SESEC V
China Standardisation Newsletter

September - October 2022

Seconded European Standardisation Expert in China
(SESEC)

Index

Preview of SESEC's Upcoming Events

Webinar 1: Carbon Peak and Carbon Neutrality Standardization in China

Time and Date: 10:00 am - 11:00 am, 22 November 2022 (CET, Brussels)
Presenter: Dr. Betty XU
Language: English
If you are interested in this topic, please register your participation via the following link:
https://us06web.zoom.us/webinar/register/WN_lVVnaLzkSrysXvFgR9sSYw

Webinar 2: China AI standardization Updates

Time and Date: 10:00 am, 06 December 2022 (CET, Brussels)
Presenter: Dr. Betty XU
Language: English
If you are interested in this topic, please register your participation via the following link:
https://us06web.zoom.us/webinar/register/WN_4PFIXyUBSN2JhtLlZJWzRg

Webinar 3: China Cyber Security standardization 2022

Time and Date: 10:00 am, 17 January 2023 (CET, Brussels)
Presenter: Dr. Betty XU
Language: English
If you are interested in this topic, please register your participation via the following link:
https://us06web.zoom.us/webinar/register/WN_0k4mjGXxRxCQe6vaLmHkmg

Webinar 4: China ICV Standardization

Time and Date: 10:00 am, 14 February 2023 (CET, Brussels)
Presenter: Dr. Betty XU
Language: English
If you are interested in this topic, please register your participation via the following link:
https://us06web.zoom.us/webinar/register/WN_IF_joqwRQECki6f-tgOszg

Webinar 5: China Standardization Outline Implementation

Time and Date: 10:00 am, 07 March 2023 (CET, Brussels)
Presenter: Dr. Betty XU
Language: English
If you are interested in this topic, please register your participation via the following link:
https://us06web.zoom.us/webinar/register/WN_x3Na49EGQa-v_GpJAFjmuA

Takeaways

New Cooperation Agreement between CEN and CENELEC and the SAC

On On Thursday 22 September 2022, on the occasion of the ISO General Meeting in Abu Dhabi, CEN and CENELEC signed a *Cooperation Agreement* with SAC, the Standardization Administration of China. During the ceremony, Mrs. Elena SANTIAGO CID, CEN and CENELEC's Director General, and Mr. XIE Jun, Director General of the International Cooperation Department of the State Administration of Market Regulation of China, signed the agreement on behalf of their respective organizations.

Administrative Measures for National Standards Released

On 22 September, SAMR released the revised *Administrative Measures for National Standards* (hereinafter referred to as the "Measures"). The Measures will come into effect on 1 March 2023 and replace its previous edition released in 1990. Generally, the Measures are indicative of China's national standardization system progressing towards more openness and rationality. But a few of ambiguities still need to be clarified and concerns to be addressed in detailed policies and regulations in the future.

Translation of Action Plan of Implementing the National Standardization Development Outline

The *Action Plan of Implementing the National Standardization Development Outline* was issued by SAMR together with other 15 ministries and national departments on July 6. The Action Plan, composed of 33 articles, specifies the key tasks to be accomplished by relevant departments and local governments by the end of 2023. It is aimed at playing the fundamental and guiding role of standardization in improving the modernization of China's system and capacity for governance.

Updates on Standards-Essential Patents (SEP) in China

With the advancement in technology and the rise of the strategic role of standards in geopolitics and international trade affairs, the integration of high-end technologies with standardization has already become a key element of development. Consequently, issues derived from standards essential patents (SEP) have also received significant attention. China has been proactively exploring solutions to balance the interests among patent owners and the society - which includes patent implementer. The last updates on SEPs in China took place in September 2022, with the release of the *Guidelines of SEP Licensing for the Automotive Industry*, and the *China Association for Standardization's (CAS) Calls for Drafters for Formulating Association Standards of SEP Identification Methods*.

China Calls for Comments on Revised Cybersecurity Law

On 14th September, the Cyberspace Administration of China (CAC) released the *Notice on Soliciting Public Opinions on the Cybersecurity Law (Draft for Comment)* (hereinafter referred to as the Draft). Since the enforcement of the current *Cybersecurity Law* in 2017, greater risks from cyberattacks combined with insufficient punishment for non-compliance, have emerged and created controversy: its capacity to deter attacks and safeguard national cybersecurity has been questioned. In this context, China's government initiated the revision of the Cybersecurity Law, mostly aimed at optimizing its legal liability system.

Revised Mandatory National Standard for Information Technology Released

The newly revised mandatory national standard, *GB 18030-2022, Information technology - Chinese coded character set*, will come into effect on August 1, 2023. Standardization Administration of China (SAC), Ministry of Industry and Information Technology (MIIT), and the State Language Commission held a launch event to release and publicize the standard in Beijing on July 28. Chinese characters are an essential part of the Chinese culture, which are not only used in daily life, but also carry the history. Therefore, literal encoding plays a fundamental role in the digital era.

General Requirements for ICV Autonomous Driving System Released for Comments

On September 7, 2022, the National Technical Committee of Automobile Standardization (SAC/TC114) solicited comments on the national standard *General Technical Requirements for Intelligent Connected Vehicle Autonomous Driving System (Draft for Comments)*, with a deadline of November 6. With the development of autonomous driving technology, autonomous driving related products have attracted wide attention from the industry. However, the safety performance of autonomous driving vehicles is uneven at present, and unified technical specifications are urgently needed to guide the healthy development of the industry. The formulation and implementation of this standard will standardize the basic requirements of automotive autonomous driving systems and, together with relevant test method standards, support the development of autonomous driving technology and the supervision of the industry. As a result, this would ultimately promote the popularization and application of autonomous driving technology.

China's Plan on Standardisation of Carbon Peak and Carbon Neutrality

On 27 July 2022, the Standardization Administration of China released the *2022 National Standardization Plan on Carbon Peak and Carbon Neutrality* (hereinafter referred to as the Plan). The Plan includes 56 national voluntary standards to be developed, 16 to be revised, and 44 standards to be translated into English. This list contains information including the names of the national voluntary standards (to be developed/revised/translated), organizations in charge, organizations for standards drafting, as well as corresponding time schedules. The Plan primarily consists of standard development and revision in carbon sink areas, such as the Guidelines on Carbon Sink Accounting in Forest Management Projects, and the General Guidelines for Carbon Sink Accounting in Terrestrial Ecosystems. Other developments include further accounting and reporting of GHG emissions in industries including the wood processing industry, aluminum smelting, coal production, steel production, etc.

China Leads International Standards for Quantum Computing

On 1 September, CESI convened the second meeting of the mirror WG of the ISO/IEC JTC1/WG14 (quantum computing) in China in 2022. The meeting aimed to promote China's participation in international standardization for quantum computing and enhance China's sway in international standardization organizations for quantum computing. Around 20 experts from 10 colleges, R&D institutes, SDOs, and enterprises attended the meeting.

China Establishes Leading Work Group for Quality Construction

On 23 August 2022, the State Council announced the establishment of the Leading Work Group for the Construction of a National Quality Strong Country (hereinafter referred to as the "work group"). The work group, which will act as a deliberative and coordinating body of the State Council, effectively replaces its predecessor – the National Joint Inter-Ministerial Meeting on Quality.

Horizontal Policy

1. New Cooperation Agreement between CEN and CENELEC and the SAC

Horizontal and Policy Issues #Sector Standards

On Thursday 22 September 2022, on the occasion of the ISO General Meeting in Abu Dhabi, CEN and CENELEC signed a *Cooperation Agreement with SAC*, the Standardization Administration of China. During the ceremony, Mrs. Elena SANTIAGO CID, CEN and CENELEC's Director General, and Mr. XIE Jun, Director General of the International Cooperation Department of the State Administration of Market Regulation of China, signed the agreement on behalf of their respective organizations.

Through this new Cooperation Agreement, both organizations reaffirm their commitment to prioritising and strengthening the international standardization system under the leadership of ISO and IEC. Other areas of cooperation covered by the agreement include general information exchange, regular meetings, expert seminars and trainings, joint events to promote public awareness on standardization, support to regulatory dialogues between the EU and the Chinese government and technical exchanges. The new Agreement will run for five years, renewable for further five years

Source: CEN-CENELEC Website

2. Administrative Measures for National Standards Released

Standardisation Regulation

On 22 September, SAMR released the revised *Administrative Measures for National Standards* (hereinafter referred to as the "Measures"). The Measures will come into effect on 1 March 2023 and replace its previous edition released in 1990.

Compared with the 1990 edition, the Measures have changed as follows.

1. The scope of national standards is expanded. National standards will cover not only the basic technical requirements in industry, agriculture, hygiene, and construction, but also the general requirements in resources, energy, environment, society governance, service, and production and circulation management. The purpose of the adjustment is to make it consistent with the corresponding provisions in the Standardization Law and objectives set by the *National Standardization Development Outlines*.
2. The role and management of national reference materials are specified.
3. Provisions for IPR protection of national standards are put forward. The Measures states that SAC owns the copyright of national standards as well as their foreign language editions, and the copyright are protection by law. The Measures also point out that no patent should be included in national standards, except those inevitable for the implementation of the standards.
4. A standards verification system is introduced. It requires national standards' technical requirements, core parameter, test and inspection methods to be verified during the process of project initiation, drafting, calling for comments, and implementation and application.

5. That association standards can be converted to national standards is reiterated, and the role, scope, and coding method of guidance technical documents for national standardization are determined.
6. The statement about TC secretariat organization is removed, as there is no clear management system on these organizations, which usually results in their standards being low quality.
7. A standards assessment system is introduced. It consists of initiation assessment and technical review. The former is for the necessity and conformity of a standard project, while the latter is for the conformity of their development procedure and the scientificity and rationality of the technical content.
8. Documentation review in the technical review is cancelled, as they cannot support timely communication and discussion and thus reaching consensus.
9. Transition period between and the legal force of new and old standards are put forward, aiming to address the problem of when to implement a new standard and if the old one still effective after the new one released.
10. A standards implementation information reporting and effectiveness assessment mechanism is added. It aims to accelerate standards' revision and update, solving the problem of national standards missing, lagging, overlapping, and contradicting with other standards.

Generally, the Measures are indicative of China's national standardization system progressing towards more openness and rationality. But a few of ambiguities still need to be clarified and concerns to be addressed in detailed policies and regulations in the future. Specifically,

1. The scope of national standards is very generalized. Article 3 (7) states that "technical requirements that play a leading role in every relevant industry" can be made national standards. As a result, how to differentiate it with other kinds of standards in term of functionality is still a problem facing Chinese standards system.
2. New systems and mechanisms brought forward lack details. Article 13 stipulates that SAC "shall establish a verification system of national standards and conduct verification as required on the technical requirements and test and inspection methods of national standards." It is unclear what criteria and procedure will be taken for the verification. Article 19 proposes to evaluate the initiation of new national standard projects but doesn't specify how the evaluation would be organized or how to ensure the openness and transparency of the evaluation system. Likewise, article 21 states that SAC "organizes professional national standards evaluation organizations to evaluate the initiation of standard projects" but doesn't set requirements to guarantee these organizations' working systems are open and transparent.
3. More Chinese proposals will appear on international stages. Article 18 reads that "it is encouraged to simultaneously submit application for the initiation of international standard projects while submitting application for the initiation of national standard projects." The best way to align with international standards and thereby reduce trade barriers is to either directly work on international level or start a national project and convert it to international standards when it is mature.
4. Limited development duration cannot guarantee standards' quality. Article 25 insists on the 24 months of duration for the development of mandatory national standards. It is obviously too short to develop these de facto technical regulations, as they would need plenty of time to reach extensive coordination and consensus.

In conclusion, it is foreseeable in near future that, the contradiction and overlapping between different kinds of standards won't disappear; more Chinese standard proposals will appear on ISO/IEC platforms, probably resulting in a greater clout in international standards setting; decision-making in some systems and mechanisms still lack sufficient transparency, leading to foreign enterprises hard to effectively contribute to China's standardization work; inadequate development time could harm some standardization stakeholders' interests, as their opinions may not be fully considered; association standards are expected to play a greater role in China's society governance, greatly increasing enterprises' burden of tracking and participating in China's standardization work. The English translation of this regulation can be find here.

3. Translation of Action Plan of Implementing the National Standardization Development Outline

#Horizontal and Policy Issues

The full translation is attached in the Annex 1.

4. MIIT of China Released the Plan on Sector Standards

#Sector Standards

In July 2022, the Ministry of Industry and Information Technology (MIIT) released the *Plan on Sector Standards' Revision, Development and Translation* (hereinafter referred to as the Plan). The Plan contains a list of standards that require further development, including 188 sector standards that need to be revised, 450 that need to be formulated, and an additional 40 that need translating. The aim of the Plan is to better support the implementation of *China's Outline for the Development of National Standardization* released in 2021. This list contains information on the name of sector standards (to be developed/revised/translated), the organizations in charge, organizations for standards drafting, as well as corresponding time schedules.

Among the list of sector standards, priority has been given to the standardization of key industries with a focus on stabilizing their supply chains. The focal points of standardization include 5G - the new generation of information technology, as well as new energy automobiles and intelligent connected vehicles. Following these key industries, the standardization of emerging industries has also been added to the list, specifically including the standardization of new materials (e.g. micro-nano brown powder), integrated circuits (e.g. AI smart chips), and ultra-high definition video. Another key category on the list is the standardization of new-type infrastructure, under which are standardization programs related to the Internet of Vehicles, mobile communication, high-speed broadband, cloud computing, big data, industrial internet, data center, data security, mobile internet, internet of things, and IPv6, as well as the future network. All key standardization programs have the same general goal of upgrading from the traditional industry and expanding the scale of the emerging industry. Green and low carbon standardization programs as well as standardization programs in other industries, including the chemical industry, iron industry, machinery industry, etc. are also listed in the Plan.

Key considerations of standard revisions and developments in the Plan stem from market needs. As Chinese enterprises face the increasing risk of supply chain disruption caused by a continuously shifting international political and economic environment, policies released in China intend to support a comprehensive supply chain at home. The Plan is one of them. Specifically, to better serve the market, the Plan introduces a number of basic standardization programs such as basic terminology, key generic technology, testing methods standards, as well as generic standardization programs for construction, energy conservation, and quality&safety related programs. Each of the standards are marked with a different number of stars representing their importance. The translation of standards, though, is especially meant to serve the Belt and Road Initiative to better support the output of Chinese standards.

5. Updates on Standards-Essential Patents (SEP) in China

#Standards-Essential Patents

With the advancement in technology and the rise of the strategic role of standards in geopolitics and international trade affairs, the integration of high-end technologies with standardization has already become a key element of development. Consequently, issues derived from standards essential patents (SEP) have also received significant attention. China has been proactively exploring solutions to balance the interests among patent owners and the society - which includes patent implementer. The last updates on SEPs in China took place in September 2022, with the release of the *Guidelines of SEP Licensing for the Automotive Industry*, and the *China Association for Standardization's (CAS) Calls for Drafters for Formulating Association Standards of SEP Identification Methods*.

Guidelines of SEP Licensing for the Automotive Industry

On 13th September 2022, the China Academy of Information and Communications Technology (CAICT) and the China Automotive Technology and Research Center jointly issued the *Guidelines of Standard Essential Patent Licensing for the Automotive Industry* (hereinafter referred to as the Guidelines). The Guidelines, which were drafted by the Information IP Committee of China-SAE and the IMT-202(5G) Promotion Group and Working Group, consist of four parts: i) definitions; ii) core principles for Automotive SEP licenses, iii) principles for calculating reasonable royalties; iv) rights of interpretation and declarations.

The Guidelines aim to provide a solution to reduce the differences and facilitate common understanding in intellectual property protection and licensing mode, among the patentee, patent implementer and the society. Specifically, the core principles incorporate the FRAND principle dedicated to creating a fair, reasonable and non-discriminatory environment for essential patent licensing. Apart from general principles that apply to any industries, the Guidelines also outline specific principles for the automotive industry, the most important of which being the "entitlement to obtain licenses at any level of the industry chain". This principle means that, in practice, automobile components and parts producers might be able to obtain licenses – in contrast to the common commercial practice where automobile manufacturers assume the responsibility of solving intellectual property-related issues of the supplied parts and components. As a matter of fact, the common commercial practice adds significant burdens to automobile manufacturers as obtaining SEP licenses for parts and components is time and labor consuming, thus reflecting in higher costs not only for production but also in case of potential negligence or infringement. In this context, therefore, the principle outlined by the Guidelines offers a more flexible approach by allowing eligible components and parts producers to share the burden and be able to obtain licensing. Meanwhile, the Guidelines also support negotiations "when there are discrepancies or differences between SEP licensing models and current licensing model or commercial practices".

In the third part, the Guidelines provide details on the calculation of royalties, including the calculation basis, factors, principle of limitation to aggregate royalty rates, and reasonable selection of royalty calculation method. But instead of elaborating on specific calculation methods, the document offers perspectives and factors that are suggested to take into account in the calculation process, including the actual value contributed by the SEP technology to the automotive product, the cumulative royalty rate in the industry, the number of SEPs held by the patentee, the geographical distribution of the patents, etc. Specifically, "the determination of the value contributed by SEPs to automotive products needs to be taken into account that the value of automotive products collectively comprises various aspects such as technology, market, production, brand and after-sales, especially the contribution of brand". In general, though the Guidelines only provide a possible framework in terms of SEP licensing in automotive industry, the principles and royalty may represent an important reference for standards developing organisations and patentee in automotive industry. Such common understanding is helpful for further negotiating licensing details. Most importantly, to some extent, it reduces the uncertainties especially for the calculation of royalties.

CAS Calls for Drafters for Formulating Association Standards of SEP Identification Methods

The past few years have seen China's legislation and policies shifting their focus, from the mere pursuit of technology advancement to the establishment of an organic and innovative framework enabling interactions among technology, patents and standards. In 2021, the *Law on Scientific and Technological Progress (2021 revised version)* stipulates that China shall promote the coordinated development of sci-tech product R&D and standard formulation. In the same year, the CPC Central Committee and the State Council issued the *Outline of National Standardization Development*, which also calls for improving the mechanisms of converting sci-tech achievements into standards, improving the SEP system, and encouraging enterprises to establish an innovative system of technology, patents and standards.

In this process, SEPs become the focal point. Currently, the only regulation that specifies the SEP disclosure and licensing is the Interim Provisions on the Administration of National Standards Involving Patents (hereinafter referred to as the Provisions) issued by Standardization Administration of China and the State Intellectual Property Office. The Provisions specify the role of standard development organizations (SDOs) and patentee in the process of SEP disclosure and licensing. In addition, a few other national voluntary and association standards offer guidance towards the patent disclosure and application, such as GB/T 20003.1-2014 Special procedures for the development of standards—Part 1: Standard related to patents, and CAS's series standards of Disposal guides for patents related to social organization standards.

However, between SEP disclosure and licensing, there are few specific guidelines for SDOs with regard to SEP identification. The consequences of improper identification of SEPs may be severe as it might cause large unnecessary costs of licensing fees, and potentially disrupt the market. To solve this issue, CAS – as one of the largest standard-related associations in China – intends to develop an association standard of SEP Identification Methods.

According to CAS, the standard can improve the efficiency and quality of SEP certification, and reduce the cost of SEP licensing and implementation. Secondly, the standard can balance the rights and interests of patentee and standard implementer, thus reduce judicial disputes. Thirdly, it can improve the willingness of relevant domestic enterprises to license technology patents and promote the development of the domestic market for the transfer and transformation of sci-tech achievements. To this end, CAS invites eligible organisations to participate in the formulation of this standard so as to explore solutions acceptable to SDOs.

6. China's Provincial Plan for Implementing the Outline

#Standardisation

The Action Plan of Implementing the National Standardization Development Outline (hereinafter referred to as the Action Plan) was issued by SAMR together with other 15 ministries and national departments on July 6. The Action Plan, composed of 33 articles, specifies the key tasks to be accomplished by relevant departments and local governments by the end of 2023. It is aimed at playing the fundamental and guiding role of standardization in improving the modernization of China's system and capacity for governance. Apart from the release of the Action plan, government at provincial level released their own plan echoing with the policy from central government. The following are the plans issued by key municipal and provincial governments.

Beijing

Beijing municipality released a notice on May 12, 2022 to collect opinions for the capital standardization strategic outline 2035, which provides standardization support for basically realizing the goal of socialist modernization.

Targets in figures

- Develop more than 30 local standards on coordinated development of Beijing-Tianjin-Hebei region, participate in developing over 100 international standards, develop over 800 local standards, and reduce the average period of standards development to less than 18 months.
- Raise the rate of standard research achievements to over 60 percent, which are obtained from projects of common and key technologies and applied science and technology plans, carry out 40 standardization pilot and demonstration projects, and establish more than 12 national technical standard innovation bases.

Major tasks

- Strengthen the standards support in the construction of "four centers", i.e. national political center, national cultural center, international communication center, and international technical innovation center.
- Deepen the coordinated development of Beijing-Tianjin-Hebei region with standardization, such as promoting the standards interconnectivity of the region and improving the standards level for the construction of the sub-center of Beijing.
- Raise the standardization level of industries, including high-tech, digital economy, modern services and modern agriculture.
- Highlight the standardization efficiency of smart city management, such as planning and construction management, smart city management, modern urban transportation, urban operation and modern social governance.
- Improve the standardization of green development, including carbon peak and neutrality, ecological system building and protection, and economical and intensive utilization of resources.
- Reinforce the standardization of public services in the areas of education, "healthy Beijing" and social security.
- Deepen the standardization development of "peaceful Beijing" in the areas of risk prevention, disaster prevention and reduction, and emergency management.
- Raise the openness of standardization, such as strengthening the standardization basis of "two zones", cultivating influential standards bodies, and deepening the standardization communication and cooperation.
- Optimize the standards supply structure, including optimizing the work mechanism for government-led standards, guiding the development of market-oriented standards, and strengthening the application, evaluation and supervision of standards.
- Consolidate the foundation of standardization, including improving the technical support of standardization, cultivating standardization talents, and creating good social environment for standardization.

Shanghai

Shanghai municipality issued the action plan for standardization development on February 17, 2022, which is designed to establish a standards system that serves its high-quality development.

Targets in figures

- Develop and revise 60 international standards and 800 national standards with leading efforts, develop 50 Shanghai standards, undertake 30 national standardization pilot and demonstration projects, and win a greater number of awards in the China Standards Innovation and Contribution Award.
- Develop 30 standards for regional coordination of integrated high-quality development of the Yangtze River Delta, increase 200 registered experts in international standards organizations, and gain more international influence of standardization.
- Hold 5 more secretariats of international or national TCs/SCs, establish 30 new-type standardization bodies and a batch of standardization service bodies, and cultivate 1,000 standardization directors for enterprises.

Major tasks

- Promote the integration of standardization and technical innovation, including increasing standards research in key technical fields and facilitating the application of technical achievements with standardization.
- Accelerate the standardization for urban digital transformation, including reinforcing the development of fundamental standards for urban digital transformation and advancing the standardization development in the digital transformation of economy, life and governance.
- Facilitate the high-quality development of industries via standardization, such as three leading industries, six high-end industries (including electronic information, health, automobile, high-end equipment, advanced materials and fashionable consumer products), services and modern green agriculture.
- Improve the standards system of urban governance and public services, including urban governance, administration and public services.
- Strengthen the standardization of green and ecological development, including improving the standards system on ecological environment, energy conservation and low carbon.
- Push forward the coordinated governance and openness of standardization, including deepening the standardization of coordinated regional development and accelerating the institutional openness of standards.
- Deepen the reform and innovation of standardization system in the areas of "Shanghai standards", standards supply structure as well as standards implementation and supervision.
- Consolidate the foundation of standardization development, including the supporting role of standardization, standardization talent resources and good standardization environment.

Hainan

Hainan province released the opinions on implementing the Outline on March 8, 2022, to strengthen the standardization development, accelerate the construction of Hainan Free Trade Port and provide technical support for the high-quality economic and social development of Hainan.

Targets in figures

- Enable all local standards and normative technical documents to fully conform to the review for adoption and conversion of international standards and advanced foreign standards, and encourage key research institutions and enterprises to actively participate in domestic and foreign standardization activities.
- Deepen the in-depth standardization development in all respects, establish a standards system for high-quality development, and participate in the development of more than 400 international and national standards.
- Basically establish a team of standardization technical talents, with no less than 100 senior experts in the think tank of the province.

Major tasks

- Deepen the standardization work reform, and establish a standard supply structure applicable to the construction of Hainan Free Trade Port.
- Comply with international economic and trade rules, and constantly improve the openness of standardization, including raising the awareness of standards internationalization, adopting international standards and advanced foreign standards, strengthening standardization communication and cooperation, and improving the supporting role of standards in trade facilitation.
- Vigorously promote the standardization actions on high-quality development of Hainan Free Trade Port in the key fields for economic and social development, such as institutional innovation, new development pattern, modern industrial system, innovation-driven development, international center for tourism consumption, first-class business environment, rural revitalization, regional coordination, new urbanization development, infrastructure quality improvement, national pilot zone for ecological conservation, public services, cultural soft power, coordinated development and safety.

- Improve the standardization work system and mechanism, such as the promotion mechanism of government at various levels, regulation and service mechanism, technical support mechanism and market-driven mechanism, and increase the effectiveness of standardization in serving the construction of Hainan Free Trade Port.

Jiangsu

Jiangsu province issued the opinions on implementing the Outline on May 18, 2022, which will improve the standards system for high-quality development of the province.

Targets in figures

- Release more than 1,000 local standards, disclose more than 1,000 association standards through self-declaration, increase over 50,000 enterprise standards, and draft more than 60 international standards and over 1,000 national standards with leading efforts.
- Establish more than 30 technical standard innovation bases, establish over 30 standardization technical committees at the provincial level, and cultivate more than 1,000 standardization directors for enterprises.

Major tasks

- Promote the integrated development of standardization and technical innovation by improving the mechanism of transforming technical innovation achievements into standards, carrying out the standard layout in digital economy, and facilitating research and technical bodies to conduct standardization work.
- Improve the standardization level of industrial chain and supply chain by strengthening standards development in full industrial chain of modern agriculture, improving the standardization level of key industrial chain in advanced manufacturing, increasing the quality and efficiency of standards in modern services, and improving the standardization level of supply chain.
- Improve the standardization of green development in the areas of carbon peak and neutrality, ecological environment, protection and utilization of natural resources as well as green production and consumption.
- Accelerate the standardization process of urban and rural construction and social progress, such as rural revitalization, new urbanization, basic public services, public safety, government affair services, social governance and quality life.
- Raise the openness of standardization by innovating work mechanism, optimizing standards supply, strengthening standards implementation, reinforcing standards supervision, facilitating integrated development and promoting balanced development.
- Drive standardization reform and innovation by promoting regional standardization, serving national standardization development, participating in international standardization cooperation, and advancing the work on technical measures to trade.
- Consolidate the foundation of standardization development by improving standardization service capability, giving play to the role of standardization technical bodies, strengthening standardization talents building, and creating good social environment for standardization.

Source: China Standardization Magazine, 5th issue, 2022.

Digital Transition

7. China Calls for Comments on Revised Cybersecurity Law

#Cyber Security

On 14th September, the Cyberspace Administration of China (CAC) released the *Notice on Soliciting Public Opinions on the Cybersecurity Law (Draft for Comment)* (hereinafter referred to as the Draft). Since the enforcement of the current Cybersecurity Law in 2017, greater risks from cyberattacks combined with insufficient punishment for non-compliance, have emerged and created controversy: its capacity to deter attacks and safeguard national cybersecurity has been questioned. In this context, China's government initiated the revision of the Cybersecurity Law, mostly aimed at optimizing its legal liability system.

The following is a summary of the main changes introduced by the Draft and impacting overseas stakeholders.

1. Increasing, in the general provisions of the legal liability system, the severity of punishment for non-compliance. Based on the fact that the old penalty rules are not intimidating enough for large internet companies, the new Draft introduces adjustments enabling law enforcement bodies to impose more severe punishment. The increase of severity is reflecting in:
   1) addition of new types of administrative punishment - the amount of the fine might be linked to the turnover of the company
   2) cancellation of the upper limit of the fine – which can now exceed 1 million RMB
   3) prohibition for relevant personnel from working in relevant areas or taking relevant positions if necessary.

Meanwhile, the adjustment rouses controversy as well in terms of its feasibility:

   4) Large discretion. The decision on the type and degree of the fine totally depends on the seriousness of the circumstances, which leaves too much discretion for the law enforcers to decide on the final punishment.
   5) Lack of the principle of "no penalty for compliance". The draft does not apply such principle in its newly-added and revised articles. Without it, those actors that comply with the law may be punished for unexpected cybersecurity incidents.
   6) Unclear definition of certain types of personnel that are hold accountable, which could potentially result in improper punishment. The most obvious example is the "directly responsible personnel" and "personnel in key positions of network operation". For instance, one entity may appoint one figure as directly responsible for network security, yet without granting real authority: this is in fact a loophole that could be potentially exploited.

2. Optimising, in the provisions relating to critical information infrastructure (CII) protection and cyberspace information security protection, the penalties for non-compliance. These adjustments are largely aimed at offering better protection for CII and cyberspace information.
3. Adding reference to other existing laws, mainly the *Personal Information Protection Law*, for addressing non-compliance cases of personal information protection, with the purpose of avoiding overlaps and maintain the consistency of the legal system.

In general, the major adjustments in the Draft are about the legal consequences and severity of the punishment. Such adjustments require foreign stakeholders to increase their attention towards cybersecurity issues of their

products and services. No adjustments took place in the articles related to specific cybersecurity requirements. Yet, the most problematic issue for foreign stakeholders is the absence of the principle of "No Penalty for Compliance": without this principle, compliant companies might be fined for unexpected cybersecurity incidents. It is not clear if the final draft of the revised *Cybersecurity Law* will incorporate this principle. Finally, foreign

stakeholders should also pay attention to the clarification in the final draft about the turnover - whether it refers to turnover generated in China, or global turnover.

Essentially, compared with the law currently in force, the Draft allows much more severe punishment without upper limit, which may constitute a better deterrent. However, large discretion together with other defective arrangements in the draft might also leave space for abuse of power by law enforcers.

8. Revised Mandatory National Standard for Information Technology Released

Information Technology

The newly revised mandatory national standard, *GB 18030-2022, Information technology - Chinese coded character set*, will come into effect on August 1, 2023. Standardization Administration of China (SAC), Ministry of Industry and Information Technology (MIIT), and the State Language Commission held a launch event to release and publicize the standard in Beijing on July 28. Chinese characters are an essential part of the Chinese culture, which are not only used in daily life, but also carry the history. Therefore, literal encoding plays a fundamental role in the digital era.

Tian Shihong, Vice-Minister of State Administration for Market Regulation (SAMR) and Administrator of SAC, Zhang Yunming, Vice-Minister of MIIT, and Tian Xuejun, Vice-Minister of Education and Head of State Language Commission, addressed the event. Also, nearly 50 participants from the standard drafting units and relevant departments attended the event.

Literal coding is the important basis of informatization, and standardization enables literal coding to play a big role. And the standardization of Chinese coded characters is needed in both the process of inheriting and developing the traditional culture of the Chinese nation and realizing the handling of governmental affairs via internet, Tian said. The standard is the most important one in the area of the Chinese language information technology, which provides the uniform coding of Chinese characters and the languages of ethnic minority groups in China to realize a wide range of application. First published in 2000 and revised in 2005, the standard has satisfied the demands of processing and exchanges of information in Chinese languages.

The standard includes a total of 87,887 Chinese characters with more than 17,000 rare characters added. It can meet various needs, providing strong guarantee for inheriting the Chinese culture, enhancing information processing capability and satisfying the demands of using rare characters.

Source: China Standardization Magazine, 5th issue, 2022.

9. General Requirements for ICV Autonomous Driving System Released for Comments

Autonomous Driving

On September 7, 2022, the National Technical Committee of Automobile Standardization (SAC/TC114) solicited comments on the national standard *General Technical Requirements for Intelligent Connected Vehicle Autonomous Driving System (Draft for Comments)*, with a deadline of November 6.

With the development of autonomous driving technology, autonomous driving related products have attracted wide attention from the industry. However, the safety performance of autonomous driving vehicles is uneven at present, and unified technical specifications are urgently needed to guide the healthy development of the industry. The formulation and implementation of this standard will

standardize the basic requirements of automotive autonomous driving systems and, together with relevant test method standards, support the development of autonomous driving technology and the supervision of the industry. As a result, this would ultimately promote the popularization and application of autonomous driving technology.

In December 2017, MIIT and SAC jointly issued the *Guidelines for the Construction of National Industrial Standards System for Internet of Vehicles (Intelligent Connected Vehicles)*, putting forward a complete plan for the construction of China's intelligent connected vehicle standards system. This standard is one of 11 general standards for the standards systems and can provide support for the subsequent introduction of laws, regulations and mandatory standards for autonomous driving.

This standard specifies the overall requirements, dynamic driving task execution requirements, dynamic driving task backup requirements, man-machine interaction requirements, and the instructions for autonomous driving system. It is applicable to Class M and Class N vehicles equipped with autonomous driving systems. This standard was developed based on UN Regulation R157 "*Automatic Lane Keeping System (ALKS)*", but it has also been modified in light of the current industrial situation in China.

UN regulation R157 "*automatic lane keeping system (ALKS)*" has the following restrictions: (1) physically separated roads that prohibit pedestrians and bicycles, which in short mainly refers to highways, urban expressways, etc.; (2) ADS speed is limited and should not be higher than 60km/h; (3) need to take over; (4) Passenger cars.

In contrast to R157, this document is applicable to all ADS and regulates the general requirements of ADS, which is more widely applicable than ALKS. For takeover, intervention, activation, exit and other contents, the relevant performance requirements refer to the relevant requirements of ALKS on the premise of considering the actual situation of the Chinese industry.

Green Transition

10. China's Plan on Standardisation of Carbon Peak and Carbon Neutrality

#Carbon Emission

On 27 July 2022, the Standardization Administration of China released the *2022 National Standardization Plan on Carbon Peak and Carbon Neutrality* (hereinafter referred to as the Plan). The Plan includes 56 national voluntary standards to be developed, 16 to be revised, and 44 standards to be translated into English. This list contains information including the names of the national voluntary standards (to be developed/revised/translated), organizations in charge, organizations for standards drafting, as well as corresponding time schedules.

The Plan primarily consists of standard development and revision in carbon sink areas, such as the Guidelines on Carbon Sink Accounting in Forest Management Projects, and the General Guidelines for Carbon Sink Accounting in Terrestrial Ecosystems. Other developments include further accounting and reporting of GHG emissions in industries including the wood processing industry, aluminum smelting, coal production, steel production, etc.

To further support China's goal of achieving carbon peak and carbon neutrality, the standardization in accounting and reporting of GHG emissions provides useful tools for enterprises to either evaluate or reduce their emissions. For governmental authorities, the standardization of accounting and reporting allows them to get a clearer picture of the status quo in terms of carbon emission and space for reduction. In short, the standardization list is a big step for China in achieving its goal of carbon peak and carbon neutrality by 2030 and 2060.

The organizations working on standard developments include power and energy state-owned enterprises, as well as several universities and research centers. The following is a part of the list of standards programs and their drafting organizations for reference:

Name of Standards	Drafting Organizations
Technical Specifications of Energy Consumption Measurement for Flue gas CO2 Capture System in thermal power plants	National Energy Group New Energy Technology Research Institute Co., Ltd.
	Huaneng Clean Energy Research Institute
	Zhejiang University
	Huadian Electric Power Research Institue
	State Power Corporation
	Shaanxi Guohua Jinjie Energy Corp.
Technical specification at the project level for assessment of greenhouse gas emission reductions—power energy alternative projects	China Electric Power Research Institute
	State Grid Corporation of China
	INNER MONGOLIA POWER (GROUP) Co., Ltd.
	China Huaneng Group
	State Power Investment Ronghe Investment Co., Ltd.
	China Datang Corporation
	National Energy Investment Group Co., Ltd.
	China Huadian Group Corporation
	CSG Electric Power Research Institute Co., Ltd.

Supercritical carbon dioxide boiler	China Special Equipment Inspection & Research Institute
	Harbin Boiler Company Limited
	Xi'an Thermal Power Research Institute Co., Ltd.
	Harbin Institute of Technology
	North China Electric Power University
	Hadian POWER Equipment National Engineering Research Center Company Ltd.
	Shanghai Power Equipment Research Institute Co., Ltd.
Technical specification for quantification and verification of greenhouse gas emission reduction of carbon capture, utilization and storage (CCUS) project	Guangdong Strong Metal Technology Co., Ltd.
	Beijing Research Institute of Mechanical and Electric Technology
	Jiangsu Fengdong Thermal Technology Co., Ltd.
	Chinese Heat Treatment Society
Technical specification for project-based greenhouse gas emission reduction assessment for agricultural and forestry biomass power generation and cogeneration projects	China Association for the Promotion of Industrial Development
	China National Institute of Standardization
	Shenzhen Energy and Environmental Protection Co., Ltd.
	Anhui Guozhen Eco-tech Co., Ltd.
	Li Ang Ecological Energy Co., Ltd.
	Shandong Fengyuan Biomass Power Co., Ltd.
	Zhejiang Chunhui Environmental Protection Energy Co., Ltd.
Site evaluation index system of carbon dioxide geological sequestration	China Institute for Geo-Environmental Monitoring
	Zhejiang Jufengguang Technology Co., Ltd.
	Beijing Normal University

Electrical and Electronics standards

11. China's Standardization TC on Electrostatics Established

#Electrostatics

The national standardization technical committee on electrostatics, SAC/TC 597, was set up by Standardization Administration of China (SAC) recently. The Ministry of Industry and Information Technology (MIIT) is in charge of its routine management and operational guidance, and China Electronics Standardization Institute (CESI) undertakes the secretariat.

SAC/TC 597 is responsible for developing and revising national standards for fundamental electrostatic technologies, including electrostatic principles, electrostatic simulation model, testing method, protection and control, etc. The work scope of the technical committee corresponds with IEC/TC 101, Electrostatics.

The next plan of the technical committee is to sort China's standards for electrostatics, and improve the standards system in this area. It will focus on electrostatic industry analysis, fundamental research, national standards development, international standardization, standards implementation and promotion, etc.

Source: China Standardization Magazine, 5th issue, 2022.

12. China Makes Adjustments in Electrical and Electronics Product Certification

#Electrical Product

The Reform mainly consists of five major actions: (i) Optimising the market access management system for electronic and electrical products; (ii) Streamlining the evaluation and certification system for green products; (iii) Supporting the high-quality development of basic electronics industries; (iv) Optimising the circulation management system; (v) Strengthening regulation throughout the whole supply chain.

The following is a summary of the major adjustments outlined in the Reform that will influence manufactures and importers, especially in terms of compulsory certification and supervision.

1. Adjusting CCC catalogue. A total of nine electrical and electronic products have been removed from the CCC C For more details, please refer to the *Notice on Canceling the Compulsory Certification for Certain Electrical and Electronic Products*. However, there will be two new products that will be added to the CCC Catalogue: (i) lithium ion cells and batteries, and mobile power supplies used in electronic and electrical products; and (ii) power adapters/chargers for telecommunication terminal products. Within these two categories, currently there are a few national standards for specific types of products, e.g., *GB 31241-2014 Lithium ion cells and batteries used in portable electronic equipment*; *GB 40165-2021 Lithium ion cells and batteries used in stationary electronic equipment*; *GB/T 32638-2016 Technical requirements and test methods for power adapters and charging/data port of mobile telecommunication terminal equipment*. However, there still lack specific standards illustrating clearly the CCC certification process of those two products.

2. Reforming the CTA certification and trial approval. The China Network Access License (NAL) Certification for Telecommunications Equipment, commonly known as CTA certification, is a mandatory network access

requirement that must be followed by those telecommunication products listed in the telecommunication product catalogue, which released and updated by MIIT. For products that are not listed in the catalogue, or lacking support from national or sector standards, suppliers may apply for trial approval, which is equally recognised. The Reform makes adjustments in terms of timeline for approval – shortened to 15 workdays – and validity of the trial approval – extended from 1 to 2 years. In addition, according to the Reform, the network license number is no longer required to be marked on the product's package, built-in information and advertisement: this will allow enterprises to arrange certification, prepare the printing of packaging and instructions at the same time, thus avoiding unnecessary delays for in-order arrangements. Furthermore, the test for CTA certification and testing for mandatory electromagnetic compatibility (EMC) certification for telecommunications equipment, will be mutually recognised by the licensing bodies: enterprises will only need to carry out one single test while applying for both CTA and EMC certification. The above measures will significantly improve the efficiency and shortens the time for preparation.

3. Optimising the SRRC Certification. Based on MIIT's regulations and requirements, all radio components sold and used in China must obtain the radio type approval certification. The Reform will shorten the approval time for SRRC certification, and extend the validity of the license that are less than two years to more than two years. More importantly, enterprises will be allowed to generate the SRRC approval code by themselves, as long as it is done in accordance with the coding rules formulated by MIIT. Though the products are not allowed for sales or uses before the code is being official approved, this will allow relevant enterprises to begin immediately relevant packaging activities with codes attached while waiting for the approval.

4. Promoting self-inspection and self-certification. According to the Reform, "by the end of 2022, a number of enterprises producing telecommunication equipment, radio transmission equipment, information technology equipment and household appliances with solid foundations, quality management and credit, will be identified to carry out self-inspection and self-certification trials".These will be allowed to replace third-party certification report for CTA, CCC and SRRC with their own reports. The trial result will decide further actions of authorities. Though the Reform limits the commitment to trials only, it is still regarded as a significant step forward for exploring a new compulsory certification mechanism: if self-inspection and certification become possible, the costs for enterprises will be significantly reduced as they will not need to engage third-party bodies to carry out product and factory inspection. Yet, to ensure the product quality, the regulation needs to be adapted to the new model as well, which in practice will translate into more stringent monitoring and supervision from authorities for self-inspected products.

5. Improving the regulatory supervision mechanism. According to the Reform, the credit-based supervision system will be further improved. Specifically, the risk levels for electronic and electrical enterprises will be divided into different classes, and the proportion and frequency for spot checks will be linked with enterprises' credits and risk levels.

In short, through a series of measures and actions, China intends to alleviate the burdens of the enterprises. Such intention, by contrast, may result into heavier burdens for regulatory authorities to ensure compliance of the product. It is reflected in the Reform that the regulatory mechanism is adjusted accordingly. In addition, it is expected that that more supporting measures and standards will be formulated and released. Especially when the self-inspection and declaration is promoted, all relevant regulations must be poised to provide support.

13. Two Mandatory EMC Standards Released

#EMC #Mandatory Standards

On 12 October, SAC issued two mandatory EMC standards: i) *GB 14023-2022 Vehicles, boats and internal combustion engines — Radio disturbance characteristics —Limits and methods of measurement for the protection of off-board receivers*; ii) *GB 17799.4-2022 Electromagnetic compatibility (EMC) — Generic standards — Part 4: Emission for industrial environments*.

GB 14023-2022

China has taken new energy vehicles as a strategic emerging industry in 2009, following by its rapid development in the following years. As a result, the former edition of the standard, i.e., GB 14023-2011, cannot catch up with the needs of the market. GB 14023-2022 aims to synchronize China's radio disturbance standard for vehicles, boats, and internal combustion engines with its international counterpart, and therefore satisfy the demands of international trade, technical and economic exchange, and quality certification.

GB 14023-2022 is applicable to vehicles propelled by internal combustion engines, electrical means, or both; ships propelled by internal combustion engines, electrical means, or both; and devices equipped with internal combustion engines or power batteries. Compared with the 2011 edition, GB 14023-2022 puts forwards new requirements for the test configuration of EMI emission test of new energy vehicle under charging mode, defines the impedance stabilization network (ISN) for the charging mode test, and sets requirements for measuring apparatus's uncertainty and EMI Test Site Validation.

In the development of the standard, international standard IEC CISPR 12:2009 was referenced, but modifications were made according to Chinese market's actual situation. Therefore, overseas enterprises should take note of these modifications and identify the possible impacts that they will bring. GB 14023-2022 will come into effect on 1 November 2023.

GB 17799.4-2022

In the environment that industrial electromagnetic pollution is inevitable, in particular some industrial locations where electromagnetic radiation is severer that other sites, how to reduce its damages while maintaining the industrial equipment operating properly is a topic that needs continuously in-depth study.

GB 17799.4-2022 aims to provide an adequate level of protect to radio equipment that are operating at the frequency band of 9Hz~400GHz in industrial environment, like high-power industrial, scientific, and medical equipment, thus increasing the efficiency of industrial production and reducing the operation and maintenance costs. GB 17799.4-2022 doesn't consider all interference phenomenon but those related to the equipment covered by the standard and stipulates test requirements for all related interfaces. The standard is identical to IEC 61000-6-4:2018 and will take effect on 1 November 2023.

International Standards and cooperation

14. Beijing: Forum on Enhancing International IT Standardisation Capabilities

#Standardisation

The Forum on Enhancing International Standardization Capabilities in the Information Technology (IT) Field was held in hybrid form on July 16 in Beijing. Hosted by SAC/TC 28, Information technology, the forum was attended by Guo Chenguang, Deputy Director-General of Standards Innovative Management Department of SAMR, Yang Jianjun, Vice Chair of SAC/TC 28 and Secretary of the Party Committee of China Electronics Standardization Institute (CESI) and Sun Wenlong, Secretary of SAC/TC 28 and Vice President of CESI.

To press ahead with the *Action Plan of Implementing the National Standardization Development Outline*, SAC has carried out lots of work in the IT field in terms of international standardization top-level design, international standardization governance, technical support for trade facilitation, and training of international standardization talents, according to Guo Chenguang.

To meet the requirements of the Action Plan, more efforts should be put into the development and application of technical standards for key products, processes and areas, which will play a crucial role in leading the high-quality development, Guo stressed. SAC/TC 28 will implement relevant national policies in three facets: First, promote standards innovation in fields of emerging technologies, and create a platform for providing guidance, support and services. Second, conduct research on the strategies, policies, principles of international standardization and advanced technology to make breakthrough in emerging fields. Third, deepen multilateral cooperation to meet industrial demands, said Yang Jianjun.

The meeting attracted some 100 par ticipants from standardization organizations, institutes, universities, enterprises, industry organizations. Experts shared their opinions on the progress of international standardization in smart cities, brain-computer interface, unmanned aerial vehicle and data sharing.

Source: China Standardization Magazine, 5th issue, 2022

15. Two Chinese Experts Win the Thomas Edison Award

#International Standards

The International Electrotechnical Commission (IEC) recently presented its Thomas Edison Award to six experts who have made outstanding contributions to IEC, including Huang Wenxiu and Xu Jianping from China.

Huang Wenxiu is the Chair of IEC/SC 59L on small household appliances, and Xu Jianping is an international peer reviewer of the IECEx System. Prior to this, they have both won the IEC 1906 Award twice, making great contribution to the international standards systems and the international mutual recognition of conformity assessment systems in IEC. Created in 2010, the Thomas Edison Award, the highest award on technical management in IEC, recognizes exceptional achievement, dedicated service and significant contributions to IEC by officers in IEC technical committees and subcommittees as well as officers of the conformity assessment systems.

Source: China Standardization Magazine, 5th issue, 2022.

16. Bilateral Meeting on Standards and Quality Hold by China and Costa Rica

#Standardisation Cooperation

State Administration for Market Regulation (SAMR) of China and the Ministry of Economy, Industry and Commerce (MEIC) of Costa Rica held a bilateral meeting on product quality and safety and standardization via video on July 15, 2022.

During the meeting, the two sides shared the status quo of laws and regulations in the area of product quality and safety supervision in China and Costa Rica respectively, held in-depth discussions on the key topics such as the list of quality and safety supervision for national key industrial products, product quality supervision and spot check mechanism, production license system of industrial products, risk assessment and international standardization cooperation in related fields. They agreed to continue to enhance the cooperation on capability improvement in the areas such as standardization and product quality and safety supervision.

The meeting is aimed at putting in place the MoU signed by SAMR and MEIC in April. Within this framework, the two sides will work together to explore cooperation on information exchange, experience sharing and capability improvement, improve the level of product quality and safety in bilateral trade, and protect the safety of consumers, so as to better facilitate the bilateral economic and trade cooperation.

The meeting was attended by the representatives from Quality Supervision Department and Standards Innovative Management Department of SAMR, and China National Institute of Standardization (CNIS).

Source: China Standardization Magazine, 5th issue, 2022.

17. International Standardisation Forum 2022 Held in China

#International Standards

International Standardisation Forum 2022 was convened on August 20 in Nanjing, Jiangsu province, which is another vital international conference held in China since the 83rd IEC General Meeting in 2019. During the forum, the IEC International Standards Promotion Center (Nanjing) was established, which is the first branch of IEC in China.

Directed by SAMR (SAC) and Chinese Academy of Engineering, the forum was jointly hosted by the Nanjing Municipal People's Government, Chinese Society for Electrical Engineering, State Grid Corporation of China and China Huaneng Group. Tian Shihong, Vice-Minister of SAMR and Administrator of SAC, Shu Yinbiao, President of IEC, Zhou Guoping, Chairman of the Board of China Anneng Construction Group, Xu Kunlin, Governor of Jiangsu province, and other officers attended and addressed the forum.

Philippe Metzger, Secretary-General of IEC, Sergio Mujica, Secretary-General of ISO, Zhao Houlin, Secretary-General of ITU and Lu Yong, Vice-President of All-China Federation of Industry and Commerce made speeches via video. China has always been a significant participant and contributor of international standards, said Shu Yinbiao. With the goals of carbon peak and carbon neutralization, China continuously deepens cooperation with international standardisation organizations like IEC, promotes the development of relevant standards system, and sets up conformity assessment service platform in accordance with international regulations. China will further boost the low-carbon development by utilizing standardisation, and build a community with a shared future for mankind and a clean and beautiful world.

Tian Shihong highlighted that the establishment of IEC International Standards Promotion Center in Nanjing creates a new development mode with standardisation at international, national, provincial and municipal levels, which will enable stakeholders at all levels to collaborate on standards internationalization and share achievements.

International and domestic experts and representatives of enterprises shared their opinions on topics like "promoting industrial low-carbon development, realizing carbon peak & neutrality goals", "implementing national standardisation strategies, serving green development" and "international standardisation helps achieve carbon peak & neutrality goals" during the two-day forum.

Source: China Standardization Magazine, 5th issue, 2022.

18. China Leads International Standards for Quantum Computing

#Quantum

On 1 September, CESI convened the second meeting of the mirror WG of the ISO/IEC JTC1/WG14 (quantum computing) in China in 2022. The meeting aimed to promote China's participation in international standardization for quantum computing and enhance China's sway in international standardization organizations for quantum computing. Around 20 experts from 10 colleges, R&D institutes, SDOs, and enterprises attended the meeting.

Currently, the mirror WG is promoting 4 ISO/IEC standard projects for quantum computing, as below.

No	Project Code	Project Name
1	ISO/IEC CD 4879	Information technology - quantum computing - terminology and vocabulary
2	ISO/IEC TR 18157	Information technology - introduction to quantum computing
3	ISO/IEC PWI 18670	Information technology - general requirements for quantum resource simulation platform
4	ISO/IEC PWI 18660	Information technology - quantum machine learning datasets

Next step, the mirror WG will continue supporting the development of the quantum computing roadmap in ISO/IEC JTC1 and recruiting Chinese members for IEC/SMB/SEG 14.

ISO/IEC JTC1/WG14 was established in June 2020 under China's call, with a expert from CESI as the convenor. The mirror WG of ISO/IEC JTC1/WG14 in China was established later in August 2020, aiming to identify standardization demands in quantum computing, analyse standardization gap, convey project proposals to ISO/IEC JTC1/WG14, update the report on ICT standardization demands for quantum computing, establish connections with relevant domestic and overseas SDOs, and promote the development of standards for quantum computing in ISO/IEC. So far, no foreign enterprises participation in this mirror WG has been observed.

Others

19. China Establishes Leading Work Group for Quality Construction

#Quality

On 23 August 2022, the State Council announced the establishment of the Leading Work Group for the Construction of a National Quality Strong Country (hereinafter referred to as the "work group"). The work group, which will act as a deliberative and coordinating body of the State Council, effectively replaces its predecessor – the National Joint Inter-Ministerial Meeting on Quality.

The work group will take measures to optimize regulations and legislation on quality issues, and carry out the research on major quality policies. In addition, it will also be response for coordinating the efforts to achieve the target of constructing a "National Quality Strong Country". Specifically, the work group will be in charge of tackling the various obstacles encountered, and to adopt corresponding actions to promote the quality and optimize relevant infrastructure. At the same time, the work group will also supervise the quality and organise the activity of the 'Quality Month'. Finally, it will also be responsible for supervising and inspecting the implementation of major tasks in the field of quality.

Post of the group	Name	Title
Head	Wang Yong	The State Councilor
Deputy head	Luo Wen	Director of the State Administration for Market Regulation
	Wang Zhiqing	Secretary General of the General Office of the State Council
	Lin Nianxiu	Secretary General of National Development and Reform Commission
Members	Mao Dingzhi	Member of the Ministry of Central Organization
	Zhao Zeliang	Deputy Director of the Cyberspace Administration of China
	Zheng Fuzhi	Deputy Minister of the Ministry of Education of China
	Zhang Yudong	Deputy Minister of the Ministry of Science and Technology of China
	Xu Xiaolan	Deputy Minister of Ministry of Industry and Information Technology
	Du Hangwei	Deputy Minister of the Ministry of Public Security
	Zhang Chunsheng	Deputy Minister of the Ministry of Civil Affairs of China
	Zuo Li	Deputy Minister of the Ministry of Justice of China
	Zhu Zhongming	Deputy Minister of the Ministry of Finance of China
	Ling Yueming	Deputy Minister of the Ministry of Natural Resource of China
	Zhao Yingmin	Deputy Minister of the Ministry of Ecology and Environment of China
	Zhang Xiaohong	Deputy Minister of the Ministry of Housing and Urban-Rural Development of China
	Xu Chengguang	Deputy minister of the Ministry of Transport of China
	Liu Weiping	Deputy Minister of the Ministry of Water Resources of China
	Ma Youxiang	Deputy Minister of the Ministry of Agriculture and Rural Affairs of China
	Sheng Qiuping	Deputy Minister of the Ministry of Commerce of China
	Du Jiang	Deputy Minister of the Ministry of Culture and Tourism of China
	Li Bing	Deputy Director of the National Health Commission of China
	Song Yuanming	Deputy Minister of the Ministry of Emergency Management of China
	Fan Yifei	Deputy Director of People's Bank of China
	Peng Huagang	Secretary-General of State-owned Assets Supervision and Administration Commission of the State Council
	Zhang Jiwen	Deputy Director of the General Administration of Customs of China
	Wang Daoshu	Deputy Director of the State Taxation Administration
	Tian Shihong	Deputy Director of the State Administration for Market Regulation
	Sheng Laiyun	Director of the National Bureau of Statistics
	Deng Boqing	Deputy Director of the International Development Cooperation Agency
	Wu Manqing	Deputy Director of the Chinese Academy of Engineering
	Zhou Liang	Vice-chair of the China Banking and Insurance Regulatory Commission
	Hu Wenhui	Deputy Director of China National Intellectual Property Administration
	Wang Wei	Deputy Director of All China Federation of Supply and Marketing Cooperatives
	Huang Rong	Vice-chair of the All-China Federation of Industry and Commerce

The administrative office of the group is set within the State Administration for Market Regulation (SAMR). The office's staff will be responsible for the daily work of the work group, as well as for reporting to its members, proposing advice, and supervising the implementation of the decisions made by the work group. Luo Wen, the director of SAMR, will act as head of the office, while Tian Shihong will take the position as deputy head.

The head or deputy head may convene the meeting of the work group on a regular or irregular basis. The other members of the work group may invite people from other relevant organizations or experts to participate in the meeting. Local authorities above the county level shall build coordination mechanisms accordingly to improve quality within their jurisdictions.

Annex: List of the Members of the Work Group (i.e. the blue form inserted in-between the text).

Annex 1: *Translation of Action Plan of Implementing the National Standardization Development Outline*

Annex 2: *CEEIA Standardization Committee Assembly 2022 and Electrotechnical Standardization Development Forum*

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 three SESEC projects in China, SESEC I (2006-2009). SESEC II (2009- 2012) and SESEC III (2014-2017). In April 2018, SESEC IV was officially launched in Beijing, China. Dr. Betty XU was 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 eco-design & labeling, as well as environmental performance of buildings).

SESEC IV China Standardization and Technical Regulation Bimonthly Newsletter

SESEC IV 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
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