

SESEC V China Standardisation Newsletter

March - April 2024



Seconded European Standardisation Expert in China (SESEC)

Index

Takeaways	4
SESEC and Supported Events	6
Head of ETSI's Governmental Affairs Visited EU Delegation, CCSA and CAICT	6
SESEC Presents European Standardization System in CATARC	7
The Digital Series Episode I: AI Development in the EU and China	7
Horizontal Actions	9
Statistical Analysis and Reporting System to Be Built for Mandatory Standard Implementation	9
Sequel Action Plan Announced for China's Standardization Development	10
SAMR issues New Policy to Strengthen the Supervision of Standard Setting and Implementation	11
SAC Summarizes the Development of China's National Standardization System	12
Top-level Policy to Attract Foreign Investment in China	14
China Promotes Large-scale Equipment Renewal and Consumer Goods Trade-in	15
China Researching on Quality Infrastructure and Regulatory Systems in BRI Countries	17
Key Legislation Tasks Issued by SAMR for 2024	17
Digital Transition	18
Standards to Guide Quality Work in Industry and Information Technology for 2024	18
MIIT Releases Radio Management Rules for UWB and 900 MHz RFID Devices	19
New Policy Promotes Large-Scale Deployment and Application of IPv6	20
China Issued the Technical Document on Basic Security Requirements for Generative Artificial Intelligence Services	
China Hosts 3GPP Working Meeting	22
Standards Promote the Renewal of Industrial and Information Technology Equipment	22
China Develops Domestic Short-Range Wireless Communication Standards	23
The Second Working Group Meeting on Quantum Information	23
TC260 Announced Key Working Points in 2024	24
China Updates Guidelines for Cross-Border Data Transfer Security Assessment and Filing	25
China's New Measures on Facilitating the Data Cross-border Transfer	25
Green Transition	27
China Called for the "New Three" Carbon Footprints Standard Projects	27
China's Implementation Rules of Carbon-relevant Certifications	27
Mandatory Standard in Place for the Safety of Lithium-ion Battery on Electric Bicycles	28
Research Group Founded in China for ESG Standardization	28
Product Category Rules For Carbon Footprint of Electrical and Electronic Products	29
China Called for Carbon Peak and Neutrality Standard Projects in 2024	30
Others	31
New Developments in China's Standardization Education	31

China Releases Measures for Administration of Sector Standards for Transport Industry	31
First Batch National Standards Issued on Quantum Measurement in China	33
China Develops Standard for Classifying and Evaluating the Machine Readability of Standards	33
Annex 1 Introduction to the National Education about Standardization Special Working Group (SAC/SWG27)	
Annex 2 Translation of Annual Report on Standardization Development in China	
Annex 3 Dialogue on Standards: Work Plan of Overseas Standarsd Organizations in 2024	

Takeaways

SESEC Presents European Standardization System in CATARC

On March 19, 2024, to enhance the understanding of international standardization work and improve the enthusiasm of participating in international standardization work, China Automotive Standardization Research Institute (hereinafter referred to as the "Institute") held the "Serious Dialogues with Standard Experts: First Dialogue on European Standardization". The event was hosted at the China Automotive Technology & Research Center (CATARC). Dr. Betty Xu, Director of the Seconded European Standardization Expert in China (SESEC), was invited to introduce the European standardization strategy.

Statistical Analysis and Reporting System to Be Built for Mandatory Standard Implementation

A significant step has been taken towards enhancing China's standardization system. On April 25, 2024, the Standardization Administration of China (SAC) issued *Opinions on the Establishment of a Statistical Analysis and Reporting System for the Implementation of Mandatory Standards*, grounded in the legal framework provided by the Standardization Law of China and the National Outline on Standardization Development.

Sequel Action Plan Announced for China's Standardization Development

On March 18, 2024, the State Administration for Market Regulation (SAMR), in conjunction with 17 other national ministries, unveiled the *Action Plan of Implementing National Standardization Development Outline* (2024-2025) (referred to as "the Action Plan 2024-2025" as below). The National Standardization Development Outline (referred to as the "Outline"), introduced by the State Council in 2021, was followed by an Action Plan in the subsequent year, aimed at supporting the objectives and goals outlined in the Outline. The Action Plan 2024-2025 serves as a sequel to the initial Action Plan, representing a second-round initiative to further actualize the principles and tasks delineated in the Outline, thereby holding significant importance.

SAC Summarizes the Development of China's National Standardization System

In early April 2024, the Standardization Administration of China (SAC) released a summary of the state of development of China's national standardization system in 2023. The key highlights of the summary are presented in the body text, including the number and distribution of national standardization technical organizations, newly-established technical organizations in 2023, registered technical experts and their distribution, involvement of foreign-invested enterprises' experts, top talents in national standardization system, national standards developed and under development.

China Researching on Quality Infrastructure and Regulatory Systems in BRI Countries

On 20 March 2024, SAMR announced its research achievements on the quality infrastructure and regulatory systems in Belt and Road countries. The main achievements in the fields of standards, metrology, certification and accreditation, as well as anti-monopoly are summarized.

Key Legislation Tasks Issued by SAMR for 2024

On April 9, 2024, China's State Administration for Market Regulation (SAMR) announced its key legislation tasks for 2024. The key content is a list of 20 newly-drafted or revised laws and regulations. Among these, the ones that closely concern foreign stakeholders are presented.

MIIT Releases Radio Management Rules for UWB and 900 MHz RFID Devices

On 22 April, 2024, China's Ministry of Industry and Information Technology (MIIT) issued two sets of radio management regulations: the *Interim Provisions on Radio Management for Ultra-Wideband (UWB) Devices* and the *Regulations on Radio Management for 900 MHz Band Radio Frequency Identification (RFID) Devices*.

Standards Promote the Renewal of Industrial and Information Technology Equipment

On 9 April, 2024, China's Ministry of Industry and Information Technology (MIIT), the National Development and Reform Commission (NDRC), the Ministry of Finance (MOF), the People's Bank of China (PBOC), the State Administration of Taxation (SAT), the State Administration for Market Regulation (SAMR), and the National

Financial Regulatory Administration (NFRA) jointly released the *Implementation Plan for Promoting Equipment Renewal in the Industrial Sector*. This plan aims to support the State Council's *Action Plan for Promoting Large-scale Equipment Renewal and Consumer Goods Trade-In*, by guiding efforts to accelerate the renewal of equipment in the industrial and information technology sectors.

The Second Working Group Meeting on Quantum Information

On April 11 and 12, 2024, China's SAC/TC28/WG34 (Quantum information) held the second working meeting in Chengdu, in Sichuan Province. The event, which was hosted by the University of Electronic Science Technology of China (UESTC), saw the participation of more than 70 representatives from 34 different organizations, including Beihang University, Beijing Academy of Quantum Information Science (BAQIS) and the Yangtze River Delta Industrial innovation Center on Quantum Technologies. Representatives from the Ministry of Industry and Information Technology (MIIT) and leaders from the China Electronics Standardization Institute also participated in the meeting and delivered speeches.

TC260 Announced Key Working Points in 2024

On April 7, 2024, China's SAC/TC260 (Cybersecurity) released its Annual Key Working Points 2024. The document, which was approved by the TC's Plenary session on April 2, 2024, covers five main areas; the key takeaways include: consolidating top-level design, and strengthen strategic planning and standard prospective research on cybersecurity, accelerating the formulation and revision of national standards in key cybersecurity areas, expanding promotion channels to improve the implementation of national standards, intensifying research on international standard proposals and professional personnel retention, and optimizing the working system to improve standard quality and standardization development in cybersecurity.

China Updates Guidelines for Cross-Border Data Transfer Security Assessment and Filing

On March 22, the Cyberspace Administration of China (CAC) released the second edition of the *Guidelines for Applying for Cross-Border Data Transfer Security Assessment* and the *Guidelines for Applying for Filing of the Standard Contract for Cross-Border Transfer of Personal Information*. These guidelines aim to provide guidance to enterprises for ensuring data export compliance

Updates in China's efforts in Achieving Carbon Peak and Carbon Neutrality

- On March 8, 2024, the Ministry of Industry and Information Technology (MIIT) issued the *Notice Calling for Standard Projects in the Topic of Carbon Footprint for "New Three" Products*.
- On April 7, 2024, the National Certification and Accreditation Administration of China (CNCA) issued the *Notice* on the Reporting Requirements of Direct Carbon-relevant Certification Rules.
- On April 9, 2024, the China Electronics Standardization Institute (CESI) organized a seminar for the standards on product category rules (PCR) regarding carbon footprint for electrical and electronic products.
- On March 14, 2024, the *Notice on Calling National Standard Projects on Carbon Peak and Carbon Neutrality in 2024* was issued by the State Administration for Market Regulation (SAMR).



SESEC and Supported Events

Head of ETSI's Governmental Affairs Visited EU Delegation, CCSA and CAICT

#Standardization Event

On April 10, 2024, Ms. Margot Dor, Head of ETSI's governmental affairs, visited the EU Delegation in Beijing, CCSA and CAICT, with the goal to understand China's recent efforts in ICT standardization, and European's attitude and approach. SESEC team accompanied the visiting official during all the meetings.

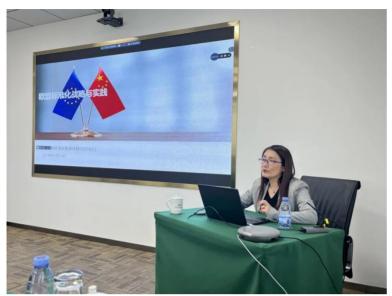
The meeting with the EU Delegation in Beijing was joined by Frank Schmiedel. First Counsellor Internal Market, Industry, Entrepreneurship and SMEs (DG GROW). The topics discussed covered various fields, including international standardization, the EU's priorities, the EU's relationship with China and US, AI regulation



and standardization, as well as standardization reform and standardization education in China. In the end, both parties agreed on the importance of the role of ETSI and its contribution to the Europe. More technical proposals from ETSI, aimed at assisting the European Commission to address current opportunities and challenges, are welcome.

Following the meeting with the EU Delegation in Beijing, Ms. Margot Dor met with officers from CCSA and CAICT. The participants included Mr. Wen Ku, Secretary General of CCSA; Mr. Nan Xinsheng, Vice Secretary General of CCSA; Ms. Wang Zhiqin, Chair person of TC5; Ms. Liu Rui, Director of International Affairs Department in CAICT; and Mr. Zhao Shizhuo, Director of International department of CCSA. During the meeting, the participants shared their preparation for the recent 3GPP meeting, as well as future arrangements of ICT standardization. Meanwhile, the officers from CCSA and CAICT shared their ideas regarding recently established organizations, including WAA and SparkLink.

2 SESEC Presents European Standardization System in CATARC #Standardization Event



On March 19, 2024, to enhance the understanding of international standardization work and improve the enthusiasm of participating in international standardization work, China Automotive Standardization Research Institute (hereinafter referred to as the "Institute") held the "Serious Dialogues with Standard Experts: First Dialogue on European Standardization". The event was hosted at the China Automotive Technology & Research Center (CATARC). Dr. Betty Xu, Director of the Seconded European Standardization Expert in China (SESEC), was invited to introduce the European standardization strategy.

The activity was held offline with online access available. A total of 520 people attended the

meeting, representing the China Automotive Technology & Research Center as well as other industrial stakeholders. During the meeting, Dr. Betty Xu introduced the:

- characteristics of the European technical regulations and standardization system
- the strategy of the European standardization organizations
- the standardization strategy of the European Commission
- the European Green Deal and the EU legislation on battery
- the carbon border adjustment mechanism

The meeting provided an opportunity for stakeholders in the automotive industry to have an in-depth understanding of the European standard system. It put forward actionable suggestions for Chinese enterprises to participate in the European standardization work, and played a positive role in promoting China's full participation in the formulation of global automotive standards and technical regulations.

The Digital Series Episode I: Al Development in the EU and China #Standardization Event

On 10th April, the European Chamber, together with the China Academy for Information and Communications Technology (CAICT) and the Seconded European Standardization Expert for China (SESEC) successfully co-organised the first digital series episode in 2024 with the topic of AI development in the EU and China.

Michael Chang, the Chair of the ICT working group warmly welcomed participants to this inaugural seminar and empharised the transformative role of Artificial Intelligence (AI) and its expansive impact and innovation potential. During the seminar, deputy director Wu and Senior engineer Ms. Deng from the CAICT AI Research Center gave an overview of the development of AI in China and introduced the Artificial Intelligence Industry



Alliance (AIIA) and its International Cooperation Group respectively.

From the EU side, Ms. Margot Dor, the Director of Government Affairs of the European Telecommunications Standards Institute (ETSI), gave a detailed presentation on AI regulation and standardisation in the EU, including legislative process, timeline and EU's AI standardisation strategy. Michael Chang then introduced the Global AI Governance and challenges from the European enterprise's perspective.

At the end of the seminar, Ms. June Zhang, the Chair of European Chamber SCA working group, wrapped up the seminar with sincere thanks to all participants and speakers for their invaluable insights and wished to maintain close collaboration with all stakeholders to facilitate meaningful exchanges regularly.

Source: EUCCC Website



Horizontal Actions

Statistical Analysis and Reporting System to Be Built for Mandatory Standard Implementation

#Mandatory Standards

A significant step has been taken towards enhancing China's standardization system. On April 25, 2024, the Standardization Administration of China (SAC) issued *Opinions on the Establishment of a Statistical Analysis and Reporting System for the Implementation of Mandatory Standards*, grounded in the legal framework provided by the Standardization Law of China and the National Outline on Standardization Development.

The primary objective of this endeavor is to comprehensively assess the implementation status, efficiency, and associated challenges of mandatory standards. By employing tracking and monitoring mechanisms, information collection protocols, and analytical tools, the ultimate aim is to facilitate a holistic approach to standardization management, focusing on formulation, implementation, and feedback loops to enhance applicability.

Key directives outlined in the Opinions encompass various aspects:

- SAC is tasked with spearheading the establishment of the Statistical Analysis and Reporting System (referred to as "the System"), including the formulation of cohesive and scientifically sound guidelines and measures for its implementation.
- The SAC will delineate statistical and analytical focal points across key sectors and industries, along with devising performance evaluation methodologies to gauge metrics such as completion rate, task fulfillment, and the quality of outcomes.
- Annually, SAC will pinpoint critical mandatory standards for data collection and analysis. Additionally, sectorspecific ministries and regional authorities are empowered to select core mandatory standards for their respective monitoring and analysis.
- Sector ministries and regional governments are responsible for organizing and executing data collection and analysis activities, subsequently reporting their findings to SAC.
- Diverse data sources and methodologies, including but not limited to production licensing, inspections, certification processes, and feedback mechanisms, will be utilized for monitoring and statistical purposes. This encompasses the synthesis and analysis of standard citation data from laws, regulations, and policies, as well as facilitating discussions, exchanges, and on-site research endeavors related to standard implementation.
- Emphasis is placed on constructing an accessible platform for disseminating statistics and analysis pertaining to mandatory standards implementation. Entities involved in statistical analysis are encouraged to develop information and intelligent platforms as needed, integrating them into a unified national platform for enhanced accessibility and efficiency.

In essence, China's endeavor to establish a Statistical Analysis and Reporting System for Mandatory Standards reflects a proactive approach towards bolstering standardization practices. By fostering transparency, accountability, and informed decision-making, this initiative aims to elevate the quality and efficacy of mandatory standards implementation across various sectors and industries.

Sequel Action Plan Announced for China's StandardizationDevelopment

Standardization

On March 18, 2024, the State Administration for Market Regulation (SAMR), in conjunction with 17 other national ministries, unveiled the *Action Plan of Implementing National Standardization Development Outline (2024-2025)* (referred to as "the Action Plan 2024-2025" as below).

The National Standardization Development Outline (referred to as the "Outline"), introduced by the State Council in 2021, was followed by an Action Plan in the subsequent year, aimed at supporting the objectives and goals outlined in the Outline. The Action Plan 2024-2025 serves as a sequel to the initial Action Plan, representing a second-round initiative to further actualize the principles and tasks delineated in the Outline, thereby holding significant importance.

Comprising eight chapters encompassing 35 detailed articles, each assigning main responsibilities to relevant regulatory bodies, the Action Plan 2024-2025 delineates key areas of focus:

- Enhanced Synergy between Standardization and Technological Innovations: Prioritizing standard breakthroughs in pivotal sectors such as integrated circuits, semiconductors, AI, etc., and aligning major national scientific and technological achievements with standards to expedite standardization processes and outcomes from corresponding technological advancements. Additionally, accelerating standardization research in emerging technologies like metaverse and next-generation internet is emphasized.
- Modernization of the Standardization Sector: Streamlining basic standard systems in key industrial sectors, integrating emerging technologies with traditional sectors, and emphasizing standards that enhance the industrial chain, sector innovation, and infrastructure construction. Standard criteria for regular products and services, particularly in terms of safety and energy efficiency, are to be bolstered to spur consumer consumption while optimizing safety and quality.
- Optimization of Standardization Support for Green Development: Revising standards systems to advance carbon peak and neutrality, ecological environment protection, resource conservation, and support green and lowcarbon transitions.
- Advancement of Standardization in Rural and Urban Construction and Social Governance: Developing and optimizing standard systems to support rural revitalization, new urbanization, and enhance administrative management, social governance, public service delivery, elder care, and public security.
- Heightened Emphasis on International Standardization: Expanding international standardization cooperation with organizations such as WTO, BRICS, and APEC, and encouraging state-owned enterprises to deepen standardization cooperation in overseas projects. Active participation in international standards development organizations (SDOs) including ISO, IEC, CAC, and WOAH, with a focus on topics such as carbon neutrality, digital technologies, GHG emission reduction, and green finance, is prioritized. The adoption of international standards is to be increased significantly, aiming for a resemblance of TC structure of over 90% compared to international SDOs, and a conversion rate of international standards of over 85%.
- Deepening Standardization Reform and Innovation: Enhancing standard supply and management levels, and strengthening standard training and implementation supervision.
- Building a Solid Foundation for Standardization Development: Optimizing the standardization foundation through basic theoretical research, standard experimentation and verification, personnel training, and the establishment of professional technical institutions.
- Implementation: Strengthening the current standard management system at all levels of government and providing policy support to streamline standard working processes, statistical work, and recognition of outstanding personnel and achievements.

To summarize, China underscores the paramount importance of standardization for its economic development and transition towards green and intelligent practices. The articles within the Action Plan 2024-2025 align closely with the country's recent development policies and objectives, underscoring its pivotal role. Efforts are geared towards enhancing the efficacy and functionality of standardization while expanding international influence.

SAMR issues New Policy to Strengthen the Supervision of Standard **6**. Setting and Implementation

#Standard Formulation and Implementation

On On 12 April, 2024, the State Administration of Market Regulation (SAMR) issued a call for comments on the Guiding Opinions on Strengthening the Supervision of Standard Setting and Implementation (Draft for Comment). The deadline for submitting comments is set on 13 May, 2024. This is a comprehensive policy intended to enhance the development and oversight of standardization, in accordance with China's Standardization Law and the National Standardization Development Outline. Below is a summary of the key highlights of the document:

Objectives:

The document aims to strengthen the supervision of the standard setting and implementation process, with the aim of supporting high-quality development through a more effective standardization governance structure. It outlines an ambitious goal to establish, by the end of the 14th Five-Year Plan period, a set of supervision mechanisms covering the entire lifecycle of standard setting and implementation.

Tasks and Responsibilities:

- Intensify supervision over the creation and enforcement of mandatory national standards, which are viewed as technical regulations essential for ensuring safety and compliance.
- Promote the dissemination and implementation of recommended standards, while monitoring and facilitating their adoption across various administrative levels and sectors.
- Address and correct problems in standard drafting, such as conflict of interest or undue competitive advantages.
- Enhance the transparency and public accessibility of standard texts, ensuring that standards are implemented fairly and efficiently.

Mechanisms for Supervision:

- Establishment of a routine monitoring and feedback mechanism to continuously assess the effectiveness and enforcement of standards.
- Implementation of supervision and random checks throughout all phases of standard setting and implementation, to ensure compliance and to address any deviations in a promptly manner.

Promotion of International Standards:

The document stresses that SAMR will strengthen the role of domestic technical bodies in the development and voting processes of international standards. The goal is to enhance China's influence and compliance with global norms.

The draft policy document reflects a significant effort to refine China's standardization process and enhance its efficiency, transparency, and alignment with international norms. Its proposals to conduct random checks during the supervision of standard setting and implementation, combined with the establishment of a national standard implementation monitoring network, will help further identify the quality of standards and lay the foundation for future improvements in standardization work.

However, some controversial statements are highlighted in the document, such as "promoting enterprises to disclose their implemented standards on the public service platform for enterprise standards, urging enterprises that do not disclose their standards as required to rectify within a specified deadline, to avoid being publicly listed on the public service platform for enterprise standards as non-compliant." The lack of clear criteria for disclosing information on standards, especially enterprise standards, is expected to create dual barriers in enterprise execution and government regulation.

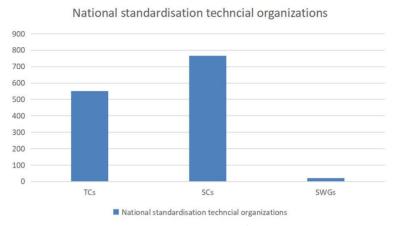
SAC Summarizes the Development of China's National StandardizationSystem

#National Standardization System

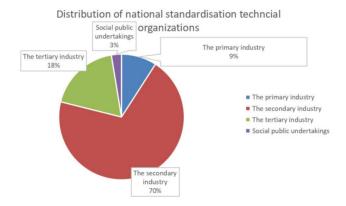
In early April 2024, the Standardization Administration of China (SAC) released a summary of the state of development of China's national standardization system in 2023. The key highlights of the summary are presented below.

Number and distribution of national standardization technical organizations

By the end of 2023, China had established 1,338 national standardization technical organizations, including 550 Technical Committees, 766 Subcommittees (SCs) and 22 Standardization Working Groups (SWGs).



Among these national standardization technical organizations, 9% are for the primary industry, 70% for the secondary industry, 19% for the tertiary industry, and 3% for social public undertakings.



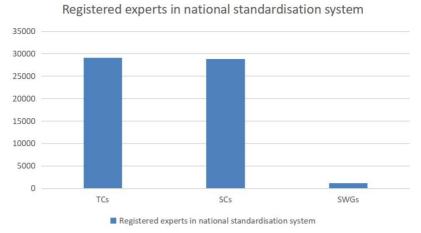
Newly established technical organizations in 2023

China established 23 new national standardization technical organizations in 2023. This includes 5 TCs, 12 SCs, and 6 SWGs. Some examples are TC 600 for institution governance, TC 602 for air traffic control, SWG 31 for industrial design fundamentals, SWG32 for intelligent computing, etc.

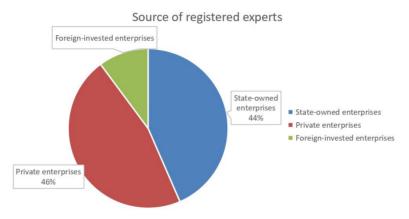


Registered technical experts and their distribution

By the end of 2023, 59,052 experts had registered as members of China's national standardization technical organizations, among which 29,107 registered in TCs, 28,815 in SCs, and 1,130 in SWGs.

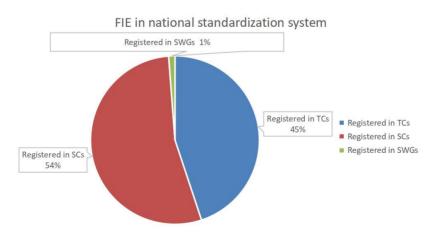


Among these registered experts, more than 15,000 came from State-owned enterprises, more than 16,000 from private enterprises; while the remaining 3,500 came from foreign-invested enterprises.



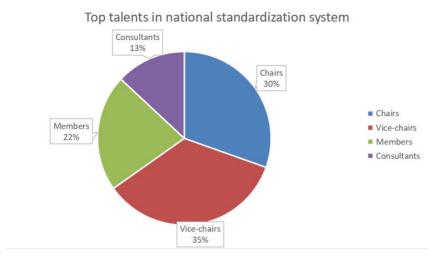
Involvement of foreign-invested enterprises' experts

Among the registered experts from foreign-invested enterprises, more than 1,500 are members of TCs, more than 1,800 are members of SCs, while more than 40 joined SWGs.



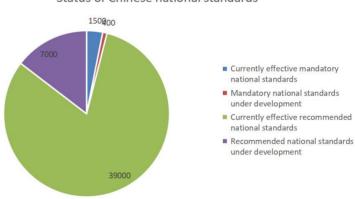
Top talents in national standardization system

By the end of 2023, 132 academicians from the Chinese Academy of Engineering and 52 academicians from the Chinese Academy of Sciences had been actively involved within China's national standardization system. Among these academicians, more than 70 academicians served as chairs, more than 80 as vice-chairs, more than 50 as members, and more than 30 as consultants of national standardization technical organizations.



National standards developed and under development

By the end of 2023, China's national standardization system featured over 1,500 currently effective mandatory national standards, and over 39,000 currently effective recommended national standards. In addition, China was developing more than 400 new mandatory national standards and more than 7000 new recommended national standards.



Status of Chinese national standards

Top-level Policy to Attract Foreign Investment in China #Foreign Investment

On March 19, 2024, the State Council unveiled a pivotal strategy aimed at fortifying China's position as a prime destination for foreign investment, namely the *Action Plan for a Steady Advancement in Higher Opening-up and Strengthened Efforts to Attract and Leverage Foreign Investment* (referred to as "the Action Plan" as below). This comprehensive initiative marks a significant stride towards bolstering the nation's global economic integration.

The Action Plan seeks to redress the existing imbalance in foreign investment distribution across China, which has traditionally favored the eastern and coastal regions. Here are the key highlights:

Expanded Market Access:

The Action Plan proposes a sweeping expansion of sectors open to foreign investment. Restrictions in critical areas such as telecommunications, banking, the bond market, insurance, and healthcare will be lifted, providing foreign investors with greater opportunities for market entry.

Supportive Policies Reinforcement:

Efforts will be intensified to attract foreign investment in strategic sectors such as advanced manufacturing, high technology, energy efficiency, and environmental protection. To this end, a suite of supportive policies including tax incentives, energy subsidies, and financial assistance will be extended. Notably, emphasis will be placed on attracting investment to the middle, northeastern, and western regions.

Enhanced Fair Competition Environment and Investment Services:

The Action Plan advocates for the elimination of barriers that impede fair competition. Measures will be implemented to refine bidding processes, ensure equitable participation of foreign enterprises in standard-setting, and enhance market oversight and regulatory enforcement. Moreover, service provisions for foreign enterprises will undergo enhancements.

Facilitation of Innovative Collaboration:

Initiatives will be rolled out to facilitate seamless data exchange between foreign subsidiaries and their headquarters. Additionally, efforts will be made to streamline international logistics for foreign businesses through improved visa services and transport infrastructure. Foreign enterprises will be incentivized to participate in national research and development initiatives and scientific-technological projects.

Strengthening Business Regulations:

Intellectual property protection measures will be bolstered, and regulations governing cross-border data transfers will be optimized. Piloting the implementation of international trade rules will be actively pursued.

To summarize, the Action Plan signifies a proactive push to elevate China's openness to the global economy. By fostering a conducive environment for foreign investment, promoting fair competition, and facilitating innovative collaboration between domestic and foreign enterprises, the plan aims to propel the nation's economic development and global integration.

These national-level measures are poised to offer robust support for foreign investments across various sectors, particularly for those eyeing opportunities in integrated circuits, biomedical, high-end equipment, finance, and insurance. The manufacturing sector, in particular, stands to benefit significantly from these initiatives, presenting promising prospects for market entrants in China.

China Promotes Large-scale Equipment Renewal and Consumer Goods Trade-in

#Consumer Goods

On 13 March 2024, the State Council issued the *Action Plan for Promoting Large-scale Equipment Renewal and Consumer Goods Trade-In.* The purpose of the document is to promote the production and application of advanced equipment, increase the proportion of advanced production capacity, introduce high-quality and durable consumer goods into people's lives, facilitate the recycling of resources, and improve the quality and level of economic circulation.

The document proposes measures for promoting the renewal of equipment in various fields, including

industry, construction and municipal infrastructure, transportation equipment and agricultural machinery, as well as education, culture, tourism, and medical fields. In addition, it suggests launching trade-in programs for consumer products in sectors such as automobiles, household appliances, and home decoration. Furthermore, the document emphasizes the need to strengthen resource recycling, by improving waste product recovery networks, supporting the circulation and trading of second-hand goods, promoting remanufacturing and graded utilization, and enhancing high-level recycling of resources.

Standards are regarded as important means to guide equipment renewal, and the document proposes the implementation of a "standard enhancement action", which includes:

- Accelerating the improvement of energy consumption, emission, and technical standards. China
 shouldrevise and update national standards for energy consumption limits and equipment efficiency in key
 energy-consuming products based on international advanced levels, and enhancing energy-saving indicators and
 market access thresholds. China should also upgrade standards related to energy consumption for passenger
 cars and heavy-duty commercial vehicles, improve emission standards in key industries to optimize air and water
 pollutant emission control. Moreover, the carbon emission accounting standards for key industry enterprises
 should also be revised and improved, alongside the standards related to the upgrading and retirement of wind
 power generators and photovoltaic equipment and products.
- Strengthening the enhancement of product technical standards. Focusing on bulk consumer products such as automobiles, household appliances, home furnishings, consumer electronics, and civil drones, China should accelerate the upgrading of safety, health, performance, environmental protection, and testing standards. China should also improve the quality and safety standards systems for household appliances, promoting the use of household appliance safety usage years and energy-saving knowledge. Furthermore, the country should upgrade consumer product quality standards, formulate the catalog for the quality and safety supervision of consumer products, and strictly enforce quality and safety supervision. In addition, carbon labeling and other standard systems should be improved to fully leverage the role of standards in guiding the green transition, specifically green certification and other high-end certifications.
- Strengthening the supply of standards for resource recycling. China should improve green design standards for materials and components that are easy to recycle, disassemble, and remanufacture. It should also revise standards for recycling of waste electrical and electronic products, introduce national standards for information erasure methods in the second-hand trading of electronic products such as mobile phones and tablets, guide second-hand electronic product dealers to establish information security management systems and information technology service management systems, and research and formulate standards for the usability grading of second-hand electronic products.
- Strengthening the connection between domestic and international standards in key areas. China should establish and improve mechanisms for tracking the consistency of and transforming international standards. It should also conduct comparative analysis between Chinese standards and relevant international standards, transform a batch of advanced and applicable international standards, and continuously improve the conversion rate of international standards. China should also support domestic institutions to actively participate in the development and revision of international standards, and support key industry standards such as new energy vehicles to go global. In addition, the connection between domestic and international quality standards, inspection and quarantine, certification, and accreditation systems should be enhanced.

Against the backdrop of sluggish economic growth, by promoting equipment upgrades and trade-ins, the introduction of this policy clearly aims to stimulate a new wave of investment and consumption. Although the document proposes a large number of standardization tasks, aimed at providing support for equipment and product upgrades by developing new, higher technical standards, the completion of these tasks will require time; furthermore, whether these can truly lead this process remains to be seen.

Finally, the mention of "accelerating the upgrading of consumer product quality standards, formulating the catalog for quality and safety supervision of consumer products, and strictly enforcing quality and safety supervision" in the document is significant for overseas companies. Quality standards are often recommended standards, and the implementation of "quality and safety supervision" may enforce these recommended standards, potentially creating new technical trade barriers.

China Researching on Quality Infrastructure and Regulatory Systems 10. in BRI Countries

#Quality Infrastructure #BRI

On 20 March 2024, SAMR announced its research achievements on the quality infrastructure and regulatory systems in Belt and Road countries. The main achievements are summarized below.

In the field of standards, SAMR has conducted comparative analyses of key technical indicators adopted in standards in over 20 key industry sectors, with those developed by over 40 regional or national standard organizations across Europe, America, Japan, and South Korea. The key industries include medical devices, construction materials, agricultural products, and engineering machinery, among others. Research on cooperation mechanisms and the internationalization of Chinese standards has also been carried out.

In the field of metrology, SAMR has focused on mutual recognition (of measurement results) between China and Mongolia, China and Myanmar, and China and Georgia, conducting research on key metrological standards and technology cooperation in key areas such as energy, food and agricultural products. The goal was to promote mutual recognition of inspection and testing results.

In the field of certification and accreditation, SAMR has comprehensively collected and systematically analyzed the current status of laws and regulations, market access requirements, characteristics of certification and accreditation systems, and their latest implementation situations in various countries along the Belt and Road. Research has been conducted on cooperation mechanisms under the Regional Comprehensive Economic Partnership (RCEP), sub-sectors, intergovernmental cooperation. The effectiveness of international multilateral mutual recognition and international cooperation achievements in the field of certification and accreditation has been analyzed, and certification country databases have been improved. A number of publications have been issued, such as Research Series on Technical Trade Measures and Standards along the Belt and Road Countries and and Compilation of Certification Regions Accreditation Systems in Some Belt and Road Countries.

In the field of anti-monopoly, SAMR has compiled the Compilation of Anti-Monopoly Laws in Belt and Road Countries. It provides a systematic overview of the antimonopoly legislation of 30 countries including Poland, Czechia, Egypt, the Philippines, Singapore, and Pakistan. Guidance documents such as the Opinions on Regulating Overseas Business Activities and the Guidelines for Overseas Anti-Monopoly Compliance Management of Enterprises have been issued to guide Chinese enterprises in complying with the laws and regulations of host countries.

Key Legislation Tasks Issued by SAMR for 2024 #Legislation

On April 9, 2024, China's State Administration for Market Regulation (SAMR) announced its key legislation tasks for 2024. The key content is a list of 20 newly-drafted or revised laws and regulations. Among these, the ones in the picture closely concern foreign stakeholders.

SAMR also stated the overall principles and priorities that will guide this year's key legislation tasks:

- Improve the quality of development for business entities, and their credibility and legal-binding levels.
- Continue optimizing the market environment to ensure fair competition.
- Further implement the Outline on Building a Law-based Society (2020-2025) and the Outline on Building a Lawbased Government (2021-2025) (known in China as "the Two Outlines") to enhance the quality of development.
- Strictly regard safety as the bottom line for market administration.

No.	Law/Regulation Name	
1	Product Quality Law of the People's Republic of China	
2	Medical Device Management Law of the People's Republic of China	
3	Provisions of the State Council on Implementing the Registered Capital	
	Registration Management System of the Company Law of the People's Republic of China	
4	Regulations on Safety Supervision of Special Equipment	
5	Regulation on Certification and Accreditation of China	
6	Interim Measures for the Random Inspection of Public Disclosure of Information by Enterprises	
7	Measures for the Administration of Adoption of International Standards	
8	Measures for the Supervision and Administration of Inspection and Testing Institutions	



Digital Transition

Standards to Guide Quality Work in Industry and Information Technology for 2024

#ICT

On 8 April, 2024, the Ministry of Industry and Information Technology (MIIT) issued the *Notice on Carrying Out Quality Work in Industry and Information Technology for 2024*. The document emphasizes strengthening the leading role of standards, promoting innovation and development in pilot plant test, building the "Made in China" brand, and advancing high-quality growth in manufacturing.

The notice outlines a plan to promote industrial and IT product quality through 20 measures across five areas: (i) implementing an outstanding quality engineering initiative (raising awareness of quality in businesses, enhancing their ability to develop quality, advancing digital quality management, and evaluating quality management capabilities, etc.); (ii) improving product quality centering around reliability; (iii) solidifying the foundation for quality development (strengthening quality standards, advancing technological innovation and applications in quality engineering, improving the quality control of industrial products and the management of quality assessment laboratories, and enhancing the effectiveness of quality public services); (iv) promoting innovation and development in pilot plant tests; and (v) building the "Made in China" brand.

Standards are a crucial pillar of the document: these ensure that the measures are implemented effectively:

- The first section, titled "Implementing the Outstanding Quality Engineering Initiative", specifically emphasizes policy and standard interpretation, guiding industry associations and professional organizations to adopt advanced quality standards and publish sector standards for quality management capacity assessment; it also suggests reinforcing guidance for evaluations.
- In the third section, titled "Solidifying the Foundation for Quality Development", the document proposes developing and revising product quality standards for materials, machinery, electronics, automobiles, software, etc., to facilitate the conversion of advanced association standards into sector or national standards. Additionally, it calls for issuing guidelines to build a reliability standards system for manufacturing and strengthen top-level design.
- In the fourth section, titled "Promoting Innovation and Development in Pilot Plant Tests", the document stresses the need for better coordination in pilot plant test standards, advocating for the establishment of a working group to standardize pilot plant tests. It proposes developing guidelines for a pilot plant test standards system, creating a sound standards system and issuing key standards.
- Lastly, in the section titled "Building the 'Made in China' Brand", the document mentions optimizing and upgrading the brand cultivation management standards system and establishing a comprehensive standards system for manufacturing brands.

This document reflects China's recognition of standards as the foundation of quality; therefore, it seeks to guide product quality improvement by driving standard formulation and implementation. Notably, the second section titled "Improving Product Quality Centering Around Reliability", suggests expanding product quality grading assessments in key industries such as machinery, steel, building materials, and nonferrous metals. This implies that quality standards could be referenced in product quality grading systems, potentially impacting market competition and compelling domestic and foreign companies to allocate more resources to track and comply with these voluntary quality standards.

MIIT Releases Radio Management Rules for UWB and 900 MHz RFID Devices #UWB #RFID

On 22 April, 2024, China's Ministry of Industry and Information Technology (MIIT) issued two sets of radio management regulations: the *Interim Provisions on Radio Management for Ultra-Wideband (UWB) Devices* and the *Regulations on Radio Management for 900 MHz Band Radio Frequency Identification (RFID) Devices*.

1. Interim Provisions on Radio Management for Ultra-Wideband (UWB) Devices

These rules cover UWB radio transmitters that have a signal bandwidth of at least 500 MHz (-10 dB bandwidth). The rules mainly apply to high-speed wireless data communication, positioning, ranging, and sensing in short-range applications, using the 7163-8812 MHz frequency range.

Key requirements of the rules include:

- UWB radio transmitting devices produced or imported for sale and use in China must comply with the "Technical Requirements for UWB Radio Transmitting Devices" (annexed to the regulations) and apply for type approval from the national radio management agency.
- The set up and usage of UWB radio transmitters are managed similarly to public mobile communication terminals on the ground, so a radio station license is not required.
- The regulations will come into effect on August 1, 2025. From this date, the national radio management agency will no longer accept or approve type approval applications for UWB radio transmitters that do not meet these technical requirements. Devices with an existing type approval certificate may continue to be sold and used until they reach the end of their lifecycle.

2. Regulations on Radio Management for 900 MHz Band RFID Devices

These regulations govern RFID radio transmitters that operate in the 920-925 MHz frequency range. Key requirements include:

- RFID radio transmitting devices produced or imported for sale and use in China must comply with the "Technical Requirements for 900 MHz Band RFID Radio Transmitting Devices" (annexed to the regulations) and apply for type approval from the national radio management agency.
- The set up or usage of 920-925 MHz band RFID radio transmitters are managed similarly to public mobile communication terminals on the ground, so a radio station license is not required.
- The regulations will come into effect on November 1, 2024. From this date, the national radio management agency will no longer accept or approve type approval applications for 840-845 MHz band RFID radio transmitters. Devices with an existing type approval certificate for this band may continue to be sold and used until they reach the end of their lifecycle.

14.

New Policy Promotes Large-Scale Deployment and Application of

#IPv6

On April 19, 2024, China's Cyberspace Administration, the National Development and Reform Commission, and the Ministry of Industry and Information Technology jointly issued the 2024 work plan for advancing the large-scale deployment and application of IPv6.

The Work Plan aims to further promote the widespread use of IPv6. It does so by setting specific goals to be achieved by the end of 2024, including:

- Number of active IPv6 users to reach 800 million.
- Number of IoT IPv6 connections to hit 650 million.
- Achieve a share of IPv6 traffic in fixed networks of 23% and in mobile networks of 65%.
- Significant improvement in IPv6 network performance and user experience.
- Cloud services, content delivery networks, and data centers will enable, by default, IPv6 at the start of service.
- Major commercial websites and mobile internet applications are expected to achieve a 95% IPv6 support rate, with deeper and more extensive integration of IPv6 in various industries.
- Penetration level of IPv6 in fixed networks will be significantly increased, with new home routers, set-top boxes, and other terminal devices defaulting to IPv6, and a noticeable increase in the IPv6 activation rate in existing home routers and corporate internet dedicated lines.
- Continuous strengthening of IPv6 single-stack support capability.
- Further expansion of "IPv6+" innovation technology application fields.
- The IPv6 standard system will continue to be perfected, with the establishment of 50 national IPv6 standards.

To achieve these goals, the Work Plan outlines ten key tasks:

- Enhance IPv6 network performance and service quality. This includes intensifying IPv6 network optimization efforts, improving the process for IPv6 service activation, continuously enhancing IPv6 interconnectivity, and advancing the transformation of broadcast networks to support IPv6.
- Improve the level of IPv6 deployment in application facilities. Efforts will focus on strengthening the promotion of IPv6 in cloud products, increasing the IPv6 traffic share in content delivery networks, enhancing IPv6 upgrades in data centers, and promoting IPv6 deployment in computing infrastructure.
- Enhance the IPv6 connectivity of end devices. This involves improving the use of IPv6 in home routers, expanding IPv6 support in smart home devices, and accelerating IPv6 applications in the Internet of Things.
- Strengthen pilot testing and demonstration leadership. Initiatives include conducting IPv6 special actions in key cities, enhancing the role of pilot demonstrations, and promoting the early adoption of IPv6 in government office networks.
- Advance the deployment of IPv6 single-stack. This includes enhancing the operational capabilities of IPv6 singlestack and expanding the pilot deployment range of IPv6 single-stack.
- Deepen industry integration applications. Activities will focus on upgrading IPv6 in the systems of state-owned enterprises, elevating the level of IPv6 innovative applications in financial institutions, advancing IPv6 upgrades in the agricultural sector, deepening IPv6 deployment in the education sector, promoting IPv6 applications across various levels of human resources departments, advancing IPv6 deployment in civil affairs information systems, enhancing IPv6 upgrades in healthcare institutions, pushing forward IPv6 applications in digital transportation facilities, expanding IPv6 applications in the industrial internet, deepening IPv6 deployment in the water resources sector, intensifying IPv6 transformation in natural resources and environmental informatics, and promoting IPv6 support in emergency management business systems and devices.
- Expand the scale of IPv6 content sources. This includes accelerating the upgrade and transformation of government networks and application services to IPv6, and expanding the scope of IPv6 support for commercial applications.
- Promote the construction of innovative ecosystems and standard systems. This includes strengthening the construction of the "IPv6+" innovative industrial ecosystem, enhancing research on innovative Internet system architecture, continuously promoting the formulation and implementation of national IPv6 standards, and actively participating in the formulation of international IPv6 technical standards.

- Strengthen network security guarantee. This includes accelerating the research, development, and application of IPv6 security technology products, and strengthening supervision of IPv6 network security protection and management.
- Intensify publicity and promotion efforts. This includes innovating forms and content of publicity, and enriching industry exchange activities.

The large-scale deployment and use of IPv6 is a top policy priority in China. Since 2020, China has launched several actions and policy plans to facilitate the large-scale application of the technology, such as the special action plan for enhancing the end-to-end capability of IPv6, IPv6 transformation of Internet TV service, the three-year special action plan for IPv6 traffic enhancement (2021 to 2023), and tests for IPv6 protocol support capabilities in wireless local area network equipment in SRRC certification (radio devices type approval). The newly released documents can thus be seen as a continuation of this policy, reflecting China's ambition to meet the vast needs of the internet economy and to seize the technological high ground.

15. China Issued the Technical Document on Basic Security Requirements for Generative Artificial Intelligence Services

On March 4, 2024, the National Cybersecurity Standardization Technical Committee (SAC/TC260) officially unveiled a pivotal technical document: *TC260-003 Basic Security Requirements for Generative Artificial Intelligence Services* (hereinafter referred to as the Basic Requirements).

Background

The Basic Requirements outline security requirements that should be followed by generative AI service providers, including training data security, model security, and security measures. At the same time, the Basic Requirements can be seen as a supporting document for the Interim Measures for the Management of Generative Artificial Intelligence Services (hereinafter referred to as the "Interim Measures"), as they establish a clear standard for the security assessment stipulated in Article 17 of the Interim Measures. According to the Interim Measures, when generative AI service providers perform the algorithm filing procedures as required, they shall conduct a security assessment in accordance with the Basic Requirements and submit an assessment report to the competent authority.

Drafting organizations

Unlike for standardization projects, the drafting of technical documents does not require the stage of open

drafting organization instead mandatory for standardization projects. Considering the exigency of industrial needs in terms of compliance with the Interim Measures, SAC/TC260 adopted the form of technical document rather than standard on this matter. Additionally, it is noteworthy that none of the principal drafting organizations of the technical document are European enterprises, signaling the absence of European involvement in the drafting process. Yet they did convene several rounds of closeddoor informational sessions prior to the official release, wherein domestic and foreign enterprises had the opportunity to pose inquiries regarding the draft, which were explained onsite by the main drafters. However, formal comments were not solicited or addressed during the session; instead, enterprises encouraged to submit feedback via email. According to representatives offrom foreign enterprises who also participated in closed-door informational sessions, a few foreign enterprises raised objections or had strong second opinions.

With the intention of upgrading the technical document into an official standard, upon the release of Basic Requirements, TC260 issued a call for drafters to participate in the development of the official standard version of the document, which indicate opportunities for foreign stakeholders to participate in this process.

16. China Hosts 3GPP Working Meeting

On 15 April, 2024, a series of working group meetings for the Third Generation Partnership Project (3GPP) opened in Changsha, Hunan province, co-hosted by the China Communications Standards Association (CCSA) the China Academy of Information and Communications Technology (CAICT). Representatives from over 40 countries and regions, including China, Europe, the United States, Japan, South Korea, and India, attended the meeting. It focused on developing international standards for the evolution of 5G (5G-Advanced, 5G-A), covering key topics such as the integration of 5G and artificial intelligence, energy efficiency in networks and devices, enhancements in massive antennas, new duplex technology, noncommunication networks, terrestrial emerging frequency bands, and integrated sensing channel models.

Puneet Jain, Chair of the 3GPP SA (Services and Systems Aspects) Technical Specification Group, Wanshi Chen, Chair of the RAN (Radio Access Network) Technical Specification Group, and Peter Schmitt, Chair of the CT

(Core Network and Terminals) Technical Specification Group, highlighted that 3GPP is currently prioritizing the research for the second release of 5G-A (Release 19). Release 19 will focus on enhancing mobile broadband and vertical services while expanding new device types. Additionally, it will explore foundational technologies to lay a solid foundation for future 6G standardization. 3GPP is already drafting a work plan for 6G international standardization based on the overall framework defined the International bv Telecommunication Union (ITU), signaling optimism for continuous progress in 3GPP standardization over the coming years.

Recently, the 103rd 3GPP plenary meeting was held in the Netherlands to finalize the 6G international standardization timeline. 3GPP will start studying 6G service requirements in September 2024, initiate 6G technology pre-research in June 2025, start 6G standardization in the first half of 2027, and complete the foundational version of the 6G standard (Release 21) by 2029.

Standards Promote the Renewal of Industrial and Information Technology Equipment

On 9 April, 2024, China's Ministry of Industry and Information Technology (MIIT), the National Development and Reform Commission (NDRC), the Ministry of Finance (MOF), the People's Bank of China (PBOC), the State Administration of Taxation (SAT), the State Administration for Market Regulation (SAMR), and the National Financial Regulatory Administration (NFRA) jointly released the Implementation Plan for Promoting Equipment Renewal in the Industrial Sector. This plan aims to support the State Council's Action Plan for Promoting Large-scale Equipment Renewal and Consumer Goods Trade-In, by guiding efforts to accelerate the renewal of equipment in the industrial and information technology sectors.

The document outlines detailed actions in four areas: implementing advanced equipment, digitizing existing production equipment, promoting green equipment, and improving safety standards. It emphasizes the pivotal role of standards, specifically stating the need to "develop and revise a batch of standards related to energy conservation, carbon reduction, environmental protection, safety, and recycling in key industries;

implement an industrial energy conservation and green standardization action; compile a 'Catalog for Promoting Advanced Safety Emergency Equipment'; and promote the 'Catalog of Recommended Energy Conservation and Carbon Reduction Technologies and Equipment in the Industrial and Information Sector', to guide companies in aligning with advanced standards for equipment renewal and technological transformation."

In terms of the industrial energy conservation and green standardization action, MIIT had previously formulated the *Industrial Energy Conservation and Green Standardization Action Plan (2017-2019)* to develop and revise a series of key industrial energy conservation and green standards. This plan put particular emphasis on the implementation of these standards, on the establishment of a work platform for industrial energy conservation and green standardization, on the enhancement of training and education, and on fostering standardization support and evaluation agencies. It is expected that MIIT and other ministries will issue similar policies in the future to continue

strengthening research and implementation of industrial energy conservation and green standards.

Standards will undoubtedly serve as criteria for products to be included in the *Catalog for Promoting Advanced Safety Emergency Equipment* and the *Catalog*

of Recommended Energy Conservation and Carbon Reduction Technologies and Equipment in the Industrial and Information Sector. Standards will determine which products or technologies will receive government endorsement, providing them with greater market opportunities.

18. China Develops Domestic Short-Range Wireless Communication Standards

#Short-Range Wireless Communication

On 30 March, 2024, the 2024 International SparkLink Alliance Industry Summit was held in Shenzhen. During the event, 21 SparkLink 2.0 short-range wireless communication standards were released by the SparkLink Alliance.

The SparkLink Alliance is an industry organization founded in September 2020, comprising nearly 1,000 companies and organizations from the short-range wireless communication industry supply chain, research institutions, and standardization organizations. Its members include standardization bodies, such as CNIS and CESI; research institutions, such as CAICT and CATARC; and companies, such as Huawei and China Mobile. The SparkLink Alliance aims to promote the development of China's NearLink new generation wireless short-range communication technology and establish an industry ecosystem to support the emerging applications of smart vehicles, smart homes, smart terminals, and intelligent manufacturing. NearLink technology boasts ultra-low latency, ultra-high reliability, and precise synchronization, with advantages over traditional short-range wireless communication technologies like Bluetooth and WiFi, for instance concerning power consumption, transmission rate, latency, the number of connections, etc.

Standards form a crucial part of SparkLink's work. In

November 2022, the Alliance published the SparkLink 1.0 standard, consisting of 12 standards that cover the access layer, foundational service layer, general aspects (architecture, identification, etc.), security, and testing for new generation short-range wireless communication. SparkLink has now released 32 association standards, creating a comprehensive end-to-end protocol system that fully supports native audio/video, human-computer interaction, and positioning applications.

Meanwhile, the Sub-Technical Committee for Data Communication of the National Information Technology Standardization Committee (TC28/SC6) is drafting two new national standards for short-range wireless communication: Information Technology - Specification for Polar Code-Based Low-Power Wireless Communication Networks - Part 1: Physical Layer and Information Technology - Specification for Polar Code-Based Low-Power Wireless Communication Networks - Part 2: Data Link Layer. The English version of both standards are being developed simultaneously.

NearLink is an independent solution for short-range wireless communication, distinct from Bluetooth and WiFi. It represents China's long-term pursuit of technological autonomy, while laying the groundwork for China to lead in next-generation wireless short-range communication technology.

19 The Second Working Group Meeting on Quantum Information #Quantum Information

On April 11 and 12, 2024, China's SAC/TC28/WG34 (Quantum information) held the second working meeting in Chengdu, in Sichuan Province.

The event, which was hosted by the University of Electronic Science Technology of China (UESTC), saw the participation of more than 70 representatives from 34 different organizations, including Beihang University, Beijing Academy of Quantum Information Science (BAQIS) and the Yangtze River Delta Industrial innovation Center on Quantum Technologies. Representatives from the Ministry of Industry and Information Technology (MIIT) and leaders from the China Electronics Standardization Institute also participated in the meeting and delivered speeches.

The development of quantum technologies has been central to numerous national policies and initiatives in China in

recent years, including Digital China, Internet Power, and the Belt and Road Initiative.

The attendees of the working group agreed and emphasized the importance of building a quantum standard system, and of deepening research into the technology system itself. The specific topics discussed during the meetings are:

- Discussion on the Research Report on the Roadmap of Quantum Information Standardization, Research Report on Ion Trap Quantum Computing, Research Report on the Impact of Quantum Computing Attacks on Information System Data Protection and its Protection, and benchmarking test methods for quantum computing.
- Update on five standardization proposals:
 - ✓ Overall technical requirements for quantum operating systems
 - ✓ General requirements for quantum data set construction
 - ✓ General technical requirements and test methods for Rydberg atomic superheterodyne receivers
 - ✓ Specification for ultra-low temperature microwave interconnection cable assembly
 - ✓ Quantum computer cryogenic system Dilution chiller and cryoelectronic device series product standards

20. TC260 Announced Key Working Points in 2024 #Cybersecurity

On April 7, 2024, China's SAC/TC260 (Cybersecurity) released its *Annual Key Working Points 2024*. The document, which was approved by the TC's Plenary session on April 2, 2024, covers five main areas; the key takeaways include:

Consolidate top-level design, and strengthen strategic planning and standard prospective research on cybersecurity

The standard systems for critical areas should be optimized, including but not limited to security for critical information infrastructure, data and generative AI. Corresponding plans and implementation should be carried out in an orderly manner.

Research reports and whitepapers should be drafted on emerging technologies and future security risks and challenges. Other research and studies should be made in various forms, including seminars, on-site study etc.

Accelerate the formulation and revision of national standards in key cybersecurity areas

The research and formulation of urgently-needed standards should be accelerated. Specific areas include: critical information infrastructures, data security, data trade service security, personal information protection for minors, classifications of important data, interconnection system of cybersecurity products; as well as technical requirements that support security certification and inspection, security of generative AI, etc.

Expand promotion channels to improve the implementation of national standards

The promotion and dissemination of standards should be consolidated via all possible channels and measures, such as trainings, seminars, school events, interaction or broadcasting through all types of media, events co-organized with other regulators and stakeholders, etc.

Intensify research on international standard proposals and professional personnel retention

Strengthen the process of present international standard work, propose China's international standardization roadmap in cybersecurity. Efforts will be made to ensure the approval of international standard proposals related to Al and quantum technology.

The overall capability of the experts participating in international works will be further improved, while the coordination of international standards with national ones facilitated. Actively apply to be the host of the SC27 meeting in 2025, and continue to push forward standardization engagement on cybersecurity with relevant organizations from foreign countries and regions, such as the United States, EU and Japan.

Optimize the working system to improve standard quality and standardization development in cybersecurity

Optimize structure and relevant working rules and regulations of the TC. More sectoral experts should be recruited

to participate actively in standardization work. TC working results and status should be regularly published while upgrading TC's working platform.

In the document, TC260 requires its WGs and members to organize their work and implement goals and assignments accordingly.

21. China Updates Guidelines for Cross-Border Data Transfer Security Assessment and Filing

#Cross-border Data Transfer

On March 22, the Cyberspace Administration of China (CAC) released the second edition of the *Guidelines for Applying for Cross-Border Data Transfer Security Assessment* and the *Guidelines for Applying for Filing of the Standard Contract for Cross-Border Transfer of Personal Information*. These guidelines aim to provide guidance to enterprises for ensuring data export compliance.

China has recently introduced several regulations in the field of cross-border data transfer, including the *Measures* for Security Assessment of Cross-Border Data Transfer, Measures for Standard Contract of Cross-Border Transfer of Personal Information, and Regulations to Promote and Regulate Cross-Border Data Flows. The core requirements of these regulations are:

- Relevant actors must apply for cross-border data transfer security assessment in certain situations stipulated;
- When transferring abroad personal information through a standard contract signed with the overseas recipient, the contract should be filed with the provincial cyberspace authorities.

To implement the cross-border data transfer security assessment and the cross-border personal information transfer contract filing schemes, CAC has previously released the first editions of these guides in August 2022 and May 2023. The newly released documents thus consist of updated versions of the guidelines: these reduce further the compliance burden for companies transferring data outside of China, by narrowing the scope of the cross-border data transfer security assessment scheme, and by simplifying the materials that data processors need to submit.

22 China's New Measures on Facilitating the Data Cross-border Transfer #Cross-border Data Transfer

On March 22, the Cyberspace Administration of China introduced the *Regulations on Promoting and Regulating Cross-border Transfer* (referred to as "the Regulations" as below), which took immediate effect upon issuance. The Regulations draw upon the legal framework established by three pivotal laws in the sector: the *Cybersecurity Law of China*, the *Data Security Law of China*, and the *Personal Information Protection Law of China*. Their objective is to enhance the current management system governing cross-border data transfer, thereby facilitating an orderly and lawful flow of data, harnessing the value of data assets, and fostering greater openness to the global community.

Comprising 14 articles, the Regulations elucidate numerous scenarios where stakeholders may benefit from facilitation or even exemption from cross-border data security assessments, cross-border personal information standard contracts, and personal information protection certifications. Key provisions of

the regulation include:

Declaration Criteria Clarification: It delineates criteria for cross-border data security assessments, stipulating that if data processors have not been informed by relevant authorities or regions, or if their data has not been designated as key data, they are not required to undergo cross-border data security assessments.

Exemption Scenarios: The Regulations outline exemption scenarios for various activities, including international trade, academic cooperation, and transnational manufacturing and marketing activities, provided that they do not involve personal information or key data. Additionally, exemptions are granted for specific circumstances such as emergency situations requiring the protection of life, health, and property safety.

Reporting Requirements: It specifies reporting requirements for certain cross-border data activities,

particularly those involving critical information infrastructure operators and data processors intending to transfer important data overseas or process personal information on a large scale.

Conditions for Standard Contracts and Certification: Conditions for concluding personal information exit standard contracts or obtaining personal information protection certification are clarified, particularly for data processors handling significant volumes of personal information.

Furthermore, the Regulations institute a negative list system for pilot free trade zones. Under this system,

pilot free trade zones may establish their own negative lists within the framework of the national data classification and protection system. Once approved by regional cyberspace and information regulators and reported to national regulators, data processors in these zones may be exempted from certain crossborder data transfer requirements when transferring data outside the negative list.

In essence, the Regulations represent a significant step towards enhancing oversight and facilitating cross-border data transfer in line with evolving legal frameworks and technological advancements. They aim to strike a balance between promoting data flow and safeguarding data security and privacy.



Green Transition

23. China Called for the "New Three" Carbon Footprints Standard Projects

#Carbon Peak and Neutrality

On March 8, 2024, the Ministry of Industry and Information Technology (MIIT) issued the *Notice Calling for Standard Projects in the Topic of Carbon Footprint for "New Three" Products* (hereinafter referred to as "the Notice"). The call for standard projects ended on April 15, 2024.

The "New Three", namely photovoltaic products (PV Products), lithium-ion batteries, and electric vehicles (EVs), present strong performance in China's exports since the year 2023. However, the high manufacturing volume requires better carbon footprint monitoring as China is on the way to achieving its carbon peak and carbon neutrality goals.

The Notice is issued in accordance with the requirements and goals stated in top-level documents, including the National Standardization Development Outline, the Implementation Plan on Establishing Carbon Peak and Carbon Neutrality Measuring System, the Guidelines of Carbon Peak and Neutrality Standard System, and the Key Points of National Standardization Work 2024. The key fields of this round of call for projects are summarized as carbon footprint quantification and product categorization, specifically for:

- Photovoltaic products (PV Products): PV modules, electrical components and other key products.
- Lithium-ion batteries
- Electric vehicles (EVs): vehicle manufacturing, drive motor, power battery, etc.

The proposals should be for national standards, and should not exceed the time limit of 18 months. The standard project proposals should cover: i) project significance; ii) scope and main technical contents; iii) status of counterparts (if any) in the international standardization community; iv) correlation with relevant Chinese laws/regulations and mandatory standards; iv) list of involving products; v) any connection with any patent, etc.

24 China's Implementation Rules of Carbon-relevant Certifications #Carbon #Certification

On April 7, 2024, the National Certification and Accreditation Administration of China (CNCA) issued the *Notice on the Reporting Requirements of Direct Carbon-relevant Certification Rules* (referred to as "the Notice" henceforth). The primary objective of this significant notice is to provide clear guidance and specifications regarding Carbon-relevant certification activities conducted by certification bodies.

The term "Direct Carbon-relevant Certification Rules" pertains to the fundamental criteria and procedures for certifying products, management systems, and services based on greenhouse gas (GHG) emission quantification. It is noteworthy that the Notice applies exclusively to certification rules formulated by certification bodies or those authorized for implementation in the absence of national regulations.

The certification rules falling under the purview of the Notice are categorized into three types for certifications on products/services/management systems: carbon reduction/removal, carbon disclosure, and carbon neutrality.

The key requirements outlined for the relevant certification rules include:

• Comprehensive coverage of application scope, technical basis (technical specifications, mandatory technical requirements, or standards), qualifications of certification staff, certification model (where applicable), data quality requirements, GHG quantification methods for specific sectors, implementation processes, post-

certification surveillance, renewal procedures, certificate and marking requirements, and conditions for changing certificate status.

- Certification rules being reported must not bear names similar or identical to national carbon-relevant certification rules. Instead, priority is given to incorporating provisions from international, national, and sector standards. Importantly, it is prohibited to rely solely on domestic or foreign carbon reduction systems such as Chinese Certified Emission Reduction (CCER), Clean Development Mechanism (CDM), Verified Carbon Standard (VCS), Gold Standard (GS), etc.
- Background databases or emission factors should be selected in line with China's sector development status, ensuring fairness and scientific rigor.

Certification bodies with existing certification rules falling within the outlined scope must promptly submit and file their certification rules through the official online reporting platform. Failure to do so will result in their certification rules being invalidated, and any certificates issued based on those roles will be revoked by April 30, 2024. Furthermore, non-compliance with the certification rules or the stipulated deadline will result in penalties imposed by CNCA.

25. Mandatory Standard in Place for the Safety of Lithium-ion Battery on Electric Bicycles

#Lithium-ion #Electric Bicvcles

On April 25, 2024, the Standardization Administration of China (SAC) approved the implementation of *GB 43854-2024 Safety technical specification of lithium-ion battery for electric bicycle* (hereinafter referred to as "GB 43854")

The application scope of GB 43584 is the lithium-ion battery as defined in the *GB 17761-2018 Safety technical specification for electric bicycle*, namely: lithium-ion batteries for electric bicycles with maximum output voltage not exceeding 60V. It is not applicable to lithium-ion batteries used by electric scooters, balance vehicles, electric motorcycles, electric tricycles and other vehicles.

China is estimated to have more than 350 million units of electric bicycles owned by the population, raising a significant challenge for public safety due to the risks that lithium-ion batteries bring. In this context, the goal of GB 43854 is to standardize the design, production and sales of lithium-ion batteries for electric bicycles, with the aim of improving product quality and safety. It does so by specifying the safety requirements and test methods for both cells and batteries used on electric bicycles within its scope, specifically:

- The safety requirements on cells include 6 items: overcharge, over discharge, external short circuit, heat abuse, acupuncture and mark.
- For batteries, 22 safety requirements are stipulated, covering 7 aspects, including: electrical safety, mechanical safety, environmental safety, thermal diffusion, mutual recognition cooperative charging, data acquisition, and marking.

This mandatory standard will come into force on November 1, 2024, providing a half-year transition period for stakeholders. For the next step, the Ministry of Industry and Information Technology (MIIT) will organize seminars and technical trainings for manufacturers and distributors, guiding all stakeholders to fully implement the requirements of the standard. Foreign stakeholder should also note that GB 43854 is a newly-drafted standard, without international adoption.

Research Group Founded in China for ESG Standardization#ESG

On April 18, 2024, the Standardization Administration of China (SAC) unveiled a significant initiative with the establishment of the ESG Standardization Project Research Group, henceforth referred to as "the ESG Group." This development arises from the recognition of ESG (Environmental, Social, and Governance) as a pivotal global framework for sustainable development information disclosure and an essential criterion for enterprises committed to high-quality development.

Comprising diverse stakeholders including research institutions (like the Chinese Academy of Environmental Planning), academic institutions (such as the Capital University of Economics and Business and Tsinghua University), organizational bodies (like the Beijing office of the International Sustainability Standards Board), and corporations (such as the People's Insurance Company of China), the ESG Group is structured to drive comprehensive engagement. Oversight of its day-to-day operations will be spearheaded by the Capital University of Economics, with support from a convener and deputy convener from the same university and the China National Institute of Standardization (CNIS), respectively.

The primary aim of the ESG Group is to expedite the standardization of ESG practices in China. By doing so, it aims to steer enterprises towards greener, low-carbon trajectories, aligning with the nation's goals of achieving carbon peak and neutrality. Additionally, the initiative seeks to bolster the integration of Chinese businesses into the global economic framework, thereby enhancing China's influence in global economic governance.

Key responsibilities of the ESG Group include:

- Analyzing current domestic and global trends in ESG standardization.
- Assessing existing ESG standards and anticipating future requirements.
- Charting a roadmap for ESG standardization, proposing both international and domestic policies, systems, and strategies.
- Identifying short-term priorities and proposing new initiatives.
- Offering recommendations for the establishment or refinement of ESG Standard Development Organizations (SDOs).
- Curating a list of international ESG standards for adoption recommendations.

The ESG Group's operational timeline spans 18 months, during which it aims to conduct comparative research, develop strategic frameworks, and lay the groundwork for an ESG standardization system in China. This concerted effort is poised to streamline integration into the international arena, facilitating smoother engagement for foreign stakeholders.

27. Product Category Rules For Carbon Footprint of Electrical and Electronic Products

#Electrical and Electronic Products

On April 9, 2024, the China Electronics Standardization Institute (CESI) organized a seminar for the standards on product category rules (PCR) regarding carbon footprint for electrical and electronic products (hereinafter referred to as "EEPs").

The scope of this professional standard seminar targets key EEPs, including but not limited to: photovoltaic modules, computers, printers and multifunctional all-inone machines, speakers, uninterruptible power supplies, servers, drones, storage devices, scanners. The seminar was attended by more than 40 representatives from EEP manufacturers, including Huawei, Hisense, BOE, OPPO, and Inspur.

The representative from CESI's Green Development Research Center introduced the overall requirements, working procedures, and technical plans for formulating standards related to product carbon footprint accounting rules in the field of industry and information technology. A comprehensive overview of the background, significance, framework, technical content, work schedule, basic database and accounting software of 20 approved PCR standards in the field of electronic and electrical appliances was also provided. The attendees conducted in-depth exchanges discussions on the scope of application of the standards, covering industrial chain links, applied product categories, data traceability, technology framework, subsequent promotion application requirements.

The key outcome of the seminar was to determine the template for the preparation of the product carbon footprint PCR standard. An agreement was also reached on aligning several technical items, including product carbon footprint accounting methods and principles for data quality control. Finally, the selection and rating methods of carbon emission factors, as well as the overall framework of product carbon footprint

reporting, were clarified.

In the coming months, CESI will continue carrying out research and engage relevant stakeholders on the topic.

The goal is to further deepen coordination in the upstream and downstream supply chain, and optimize carbon footprint standards via effective measures such as trial accounting.

28. China Called for Carbon Peak and Neutrality Standard Projects in 2024

#Carbon Peak and Neutrality

On March 14, 2024, the *Notice on Calling National Standard Projects on Carbon Peak and Carbon Neutrality in 2024* was issued by the State Administration for Market Regulation (SAMR). The document aims to improve the standard system and strengthen the supporting role of standards to achieve the country's carbon peak and carbon neutrality goals. All relevant standard project applications had to be submitted to SAMR before April 30, 2024.

The scope of proposed standard projects should be:

- Carbon emission management: calculation methods, product carbon footprint and evaluation on carbon emission reduction for manufacturers with large emissions.
- Carbon emission reduction management: carbon reduction standards on key technologies; conversion of technically advanced association standards with excellent implementation into national standardsis encouraged.
- Energy efficiency standards on new types of equipment: energyefficiency standards on industrial equipment/facility with a high level of energy consumption.
- Energy consumption allowable limit:upgrading or renewal of mandatory allowable limits for key sectors.
- Carbon removal technologies: technical standards on carbon capture, utilization and storage (CCUS), together with carbon sink.

The main sectors mentioned in the Notice cover power, steel, building materials, nonferrous metals, and petrochemicals. The Notice also requires the standard proposals not to have overlaps with existing national standards, while falling under the jurisdiction of relevant TCs or regulators in accordance with the stipulations listed in *Scope and Principles for National Standard Projects on Carbon Peak and Neutrality (Interim)*. The standard proposals must also be aligned with relevant national standard proposal regulations, and should be submitted via the Management System of National Standard Drafting and Revising Work.



Others

29. New Developments in China's Standardization Education
#Standardization Education

From April 22 to 26, 2024, the National Standardization Education Working Group (SAC/SWG 27) organized the Standardization Week in Shenzhen. During the event, the SWG also held its annual meeting, during which it introduced the latest developments in China's standardization education, specifically:

- Since its establishment in July 2022, SAC/SWG 27 has successfully initiated 13 national standardization projects, providing guidelines for the development of standardization education courses, covering general aspects such as quality management, as well as sector-specific aspects in the field of automotive, Internet of Things, and logistics.
- SAC/SWG 27 has formally signed agreements with pilot universities in China, including Zhongnan University of Economics and Law, Yanshan University, Liaoning University of Technology, Hefei University of Technology, Hebei University, and Guangdong University of Technology. The goal was to jointly promote and implement the "Fundamentals of Standardization" course in higher education. Furthermore, in collaboration with China Quality Standards Publishing & Media Limited (China Standards Publishing House), the SWG has launched the writing of the "Standardization Education Curriculum Guide Series." Additionally, SAC/SWG 27 has initiated the 2024 "Standardization+" student paper collection activity, "Standardization+" original short video collection activity, and standardization teaching capability enhancement training sessions.
- The SAC/SWG 27 Secretariat reported on the "Research Project on the Matching of Standardization Courses and the Ministry of Education's Subject Catalog," which examines the correlation between current university majors and existing standards, based on the "Undergraduate Major Catalog (2022)" and the "National Standard for Teaching Quality of Undergraduate Majors in Ordinary Higher Education." Through the matching exercise, this project provides theoretical guidance for the development of standardization courses, aiming to build and optimize a standardization curriculum system applicable to all majors, and gradually achieve full coverage of standardization courses.
- The Shenzhen University of Technology, in conjunction with the China Institute of Metrology, the China Academy of Standardization, the China Commodity Coding Center, the Certification and Accreditation Technical Research Center of the State Administration for Market Regulation, the National Standards Review Center of the State Administration for Market Regulation, China Quality Standards Publishing & Media Limited (China Standards Publishing House), and the China Standardization Association, jointly held standardization teaching capability enhancement training sessions for three consecutive years. This year, 116 participants from 84 units across 18 provinces and cities participated, including universities, government agencies, research institutes, industry associations, and enterprises.

China Releases Measures for Administration of Sector Standards for Transport Industry

#Transport Industry

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

1. Background and Significance

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

significance for improving the transport standardization policy and institutional system and enhancing the management level of sector standards.

2. Main Contents

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

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

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

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

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

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

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

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

First Batch National Standards Issued on Quantum Measurement in China

#Quantum Measurement

On March 15, 2024, SAC/TC578 (Quantum Computing and Metrology) issued multiple national voluntary standards on quantum measurements. They are the first batch within the topic in China, and all five standards will come into force on October 1, 2024.

Quantum measurement is believed to be more precise and stable comparing with traditional measuring technologies. It is defined as a big potential in China for application in fields including but not limited in highend equipment, intelligent manufacturing, life science etc.

The key contents and significance of these five standards include:

GB/T 43737-2024 Terminology for quantum measurement

It defines the relevant terms and definitions of quantum measurement, standardizes the term consistency and logical integrity between the professional field of quantum measurement and related fields, making it an important basic standard in the field of quantum measurement.

GB/T 43784-2024 Characterization and measurement of the performance of single-photon sources

It proposed single-photon source performance characterization method, therefore provides a reliable basis for the measurement of spectral, spatial, time-domain distribution and other characteristics of quantum and classical light sources at very weak power levels. This standard greatly improves the measurement limit of spectral radiance.

GB/T 43785-2024 Characterization and measurement of

the performance of optical clocks

It classifies the most basic frequency stability and frequency uncertainty indicators of optical clocks. The standard also specifies the test process and data processing process, which are mainly used in important scenarios such as relativistic geodetic survey, optical frequency reference ratio measurement, optical frequency standard value transmission and optical clock product performance evaluation. It is expected to greatly improve the comparability of optical clock performance indicators, while helping optical clock research and industrial development.

GB/T 43735-2024 Methods for the preparation of Rydberg atoms for quantum precision measurement
This standard standardized the preparation of Rydberg atoms, which lays a foundation for promoting the application of precision measurement technology based on Rydberg atoms in microwave, terahertz, communication radar and other fields.

GB/T 43740-2024 Requirements and test methods for performances of the atom gravimeters

It stipulates requirement of atomic gravimeter performance index and test method for ensuring the application of atomic gravimeter in the fields of resource exploration, geological disaster monitoring, earth science research and so on.

All five standards are made by TC578 experts without any adoption from international standards. They are aiming at bridging the gap on the lack of basic standards for the development of quantum sectors. They are expected to optimize the standard system and support the quantum sector development.

32. China Develops Standard for Classifying and Evaluating the Machine Readability of Standards

#Quantum Measurement

SAC/TC124 (National Technical Committee for Standardization of Industrial Process Measurement, Control, and Automation) is soliciting feedback on the national standard *GB/T Machine Readable Standards Capability Classification Model (Draft for Comments)*. This standard aims to guide relevant stakeholders on how to identify, assess, and enhance the machine-readable levels of standards.

Specifically, the standard categorizes machine-readable capabilities into five levels, ranging from low to high, each featuring its own set of requirements:

• Level One (Machine Displayable): Machines can display and search relevant content.

- Level Two (Machine Processable): Includes structured content of standard texts, allowing machines to identify the document structures and perform basic processing.
- Level Three (Machine Executable): Machines can selectively access semantically enriched standard content based on application scenarios and perform more complex operations on standard content using application programming interfaces.
- Level Four (Machine Analyzable): Machines can execute or analyze standard content in a more complex manner. This includes an information model (standard management shell) representing the relationships between standard content and elements, enabling uninterrupted and unambiguous data flow, and with the capability to provide preliminary responses and feedback results, in an autonomous manner.
- Level Five (Machine Decidable): Machines can autonomously modify standard content and make autonomous decisions on adopting relevant standard content. Standards can autonomously update, optimize, and adapt to the latest technologies and regulatory frameworks. Machines are capable of self-learning and validation, and providing required standard content in a predictive manner (such as responding to demands in the procurement and sales processes of the industry chain).

Furthermore, for each level, the standard specifies several capability features from four aspects: (i) content creation, (ii) content management, (iii) content delivery, and (iv) content application. Detailed requirements are also outlined.

This standard represents China's first disclosed model for the classification of machine-readable standards. It differs, to a certain degree, from ISO/IEC's SMART Standards Utility Model. Additionally, China has established the National Standards Digitization Standardization Working Group (SAC/SWG 29) at the national level, which is also developing general guidelines for standard digitization and a universal architecture standard for standard machine languages. The coordination between these standards remains to be observed in the future.

Annex 1 Introduction to the National Education about Standardization Special Working Group (SAC/SWG27)

Annex 2 Translation of Annual Report on Standardization Development in China Annex 3 Dialogue on Standards: Work Plan of Overseas Standarsd Organizations in 2024

Introduction of SESEC Project



The Seconded European Standardisation Expert in China (SESEC) is a visibility project co-financed by the European Commission (EC), the European Free Trade Association (EFTA) secretariat and the three European Standardisation Organizations (CEN, CENELEC and ETSI). Since 2006, there has been four SESEC projects in China, SESEC I (2006-2009). SESEC II (2009- 2012), SESEC III (2014-2017), SESEC IV (2018-2022) and SESEC V (2022-2025). Dr. Betty XU is nominated as the SESEC expert and will spend the next 36 months on promoting EU-China standardisation information exchange and **EU-China** standardisation cooperation.

The SESEC project supports the strategic objectives of the European Union, EFTA and the European Standardisation Organizations (ESOs). The purpose of SESEC project is to:

 Promote European and international standards in China;

- Improve contacts with different levels of the Chinese administration, industry and standardisation bodies;
- Improve the visibility and understanding of the European Standardisation System (ESS) in China;
- Gather regulatory and standardisation intelligence.

The following areas have been identified as sectorial project priorities by the SESEC project partners: Internet of Things (IoT) Machine-to-Machine(M2M) communication, communication networks & services, cybersecurity & digital identity, Smart Cities (including transport, power grids & metering), electrical & electronic products, general product safety, medical cosmetics, energy management environmental protection (including ecolabeling, as well environmental performance of buildings).

SESEC V China Standardisation and Technical Regulation Bimonthly Newsletter

SESEC V China Standardisation and Technical Regulation Bimonthly Newsletter is the gathering of China regulatory and standardisation intelligence. Most information of the Monthly Newsletter was summarized from China news media or websites. Some of them were the first-hand information from TC meetings, forums/workshops, or meetings/dialogues with China government authorities in certain areas.

In this Bimonthly Newsletter

In this Bimonthly Newsletter, some news articles were abstracted from Chinese government organizations. All new published standards, implementation or management regulations and notice are summarized; original document and English version are available.

Abbreviations

SAMR	State Administration for Market Regulation	国家市场监管总局
CAS	China Association	中国标准化协会
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
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
	I .	