

SESEC V China Standardisation Newsletter

July - August 2023



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Takeaways

ETSI's First-Time Visits under Support of the SESEC in China since Pandemic

From 10 to 11 July, on behalf of European Telecommunications Standards Institute (ETSI), Mr. Luis Jorge Romero, Director General of ETSI, visited ETSI's partners and relevant stakeholders in China. The visits of this time are attached with great significance because it is ETSI's first-time visit in China since 2019 when the pandemic started to hit the world. To rebuild connections, Mr. Luis Jorge Romero, accompanied by Dr. Betty Xu, Director of SESEC, took the chance and had conversations and exchanges with his counterparts, experts, governmental officials working on ICT related standardization and policies. In his two-day visit, Mr. Luis Jorge Romero had meetings with governmental officials from the Standardization Administration of China, and the Ministry of Industry and Information Technology, as well as experts from China Academy of Information and Communications Technology (CAICT), China Communications Standards Association (CCSA) and China Electronic Standardization Institute (CESI).

SESEC Webinar 9 Review: China's Open-source Policies and Standardization

The Outline of the 14th Five-Year Plan (2021-2025) for National Economic and Social Development and the Long-Range Objectives Through the Year 2035 specifically reflects its supports to the development of open source community for digital technology and encourages enterprises to open the source code, design of hardware and application services. Facilitated by the Outline, China has established more than 500 open-source communities as of 2022, covering sectors of database, Internet of Things, Big Data, Artificial Intelligence, and Cloud computing, etc. To help relevant stakeholders to have a clear picture of role of standardization in facilitating the open source development in China, on 5 July, Dr. Betty XU, SESEC's Director, gave introduction on the overview situation, government policies, open-source standardization, issues and challenges, as well as possible trends and next steps.

China Encourages the Participation of Foreign Enterprises in Standardization

On 13 August 2023, the State Council released the *Opinions to Further Optimize the Environment for Foreign Investment and Increase Efforts to Attract Foreign Investment* (hereinafter referred to as the Opinions). The Opinions encompass 24 specific measures in 6 main areas: (i) improving the utilization of foreign capital, (ii) ensuring national treatment received by foreign-invested enterprises (FIEs), (iii) strengthening the protection for foreign investment, (iv) improve the ease of conducting investment and operations, (v) enhancing fiscal and tax support, and (vi) optimizing the methods of foreign investment promotion. The specific tasks will be carried out by several ministerial departments of the State Council, such as the Ministry of Commerce, the Ministry of Finance, the Ministry of Industry and Information Technology, and the State Administration for Market Regulation (SAMR). One of the measures outlined by the Opinions is dedicated to standardization, specifically aimed at supporting FIEs to participate in the formulation of standards, in an equal and law-abiding manner.

Translation of China's Interim Provisions on Upgrading Association Standards

On 18 August 2023, the State Administration for Market Regulation issued the *Interim Provisions on Conversion of Association Standards into Recommended National Standards* (hereinafter referred to as "the Provisions") to the public. The Provisions enter into force as of the date of release. SESEC translated the Provisions and uploaded on SESEC's website. Please click here to see the translation.

China's Efforts in Standardization of Emerging Industries

On 22 August 2023, China's Ministry of Industry and Information Technology, together with the Ministry of Science and Technology, the National Energy Administration, and the Standardization Administration of China, recently issued the *Implementation Plan of Standardization for Emerging Industries (2023-2035)* (hereinafter referred to as the "Implementation Plan"). The purpose is to thoroughly implement the deployment requirements of the *National*

Standardization Development Outline, continuously improve the standard system of emerging industries, and proactively plan for future industry standard research. For the translation offered by SESEC, please see the Annex 1 of this newsletter.

China Revises the ICV Standard System

On 26 July 2023, China's Ministry of Industry and Information Technology (MIIT) and Standardization Administration of China (SAC) jointly issued the *Guidelines for the Construction of the National Internet of Vehicles Industry Standard Syst em* (Intelligent and Connected Vehicles) (2023 Version) - hereinafter referred to as the Guidelines. The Guidelines are a n important part of the national Internet of Vehicles (IoV) standard systems. The Guidelines consist of five chapters: general requirements, general principles, the standard system, organization and implementation requirements, and anne xes. The standard system outlined in the Guidelines has been significantly enriched and streamlined compared to that of the previous 2018 version of the Guidelines.

China Establishes the Carbon Peak and Carbon Neutrality Metrological Technical Committee

On 15 July 2023, in order to support the achievement of carbon peak and carbon neutrality goals, the State Administration of Market Regulation (SAMR) held the inauguration meeting of the newly-established National Carbon Peak and Carbon Neutrality Metrology Technical Committee and its Sub-committees in Beijing. A total of 157 representatives from over one hundred institutions attended, including those from relevant departments of the State Council, local market supervision departments, research institutes, universities, enterprises and associations.

China's Medical Device Standards: 90% Consistency with International Standards

On 5 July 2023, Mr. Xu Jinghe, Deputy Commissioner of China's National Medical Products Administration (NMPA), during the press conference "Talk by Authorities" illustrated the efforts that China has made, over the past five years, in optimizing and improving the medical device standards system. Currently, a total of 1937 medical device standards are in force, while the degree of consistency with international standards has exceeded 90%. Around 18 standards are the newly-formulated in 2023.

China Releases the Standard System for the Hydrogen Energy Industry

On 8 August 2023, the Standardization Administration of China, in collaboration with five other ministerial departments, jointly released the Guidelines for Establishing the Standard System for the Hydrogen Energy Industry (hereinafter referred to as the Guidelines). The Guidelines encompass six sections: general requirements, rationale for the standard system, the standard system, key tasks, implementation provisions, and a list of hydrogen-related standards. As per the Guidelines, the standard system is presented as a layered tree diagram, progressing from basics and safety, to hydrogen energy supply and hydrogen utilization.



SESEC and Supported Events

ETSI's First-Time Visits under Support of the SESEC in China since Pandemic

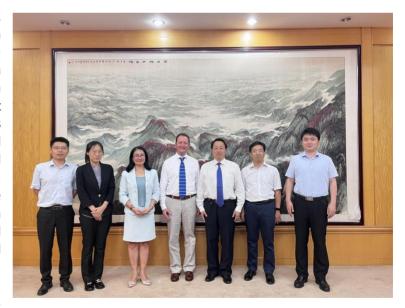
#Standardization Event

From 10 to 11 July, on behalf of European Telecommunications Standards Institute (ETSI), Mr. Luis Jorge Romero, Director General of ETSI, visited ETSI's partners and relevant stakeholders in China. The visits of this time are attached with great significance because it is ETSI's first-time visit in China since 2019 when the pandemic started to hit the world. To rebuild connections, Mr. Luis Jorge Romero, accompanied by Dr. Betty Xu, Director of SESEC, took the chance and had conversations and exchanges with his counterparts, experts, governmental officials working on ICT related standardization and policies.

In his two-day visit, Mr. Luis Jorge Romero had meetings with governmental officials from the Standardization Administration of China, and the Ministry of Industry and Information Technology, as well as experts from China Academy of Information and Communications Technology (CAICT), China Communications Standards Association (CCSA) and China Electronic Standardization Institute (CESI). In general, Chinese side and ETSI exchanged information and ideas over their ICT related standardization and policies, and provided interpretation over EU and China's standardization strategies to each other. More importantly, both sides expressed the willingness to keep the communication channels open, and explore potential opportunities to cooperate with each other. The following will brief the meetings with those five parties.

(1) ETSI's Communication Meeting with Standardization Administration of China

On 10 July 2023, Mr. Luis Jorge Romero, Director General of the European Telecommunications Standards Institute (ETSI) had an offline meeting with officials from Standardization Administration of China (SAC) under State Administration for Market Regulation (SAMR). SAC, authorized by China's State Council, is responsible for the unified management, supervision and overall coordination of standardization work in China; it also represents China within International Organization for Standardization International Electrotechnical Commission (IEC) and other international and regional standardization organizations.



The meeting was attended by Mr. Xiao Han,

Director-General of SAMR's Standards Innovative Management Department; Mr. Tao Liang, Deputy General of Application Division of SAMR's Standards Innovative Management Department; Mr. Sun Xiaohui, Official of Information Division of SAMR's Standards Technical Management Department; as well as other officials from the International Cooperation Division of SAMR's Standards Innovative Management Department. The European side was represented by the SESEC team, including Dr. Betty Xu, Director of SESEC, who also attended the meeting and provided support.

The meeting covered three main parts:

- SAC's introduction to China's National Standardization Development Outline;
- ETSI's interpretation of the EU Standardization Strategy and other recent activities;
- Discussion over the EU's Standard Essential Patents Regulation Proposal.

More specifically, Mr. Xiao Han gave the opening speech and elaborated in detail on China's standardization strategy, including its background, supporting policies as well as recent developments. On the other hand, Mr. Luis Jorge Romero shared his views on the EU's Standardization Strategy and the EU's AI Act. Following the presentation, the two sides exchanged information and shared their experience on the cultivation of standardization experts, EU's Standard Essential Patents Regulation Proposal, as well as China's current standard essential standard policies and regulations.

At the end of the meeting, both sides recognized the importance of communication as it deepens both sides' understanding of each other's actions in the field of standardization. Mr. Luis Jorge Romero again expressed appreciation to SAC for hosting the meeting, and looked forward to future exchanges.

(2) ETSI Visits China's Ministry of Industry and Information Technology



On 10 July 2023, Mr. Luis Jorge Romero, Director General of the European Telecommunications Standards Institute (ETSI), visited China's Ministry of Industry and Information Technology (MIIT). During the visit, Mr. Romero had a meeting with representatives of MIIT's Information and Communication Development Department, including Mr. Liu Yulin, Level I Bureau Rank Official; Ms. Sun Ji, Director of the Network Technology Division; and Deng Jianhui, Official of the Network Technology Division. The European side was represented by the Mr. Luis Jorge Romero and SESEC team, including Dr. Betty Xu, Director of SESEC, who also attended the meeting and provided support.

During the first half of the meeting, Mr. Liu Yulin provided a comprehensive introduction of MIIT's efforts in supporting the development of the information and communication industry through standardization

activities and policies. In his speech, he highlighted the role of 5G in supporting China's digital economy and presented China's achievement in 5G deployment. Specifically, by the end of May 2023, the number of 5G base station in China had reached 28,400, while the number of 5G base stations per 10,000 people had reached 18. Mr. Liu Yulin emphasized the commonalities between Europe and China in terms of their pursuit of digital and green development, which he believed could serve as the foundation for Sino-European cooperation.

Following Mr. Liu Yulin's speech, Mr. Luis Jorge Romero expressed appreciation for MIIT hosting the, and then gave a detailed introduction to ETSI's priorities, including the development of digital standards, promoting green and sustainable development, and security issues. To help MIIT to understand European actions, he also covered various digital and green transition policies that the European Commission has recently implemented.

Both sides were delighted to have this face-to-face meeting. At the end of the meeting, Mr. Liu Yulin invited Mr. Luis Jorge Romero to participate in PT Expo China in the next year.

(3) The High-level Meeting between ETSI and CCSA in China

On 10 July 2023, Mr. Luis Jorge Romero, Director General of the European Telecommunications Standards Institute (ETSI), had a high-level meeting with officials from the China Communications Standards Association

(CCSA). The CCSA is a national and unified communications standardization organization that carries out standardization work in the field of information and communication technology. In addition, CCSA is one of the seven organization partners of 3GPP. The meeting was attended by Mr. Wen Ku, Secretary General of CCSA; Mr. Nan Xinsheng, Vice Secretary General of CCSA; Ms. Wang Zhiqin, Chairperson of TC5; as well as delegates of Huawei. The European side was represented by the Mr. Luis Jorge Romero and SESEC team, including Dr. Betty Xu, Director of SESEC, who also attended the meeting and provided support.



The meeting was opened by Mr. Wen Ku, who gave the opening speech and welcomed Mr. Luis Jorge Romero's visit. Then, following the meeting agenda, Ms. Wang Zhiqin, introduced the 6G standardization and research situation in China. Specifically, China intends to develop 6G standards in 3GPP after 2025. To facilitate the 6G standardization development, in June 2019 the Chinese Ministry of Industry and Information Technology (MIIT) established the IMT-2030 (6G) promotion group, whose organizational structure is based on the predecessor IMT-2020 (5G) Promotion Group. CCSA also dedicates significant resources and efforts in this area: CCSA/TC5/WG6 carried out research on 6G technologies, and has developed a number of technical reports. Apart from 6G, Ms. Wang also introduced recent efforts of CCSA/TC3 and CCSA/TC7 in future networks. Furthermore, during the meeting, Mr. Wen Ku also shed light on the statistics of deployment of gigabit optical networks: household access bandwidth reached 100M in 2023, from 20M in 2015; 110 cities and one-fifth of consumers have got access to gigabit optical communication network.

From the European side, Mr. Luis Jorge Romero recognized the importance of meeting, especially considering the difficulties from the lack of face-to-face communication during the last three years, due to the pandemic. In addition, both sides agreed to continue cooperation with CCSA under 3GPP, especially on 6G standardization. To help Chinese counterparts to better understand the current situation and developments in Europe, Mr. Luis Jorge Romero elaborated on the European's priorities in the communication industry. Most importantly, the bilateral parties also exchanged ideas over CCSA's IPR policy, which is currently under revision. As for potential cooperation in the future, both sides agreed on the necessity of identifying and focusing in first place on specific topics that are of interest to both sides.

At the end, both sides deemed that the meeting was productive and necessary. Mr. Luis Jorge Romero again expressed appreciation for CCSA's invitation and extended the invitation to CCSA to visit ETSI's headquarter in France some day in the future.

(4) ETSI's Director-General Visits CAICT in Beijing

On 10 July 2023, Mr. Luis Jorge Romero, Director General of the European Telecommunications Standards Institute (ETSI), visited the China Academy of Information and Communications Technology (CAICT), a scientific research institute directly under China's Ministry of Industry and Information Technology (MIIT). During the visit, Mr. Romero had an exchange meeting with CAICT representatives and experts, including Ms. Wang Zhiqin, Vice-president of CAICT and Professorate Senior Engineer; Ms. Liu Rui, Director of CAICT's International Cooperation Department; Yu Bingyan, Deputy Director of Research Department of Automotive and Transportation, Technology and Standards Research Institute; Jiang Chunyu, Director of CAICT's Big Data and Blockchain Department, Cloud Computing & Big Data Research Institute. The European side was represented by the Mr. Luis Jorge Romero and SESEC team, including Dr. Betty Xu, Director of SESEC, who also attended the meeting and provided support.



The meeting commenced with welcome remarks by Ms. Wang Zhiqin, who then gave an updated introduction to CAICT, including its four major areas: ICT technology, digitalization, cyber and data security, and economics and policy. In her speech, she specifically mentioned CACIT's contribution commitment to China's national standard strategy and policies, as China Standards 2035, the Guidelines for the Construction of Data Security Standard Systems in the Telecommunications and Internet Industries, etc. Regarding domestic standardization, CAICT has participated in the development of a total of 358 national standards and 3474 sector standards.

With regards to international standardization cooperation, CAICT regularly participates in ITU, ISO, IEC, ETSI, 3GPP, IEEE, IETF, and other international fora. It currently holds 81 positions in 26 organizations (ITU, ISO, IEEE, 3GPP, and APT, etc.), with 30 CAICT experts serving as Chairs and Vice-Chairs. CAICT led and participated in 137 international standards in the areas of mobile communications, AI, cloud computing, big data, blockchain, data center, optical communications, future networks, IoT, network security, smart healthcare, energy saving, and environment protection. To elaborate further on this topic, five experts from CAICT respectively introduced their work activities in broadband access, Internet of Vehicles, blockchain, AI, cybersecurity, green and low-carbon development.

Following Ms. Wang Zhiqin's introduction, Mr. Luis Jorge Romero expressed appreciation for CAICT's invitation of this visit and then updated CAICT on ETSI's recent activities, the EU's priorities in the communication industry, and briefly introduced the recent EU's AI Act. During the introduction of ETSI, Mr. Luis Jorge Romero specifically explained to CAICT how technical alignment is ensured by those members who simultaneously participate in ETSI, 3GPP and the O-RAN Alliance. In addition, the Director General introduced the EU's priorities in the communication industry, which include 5G, 6G, fixed 5G, ICT's application in different sectors, as well as sustainability and energy consumption.

At the end of the meeting, both sides recognized the productivity and importance of communication and information exchange. These are beneficial for both sides for establishing trust and maintaining dialogue in the future.

(5) ETSI Meets with CESI's Officials in China

On 11 July 2023, Mr. Luis Jorge Romero, Director General of the European Telecommunications Standards Institute (ETSI), met with officials from the China Electronic Standardization Institute (CESI). CESI is a public institution directly under the management of China's Ministry of Industry and Information Technology, specializing in standardization research in the field of industry and electronic information technology. The meeting was attended by Mr. Cheng Duofu, Vice President of CESI; Mr. Jia Zhijie, Director of CESI's International Cooperation Division; Mr. Fan Kefeng, Director of CESI's Information Technology Research Division; Mrs. Liu Rui, Vice Director of CESI's International Cooperation Division; as well as several other experts and officials from CESI. The European side was represented by the Mr. Luis Jorge Romero and SESEC team, including Dr. Betty Xu, Director of SESEC, who also attended the meeting and provided support.

The meeting covered four main parts:

- Recent activities of CESI
- Recent activities of ETSI
- EU's AI Act
- Introduction of China's AI Standardization

Mr. Cheng Duofu welcomed the visit of the ETSI's Director General, and expressed the willingness to strengthen communication and exchanges between CESI and ETSI. He emphasized CESI's determination to engage in international standardization activities, as CESI has, to date, organized more than 1000 experts to participate in international standardization. Mr. Luis Jorge Romero expressed his appreciation to CESI for the warm welcome and



expressed his willingness to work with CESI in fields of interest. During the meeting, both sides also exchanged information on artificial intelligence standardization activities in both China and Europe.

At the end of the meeting, Mr. Jia Zhijie reiterated CESI's commitment to standardization and expressed his desire for ETSI and CESI to explore opportunities for future cooperation. Mr. Luis Jorge Romero expressed his appreciation for CESI's invitation and agreed to strengthen communication between CESI and ETSI.

SESEC Attends the Annual Meeting of CEEIA: Reviews Standardization in 2022 and Plans for 2023

#Standardization Event

On 20 July 2023, the China Electrical Equipment Industry Association (CEEIA) Standardization Committee convened its 2023 assembly. Approximately 170 members representing the entire electrical industry joined the meeting.

During the meeting, Mr. WU Xiaodong, Chairman of the Committee, reported to the attendees the main activities and achievements carried out in the past year. Specifically, in 2022, the Committee held the appraisal and election activities of innovative standards, good practice enterprises, and excellent standards applications. It established two new technical committees (TCs) for electric transporting appliances and disaster monitoring and prevention. Additionally, it carried out cooperation and exchanges with a number of Standards Development Organizations (SDOs) for the joint development of standards, evaluation and certification schemes.

Mr. WU also proposed the work directions and main tasks of the Committee in 2023, which were adopted by participating members. Specifically, in 2023, the Committee will continue developing high-quality standards to support the electrotechnical industry's advancement towards more advanced, intelligent and greener directions. To this end, the Committee will concentrate on intelligent, green, and service-oriented manufacturing, along with standardization activities for efficient energy utilization and product's green design and evaluation. It will also strengthen the management of its current 68 TCs and establish new ones to address the needs of fulfilling these standardization tasks. Finally, the Committee will continue organizing appraisal and election activities to encourage good practices and deepen cooperation with other SDOs, thus expanding the influence of CEEIA standards.

Apart from the work summary and plan mentioned above, the attendees also reviewed and adopted the CEEIA Standardization Committee Working Rules. This document aims to regulate CEEIA's association standardization activities and facilitate its healthy development in the future.

SESEC Webinar 9 Review: China's Open-source Policies and Standardization #Standardization Event

The Outline of the 14th Five-Year Plan (2021-2025) for National Economic and Social Development and the Long-Range Objectives Through the Year 2035 specifically reflects its supports to the development of open source community for digital technology and encourages enterprises to open the source code, design of hardware and application services. Facilitated by the Outline, China has established more than 500 open-source communities as of 2022, covering sectors of database, Internet of Things, Big Data, Artificial Intelligence, and Cloud computing, etc. To help relevant stakeholders to have a clear picture of role of standardization in facilitating the open source development in China, on 5 July, Dr. Betty XU, SESEC's Director, gave introduction on the overview situation, government policies, open-source standardization, issues and challenges, as well as possible trends and next steps. In the webinar, Dr. Betty Xu points out that:

Insufficient standardization level in the open-source rules and governance bring quality and security issues;

- The open-source community has a poor understanding of the value of standardization;
- Standardization organizations need to improve their understanding on the value of open source;
- Intellectual property issues in standards are challenges in collaboration with open source;

In general, though challenges do exist, high priority is given in this field by China. If you would like to know more, please forward us an email (assistant@sesec.eu) for webinar slides and recordings.



Horizontal Actions

China Encourages the Participation of Foreign Enterprises in Standardization

#Horizontal Policy

On 13 August 2023, the State Council released the Opinions to Further Optimize the Environment for Foreign Investment and Increase Efforts to Attract Foreign Investment (hereinafter referred to as the Opinions). The Opinions encompass 24 specific measures in 6 main areas: (i) improving the utilization of foreign capital, (ii) ensuring national treatment foreign-invested received bv enterprises (FIEs), (iii) strengthening the protection for foreign investment, (iv) improve the ease of conducting investment and operations, (v) enhancing fiscal and tax support, and (vi) optimizing the methods of foreign investment promotion. The specific tasks will be carried out by several ministerial departments of the State Council, such as the Ministry of Commerce, the Ministry of Finance, the Ministry of Industry and Information Technology, and the State Administration for Market Regulation (SAMR).

One of the measures outlined by the Opinions is dedicated to standardization, specifically aimed at supporting FIEs to participate in the formulation of standards, in an equal and law-abiding manner. The specific tasks in this regard include:

- Promoting the disclosure of information about the whole process of standard formulation and revision;
- Encouraging foreign-invested enterprises to formulate enterprise standards, independently or jointly with other enterprises, to carry out standardized services;

 Carrying out national trials for the standardization of the service sector in national comprehensive demonstration zones for the opening up of the service industry.

During a press conference convened to introduce the content of the Opinions, an official from SAMR also mentioned recent release of the Guidelines on Improving the Work of the National Standardization Technical Committees, which are aimed at encouraging FIEs and foreign experts to participate in the development of association standards. Statistically, at present, 62% of national standardization technical committees have members from FIEs.

Furthermore, over the coming months SAMR will continue to promote the construction of a national unified market, thus providing standardized, convenient and unified registration services for all types of business entities, including FIEs. SAMR will also continue to support FIEs to participate in standardization work on an equal basis according to law, while strengthening efforts to tackle unfair competition and carry out intellectual property law enforcement.

However, there are still various issues faced by FIEs when participating in different technical committees, such as unequal membership fees, access to certain technical committees, and participation in China's international standardization activities. The Opinions only address part of these issues – more concrete measures in this regard will be welcomed by FIEs.

China Convenes Consultation Meeting on Standard Deposit #Standard Deposit

On 15th June 2023, the China National Institute of Standardization (CNIS) convened a consultation meeting on the Administrative Measures for Standard Deposit (hereinafter referred to as the Administrative

Measures), which are aimed at establishing a standard deposit mechanism. According to the official explanation, the mechanism will require the relevant standard publishing body to deposit the standard text to the standardization administrative department (namely, the Standardization Administration of China, SAC) or the institution designated by SAC. The purpose is to collect and preserve the standard, in line with the requirements of the National Standardization Development Outline.

CNIS was delegated by the Standardization Administration of China the responsibility to draft the Administrative Measures for standard deposit. The June meeting was attended by government officials from Department of Standards Technology Regulation under SAMR, as well as experts from various organizations, such as SAMR's National Center of Standards Evaluation, China Quality and Standard Publishing & Media Co., Ltd., National Library of China, University of Chinese Academy of Sciences Library,

China University of Political Science and Law, etc. CNIS' Wang Bin, i.e. the curator of National Library of Standards, acted as moderator.

During the meeting, the drafting group of the Administrative Measures introduced the background, and research on standard purpose, mechanism, the potential structure, drafting process, and major contents. Afterwards, the meeting initiated a discussion on the basis for the development of the Administrative Measures, the application scope, as well as the expected use of deposited standards. Mr. Guo Huanxin, the Level I Bureau Rank Official of Department of Standards Technology Regulation, emphasized the significance of the standard deposit mechanism, at the same time asking the drafting group to improve the draft based on the opinions received from the experts, and to solicit opinions from the industry and local authorities.

Translation of China's Interim Provisions on Upgrading Association Standards #Standard Policy

On 18 August 2023, the State Administration for Market Regulation issued the *Interim Provisions on Conversion of Association Standards into Recommended National Standards* (hereinafter referred to as "the Provisions") to the public. The Provisions enter into force as of the date of release. For the translation offered by SESEC, please click the link below.

SESEC V Translation of Rules of Upgrading Association Standards

DISCLAIMER: This translation is produced by SESEC and may be used only for reference purposes. This English version is not an official translation of the original Chinese document. In cases where any differences occur between the English version and the original Chinese version, the Chinese version shall prevail which can be found here. SESEC shall accept no responsibility or liability for damage or loss caused by any error, inaccuracy, or misunderstanding with regard to this translation.

China's Efforts in Standardization of Emerging Industries #Emerging Industries

On 22 August 2023, China's Ministry of Industry and Information Technology, together with the Ministry of Science and Technology, the National Energy Administration, and the Standardization Administration of China, recently issued the *Implementation Plan of Standardization for Emerging Industries (2023-2035)* (hereinafter referred to as the "Implementation Plan"). The purpose is to thoroughly implement the deployment requirements of the National Standardization Development Outline, continuously improve the standard system of emerging industries, and proactively plan for future industry standard research.

Emerging industries refer to emerging and future industries that thrive and grow through the application of new technologies. They are characterized by innovation, technological intensity, and broad development prospects, and closely related to the overall development of the national economy, social development, and the optimization and upgrading of industrial structure. Standardization plays a fundamental and leading role in promoting the development of emerging industries. The "Implementation Plan" aims to promote the innovative development of emerging industries and seize the opportunities for future industry development. It focuses on eight emerging industries: next-generation information technology, new energy, new materials, high-end equipment, new energy vehicles, green and environmental protection, civil aviation, ships and marine engineering equipment, as well as nine future industries: metaverse, brain-computer interfaces, quantum information, humanoid robots, generative artificial intelligence, bio-manufacturing, future displays, future networks, and new energy storage. The plan will comprehensively promote the research, formulation, implementation, and internationalization of standards.

The Implementation Plan is a long-term plan for the next decade. Specifically, it has set a series of statistical goal for short term development. According to the Implementation Plan, by 2025,

- the proportion of standard achievements formed through general key technologies and application-oriented science and technology programs is expected to reach over 60%;
- Over 2,000 national standards and sector standards shall be newly formulated;
- more than 300 advanced association standards are set to be developed;
- Over 10,000 enterprises shall participate in standard promotion and implementation;
- China shall participate in the formulation of over 300 international standards, with a conversion rate of key areas' international standards exceeding 90%.

In the next step, the Ministry of Industry and Information Technology, together with relevant departments, will continue to improve the construction of the standard system for emerging industries, proactively plan for future industry standard research, fully leverage the leading role of new industry standards in promoting technological progress, serving enterprise development, strengthening industry guidance, and leading industrial upgrading. Efforts will be made to continually enhance the technical level and internationalization of new industry standards, providing solid technical support for accelerating the high-quality development of new industries and the construction of a modern industrial system. For the translation offered by SESEC, please see the Annex 1 of this newsletter.

China's Action of Anti-monopoly in the Field of SEP #Anti-monopoly #SEP

On 30 June 2023, China's State Administration for Market Regulation (SAMR) issued the *Antitrust Guidelines in the Field of Standard Essential* Patents (Draft for Comment) (referred to as the Guidelines) to support the newly revised Provisions on Prohibiting the Abuse of Intellectual Property Rights to

Exclude or Restrict Competition (referred to as the Provisions), which will take effect on 1 August 2023. Articles 18 and 19 of the Provisions provide regulations on monopoly agreements and abuse of dominant market positions in the field of standard essential patents (SEPs), which are further detailed in the Guidelines. The Guidelines clarify the distinction between proper use of SEPs and abuse of market positions as an SEP holder, contributing to antimonopoly efforts and protection of intellectual property rights.

The Guidelines consist of five chapters: general rules, monopoly agreements, abuse of dominant positions, concentration of undertakings, and supplementary rules. SEP-related behaviors are considered special and complex because they involve various potential monopoly behaviors throughout the process, including patent pool formation, patent licensing, profit distribution, and more. Distinguishing and defining monopoly actions in this process present

challenges. To address these challenges, the Guidelines elaborate on specific monopoly behaviors and factors that should be considered.

For example, the Guidelines state that in certain cases where patent holders fail to timely and adequately disclose patent information as required by the standard development organization's provisions, or explicitly waive their patent rights but later claim them against standard implementers, such behavior will be taken into account when determining whether it has an exclusionary or restrictive impact on market competition. Additionally, Chapter III of the Guidelines provides specific behaviors corresponding to each item listed in Article 19 of the Provisions. However, some comments have raised concerns about the Guidelines, arguing that the description of monopoly agreements in Chapter II and concentration of undertakings in Chapter IV is not as detailed as Chapter III, which provides concrete examples. This may pose challenges in practical implementation.

China's Examination and Evaluation of Technical Committees #Technical Committees

On 26 June 2023, the Standardization Administration of China (SAC) issued the *Notice on the Examination* and Evaluation of National Technical Committees in 2023 (hereinafter referred to as the Notice). The examination and evaluation efforts are in line with the requirements of the Measures for the Administration of the China National Standardization Technical Committee (2020 Revision) (hereinafter referred to as the Measures). According to Article 39 of the Measures, the department of Standardization Administration under the State Council shall establish an examination and evaluation system, examine and evaluate technical committees (TCs) regularly, and disclose the appraisal results to the public. The basis for the work is the *National Standardization Technical Committee Examination and Evaluation Index System (2023)*.

The examination and evaluation work consists of several stages: initial review and examination, information feedback, review, opinion collection, and disclosure of results. The results of the initial review were disclosed to the 123 TCs examined, before 31 July 2023. The goal is to review their progress and efforts in fulling their tasks in the field of standard formulation and revision, internal management, and engagement in international standardization activities. In the end, based on their evaluation outcome, each TC will be classified into four levels: Level II, Level III, and Disqualification. If a TC is classified as disqualified, it shall be ordered by SAC to adopt rectification measures within a certain time frame (Article 47 of the Measures). If problems still persist, the TC's secretariat might be reorganized, or in the worst case, the TC might even be restructured or dismissed.

According to the Notice, there are 10 indicators for evaluating TC's efforts in engaging international standardization:

- 1. Participating in the revision or development of international standards;
- 2. Submitting international standardization proposals which are consequentially listed as a Preliminary Work Item (PWI) or officially approved as standardization project;

- 3. Translating Chinese national standards in foreign languages;
- 4. Participating in the standardization work of its respective field in developed countries or regions (such as CEN, ASTM);
- 5. Organizing and hosting international conferences on standardization in their respective fields;
- 6. Tracking, evaluating and converting international standards into Chinese standards;
- 7. Promoting the overseas application of Chinese standards;
- 8. Participating in the review of communication and disclosure activities of technical trade measures;
- 9. Tracking, analyzing and researching the latest policies of standardization development trends in key regions and national key areas;
- 10. Winning relevant ISO

The evaluation and examination targets consist of two different types: one is called obligatory target, namely the standardization projects development and rejection rate, that TCs must fulfill; another one is called selective target that TCs are allowed to choose six out of the eight selective targets to fulfill. Each target is supported by multiple indicators for evaluation. For instance, as mentioned above, international engagement is one of the selective targets that is supported by ten indicators. To further classify TCs to different levels, different levels have different requirement for how many indicators need to be reached. For instance, if a TC choose international engagement as one of its selective targets, in order to be evaluated as Level I, it needs to fulfill four out of ten indicators; For Level II, it needs fulfill three out of ten; Level III, two our of ten indicators are required. An interesting aspect is that the engagement in international standardization activities is one of the eight selective targets that TCs only need to choose six of them to fulfill. Since the threshold for not being classified as "disqualified" is to meet at least 6 selective indicators, in practice engagement in international standardization is not compulsory for passing the examination and evaluation, but it certainly adds a point.

The examination and evaluation work of the TC is uniformly organized by the Standards Technical Management Department under the State Administration for Market Regulation, while the National Center of Standards Evaluation is responsible for the specific implementation.

China Issues New Draft Regulations on Certification and Accreditation #Certifications #Regulations

On 13 July 2023, China's State Administration for Market Regulation (SAMR) issued the draft for comments of the *Regulations of the People's Republic of China on Certification and Accreditation* (hereinafter referred to as "the Regulations"). This marks the commencement of another round of public consultation for legislative review, following a similar process done in 2021. The official consultation was open until 29 July 2023. The Regulations comprise a comprehensive document consisting of 7 chapters and 99 articles in total, aiming to address and refine various aspects of certification and accreditation practices in the country.

Background

The revision of the Regulations can be seen as a direct response to the overarching initiatives of the central leadership aimed at reforming and streamlining the government, delegating power and improving government services. The ultimate goal of the reform is to improve the business environment and ignite market vitality and social creativity, by establishing a new relationship between the government and the market, based on reduced government interference with the market; instead, the focus will be on concurrent and ex post supervision, and improving government services.

The current version of the Regulations, initially released in 2003 and partially revised in 2016 and 2020, does not align with the objectives of the government's reform and streamlining efforts. For instance, it cannot provide provisional support to market access for certification, accreditation, inspection and testing bodies, as well as for the concurrent and ex post supervision and self-declaration for mandatory product certification. Furthermore, the definition and legal liability of certification and accreditation inspection and testing activities in the current Regulations also present several issues, such as inaccurate definition, ambiguous expressions, and insufficient penalties for non-compliance, which might hinder the current economic and social development and represent obstacles to market supervision. The need for revision, therefore, is urgent, as clearly indicated in the Opinions of the State Council on Strengthening the Building of the Quality Certification System and Promoting Comprehensive Quality Management. Therefore, in 2019, SAMR officially kick-started the revision process.

Major revision and corresponding articles of the draft Regulations:

- Keep alignment with the reforms and streamlining efforts. The draft Regulations put forward the
 requirement for implementing classified management of examination and approval of certification bodies
 (Article 5). In addition, the draft Regulations introduce a self-declaration approach to the mandatory product
 certification scheme (Article 34), providing provisional support to the current practices of self-declaration for
 the China Compulsory Certification (CCC)
- Amend the parts which present some degree of conflict with existing laws, regulations and policy provisions. Specifically, the draft Regulations delete provisions related to "uniform charging standard" for mandatory product certification, as well as other provisions inconsistent with the legislative framework; the document also lays down specific articles to indicate the connection between relevant product liability and the Product Quality Law (Article 85), the Anti-Unfair Competition Law (Article 83) and other laws.
- Align relevant terminology and concepts with international rules and conventions. For instance, the draft Regulations refine the concepts of "Certification", "Accreditation", "Inspection and Testing" activities (Article 2), replace the old expression of "examination bodies" with "inspection and testing bodies", and change the "accreditation of certification personnel" to "certification of certification personnel" (Article 22), etc.
- Amend the parts which are inconsistent with the current governmental system and the new market supervision system. The draft Regulations change the "Certification and accreditation supervision and administration department of The State Council" to the "Market Supervision and Administration under the State Council", reflecting the recent institutional reforms and reshuffles of the State Council. Furthermore, dedicated provisions for duties of local market supervision and administration authorities were added.
- Revise the parts which are inconsistent with the development needs of the certification, accreditation, inspection and testing industry; as well as with the requirements for supervision. In general, the draft Regulations outline specific requirements for relevant activities, and introduce a whole-process tracking approach (Article 10) and credit supervision (Article 69). Moreover, the supervision for inspection and testing bodies and their activities is added in the draft Regulations, while the supervision of overseas bodies' conformity assessment operations within China's territory is improved (Article 20). Specifically, according to the draft Regulations, overseas bodies are allowed to engage in certification in China as long as they abide by the Regulations and other relevant laws and regulations of China.

Finally, in the draft Regulations, certain systems and mechanisms remain briefly mentioned without further elaboration. These include the process tracking mechanism, classified management of examination and approval of certification bodies, and the inter-ministerial joint meeting, among others. As the draft is not yet final, it is reasonable to anticipate that supporting documents or a more comprehensive elaboration will be included in the final draft. For those interested, SESEC has translated the entire text the Regulations into English. Please see the annex 2 of this newsletter.



Digital Transition

11.

TC260 Guidelines Promote IPv6 IID Application

#IPv6

On 21 June 2023, the National Information Security Standardization Technical Committee (SAC/TC260) published the *Guidelines for Practice of Cybersecurity Standard - IPv6 Address Assignment and Coding Rules - Interface Identifier.* The Guidelines put forward the encoding methods and implementation requirements for IPv6 address interface identifiers (IID), aiming to provide guidance and reference for the activities of Internet access service providers and other relevant entities that dynamically assign IPv6 address IID through IPv6 networks.

The Guidelines propose two IPv6 IID encoding methods: the EUI-64 (64-bit Extended Unique Identifier) encoding method, and the cryptographic transformation encoding method. The former, with reference to IETF RFC 4291, applies to both the IID encoding when assigning IPv6 addresses to network terminals via DHCPv6 (Dynamic Host Configuration Protocol for IPv6) as well as the IID encoding generated by network terminals through SLAAC (Stateless Address Auto-configuration); the latter applies only to IID encoding when assigning IPv6 addresses to network terminals via DHCPv6.

In terms of implementation, the document states that

- The two aforementioned encoding methods shall be adopted when operators such as Internet access service
 providers, application infrastructure service providers, and self-use network operators allocate IPv6
 addresses that include IID to network terminals through DHCPv6;
- IPv6 address allocation software and hardware should support the above encoding methods;
- Network terminals should support DHCPv6 protocol and adopt EUI-64 encoding method to generate stateless IID.

The technical contents of the Guidelines are derived from an ongoing national standard project called IPv6 Address Assignment and Coding Rules - Interface Identifier. This standard is developed on the basis of a great number of international standards, including IETF RFC 3306, 3587, 4193, 4291, 6052, 7217, 7371, 7915, etc. TC260 claims that this standard will be consistent with the IPv6 standards of the IETF and other international SDOs, while reflecting China's actual conditions and with a certain degree of innovation.

The release of the Guidelines reflects China's eagerness to promote the large-scale application of IPv6, even though the official standard has not yet been finished. Relevant European stakeholders are advised to closely examine the guidelines and determine if there is significant discrepancy with relevant international standards.

The text of the guidelines (in Chinese) can be downloaded from https://www.tc260.org.cn/front/postDetail.html?id=20230625221638

The draft for comments of the standard IPv6 Address Assignment and Coding Rules - Interface Identifier (in Chinese) can be found here.

12 China-led New SRv6 Work Item Established in ITU-T #SRv6

A China-led new work item TR.MPM-SRv6 "Method for Performance Monitoring of SRv6 Network" was created in ITU-T in June. This work item was initiated by the State Grid Smart Grid Research Institute of China and aims to define the architecture and method for the monitoring of SRv6 network's performance.

More information about this standard proposal can be found at https://www.itu.int/ITU-T/workprog/wp item.aspx?isn=18909

China Updates Critical Network Equipment and Specialized Cybersecurity Products List

#Specialized Cybersecurity Products

On 3 July, CAC, MIIT, MPS, and CNCA jointly released the 2023 edition of the *Catalogue of Critical Network Equipment and Specialized Cybersecurity Products* (hereinafter referred to as the "Catalogue"). The 2023 Catalogue designates 38 network products subject to mandatory Critical Network Equipment and Specialized Cybersecurity Products Certification (hereinafter referred to as the "CNESCP certification").

The first edition of the Catalogue was released in 2017, with the aim of supporting the implementation of Article 23 of the *Cybersecurity Law*, which stipulates that critical network equipment and specialized cybersecurity products shall be certified, or meet the requirements of security inspection prior to being sold or provided to the Chinese market.

The 2017 edition of Catalogue identified 4 critical network equipment and 11 specialized cybersecurity products subject to CNESCP certification; minimum technical parameters for compliance were specified. The 2023 edition of the Catalogue, instead, removes the minimum technical parameters of the specialized cybersecurity products, and at the same time adds 20 new specialized cybersecurity products. Consequently, the 2023 Catalogue now contains 4 critical network equipment and 34 specialized cybersecurity products. The full list is provided below:

No.		Categories of Equipment /Products	Product Scope or Description
1	Critical Network Equipment	Routers	Throughput of the Whole System (Bidirection) ≥ 12 Tbps; Routing Table Capacity of the Whole System ≥ 550,000 pieces
2	Critical Network Equipment	Switches	Throughput of the Whole System ≥ 30 Tbps; Packet Forwarding Rate of the Whole System ≥ 10 Gbps
3	Critical Network Equipment	Servers (Rack)	Number of CPUs ≥ 8; Number of Cores of a Single CPU ≥ 14; Memory Capacity ≥ 256GB
4	Critical Network Equipment	Programmable Logic Controllers (PLC Equipment)	Controller Instruction Execution Time ≤ 0.08 ms
5	Specialized	Data Backup and	Products that can back up and restore the

	Cybersecurity Products	Recovery Products	data of an information system and manage the backup and recovery process.
6	Specialized Cybersecurity Products	Firewalls	Products that analyze data flow and implement access control and security protection functions.
7	Specialized Cybersecurity Products	Intrusion Detection Systems (IDS)	Products that use network packets as data source, and monitor and analyze all packets of protected network nodes to find abnormal behaviors.
8	Specialized Cybersecurity Products	Intrusion Prevention Systems (IPS)	Products that are deployed on a network in the form of a bridge or gateway, detect network behaviors with intrusion characteristics by analyzing network traffic, and intercept them before they pass into the protected network.
9	Specialized Cybersecurity Products	Network and Terminal Isolation Products	Products that establish security control points and provide controllable access services between different network terminals and network security domains.
10	Specialized Cybersecurity Products	Anti-spam Products	Software or combinations of software and hardware that can identify and process spams, including but not limited to antispam gateways, anti-spam email systems, anti-spam software installed on mail servers, and anti-spam products integrated with mail servers.
11	Specialized Cybersecurity Products	Network Security Auditing Products	Products that collect recorded and activity data of networks, information systems, and their components, and store and analyze such data for incident traceability and detection of security violations or anomalies.
12	Specialized Cybersecurity Products	Network Vulnerability Scanning Products	Software, or a combination of software and hardware, that detect possible security weaknesses in a target network system by the means of scanning.
13	Specialized Cybersecurity Products	Secure Database Systems	Database systems that follow a complete set of system security policies from all stages of system design, implementation, use and management, with the aim to ensure data security at the database level.
14	Specialized Cybersecurity Products	Website Data Recovery Products	Products that provide website data monitoring, anti-tampering, and realize data backup and recovery and other security functions.
15	Specialized Cybersecurity Products	Virtual Private Network products	Products that establish dedicated secure transmission channels on a public communication network such as Internet.
16	Specialized Cybersecurity Products	Anti-virus Gateway	Products that are deployed between networks, analyze the communication between the network layers and the application layers, and protect against

			viruses on the network based on predefined filtering rules and protection policies.
17	Specialized Cybersecurity Products	Unified Threat Management Products (UTM)	Gateway devices or systems that adopt a unified security policy and integrate multiple security functions to comprehensively defend against security threats to networks and application systems.
18	Specialized Cybersecurity Products	Virus Control Products	Products that are used to detect or prevent the spread of malicious code as well as the tampering, theft and destruction of the applications of host operating system and user files.
19	Specialized Cybersecurity Products	Secure Operating System	Operating systems that follow a complete set of security policies covering system design, implementation, and use, with the purpose of ensuring system security at the operating system level.
20	Specialized Cybersecurity Products	Secure Network Storage	Dedicated storage devices connected to a server over a network based on different protocols.
21	Specialized Cybersecurity Products	Public Key Infrastructure	An infrastructure that supports public key management and provides authentication, encryption, integrity, and non-repudiation services.
22	Specialized Cybersecurity Products	Cybersecurity Situation Awareness Products	Products that collect network traffic, asset information, logs, vulnerability information, alarm information, threat information and other data, analyze and process network behaviors, user behaviors, and other factors, grasp network security state, predict network security trend, and conduct display, monitoring, and early warning.
23	Specialized Cybersecurity Products	Secure Management Platforms of Information System	Platforms that implement unified management of the security policy of information system as well as the security mechanisms in the secure computing environment, security area boundary and secure communication network that execute the policy.
24	Specialized Cybersecurity Products	Network Flow Control Products	Traffic management systems that monitor data flow and control bandwidth on the network in security domains.
25	Specialized Cybersecurity Products	Load Balancing Products	Products that provide functions of link load balancing, server load balancing, network traffic optimization, intelligent processing, etc.
26	Specialized Cybersecurity Products	Information Filtering Products	Products that screen and control text, pictures and other network information.
27		Denial-of-Service Attacks Resistance Products	Products used to identify and intercept denial of service attacks and ensure system availability.

	Specialized	Terminal Access	Products that provide access control function
28	Cybersecurity Products	Control Products	for terminals accessing network
29	Specialized Cybersecurity Products	USB Mobile Storage Media Management Systems	Products that implement management measures like identity authentication, access control, and audit, etc., to a mobile storage device, so as to realize trusted access between the mobile storage device and the host device.
30	Specialized Cybersecurity Products	File Encryption Products	Products used to prevent attackers from stealing data stored in files and other forms, to ensure the security of stored data.
31	Specialized Cybersecurity Products	Data Breach Prevention Products	Products that conduct control and audit for the main output channels of sensitive information in security domains to prevent unauthorized disclosure of sensitive information in the security domains.
32	Specialized Cybersecurity Products	Data Destruction Software Products	Products that use information technology to eliminate logic underlying data to completely destroy the data carried by a storage media
33	Specialized Cybersecurity Products	Security Configuration Check Products	Products that realize security configuration and compliance analysis for assets based on security configuration requirements, and generate security configuration suggestions and compliance reports.
34	Specialized Cybersecurity Products	Operation and Maintenance Security Management Products	Products that implement single sign-on, centralized authorization, centralized management, and audit during the maintenance of important assets of information system
35	Specialized Cybersecurity Products	Log Analysis Product	Security products that collect log data from information systems, while storing and analyzing data centrally.
36	Specialized Cybersecurity Products	Identity Authentication Product	Products that require users to provide identification information based on electronic information or biological information, and confirm the identity of the users.
37	Specialized Cybersecurity Products	Terminal Security Monitoring Products	Products that monitor and control the security of a terminal, detect and block unauthorized use of the system and network resources
38	Specialized Cybersecurity Products	Electronic Document Security Management Products	Products that produce secure electronic documents or convert electronic documents to secure electronic documents, and manage, monitor, audit them in a unified manner.

China Interprets the Provisions on Radio Spectrum Allocations #Radio Frequency

On June 28, China's Ministry of Industry and Information Technology (MIIT) released an infographic interpretation of the new version of the *Provisions on Radio Spectrum Allocations*, which was released on May 23, 2023. The purpose of the revision is to align with the *International Telecommunication Union's Radio Regulations (2020 Version)* and meet the domestic requirements for radio-frequency spectrum usage. The revision underwent coordination, verification, opinion solicitation, research, and improvement procedures, with the final draft approved by MIIT on April 26, 2023.

The major revisions in the Provisions include:

- Allocation of new frequency bands for International Mobile Telecommunications (IMT) (including 5G/6G) in the 6GHz, 26GHz, 40GHz, and 70GHz bands. The allocation of new frequency bands for IMT,a leading worldwide move of the 6GHz band, promotes global or regional alignment and supports the development of 5G/6G with sufficient medium frequency resources.
- Establishment of provisions for maritime mobile-satellite service and mobile-satellite service in the frequency bands of 150MHz and 400MHz, respectively. The Provisions introduce Earth Station in Motion (ESIM) application to the frequency bands of 17.7-19.7 GHz and 27.5-29.5 GHz. Additionally, the Provisions clarify the working conditions of non-geostationary satellite orbits (non-GSO) in certain frequency bands between 37.5-51.4 GHz.
- Clarifyinginterference protection for Earth Exploration-Satellite Service (EESS), radio astronomy, and other radio services.
- Radio positioning services in the 79-81GHz band will be prioritized for applications such as automotive radar.

China's Interpretation of the Interim Measures for the Administration of Generative AI Services #AI

In mid-July 2023, officials from the Cyberspace Administration of China (CAC) joined a press conference to provide an interpretation of the *Interim Measures for the Administration of Generative Artificial Intelligence Services* (hereinafter referred to as the Measures). The Measures, which were jointly approved by CAC and six other ministerial departments, became effective from 15 August 2023. These represent the first departmental rules in China that apply to the supply and use of generative AI technology. The Measures consist of five chapters:

- General rules
- Technology development and governance
- Stipulation on services
- Supervision, inspection and legal liabilities
- Supplementary provisions

To enhance the enforcement of the Measures, CAC addressed questions on the background, application scope, major principles, and key definitions underpinning the Measures. This also encompassed the approach to fostering the sound development of generative AI, regulations pertaining to providers and users of generative AI, AI services, governance, and mechanisms for complaints and reporting. For example, in terms of the background the Measures, CAC emphasized their role in addressing the challenges posed by recent technology advancement and the associated risks.

The Measures, in general, bear similarities to the *Provisions on the Administration of Deep Synthesis of Internet-based Information Services (2022)*. Both documents, in fact, establish provisions for content generated via AI or related technology. The main distinction between the two rules is that the Measures primarily aim to guarantee the authenticity, accuracy, and objectivity of the content generated by generative AI; whereas the Provisions focus mainly on ensuring that synthetic content is appropriately marked and recorded as required. To a certain extent, the release of these two department rules indicates that China's efforts in supervising AI and AI-related technology primarily focus on generated content. The specific goal of the supervision is to prevent the public from being misled by AI-generated content.

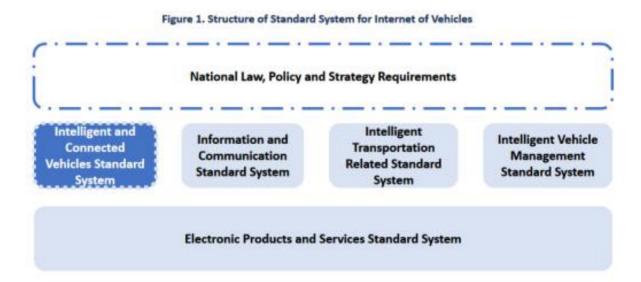
Currently, in terms of standardization, two standard projects supporting the Measures are being developed, although they have not yet been officially initiated:

- Security specification for Generative AI Manual Labeling (supporting Article 8of the Measures)
- Data security specification for generative AI pre-training and optimized training (support Article 7)

During the Standardization Week of SAC/TC 260 Information Security, the draft texts of the two standard projects were discussed and evaluated. Furthermore, more recently, SAC/TC 260 solicited public comments on the *Cybersecurity Standard Practice Guide: Method for Identification for AI Generated Contents*, which is a normative standardization document also supporting the Measures.

16 #ICV Standard System

On 26 July 2023, China's Ministry of Industry and Information Technology (MIIT) and Standardization Administration of China (SAC) jointly issued the *Guidelines for the Construction of the National Internet of Vehicles Industry Standard System (Intelligent and Connected Vehicles) (2023 Version)* - hereinafter referred to as the Guidelines. The Guidelines are an important part of the national Internet of Vehicles (IoV) standard systems, which is illustrated in the figure below.



The Guidelines consist of five chapters: general requirements, general principles, the standard system, organization and implementation requirements, and annexes. The standard system outlined in the Guidelines has

been significantly enriched and streamlined compared to that of the previous 2018 version of the Guidelines. Specifically, the original standard system only had two levels of categories, while the new version introduces a further division of several items under "Generic Specifications" and "Product and Technology Applications" – effectively forming a third level of category (see as Figure 2). Moreover, the new version deletes the "Relevant Standards" in the first level of category, as well as the two other items previously listed under that category: communication protocols, and the interface.

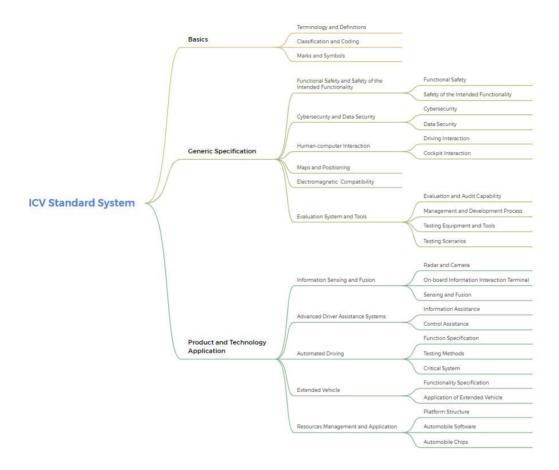


Figure 2: ICV Standard System (2023 Version)

According to its annexes, a total of 53 standards have been either released, reported for approval or recently initiated as standardization projects. Among them, 92% are national standards, while the remaining are sectoral standards; 17 standards consist of conversions from international standards (i.e. ISO standards and UN standards). Furthermore, the Guidelines present an innovative element, namely a clear indication of the standardization priorities for each category. For instance, for automobile chips, the standardization priorities include:

- Automobile safety chip technical requirements and testing methods;
- Automobile intelligent driving computing chip technical requirements and testing methods;
- Automobile intelligent cockpit computing chip technical requirements and testing methods, etc.

As for the next steps, MIIT will:

- Promote the construction of the intelligent and connected vehicle standard system.
- Continue to guide the Intelligent Connected Vehicle Sub-standard Committee of the National Automobile Standards Committee (SAC/TC114/SC34) and relevant units.
- Focus on key standardization areas and priorities, such as functional safety, cybersecurity, and operating system

- Participate in the coordination and formulation of international standards and regulations.
- Promote the implementation of key standards.
- Accelerate the integrated development of new energy vehicles with information and communication, intelligent transportation, and smart cities
- Leverage the guiding role of standards to promote the high-quality development of China's intelligent connected automobile industry.



Green Transition

17 China Releases the Standard System for the Hydrogen Energy Industry #Hydrogen

On 8 August 2023, the Standardization Administration of China, in collaboration with five other ministerial departments, jointly released the *Guidelines for Establishing the Standard System for the Hydrogen Energy Industry* (hereinafter referred to as the Guidelines). The Guidelines encompass six sections: general requirements, rationale for the standard system, the standard system, key tasks, implementation provisions, and a list of hydrogen-related standards. As per the Guidelines, the standard system is presented as a layered tree diagram, progressing from basics and safety, to hydrogen energy supply and hydrogen utilization (figure 1). This structure underscores China's determination to meet the needs of the market while fostering the development of the hydrogen industry. Specifically, the very first key task outlined is the completion of urgently-needed standardization projects, such as testing methods for hydrogen fuel quality, testing methods for the water electrolysis system used in hydrogen production, and general requirements for hydrogen fueling stations, among others.

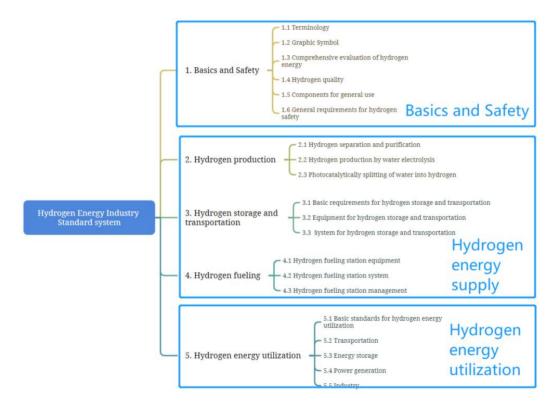


Figure 1: Standard System for the Hydrogen Energy Industry

Essentially, the Guidelines can be viewed as a three-year action plan, aiming to develop over 30 national and sector standards by 2025 in support of hydrogen production, storage, transportation, and utilization. The primary focus is on the testing of hydrogen quality, hydrogen safety, renewable hydrogen production by water electrolysis, vessels for storage of high pressure hydrogen, on-board hydrogen storage cylinders, equipment for hydrogen

liquefaction, liquid hydrogen vessel, hydrogen energy pipeline, hydrogen fueling station, fueling agreement, fuel cells and fuel cell vehicles.

Throughout this process, the Guidelines encourage the development of standard development, especially association standards, and active participation in international standardization activities and exchanges. Specifically:

- According to the Guidelines, a total of 158 standards (national and sector) and standardization projects have been identified: among these, 19 are standard projects not yet under development, while around 50% of the projects involve the hydrogen transportation system.
- The Guidelines strongly encourage experts from leading enterprises, research centers and universities to engage in international hydrogen-related standardization activities and exchanges within the ISO and IEC frameworks. The goal is to convert more than 5 international standards into Chinese standards, and to proactively propose 3 or more international standard projects.

Overall, the Guidelines align with the long-term plan for standardization and for the development of the hydrogen industry. Furthermore, the inclusion of specific targets for international standard projects underscores China's determination to expand its influence within the international standardization community, thus contributing to the development of international standards.

China Establishes the Carbon Peak and Carbon Neutrality 18 Metrological Technical Committee

#Carbon Peak and Carbon Neutrality

On 15 July 2023, in order to support the achievement of carbon peak and carbon neutrality goals, the State Administration of Market Regulation (SAMR) held the inauguration meeting of the newly-established National Carbon Peak and Carbon Neutrality Metrology Technical Committee and its Sub-committees in Beijing. A total of 157 representatives from over one hundred institutions attended, including those from relevant departments of the State Council, local market supervision departments, research institutes, universities, enterprises and associations.

The carbon peak and carbon neutrality goals are closely related to metrology, as it is an important tool allowing the accurate monitoring of energy consumption, thus enabling solutions to improve energy efficiency. Metrology is also the foundation for ensuring that greenhouse gas emissions are "measurable, reportable and verifiable". The establishment of the National Carbon Peak and Carbon Neutrality Metrology Technical Committee will systematically carry out the work in this field, and improve relevant metrological technical specifications. This work will be particularly pivotal in improving the quality of carbon emission data sets and establishing a unified and standardized carbon emission statistical accounting system.

The National Carbon Peak and Carbon Neutrality Metrology Technical Committee consists of four technical subcommittees, covering the metrology of carbon emissions, electric power, steel and construction. Together with the metrology technical committee, the duties of the four subcommittees include:

- Tracking and analyzingdomestic and foreign metrological technology relating to carbon peak and carbon neutrality;
- Puttingforward suggestions on the directions and priorities for metrology within the field of carbon peak and carbon neutrality;
- Developing metrological technical specifications for equipment and management of carbon accounting instruments, online monitoring equipment calibration, measuring methods of carbon emissions, carbon monitoring key parameters, direct accounting methods of enterprise carbon emissions, etc.;

- Strengthening the normative requirements for metrology data of carbon emissions and carbon monitoring, studying and formulating metrological technical specifications for evaluation methods and quality of carbon emission metrological data, thus providing metrology support for carbon trading and verification.
- Strengthening international exchanges and cooperation, improving the level of consistency with international metrological technical specifications. The purpose is to effectively ensure the accuracy of carbon data and international mutual recognition.

19. China Calls for Comment on the Green and Low-carbon Standard System in the Communications Industry

#Carbon Peak and Carbon Neutrality

On 18 July 2023, China's Ministry of Industry and Information Technology solicited public opinions on the Guidelines for the Construction of the Green and Low-carbon Standards System in the Communications Industry (Version 2023) (hereinafter referred to as the Guidelines). The period for submitting comments closed on 18 August 2023.

The Guidelines find their basis on the (i) standard system of energy conservation and comprehensive utilization, which was put forward during the 12th Five-year Plan Period (2011-2015); and the (ii) standard system of green manufacturing and carbon peak and neutrality, which was put forward during the 13th Five-year Plan Period (2016-2020), with the aim of providing guidance and direction to standardization in the field. The goal of the Guidelines is to develop, by 2025, over 50 national standards, sector standards,

and association standards in the field, thus serving the industry needs for achieving carbon reduction.

The Guidelines consist of five parts: general requirements, rationale for the standard system, structure of the standard system, implementation provisions, and annexes. Specifically, the standard system is a multi-layered structure with eight major aspects: energy efficiency, comprehensive uses of resources, carbon peak and carbon neutrality, green manufacturing, joint construction and sharing, construction and maintenance of infrastructure, ICT empowerment, and others (figure 1). Furthermore, a detailed overview of the third aspects constituting the Guidelines is also provided, namely the standard system of carbon peak and carbon neutrality in the communication industry (figure 2).

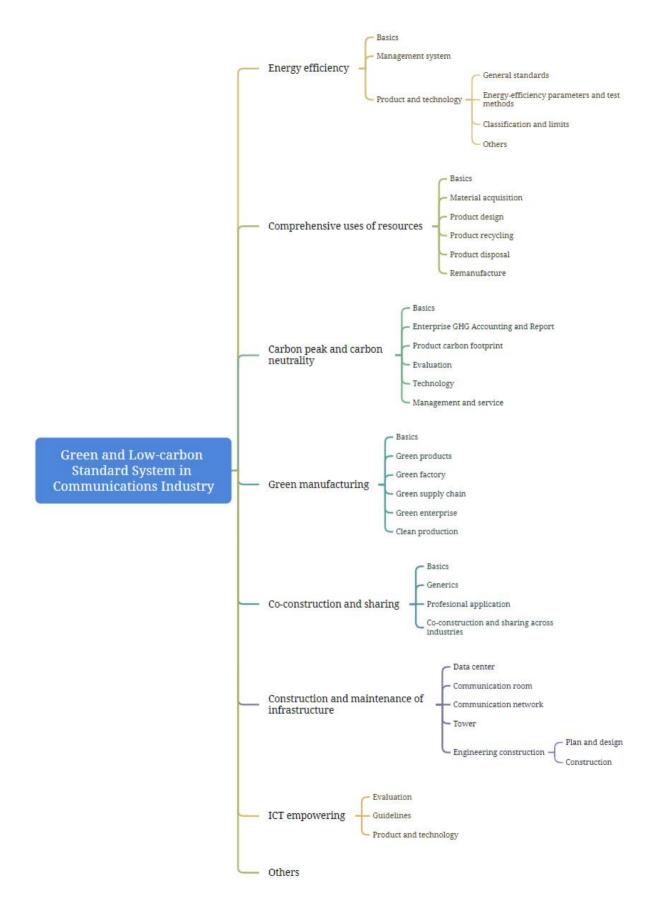


Figure 1: Green and Low-carbon Standards System in Communications Industry

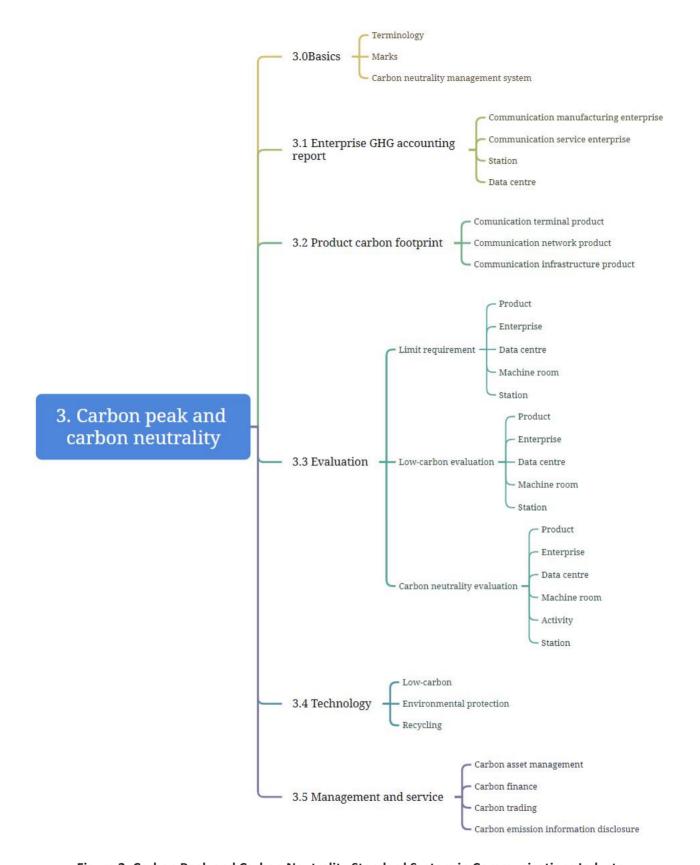


Figure 2: Carbon Peak and Carbon Neutrality Standard System in Communications Industry

The Guidelines also list, in the annexes, all the national and sector standards (released or in the development phase) that are identified as key parts of the standard system. In addition, annex 2 explicitly indicates 15 main directions for future standardization work in each field.

As to international cooperation, the following requirements are set in the Guidelines:

- Monitor the latest updates of green and low-carbon standardization work in the international communications industry;
- Participate in the international standardization work in the field of energy conservation and energy efficiency improvement, environmental protection, carbon peaking and carbon neutrality in the communications industry;
- Promote research on green and low-carbon international standards proposals;
- Promote international mutual recognition of standards;
- Promote the conversion of domestic standards to international standards in a timely manner, thus enhancing China's influence in international standard-setting organizations and its commitment to addressing climate change.



Others

China's Medical Device Standards: 90% Consistency with International Standards

#Medical Device

On 5 July 2023, Mr. Xu Jinghe, Deputy Commissioner of China's National Medical Products Administration (NMPA), during the press conference "Talk by Authorities" illustrated the efforts that China has made, over the past five years, in optimizing and improving the medical device standards system. Currently, a total of 1937 medical device standards are in force, while the degree of consistency with international standards has exceeded 90%. Around 18 standards are the newly-formulated in 2023.

Every year, NMPA issues a report on the progress of China's medical device standards. To better help foreign stakeholders understand the progress, we summarize the key points below:

Technical committees. By the end of 2022, a total of 37 medical devices standardization technical committees had been established in China, including 13 technical committees, 13 technical subcommittees, 1 standard working group, and 10 mirroring committees (see Figure 1).

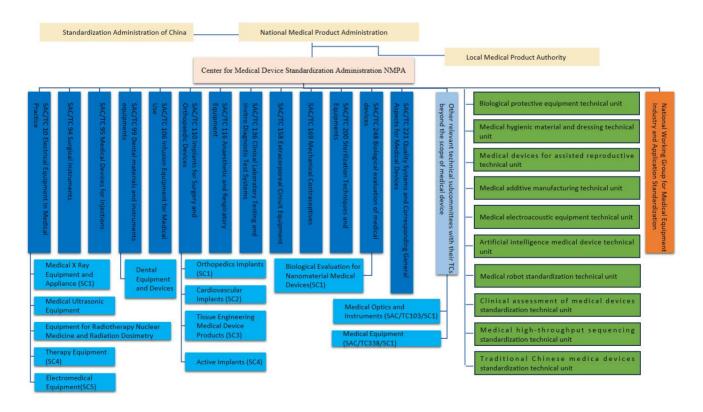


Figure 1: Technical Committees for Medical Devices Standardization in China

Standardization. In 2022, a total of 42 national standard projects on medical device were approved, together with 117 sector standard projects (of which are 23 mandatory, and 94 recommended). Furthermore, a total of 40

national standards and 114 sectoral standards for medical devices were issued, together with 4 newly-revised standards were issued. By the end of 2022, there were 1,919 active standards on medical devices (see Table 1).

Table 1: The Statistics of Standardization for Medical Device

	Mandatory	Recommended	In total
National Standards	96	164	260
Sector Standards	188	1471	1659
In total	284	1635	1919

Covered areas. The medical device standards cover various technical fields, such as electrical equipment in medical practice, surgical instruments and surgical implants. The top three areas covered are: medical laboratory equipment (14%), orthopedics and orthopedics instruments (11%), and general surgical and microsurgical instruments (11%).

International standards. Three China-led international standards were officially released. These are:

- ullet ISO 8536-15:2022 Infusion equipment for medical use Part 15: Light-protective infusion sets for single use
- ISO/TS 5798:2022 In vitro diagnostic test systems Requirements and recommendations for detection of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) by nucleic acid amplification methods; and
- ISO/TS 24560-1:2022 Tissue-engineered medical products MRI evaluation of cartilage Part 1: Clinical evaluation of regenerative knee articular cartilage using delayed gadolimium-enhanced MRI of cartilage (dGEMRIC) and T2 mapping.

In 2022, there was a significant increase in the number of applications for the conversion of international medical device standards into Chinese standards, with a total of 117 filings – twice the number recorded in 2020. This surge in applications aims to enhance consistency with international standards.

Annex:

- 1. Translation of Implementation Plan of Standardization for Emerging Industries (2023-2035)
- 2. Translation of Regulations on Certification and Accreditation (Call for Comments 2023)
- 3. China Electrical Equipment Industry Association (CEEIA)'s annual report

Introduction of SESEC Project



The Seconded European Standardization 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 Standardization 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 standardization information exchange and EU-China standardization cooperation.

The SESEC project supports the strategic objectives of the European Union, EFTA and the European Standardization 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 standardization bodies;
- Improve the visibility and understanding of the European Standardization System (ESS) in China;
- Gather regulatory and standardization 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 ecolabeling, design well environmental performance of buildings).

SESEC V China Standardization and Technical Regulation Bimonthly Newsletter

SESEC V China Standardization and Technical Regulation Bimonthly Newsletter is the gathering of China regulatory and standardization 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
ссс	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
МоН	Ministry of Health	卫生部
MoHURD	Ministry of Housing and Urban-Rural Development	住房与建设部
мот	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
тс	Technical Committee for Standard Development	标准化技术委员会