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迎接2020的挑战



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LEARN FROM *YESTERDAY* PLAN FOR **TOMORROW**

A new chapter unfolds when 2020 arrives, bringing more unknown tough challenges than ever to all sectors. Confucius once said, “Study the past, if you would divine the future.” In the January/February issue of *China Standardization*, you will learn what China has accomplished in the standardization field last year, and how it has planned for the future.

We have made major advances and new breakthroughs in 2019, which is the starting year of the third stage of deepening standardization reforms. The 83rd IEC General Meeting was successfully held in Shanghai with a congratulatory letter sent by Chinese President Xi Jinping. “China Standards 2035” project has also made major achievements. A total of 2,021 national standards have been released last year, said SAMR Vice-Minister and SAC Administrator Tian Shihong when delivering the work report at the National Standardization Work Conference in January 2020.

In the SPOTLIGHT column, you can access to the work report released by SAC at the Conference, including the standardization achievements in 2019 and the national plan for 2020.

The SPECIAL REPORT column presents the top 10 standardization events, most influential standardization experts and Chinese standards selected by CSP, the sole professional Chinese media in this industry.

“China’s contribution to international standardization has to match its economic weight not only on the technical level, but also on government and strategy levels... We welcome a bigger voice from China and more Chinese wisdom in international standardization,” said CENELEC President Dany Sturtewagen in the exclusive interview.

“The past is behind, learn from it. The future is ahead, prepare for it.” Like Thomas S. Monson said, that’s what China is doing for standardization.

■ HEADLINE |

Standards & patents at the center of technological innovation

The third China Innovation Workshop on Standards & Patents was held in Xi'an, China on December 12, 2019, bringing together over 200 experts and industry representatives in the field of standards & patents across the nation to exchange information and seek cooperation in the area.

The event was hosted by China Standardization Innovation Strategic Alliance, China Standard Science and Technology Group Co., Ltd. (CSSTGC) and Xi'an Administration for Market Regulation (XAMR), and organized by Xi'an Institute of Quality and Standardization and China Standardization Press (CSP). It was moderated by Zhang Libang, Deputy Director-General of XAMR and Zhao Hongchun, Chairwoman of the Board of CSSTGC.

“Standards & patents are pivotal to technological innovation, dissemination and application of innovative achievements and promotion of consumers' welfare,” pointed out Guo Chenguang, Director of International Standardization Cooperation under the Department of Standards Innovative Management of SAMR while addressing the event.

Wu Xiaobo, Vice President of China National Institute of Standardization also stressed in the opening address that standards & patents are making profound impact on global innovation in an era of a new-round technological and industrial revolution.

Zhang Yonghua, former Director of Department of Treaty and Law, National Intellectual Property Administration, explained the standard-essential patent (SEP)-related lawsuits and legal problems in the presentation. Leading representatives from the government and industry exchanged views on standards and patents based on their own work experience. CSP President Pei Fei concluded this session.

The event is expected to facilitate enterprises' innovative development, upgrade innovative environment in Xi'an, improve enterprises' ability in deploying standards & patents strategy and promote industrial transformation and upgrading.



China releases the first batch of 5G standards

Fourteen 5G standards were launched in Beijing on January 9, 2020 at the 5G Standards Publishing and Industrial Promotion Conference hosted by China Communications Standards Association (CCSA). Those standards cover such areas as core network, wireless access network, bearer network, antenna, terminals, safety and electromagnetic compatibility, which will provide technical bases for the market application of 5G.

The publishing ceremony was attended and addressed by Vice-Minister of Industry and Information Technology Wang Zhijun and CCSA Chairman Xi Guohua, and moderated by CCSA Secretary-General Yang Zemin. ITU Secretary-General Zhao Houlin and Adrian Scrace, Head of the Mobile Competence Centre (MCC) of 3GPP and ETSI CTO sent congratulatory video to the event. Academicians Wu Hequan, Yu Shaohua and Zhang Ping at the Chinese Academy of Engineering delivered speeches on 5G technology and the latest development in the industry.

“A common vision of the industrial circle is to establish a globally trustworthy 5G technical standards system,” Wang Zhijun stated in the opening address.

Xi Guohua put forward four pieces of advice for accelerating 5G application: cultivating 5G industrial ecology; promoting 5G network construction and development; exploring new commercial mode to create 5G profitability; and ensuring safe 5G network environment.

Zhao Houlin wished the publishing of 5G standards would help China cultivate new economic growth drivers and bring convenience and benefits for all the people around the world.

The event also showcased the newest achievements in 5G standards development, chip, network devices and industrial application, attracting widespread attention from over 300 participants from related areas.



International standardization highlighted in TCM development

With the theme of “Let the world understand traditional Chinese Medicine (TCM), let TCM go to the world”, the third Belt and Road Forum for TCM Development took place in Beijing on December 18, 2019. The event was jointly hosted by the Chinese People’s Association for Friendship with Foreign Countries, the People’s Government of Beijing Municipality, Silk-Road Planning Research Center and China Academy of Chinese Medical Sciences.



It brought together over 600 representatives from 26 countries and regions including government officials from key TCM producing provinces, 4 ambassadors to China and Great Masters of TCM such as Zhang Daning and Jin Shiyuan.

Wang Qi, Academician of Chinese Academy of Engineering and Great Master of TCM, shared his insights into the TCM development boosted by the Belt and Road Initiative and highlighted the central role of standards in promoting TCM international development. “International standardization is a practical problem faced by TCM while going global,” said Wang. Over 150 items of diseases and 196 syndromes of TCM were included in the 11th Revision of the International Classification of Diseases (ICD-11) approved by WHO on May 25, 2019, marking a big step of TCM in international standardization.

At the two sub-forums, leading scientists, experts and representatives from research institutes, universities and enterprises exchanged ideas on promoting high-quality development of TCM and enhancing international cooperation. Zhao Junning, President of Sichuan Academy of Chinese Medicine Sciences, emphasized the importance of standardization to the development of genuine regional herbs (*daodi* medicinal materials). “Developing local standards for TCM to ensure clinical efficacy is a key approach to the current dilemma of the area.” Sichuan Province especially established the TCM standardization technical committee in July 2019 to provide technical support for standards development, certification work and brand building in the field.

Trade facilitation standards coming into the spotlight

Trade Facilitation Standards and Practice Forum took place in Xiamen, China on November 25, 2019, attracting over 150 representatives from the government, industry, research institutes and universities, including over 50 global experts from United Nations Economic Commission for Europe (UNECE), UN Centre for Trade Facilitation and Electronic Business (UN/CEFACT), and more than 20 Belt and Road countries.

The event was hosted by China National Institute of Standardization (CNIS) and Xiamen Administration for Market Regulation, and attended by Maria Ceccarelli, Acting Director of Economic Cooperation and Trade Division, UNECE, Li Yubing, Deputy Director-General of Standards Innovative Management Department of SAMR, Zhou Juwen, Deputy Director-General of Department of Science and Technology, General Administration of Customs, and Xu Guohua, Director-General of Xiamen Administration for Market Regulation. It was chaired by CNIS Vice-President Qiu Yueming.

Participants shared their research results on UN/CEFACT standards, trade facilitation and e-commerce, etc. in an effort to promote the dissemination and implementation of related standards and policies in China and the countries along the Belt and Road.

Infusing standardization into steel industry

“Advanced standards system is important to the supply-side reform and medium/high-end development of China’s steel industry,” said Li Xinchuang, President of China Metallurgical Industry Planning and Research Institute (CMIPRI) at the First Standardization Forum on High-Quality Development of Steel Industry taking place in Beijing on November 9, 2019.

The forum brought together over 500 representatives from the government, standardization departments, industry associations, research institutes and some 130 steel enterprises. The event was attended by Gan Yong, former Vice-President of Chinese Academy of Engineering, former ISO President Zhang Xiaogang, and high-level officials from MIIT.

Participants were engaged in discussions on a wide range of topics from standardization strategy, standards internationalization to product quality upgrading to explore the strategic path of standards leading the high-quality development of steel industry.

SAC establishes new national technical committees

SAC has established a batch of national standardization technical committees recently such as SAC/TC 583 on asset management, SAC/TC 584 on micro bubble technology, SAC/TC 582 on health quarantine, SAC/TC 585 on protection and inheritance of minority costumes, etc. The aim is to align national standards with international level and meet the demands of economic growth and social governance.

Meanwhile, SAC has been accelerating the establishment of technical committees in hot fields such as block chain technology, sharing economy and baby products, and preparing to establish a batch of technical committees in the areas of block chain, keeping distributed accounts.

Relying on expert resources, these technical committees will fully exert the role in establishing standards systems in related fields and developing high-quality standards to assist high technical innovation, high-level openness and high-quality development.

Priorities of association standardization in 2020

The Liaison for Association Standards Development set out the priorities of the organization in 2020 at the Third Forum on Association Standards Development taking place on January 8, 2020.

Priorities include supporting the program of cultivating excellent developers of association standards, conducting research on the association standards certification and assessment mechanism as well as related intellectual property policies, etc.

The Liaison now has 274 members and observers, and 33 institutions have applied for participation this year. The 11 expert committees and work groups have collaboratively organized a series of influential workshops and activities in 2019, and accomplished the development of guidelines for implementing association standardization.

Preparing talents for blockchain industry



MIIT issued the first standard specifying capability requirements for the blockchain industrial talents at the Second Global Blockchain Industry & Entrepreneurs Summit recently held in Fuzhou, South China's Fujian province.

The standard specified capability requirements for 21 positions in the scope of core research and development, practical technology and industrial application. The capability elements were classified into comprehensive capacity, specialized knowledge, the ability of using tools, and engineering practical skills.

Township clinics to be star rated

Township clinics can be star rated following the publishing of *Indicator system for comprehensive evaluation of China's township clinics* developed by Institute for Hospital Management of Tsinghua University.

Based on the benchmark provided by accreditation standards of the International Society for Quality in Health Care (ISQua), the indicator system includes 281 items of rules for evaluating clinics' service ability and quality and safety of medical care. Clinics will finally be marked with one, two or three stars depending on the evaluation results.

The standard will provide practical and scientific guidance for improving the quality and safety levels of medical care in township clinics and help complete China's primary health system.

HIGHLIGHTS |

Enhanced cooperation with Belt and Road countries

The Chinese delegation led by Tian Shihong, SAMR Vice-Minister and SAC Administrator, visited Vietnam, Cambodia and Laos on November 10-19, 2019 to enhance cooperation in such fields as standardization, metrology and conformity assessment for serving the Belt and Road Initiative.

In Vietnam, Tian held talks with Pham Cong Tac, Deputy Minister of Science and Technology, Vietnam, and made on-site investigation into the projects invested and operated by Chinese enterprises in Vietnam. In addition, a MoU was signed between SAC and the national standardization body of Vietnam.

In Cambodia, on behalf of SAMR, Tian met with the top official of Cambodian Ministry of Industry and Handicrafts, and they signed a MoU on cooperation in such fields as standardization, conformity assessment, metrology and product quality supervision. The delegation made an investigation into the operation and supervision of special equipment in Cambodia.

In Laos, Tian held talks with Deputy Minister of Science and Technology and Deputy Minister of Agriculture and Forestry. The Chinese delegation also visited Chinese projects in Laos, such as the agricultural standardization demonstration area and China-Laos Agricultural Research and Production Cooperation Base.

UNECE delegation visits SAMR

Li Yubing, Deputy Director-General of SAMR Standards Innovative Management Department, met the visiting delegation led by Maria Ceccarelli, Acting Director of Economic Cooperation and Trade Department in UNECE on November 22, 2019.

The two sides briefed on their status quo, and held in-depth discussions on the topics of common interests, such as signing a cooperation agreement, promoting trade facilitation under the Belt and Road Initiative, and the project of UN/LOCODE comparison table issue.



China and Russia enhance cooperation on standards & metrology

The 17th meeting for the standing working group on standards, metrology, certification and inspection between China and Russia was held in Xi'an, northwest China's Shaanxi province, on December 11-12, 2019.

The event was co-chaired by Tian Shihong, Vice-Minister of SAMR and Administrator of SAC, and Anton Shalae, Deputy Head of the Federal Agency on Technical Regulating and Metrology of the Russian Federation (Rosstandart).

During the event, the two sides discussed the bilateral cooperation in the fields such as standards, metrology and conformity assessment and signed the minutes of meeting.

China and UK enhance cooperation on business environment standards

The first meeting of China-UK standards working group on business environment was held in Beijing on December 5, 2019.

The event welcomed the Chinese delegation led by Gu Baozhong, Deputy Director-General of SAMR Standards Innovative Management Department and the British delegation composed of British Embassy, BSI and other organizations.

The two sides held in-depth discussions on the goals and members of the working group, cooperation projects, work plan, implementation programs and expected results related to the standards for business environment project of the two countries.

A broad consensus was reached on improving the international level of standards in various fields, such as organizational governance, sharing economy and e-commerce.



HIGHLIGHTS |

ISO workshop on standards promotion and dissemination in Qingdao



The ISO Regional Workshop on Promotion and Dissemination of Standards, the third ISO international training session undertaken by the International Standardization Training Base (Qingdao) was held in Qingdao, East China's Shandong province on December 3-5, 2019.

Targeting at Asian countries, the regional workshop attracted more than 30 trainees from such countries as China, Malaysia, Thailand, Mongolia, Nepal, Myanmar, Pakistan, Sri Lanka, Indonesia, India, Cambodia, Laos, the Philippines, Vietnam and Japan.

The opening ceremony was addressed by Chen Ying, Deputy Director of International Standards Adoption of Standards Innovative Management Department, SAMR, and Li Zongwei, Deputy Director-General of Qingdao Administration for Market Regulation, which was moderated by Zhai Yue, Deputy Director-General of Qingdao Institute of Standardization (QIS).

The three-day workshop were facilitated by two experts from ISO Central Secretariat, Elizabeth Gasiorowski-Denis, Head of Creative Content and Tharun Thomas, marketing specialist.

The objective of the workshop, aimed at ISO members, is to highlight the importance of promotion and dissemination of standards. It has been designed to support NSBs to identify the market for standards and related services and to establish marketing and communication strategies, in addition to highlighting the requirements of ISO's commercial policy (POCOSA) and copyright in the ISO system.

According to Zhai Yue, QIS has taken charge of the management and operation of the Base. By far, the Base has offered 5 workshops, giving lectures to over 130 standardizers from 57 countries.

Driving UAS standards development and application

The 3rd International Forum on Unmanned Aircraft System (UAS) Standards Development and Application was held in Nanjing, capital of Eastern China's Jiangsu province, on November 23, 2019.

Over 300 experts from ten countries including the U.S., U.K., Germany, Italy and China attended the event, discussing the topics such as fundamental basis and products, operation and management as well as test and evaluation of unmanned aerial vehicle (UAV).

With the fast and sound development of the UAV industry, there are urgent needs for standards playing a leading role in regulating the industrial development, said Li Yubing, Deputy Director-General of SAMR Standards Innovative Management Department, during her address.

In China, a guide on establishing the standards system of UAS was released in 2017 to support government supervision and meet market demands. By far, the framework of the standards system has been established with the planning of developing nearly 300 national, sector and association standards, which will promote the normative, sustainable and rapid development of the UAV industry.

At present, ISO/TC 20/SC 16 is established for developing international standards on the quality, safety and supervision of UAS. Chinese experts serve as the convenors of WG 5 on the testing and evaluation of UAS, and WG 6 on the product subsystem of UAS. And Chinese experts have actively participated in its work, and submitted many proposals on international standards.

International exchanges on electrostatic protection and standardization

The 8th Electrostatic Protection and Standardization International Conference took place in Chengdu, China on November 11-12, 2019, attracting nearly 200 representatives from government departments, industry, research institutes and universities across the globe.

The event was co-hosted by CNIS, China Academy of Space Technology, State Key Laboratory of Complex Electromagnetic Environment Effects on Electronics and Information System (CEMEE), the U.S. Trade and Development Agency (USTDA), ANSI and Electrostatic Discharge Association (ESDA), and organized by China Standardization Press, Sichuan Aerospace Measurement and Test Research Institute and Beijing Orient Institute of Measurement & Test.

Nine experts and scholars from China and the U.S. delivered speeches on a wide ranges of topics, such as research progress of spacecraft space electrostatic effects and T/ESD standards development.

The event showcased the achievements of electrostatic protection technologies and created the chance of interactions.

Embracing the opportunities of **digital transformation**

Interview with Dany Sturtewagen,
President of CENELEC

抓住数字化转型的机遇

专访欧洲电工标准化委员会主席 丹尼·斯图特瓦根

By Jin Jili 靳吉丽

During the 83rd IEC General Meeting held in October 2019 in Shanghai, *China Standardization* had an exclusive interview with Mr. Dany Sturtewagen, President of CENELEC (European Committee for Electrotechnical Standardization). He expounded on the strategies and goals of CENELEC, and the relationship of CENELEC with IEC and the Belgian Electrotechnical Committee (CEB-BEC), where he served as the President. He also shared his thoughts about the IEC GM and China's contribution to the international standardization community.



China Standardization: Can you share your work experience with us? What is the relationship between the Belgian Electrotechnical Committee (CEB-BEC) and CENELEC?

Dany Sturtewagen: I work for the Belgian family-owned company Niko. I have a master degree in civil engineering technology, but I have always worked in marketing in Niko, first as Strategy Director and in charge of other several responsibilities and now as Director Corporate Affairs. I am also the Chairman of the Workers Council, but I am not part of any Technical Committee. As a company, we find it very important to participate in standardization, because we are at the forefront of technology. The company has about 800 employees: that means a very large company in the Belgium but a small-sized one compared to what is usual in other big European countries. Half of the staff is involved in the standardization work. We know everything that is going on in the market, and the owners of the company consider standardization as a job they must do.

Since 2007, I have been member of the board of the Belgian Electrotechnical Committee (CEB-BEC), and now I am its President. On top of this, I have started my mandate as CENELEC's President in January 2019. CEB-BEC is one of the thirty-four members of CENELEC: when a CENELEC standard is developed, all CENELEC's members must implement it identically and withdraw national conflicting standards. This means that we only have CENELEC standards in Belgium. That's the only way we work. Belgian experts in Belgium work together in technical committees on national, international and European levels.

As the President of CENELEC, I have to defend the interests of CENELEC, not the interest of CEB-BEC. So I have to consider CEB-BEC as a normal member. But, of course, being in the front row and having first-hand information allows me to help the national committees also.



What are the strategies and goals of CENELEC in the long term?

Our goal is to have 100% CENELEC standards identical to the IEC. Currently, there are already about 75% of CENELEC standards that are identical to the IEC. We strive to reach 100%, which we will certainly achieve.

Furthermore, we need to embrace the challenges and the opportunities associated with digital transformation, both in terms of the standards we produce and how we produce them, enhance the engagement with stakeholders and standards takers and improve communication on the benefits of standardization, understand the current status and optimize the standards development process for the standard-makers of the future.

According to the CENELEC 2019 Annual Report, about 75% of CENELEC standards are identical to IEC international standards. What is the cooperation mode between CENELEC and IEC? How do CENELEC standards transform into IEC standards?

For instance, the Belgian experts work at national, European and international levels. To ensure the best use of our experts' resources, a close cooperation between CENELEC and IEC is ensured through the Frankfurt Agreement. That is to say that, thanks to the Frankfurt Agreement, we only work once, as we work at the same time at international, European and national levels. So we don't transform CENELEC standards into IEC standards.

In fact, whenever there is a need for a standard, we have to propose it always first to the IEC. The parallel voting system within the Frankfurt Agreement ensures that, for each document, our national experts vote at the same time for both the international and European levels. That makes it very efficient.

It is a part of the Frankfurt Agreement that whenever a national committee comes up with the demand for a standard, we have to first propose it to the IEC, so that we can work internationally. Only when there is no need at the international level we can go for a European standard. It's really an efficient way.

That's also why a lot of regions want to work in the same way. We have agreements, for instance, with the Gulf area and Africa, because they came to us to get inspired on how to work in the same efficient way.

What has CENELEC done at the 2019 IEC General Meeting?

The IEC General Meeting is the best opportunity to have face-to-face discussions with all the colleagues in the world. For this reason, it is an event which is certainly for me very diplomatically and socially important, because I get to know all my counterparts. For example, we took the opportunity to organize bilateral meetings with our cooperating partners and the IEC governance.

The 83rd IEC General Meeting was well organized in Shanghai, which is an impressive city. The way SAC has organized it is fantastic. It also shows China's growing importance on the international stage.

What do you think about China's contribution to international standardization work?

China is now the second largest economy in the world. Therefore, the contribution to international standardization has to match its economic weight not only on the technical level, but also on governance and strategy levels. It means that China should be involved much more in international standardization. We welcome a bigger voice from China and more Chinese wisdom in international standardization.

During the 83rd IEC General Meeting in Shanghai in October 2019, we held a good workshop on the European standardization system with more than two hundred participants. As I see all these young people so enthusiastically participating, I can only conclude that China will play a very important role in the international standardization in the near future. That is a very good thing. 



Dany Sturtewagen, President of CENELEC (R3), Zhuohua Chen, Project Manager of CENELEC (R2) and the editorial team of *China Standardization*

Chinese standardizers gather for

NATIONAL STANDARDIZATION WORK CONFERENCE

2020年全国标准化工作会议圆满落幕



By Jin Yingguo 金英果

Chinese standardizers convened in Beijing on January 19, 2020 to look back at the past year and decide on the priorities for this year. SAMR Vice-Minister and SAC Administrator Tian Shihong delivered a report at the National Standardization Work Conference. This year's event is featured with pragmatic speeches given by distinguished representatives and a standardization policy interpretation session for local governmental departments in charge of standardization.



“We reap the harvest of promoting the standardization work in an all-around way in 2019,” said Tian Shihong, summarizing the past year at the National Standardization Work Conference.

The event brought together representatives from ministries and commissions, local governmental departments in charge of standardization, industry associations and research institutes across the nation. It was attended by Gao Xiaobing, Vice-Minister of Civil Affairs, Lu Yong, Vice-President of All-China Federation of Industry & Commerce (ACFIC), IEC President Shu Yinbiao, as well as Wu Hequan and Zhang Gang, respectively Chair and Vice-Chair of China Standardization Expert Committee.

“We successfully organized the 83rd IEC General Meeting, published 2,021 national standards, established 41 standardization technical committees, and put forward 238 proposals for international standards,” Tian listed some of the impressive results of standardization work in 2019.

Encouraging progress has been made in furthering the standardization work reform, constructing the standards system promoting high-quality development, standards implementation and supervision, standardization management and standards internationalization last year.

Higher requirements for standardization

As the basic system for the modernization of national governance system and governance capability, standards play an increasingly important role in facilitating trade, supporting industrial development, promoting scientific and technological progress, and regulating social governance. At the meantime, promoting high-quality development lays down new requirements for standardization.

For instance, agricultural full-industrial chain standards system must be established as soon as possible to support the healthy, green and sustainable development of modern agriculture. The emergence of new technologies and new industrial forms needs the quick response from standards to lead and regulate new economic development and promote replacement of old growth drivers with new ones. Besides, standards need to be more interconnected to promote high-level opening-up and enhance international capacity cooperation. Building a good economic environment, improving people’s well-being and other undertakings all need the support of standards.

Therefore, the standardization work in 2020 shall focus on improving governance efficiency. The five priorities include strengthening top design to upgrade the strategic positioning of standardization work, furthering standardization reform to add more vitality to the field, enhancing the building of standards system to improve the capacity of leading high-quality development, participating in international standards governance to promote standards internationalization, and scientific management to improve standardization governance efficiency.

Standardization in distinctive fields

At the event, Gao Xiaobing looked back at the achievements in elderly care service standardization in 2019. The Ministry of Civil Affairs, with the support of the SAC, issued the guidance on building the standards system for elderly care services, basic safety specifications for elderly care services and guiding opinions on establishing a grading system to assess elderly care service providers, and implemented over 50 national standardization pilots in the area last year. In 2020, more efforts will be made to guide elderly care service providers to meet the requirements of standards and continuously improve the standards system.

Lu Yong shared the vision to promote the development of association standards by its affiliated chambers of commerce and civilian-run enterprises. The aim is to contribute to enterprise transformation, promote the application of scientific and technological achievements, and encourage technological innovation and management of enterprises. The action will also help improve standards compatibility and effectiveness by reflecting the standardization needs of civilian-run enterprises.

“China is more important to the IEC and the IEC is also more important to China than ever,” said Shu Yinbiao. The IEC can give China more chances to go global and promote the harmonization and mutual recognition of Chinese national standards and international ones, which is conducive to innovation risk reduction and technological revolution. IEC standards can help Chinese enterprises deeply participate in international innovation and improve innovation efficiency. It will finally contribute to high-quality, more efficient and more sustainable development of China’s economy.

Relevant policy interpretation

Several representatives in charge of standardization work from SAMR respectively explained the policies regarding government administration, and management of local standards and association standards to help promote the standardization work in local standardization departments and research institutes. The session was moderated by Chen Hongjun, Deputy Director-General of Standards Technical Management Department.

Xu Changxing, Deputy Director-General of Standards Technical Management Department, explained the requirements for standardization specified in the *Regulations on Improving Business Environment, the Opinions on Establishing Review System for Government Affairs and Improving Government Services, the Guiding Opinions on Promoting the Standardization of Government Affairs Disclosure at the Grassroots Level*.



Gao Xiaobing, Vice-Minister of Civil Affairs



Lu Yong, Vice-President of All-China Federation of Industry & Commerce (ACFIC)



Shu Yinbiao, IEC President

Besides, SAMR will focus on the standardization work in the areas of agricultural full industrial chain, rural and agricultural green development and culture development, well-being of rural residents, rural governance and precise poverty alleviation.

Gu Baozhong, Deputy Director-General of Standards Innovative Management Department, introduced the background and necessity for the revision of *Administrative Measures for Local Standards* and interpreted its main content. He called for local governmental departments to help improve the awareness of enterprises to participate in international standardization activities and devote more efforts to training international standardization talents and supporting regional standardization research centers.

Xiao Han, Deputy Director-General of Standards Innovative Management Department, shared the latest progress of association standards, including pilot work, operation of national platform on association standards and participation of social organizations in association standards development. He put forward three directions for developing association standards: market-orientation, innovation, and internationally sharing.

Reform, innovation and strategy-orientation are the high-frequency words in this year's event. Chinese standardizers will join hands to reap the rewards of hard work in 2020! 

Keeping reform and innovation with strategy

Celebrating standardization achievements in 2019

改革创新 战略引领

2019年标准化工作成果

(Excerpted from the Report of SAMR Vice-Minister and SAC Administrator Tian Shihong at the National Standardization Work Conference in January 2020, translated by CSP)

Last year is the starting year of the third stage of deepening standardization reform, which is critical to the establishment of a complete standards system. In 2019, major advances and new breakthroughs have been made in China's standardization field.

The 83rd IEC General Meeting has been successfully held in Shanghai with a congratulatory letter sent by Chinese President Xi Jinping. "China Standards 2035" project has made major achievements. A total of 2,021 national standards have been released last year. Forty-one standardization technical organizations have been set up, covering blockchain and other areas. In 2019, 4,880 sectoral standards and 7,238 local standards have been developed and registered, 6,227 association standards developed, and 55,962 companies have disclosed more than 370,000 enterprise standards. Chinese experts have contributed 238 international standard proposals, and assumed 8 more secretariats, chairs or secretaries at international standardization organizations.



Tian Shihong, SAMR Vice-Minister and SAC Administrator

1

We have achieved new results in deepening standardization reform.

“China Standards 2035” project has made major achievements.

Chinese Academy of Engineering, the major participant of the project, has devoted great efforts to the research. A dozen of academicians and more than 300 experts have investigated more than 100 companies in 22 provinces and cities across the nation, held over 100 workshops, and made communication and exchanges with more than 10 foreign national standardization bodies and international standards organizations, completing a research report with more than 1 million Chinese words.

The report puts forward innovative, forward-looking ideas and conclusions in the aspects of standardization strategy positioning and goals, standards system, standardization mechanism, standards implementation and standards internationalization, laying a solid foundation for developing China's standardization strategy.

National standards have been further streamlined and optimized.

A total of 106 mandatory national standards have been released such as *General requirements for safety technologies of dangerous chemicals operation enterprises*, and *General specifications for service safety of elderly care organizations*, with 96 proposals approved. Mandatory sectoral standards in such areas as electricity and medical apparatus and instruments have been upgraded into mandatory national standards.

National Development and Reform Commission (NDRC), Ministry of Public Security, Ministry of Transport (MOT), and Ministry of Ecological Environment (MEE) have jointly promoted the integration and revision of mandatory national standards for the inspection of motor vehicles' safety technique, overall performance, and exhaust contaminant. We have made the approval requirements of voluntary national standard project stricter, with the elimination rate as high as 52 percent. Last year, 2,145 projects of voluntary standards have been approved, 37 percent of which are standards revision projects. More than 95 percent of national standards for consumer products such as household appliance, furniture and shoe making, and more than 90 percent of national standards in forestry machinery and earthmoving machine comply with relevant international standards.

The management of sectoral standards has been improved.

The governmental departments in charge of sectoral standards have made and improved the policies and administrative measures for sectoral standards, and updated the registration management procedures and information system of sectoral standards. They have also examined and cleaned up sectoral standards by using stricter requirements for registration. The sectoral standards structure has been further optimized, with 2,665 sectoral standards abolished and 65,998 ones registered. Three new sectoral standards codes are added respectively for fire fighting and rescue, emergency management, and national material reserves, meeting the demands of these fields.

The reform and innovation of local standardization management have been accelerated.

The registration management procedures and information system of local standards have been further upgraded. Thirty-one provinces, autonomous regions and cities have conducted self-inspection of local standards, stringently restricting the standards scope. As a result, 5,411 local standards have been abolished, and 42,881 ones registered.

Shanxi, Zhejiang and Jiangsu provinces have carried out the standardization comprehensive reform pilot programme, contributing 11 pieces of practicable and applicable phased experiences. Regional standardization development has been more balanced. For instance, the Beijing-Tianjin-Hebei region has released 8 regional harmonized standards; the Yangtze Economic Belt has completed the standardization cooperation work mechanism; we promoted the construction of the standardization research center for Guangdong-Hong Kong-Macao Greater Bay Area; New Belt & Road Standardization Strategic Alliance has developed 4 featured standards.

Standardization innovation in provinces and cities such as Hainan, Zhengzhou and Yiwu has made notable progress. The special action of standards comparison and compliance in 10,000 companies of 1,000 sectors in 100 cities has made major progress. A total of 4,659 companies in more than 800 sectors and over 140 cities have participated in the standards comparison and compliance activity, releasing 13,734 results of enterprise standards comparison.

The vigor of market-oriented standards has been further unleashed.

China Association for Science and Technology vigorously supports its members to participate in association standards work. More than 3,000 social organizations have released 12,000 association standards, ranging from smart transport, sharing economy and elderly care services, notably increasing the supply of market-oriented standards. The number of enterprise standards disclosed through self-declaration on the national platform has soared. So far, some 240,000 companies have disclosed more than 1.26 million enterprise standards through self-declaration, covering more than 2.17 million kinds of products. The Enterprise Standards Forerunner System has been implemented across the nation, with more than 360 ranking lists of products and services released. As a result, 315 standards of 245 enterprises have become the “forerunners” of enterprise standards.





2

We have made new progress in the construction of the standards system promoting high-quality development.

A preliminary agricultural and rural standards system has been established.

In 2019, 105 national standards have been released and implemented in agricultural and rural areas, covering the quality and safety of agricultural products, prevention and control of animal and plant epidemic disease, agricultural social services, etc. We have promoted the development of 150 national standards for infrastructure in rural areas, living environment, rural governance, featured town development, etc. Tibet and Qinghai have developed national standards for industry poverty alleviation, supporting the fighting against poverty.

Ministries including Ministry of Water Resources, Ministry of Agriculture and Rural Affairs (MARA), and Ministry of Forestry and Prairie have jointly completed the construction of 268 national agricultural standardization demonstration zones. Governmental departments such as Bureau of Food and Material Reserves have released the documents on facilitating standardization reform. MARA has also built the standardized gardens of fruit, vegetables and tea, and standardization healthy farms of livestock, poultry, and aquatic products. The national standard, *Specifications for building and managing rural public toilets*, has been developed to support “toilet revolution”.

The standards system of food and consumer products quality and safety has been steadily improved.

We have cleaned up national standards for food quality. Ministry of Industry and Information Technology (MIIT), Ministry of Commerce, National Health Commission, National Intellectual Property Administration and other departments have proposed 1,394 national food standards and made the plan of developing and revising 390 national food standards, establishing the national food quality standards system in a faster way. MIIT has also developed and revised mandatory national standards for household appliances, children shoes, lighting appliances, etc. in a faster way.

To meet the needs of customized service, smart and green development, we have also developed the standards for design, production and quality control of customized consumer product, robot for housekeeping services, green product evaluation of kitchen and toilet hardware, etc. In addition, standards for popular consumer products such as electronic toilet, smart household appliance, jewelry of precious metal, etc. have been released.

High-end standards system of manufacturing industry has been enhanced.

NDRC, MIIT and National Energy Administration (NEA) have successively issued standardization policies and measures, to facilitate the deep integration of advanced manufacturing industry and modern services industry, improve the design capability of manufacturing industry, promote the standardization in areas such as smart manufacturing, industrial internet, energy internet, etc., and upgrade standards in manufacturing industry.

Ministry of Science and Technology, and Chinese Academy of Engineering have carried out the navigation action of new material and additive manufacturing standards, establishing the new sectoral standards system. Ministry of Housing and Urban-Rural Development has completed the development and revision of standards such as *Symbols for the classification of household waste*, *Evaluation standards for green buildings*, etc. MEE has organized the research and development of quality standards for recycled copper and aluminium. NEA, National Nuclear Safety Administration and State Administration of Science, Technology and Industry for National Defence have jointly promoted nuclear standardization work.

The standards system of modern services industry has been gradually completed.

Seven ministries and commissions including State Administration for Market Regulation, NDRC and State Post Bureau have jointly released and implemented the three-year action plan for productive service industry. Ministry of Civil Affairs has vigorously promoted standardization of elderly care services, applying standards in the implementation of the *Senior Citizens' Rights Guarantee Act*, and *Administrative Measures for Nursing Home*. National standards for place names, the Chinese translation of foreign place names, etc., have been completed.

People's Bank of China, China Banking Regulatory Commission, and China Insurance Regulatory Commission have finished the mid-term evaluation of the financial standards innovative construction pilot programmes. NDRC, Ministry of Commerce, and All-China Women's Federation have jointly promoted the standardization of housekeeping services. MOT has developed national standards for urban railway transit facilities and operation. General Administration of Sport has facilitated the implementation and promotion of winter sports, supporting the Olympic Winter Games to be held in China in 2022.

The standards system of fundamental public services has been established in a faster way.

To implement the Guiding opinions on establishing and improving the standards system of fundamental public services issued by the General Office of the Central Committee of CCP and the Information Office of the State Council, more than 100 national standards for public culture, labor management and protection, and urban passenger transport are under development, and more than 40 national standards for the disabled care services, safe use of public sports facilities, account management of urban and rural residents' basic endowment insurance, etc. have been released. SAMR, NDRC and Ministry of Finance have launched the national fundamental public services standardization pilot programmes in 54 cities and counties. In addition, Ministry of Human Resources and Social Security has actively promoted the pilot programme. Fujian province has taken the lead in implementing the standards system of fundamental public services.



The construction of standards system on social governance has been remarkably enhanced.

The national work arrangements on streamlining administrative approval, optimizing government services and boosting the disclosure of government affairs have been well implemented. The national standards, such as GB/T 38227-2019, *Specification for agency services of investment projects construction approval*, have been published, and the national standardization and normalization pilots on the disclosure of government affairs at the grassroots level have been carried out. With the joint efforts of 17 ministries and commissions, 26 relevant guidelines in key fields have been compiled.

The Cyberspace Administration of China has revised the national standard on specification for personal information security. NDRC and Ministry of Finance have promoted the application of a series of national standards on the rules of compiling unified social credit code in the social credit system. Ministry of Public Security has driven the development of the national standards on explosive substance and equipment. Ministry of Justice has facilitated the establishment of the standardization technical bodies including those on lawyer services. Ministry of Emergency Management has published 40 national standards in the fields such as safe production, fire fighting and hazardous chemicals. Moreover, National Government Offices Administration has announced the second batch of 20 standardization pilot projects on government affairs together with the establishment of related standardization working groups.

The standards system on ecological civilization has been rapidly established.

In 2019, 24 mandatory national standards on energy efficiency and water efficiency of air conditioner, indoor lighting LED light, dish washing, etc., have been published. A total of 37 national standardization pilots on circular economy have been evaluated. Ministry of Housing and Urban-Rural Development has revised GB/T 19095-2019, *Signs for classification of municipal solid waste*. Ministry of Natural Resources has driven the development of the national standards in such fields as real estate, marine industry and green mining. Ministry of Ecological Environment has promoted the development of the national standards on emission limits of air pollutants and limit of toxic and harmful substances in fertilizers in such fields as pharmaceuticals, coating, ink and adhesive substance. In addition, the standards system has been vigorously built in the national ecological civilization experimental areas in Jiangxi, Guizhou and Hainan provinces.

3

We have taken new steps in standards implementation and supervision.

The standardization publicity and implementation are more effective.

A special press conference was held by the State Council Information Office to review the results of standardization reform and development within the 70 years since the founding of the country. Series of publicity activities for the 50th World Standards Day have been carried out by various departments in various regions. The online platform on national standards full-text disclosure has been more functional with 1,804 standards newly disclosed in 2019. The promotional videos of important national standards on technical specification for the safety of electric bicycle and guideline for avoiding the earthquake risk in primary and middle schools have been released on the occasions such as World Standards Day and National Disaster Prevention and Reduction Day to publicize the related knowledge on national standards.

The information feedback and evaluation mechanism of standards implementation has been further completed.

The online platform on information feedback of national standards implementation have been put into use and information feedback treatment of standards implementation has been added into the system of national standards development and revision, making the feedback and treatment of information more convenient and efficient. The linkage mechanisms of standardization with the fields of law enforcement & inspection and quality management have been initially established to facilitate the information sharing of standards development and implementation. The evaluation methods of national standards implementation effect have been further improved, and the evaluation of key national standards implementation effect in the fields of man-made board and cosmetics has been finished, providing direct reference for related standards revision.

The standards supervision mechanism has been further improved.

MIIT and Ministry of Public Security have strengthened the joint supervision of the implementation of new national standard on electrical bicycle to reinforce the production, sale and use management of electric bicycles. We studied and proposed the quality supervision procedure and indicator requirement of government standards, based on the practices on the supervision of ISO and EU standards development. Random selection of inspectors and inspection targets and prompt release of results have been adopted in the areas including Shandong and Sichuan to enhance the during-and-after event supervision of the development of market-oriented standards.

4

We have achieved new improvement in standardization management.

The regulations and rules supporting the Standardization Law have been rapidly improved.

The regulations including the *Administrative Measures on Mandatory National Standards* and the *Administrative Measures on Local Standards* have been released. MIIT, Ministry of Emergency Management and China Meteorological Administration have promoted and established the standardization administrative mechanism in related industries. Regulations and rules on local standardization have been released in such areas as Jiangsu and Hubei provinces.

The management of standards development and revision is more efficient.

The announcement procedure of mandatory national standards has been improved, and the member joint submission system for national standards projects has been established. By far, over 7,000 national standards projects have been approved and reviewed, reducing the period of standards development and revision to 30 months. The mechanism of projects approving, drafting and publishing synchronously of national standards and their foreign language versions has been initially established to shorten the period of standards adoption, and over 100 international standards has been transformed into national standards.

The management of technical committees is more normative.

The re-examination of technical committees has been carried out; as a result, 127 unqualified technical committees have been urged for rectification. The pilot for optimizing the technical committee system has been explored together with the adjustment and revocation of seven technical committees with narrow scope and little workload. Domestic technical organizations have been promoted to be in line with the international counterparts in such fields as sharing economy and asset management.

The service on standards information has been constantly improved.

The system of national standards development and revision management has newly added one-stop service functions including standards proposal collection, proposal approval disclosure, opinion solicitation and implementation feedback. The platform on sectoral and local standards information service has been established. The international standards information platform and the China-Europe and China-Germany standardization information platforms have realized effective linkage with international standards of ISO and IEC and foreign standards of Germany, France, Spain, etc. The Chinese standards information service platform has provided more than 180 national and sectoral standards to foreign countries including Kazakhstan, Russia and Sweden.

Standardization education and training have been continuously strengthened.

The Ministry of Education has actively pushed the construction of standardization discipline, and advanced vocational education and popularization activities on standardization. Nearly 10 universities including Qingdao University have set up standardization major with over 1,000 undergraduate students enrolled. Seven universities including China Jiliang University and Open University of Guangdong have established the Standardization Discipline Construction Strategic Alliance. Shenzhen Technology University has explored to carry out embedded teaching featured with “X+quality+standard”. Over 170 experts undertaking Chair, Secretary and Convenor in ISO technical committees have attended the relevant training on ISO technical management. A campaign on international standardization elite cultivation has been carried out to train more young experts involved in the activities of IEC. A total of 235 standardization officials and experts from 31 countries in Asia, Latin America and Africa have received standardization training in China.

5

We have made new contribution in the internationalization of standards.

The 83rd IEC General Meeting was successfully held.

Under the support of the Ministry of Foreign Affairs and the Shanghai Municipal Government, the event was successfully held with record-breaking scale, attracting over 3,800 representatives from more than 100 countries to discuss key issues on transformation of IEC governance system. At the meantime, the first IEC standard in Chinese version was published. Chinese experts submitted 79 proposals of international standards on the occasion of the meeting. Moreover, it is the third time in a row for a Chinese expert to be elected as IEC Young Leader.

The participation in international standards governance has been constantly enhanced.

Shu Yinbiao, Chairman of the Board of China Huaneng Group, has assumed the 36th President of IEC, the first Chinese President over IEC’s long history. Chinese experts have undertaken posts in important management bodies in consecutive terms, actively participating in the development of strategies, policies and rules in ISO and IEC. We have published the ISO/IEC Directive in Chinese version and disclosed the information of counterpart technical work of international standardization.



The bilateral and multilateral cooperation on standardization has been continuously expanded.

Eleven documents on bilateral standardization cooperation have been newly signed. The standardization cooperation agreement between China and Nepal has been signed witnessed by top leaders of the two countries. Standardization has been included in the cooperation framework agreements and free trade agreements signed between China and more than 10 countries such as Serbia and Kuwait. Standardization cooperation between China and African/Central Asian countries has been expanded. We held the matchmaking meetings on standards cooperation with American countries and other BRICs countries for the first time, and successfully organized China-Mongolia and China-ASEAN International Standardization Forums, and the Qingdao Forum on International Standardization.

The standards action on jointly building the Belt and Road has been vigorously pushed.

At the second Belt and Road Forum for International Cooperation, four projects on international standards cooperation such as small hydropower station were included as the outcomes of the forum. Eight Chinese standards such as *Common portland cement* have been adopted as Mongolian national standards. Altogether 232 civil aircraft standards have been included in the catalog of standards mutual recognition between China and Russia. People's Bank, National Radio and Television Administration and National Railway Administration have promoted the oversea application of the standards including service specification for self-service outlets and audio and video digital copyright management. Chinese standards have been adopted in the China-India cross-boarder railway projects. Practical effects have been achieved in the adoption of agricultural standards in ASEAN countries. A total of 606 national standards in foreign language version have been developed. 



How to rise to challenges *in 2020*

如何迎接今年的挑战？

2020年标准化工作安排

(Excerpted from the Report of SAMR Vice-Minister and SAC Administrator Tian Shihong at the National Standardization Work Conference in January 2020, translated by CSP)

The year 2020 is the milestone year for building a moderately prosperous society in an all-round way, marking the ending chapter of the 13th five-year plan and the preparatory stage for the 14th five-year plan as well as the year to improve the efficiency of governance through standardization.

The general idea of this year's standardization work is as follows: guided by Xi Jinping's socialist ideology with Chinese characteristics in the new era, we will fully implement the spirit of the 19th CPC National Congress, and the second, the third and the fourth plenary sessions of the 19th CPC Central Committee as well as the Central Economic Work Conference, and thoroughly carry out the deployment of the National Market Regulation Work Conference. Adhering to the new development concept, we will strive for the goal of building a well-off society in an all-round way and focus on the modernization of national governance system and governance capacity. We will make great efforts to vigorously promote the implementation of the standardization strategy, continuously deepen the standardization reform, vigorously advance the opening up of standards based on rules and related institutions, accelerate the construction of standards system to promote high-quality development, and give full play to the fundamental and strategic role of standardization in the modernization of the national governance system and governance capacity.

In 2020, the standardization work will focus on the following five aspects.

1 | We will strengthen top-level design and enhance strategic positioning of standardization work.

Study and work out the outline of the national standardization strategy. It is vital to propose the strategic objectives, key tasks, major projects and measures that are oriented toward the year 2035 on the basis of the research results of "China Standards 2035" project, by relying on the research of "national standardization development strategy" by the Chinese Academy of Engineering, drawing on the advanced ideas from foreign standardization strategies and gathering the wisdom and strength of all parties.

Stress the preparations for the planning of standardization work in the 14th five-year period. In the development of the 14th five-year plan, all regions and departments should strengthen standardization top-level design, systematically plan the modernization of governance system and governance capacity with standardization and highlight the leading role of standardization in promoting high-quality development.

Realize the interaction and docking of the standardization strategy. On the one hand, we should take the initiative to interact with the major national strategies and accurately meet the major requirements of national strategies for standardization such as innovation-driven development, rural revitalization, regional coordinated development and sustainable development. On the other hand, we should pay attention to the interaction and docking with the international standardization strategy to better facilitate the high-level opening up.

2 | We will deepen the standardization reform and enhance the vitality of its development.

Improve the management of mandatory national standards. We will be well prepared for publicizing and implementing the administrative measures for mandatory national standards, accelerate the integration of relevant mandatory industrial standards and local standards into mandatory national standards, basically form a mandatory national standards system with an appropriate scale and a reasonable structure, actively build a cooperative and authoritative management system for mandatory national standards, strengthen the enforcement and supervision of mandatory national standards, and ensure the effective implementation of standards.

Optimize the management of voluntary national standards. We will strengthen the integration and revision of voluntary national standards, explore the establishment of a new evaluation mechanism for review of national standards, and carry out the re-evaluation of national standards system in different professional fields. We will further improve the signature system of voluntary national standards. We will accelerate the development of standards for new technologies and fields. We will make the process of developing national standards more open.

Normalize the management of sectoral standards. We will strengthen the integration and optimization of industry standards, increase the coverage of individual sectoral standard, and appropriately control the scale of new sectoral standards. In the field of general products and services, it is vital to explore the exit mechanism of sectoral standards and encourage social organizations to undertake the supply of standards in relevant fields. We will improve the registration system for sectoral standards, gradually make the registration information of sectoral standards public, and promote the publication of texts of sectoral standards. We will strictly review sectoral standards, clean up the codes for sectoral standards, and further strengthen the effective management of sectoral standards.

Strengthen local standardization. We will summarize and evaluate the pilot projects of the comprehensive reform of local standardization to provide replicable and propagable experience of the pilot achievements. We will vigorously promote the coordinated development of standardization in Beijing-Tianjin-Hebei region, Yangtze River Delta, and the Guangdong-Hong Kong-Macao Greater Bay Area, and actively build an internationally advanced standards system for the Xiong'An New Area. We will further promote the standards comparison, compliance and promotion actions of 100,000+ companies in 1,000+ sectors in 100+ cities, combine with the reform of labelling products conforming to international standards, and encourage and guide more enterprises to participate in the actions.

Promote the innovation and development of urban standardization. We will carry out comprehensive pilot projects for urban standardization, and explore new models and paths for standardization with city as the carrier and the joint participation of governments, social organizations, enterprises, etc. We will carry out the standardization work in metropolitan areas and city clusters and foster new regional competitive advantages. We will build international exchange platforms for urban standardization to promote production capacity cooperation and trade between cities at home and abroad.

Make association standards better and stronger. We will energetically implement the training plan for the development of association standards, focus on new technologies, industries, formats and models, and expand the supply of advanced and applicable association standards. We will guide and normalize the standardization work of social organizations, strengthen the supervision and management of association standards, and create favorable environment for the healthy development of association standards. We will encourage social organizations to participate in international standardization activities and accelerate the international development of association standards.

Enhance the competitiveness of enterprise standards. We will further improve the public service platform for enterprise standards information, fully release the effects of self-declaration and disclosure of enterprise standards, carry out the “enterprise standards top-runner” campaign in 2020 to promote a new batch of top-runners and create the atmosphere of “following the top-runners in production, choosing the top-runners in consumption”. We will strengthen the supervision and inspection of enterprise standards, and improve the quality of enterprise standards.

3 | We will further improve standards system to enhance the capability of leading high-quality development.

Strengthen the establishment of an agricultural and rural standards system. We will formulate an action plan of deepening agricultural and rural standardization work, advance the agricultural standardization demonstration and promotion system and put effort into building a standards system for agricultural full industrial chain and green development. We will promote the development of ecological agriculture standards in such areas as safety management of farmland soil, emergency monitoring and ecological restoration of fishing environment, and resource utilization of livestock and poultry waste. We will further promote the agricultural and rural standardization pilot work, and increase the supply of standards for rural inhabited environment improvement, village appearance improvement, rural toilet construction and renovation. We will complete the rural governance standards system to promote the construction of beautiful villages.

Improve the quality and safety standards system for food and consumer products. We will carry out the clean-up of national standards for food quality, abolish and revise a number of food quality standards and plans, and construct a food quality standards system. We will further improve the safety standards, basic general standards, key products standards, and testing method standards in the fields of children's products, textiles & garments, household articles, decorative and refurbishment materials and other consumer products. We will continue to assess the conformity of consumer products standards, and promote the simultaneous development of national and international standards for key products such as air purifier, children's toys and furniture and school supplies. We will promote the standards development related to products for the elderly and disabled and home use medical devices. We will conduct research on the standards system for quality classification and grading of consumer products.

Advance the construction of a high-end standards system for the manufacturing industry. We will establish standards systems in such areas as industrial base, intelligent manufacturing, green manufacturing and service-oriented manufacturing. We will develop standards for intelligent manufacturing facility, digital manufacturing shop, smart factory, industrial software, etc. and build a standards system for segmented areas of intelligent manufacturing. We will improve the standards system for the informationization and industrialization integrated management, industrial internet, Hualong-1, etc. We will strengthen the research and development of standards in the areas of high-tech ships, advanced rail transportation, unmanned aerial vehicles (UAVs), satellite & space infrastructure and commercial aviation. We will develop the standards for intelligent automobiles such as safety of automobile information, operating systems for automobiles and communications protocol. We will conduct on research and development of standards regarding safety of new energy vehicles, wireless charging, high efficiency charging, fuel cells, battery recycling and reuse, etc. We will improve the green packaging standards system, revise such standards as national standard for preventing over-packaging, and develop the standard for packaging applicability grading and assessment. We will continue to implement the standardization pilot project of high-end equipment manufacturing, accelerate the upgrading of standards for steel, non-ferrous metal, building materials and chemical industry and eliminate low-end products and phase out outdated production capacity. We will carry out the navigation action plan of the standards for additive manufacturing and new materials, and promote the development of standards for materials used especially in additive manufacturing, carbon fiber, rare earth, graphene, etc.

Build a standards system for new-generation information technology and biotechnology. We will advance the construction of standards system in key areas such as blockchain, Internet of Things, new type of cloud computing, big data, 5G, new-generation artificial intelligence, and new type smart cities, and develop and publish related guides. We will accelerate the development of

standards for article numbering and automatic identification, improve the standards system for ultra high-definition video, novel display, virtual (augmented) reality, integrated circuit, cyber security, etc. We will accelerate the development and revision of basic standards for biobank, instrumental enzyme, biochemical detection, etc., and encourage the development of general application standards in the application fields of biotechnology such as biological products, advanced medical equipment, and bio-based materials.

Improve the standards system for the service industry. We will upgrade the standards system for production service industry, and develop standards in such areas as cross-border e-commerce, green finance, social credibility and modern logistics. We will issue guiding opinions on the standardization work of green packaging in the express industry, and accelerate the development of a batch of related national standards. We will improve the standards system for consumer services, and implement the special action plan of household service standardization pilot work. We will develop and revise national standards for household services, tourist resorts, etc., and develop standards for new business forms such as household service training, sports tourism and digital traffic-oriented urban transport service. We will establish a standards system for basic public services with coordinated development in urban and rural areas, and develop and issue a batch of standards in the areas of children care, elderly care, social insurance, public health, public culture, nationwide fitness campaign, disabled service and other services. We will carry out the special action plan of implementing elderly care standardization pilot program, promote the construction of national basic public service standardization pilot areas, and summarize experience and promote best practice.

Strengthen the social governance standardization work. We will improve the standards system for government service, and accelerate the research on and development of standards for satisfaction evaluation of government service centers, national government service platform and government affairs disclosure at the grassroots level. We will promote the research on and development of standards for business environment evaluation, market entity protection, administrative law enforcement and supervision, etc., and implement business environment standardization pilot work. We will develop a batch of urgently-demanded emergency management standards in the areas of firefighting, safe production, personal protection, aid supplies and equipment, etc. We will improve the standards system for the establishment and application of video surveillance network for public safety, and advance the development of social security standard in such areas as explosives safety and criminal detecting technology. We will promote the development of national standards in such areas as meteorology and topography, and improve the series standards for the unified social credit code.

Accelerate the building of the standards system for ecological civilization. We will develop and revise the standards for climate change adaptation, integrated use of resources, green product assessment, oceanographic survey and utilization of marine resources, ecological protection and restoration, etc. We will upgrade the pollutant emission and environmental quality standards, enhance the standards for energy efficiency, energy consumption, water efficiency, etc., and improve the standards system for fuel consumption of vehicles and other energy saving areas in transportation. We will promote the upgrading of standards for coal, oil product and other traditional energy resources, and develop standards for emerging energy resources such as shale gas and combustible ice. We will improve the standards system for the production, storage, transportation and utilization of clean energy such as hydrogen energy and natural gas. We will promote the research on and development of key standards for new energy generation and grid connection, electric energy storage, energy Internet, electric energy for port and shore, and electric energy demand-side management. We will issue ecological civilization construction standards with local characteristics to support the construction of ecological civilization pilot zones in Fujian, Jiangxi, Guizhou and Hainan.

4 | We will engage in the governance on international standards, and enhance the internationalization of standards.

We will be deeply engaged in the governance of international standard organizations. SAC will actively fulfill China's obligations as a permanent member of ISO and IEC by providing support for the IEC President. We will share Chinese practices and offer Chinese solutions for the reform of international standards organizations and the enhancement of organization governance ability.

In terms of sustainable development, the engagement of developing countries, regional balance, and the formulation of technical regulations, we will actively participate in the decision-making process of international standards organizations, and push the international standards to play a bigger role in international trade and global governance.

We will promote the shared growth of international standards through discussion and collaboration. As China's national committee to ISO and IEC, we will fully exert the coordination

role to establish extensive international collaboration in fields including renewable energy, new material, quantum computing, digital twin, and intelligent manufacturing. The progress of upgrading Chinese superior technical standards into international standards will be accelerated.

More and more ISO and IEC standards begin to have Chinese versions. We will actively participate in the development of international standards, and submit more international standards proposals. We will also promote the establishment of new technical institutions of international standards organizations, improve the performance and ability of Chinese leaders and secretariats undertaken by China in international standard technical institutions, and continuously contribute to perfecting the international standards system.

The interconnection among standards in various countries and regions will be promoted.

The standardization cooperation mechanism among BRICS countries will be established, and the cooperation mechanism with the European Union, the African Union, ASEAN, Northeast Asia, Central Asia, and South Asia will be deepened. The bilateral cooperation with France, Germany, the United Kingdom, the United States, Canada, Russia and Saudi Arabia will be also strengthened. The information exchange on standards between China and foreign countries will be increased, and more cooperation on standardization in professional fields will be carried out.

We will promote the comparison, mutual recognition and adoption of Chinese and foreign standards, and therefore promote the compatibility of various standards systems. We will implement the action plan of translating Chinese standards into other languages, and accelerate the development of foreign language versions for mandatory national standards. We will continue to implement the Action Plan of Standard Connectivity on Building the Belt and Road, realizing a “soft connection” of standards to serve the Belt and Road Initiative.

We will actively adopt international standards. The action plan of adopting international standards will be carried out, promoting the adoption and application of applicable, advanced international standards in China. An evaluation mechanism will be established to track and assess the adoption of international standards. Adopting national standards and researching into international standards will be carried out simultaneously.

In fields such as home decoration, consumer electronic products, disability rehabilitation, top grade numerically controlled machine tools, high-performance medical instruments, novel display materials, and advanced construction materials, we will enhanced the experimental verification of international standards, therefore increase the scientific transformation of international standards and their effectiveness.

5 | We will strengthen the scientific management of standards and increase the efficiency of standards governance.

Strengthen the establishment of standardization institution. A supporting system of laws and regulations for *Standardization Laws of China* will be completed as soon as possible. The revision of the implementation regulations of *Standardization Law of China* as well as the development and revision of regulations for national standards, industrial standards, association standards, and national standard reference materials will be advanced.

We will also reinforce the management of Chinese counterparts of international standards organizations, and develop corresponding performance evaluation methods. Each region and sector shall make and perfect supporting regulations for the *Standardization Law of China* based on practical conditions. Management systems for the coordinated development of local standards, developing district and municipal local standards, etc., will be considered to be established.

Reinforce the mutual support between standardization and scientific and technological innovation. We will strive for the support of national scientific and technological programs for the research, development and application of technical standards, and complete the fast approval mechanism for standardization projects in major technical projects, therefore improving the development capability on national and international standards. The service of the national technical standard innovation bases for scientific and technological research and development will be improved in order to accelerate the transformation of scientific achievements to technical standards. We will also speed up the distribution of standard verification points, and build a technical supporting system for standard verification. We are going to organize the selection and commendation of China Standards Innovation and Contribution Award, making award winners play a leading role.

Increase the efficiency of developing and revising standards. We will fully carry out the video reply mechanism in the project approval process of national standards, so as to increase the efficiency of standards review and evaluation. We will reinforce the reevaluation of national standards plan and then adjust the project plan of overdue projects in time. We will take one step further to optimize the process of developing and revising national standards, explore and establish a dispute settlement mechanism for standards development and revision, deepen the reform in review and edit integration system, build a regular bulletin system of project progress, and eventually shorten the development and revision cycle of national standards to 24 months.

Optimize the management and service of technical committees. In order to systemize and normalize the assessment on technical committees, we will take the assessment in 2020 as

the starting point, and cover all targeted committees in 5 years. The standardization technical organizations in certain sectors will be optimized and restructured to better fit in the development demand of technical and industrial innovation.

The SWG (standardization working group) mechanism should be improved so as to push the management innovation in technical institutions. A synchronization mechanism between domestic and international technical institutions will be set up so as to connect the technical institutions home and abroad.

Reinforce the implementation and application of standards. Standards will further play a leading role in quality infrastructure, facilitating the synergetic development between standards and metrology, accreditation as well as inspection and testing. The integrated application of NQI will enhance the effective use of standards. We will begin the study on statistical index system of standardization, establish a monitoring mechanism on standardization statistics, and emphasize the application of standards in quality supervision and inspection, law enforcement inspection, credit supervision, etc. The feedback channel of standards implementation information shall be clear and unobstructed.

We will perfect the functions of feedback platforms and carry out information analysis. We are going to study and develop the evaluation method on the performance of standards application, launch the assessment on performance, and emphasize the application of assessment results.

Perfect the standards information services. The disclosure system of the full text of national standards will be optimized, so as to offer full-round and convenient services for the society. With the assistance from big data and cloud computing, we are able to accelerate the research on standards information services and construction of relevant platform, to provide customized services to the government and the market. We are going to closely follow the news of international standards and advanced foreign standards, to provide timely, accurate, and convenient services for economic and trade communications and production capacity cooperation among international communities.

Strengthen the standardization team building. We will actively promote the education on standardization and the cultivation of relative talents by supporting the general education of standardization in more universities and encouraging setting up the standardization major at colleges and universities. The standardization textbook system will be completed and the teaching staff construction will be reinforced.

We will hold more introduction activities at universities to popularize standardization, strengthen the vocational education on standardization, and cultivate more professional talents for standardization. The training on front-line standardization personnel will be intensified so as to increase the capacity of staff. In terms of international cooperation, we will push forward the educational cooperation on standardization with countries along the Belt and Road, fully utilize the advantages of international training bases, and carry out various talent training on international standardization. 

A GLANCE AT CHINA'S STANDARDIZATION

2019 中国标准化社会关注度评议



Looking back at the past year, significant achievements have been made in China's standardization area. The 83rd IEC General Meeting held in Shanghai is a milestone, reflecting China has made greater contributions to international standardization activities. Remarkable progress has also been made in the national reform of standards development, revision and management, not to mention hundreds of Chinese experts contributing their expertise to make international standards more harmonized, advanced and applicable.

Here, we selected 10 major events, 10 Chinese experts, and 10 prominent Chinese (or Chinese version) standards released this year to display the exciting achievements in China.

10 MAJOR EVENTS 十大标准化新闻事件

Chinese President Xi Jinping sent a congratulatory letter to the 83rd IEC General Meeting

The 83rd General Meeting of International Electrotechnical Commission was held successfully in Shanghai in October 2019. Chinese President Xi Jinping sent a congratulatory letter to the event.

Nowadays, the common goal of human beings is to achieve green, low-carbon and circular development. New technologies such as artificial intelligence, big data and 5G, and emerging sectors like renewable energy and electric vehicles are further integrated and developed together. In these areas, we need to develop and use related international standards, and enhance international cooperation in standards field, said Xi in the congratulatory letter.

China has attached great importance to standardization, and actively promoted the wider use of international standards. China also regards high standards as a tool to boost technological innovation, facilitate openness and lead the development of high-quality products and services. China will continue to support and participate in international standardization activities, and join hands with other countries to improve the international standards system and governance mechanism, allowing standards play a better role in global trade and governance, stressed Xi.

Standards to be better applied in military resource allocation

The Central Military Commission of China issued an official document to promote the standardization of military resource allocation in June 2019. It is aimed at boosting the standardization progress in resource allocation areas, such as military human resources, funds, arms, military facilities, military goods and information on the internet.

According to the document, the resource allocation standards system and standardization management system will be improved, and resource allocation standards will be used and promoted in key areas in a faster way. Standardization shall be applied as a means to optimize resource allocation, and regulate work procedures. Standardization requirements for resource allocation shall be introduced into relevant laws and regulations. All levels of military forces shall raise the awareness of standards and implement standards in the management and practice.

Procedures of national standards development & revision reformed

The procedures of national standards development and revision were adjusted by State Administration for Market Regulation (SAMR) and State Administration of China (SAC) in May 2019.

To address the difficulties of applying national standards faced by the society, technical committee member is empowered to apply for national standards project on the online platform. The project proposal supported by more than 5 members must be dealt with. The reform further smoothen the channel of participating in the development and revision of national standards, making the source of standards plan more extensive, and procedure more transparent.

In addition, the online platform of soliciting public opinions will be established to disclose the development and revision process. The drafting committee must also solicit opinions both on the existing opinion solicitation channel and the online platform, forming a close loop of “collecting opinions, giving feedback, and completing the standard according to opinions”. In this way, the public can easily participate in the development and revision process of every standard, ensuring the public’s rights of acknowledgement, participation, expression and supervision, and making the opinions from all sides effectively adopted or handled.

***Administrative Measures for Association Standards* released**

In accordance with the *Standardization Law of China*, SAC and the Ministry of Civil Affairs officially issued the *Administrative Measures for Association Standards* in January 2019.

The document sets out the requirements and measures for the development, implementation and supervision of association standards, laying a theoretical foundation for the implementation of the *Standardization Law of China*, and playing a crucial role in guiding, regulating and supervising standardization activities of social organizations.

Three-year Action Plan for Standardization in Productive Service Industry

The Action Plan for Standardization in Productive Service Industry (2019-2021) was jointly released by 9 ministries including SAMR, National Development and Reform Commission (NDRC), Ministry of Science and Technology, and Ministry of Industry and Information Technology in September 2019.

The Action Plan sets the goals of standardization in productive service industry in the next three years: by 2021, the demand-oriented standardization work mechanism will be established with enterprise playing a major role, and being supported by policy, industry, academia and research field, to facilitate standards development and application. The standards system of the sector will be gradually completed, effectively supporting the high-quality development of the industry. The 9 key areas defined by the Action Plan include IT services, scientific innovation services, financial services, service outsourcing, after-sale services, human resources services, modern logistics, modern supply chain, and modern commercial trade.

National public services standardization pilot programme launched

SAMR, NDRC and Ministry of Finance jointly launched the pilot programme of national basic public services standardization in July 2019.

The goals are set as follows: by 2021, standards development, implementation and promotion will be enhanced, and the innovation in the aspects of balancing standards appliance in urban and rural areas, dynamic adjustment, monitoring and evaluation will be explored by the pilot programme in regions. The successful practices of the pilot programme are expected to be promoted across the nation.

Industrial internet standards system to be established

The Guidance for Establishing the Industrial Internet Comprehensive Standardization System was jointly released by MIIT and SAC in March 2019.

According to the Guidance, a preliminary industrial internet standards system will be established by 2020. Dozens of standards in urgent needs in the industry will be developed, covering the areas of plant intranet, network asset management, edge device, industrial big data, development and deployment of industrial APP, etc. By 2025, more than 100 relevant standards will be developed to support industrial application, establishing a unified, open industrial internet standards system to meet the technical, product, management and application needs.

Two major achievements to support the B&R Initiative

The “B&R” Platform of National Standards Information, and the Chinese-English Standardization Translation Cloud Platform, developed by China National Institute of Standardization, came into service in April 2019, aiming at supporting the Belt and Road Initiative and facilitating cooperation with the countries along the B&R.

The “B&R” Platform of National Standards Information displays the standardization work of 108 countries along the B&R, and analyzes the number and characteristics of standards in these countries, building a bridge for interconnecting standards in the B&R countries. In addition, the Translation Cloud Platform provides services for translating standards context and literature into both Chinese and English, providing a translation tool for both Chinese and foreign users.

Regulating public resource trade platform services

Standard for the services of public resource trade platform (trial) was developed and released by NDRC in May 2019, aiming at optimizing service process, regulating service behaviors, and providing effective, convenient and good services to the public.

The standard defines the basic principles and requirements of the services of public resource trade platform, including service content, service quality, and requirements of process, location, facility, safety, supervision and evaluation, providing guidance for the trade platform at all levels to streamline process and improve efficiency and transparency.

Shenzhen becomes an innovative city of standards

Shenzhen, a coastal city in South China, was granted the “Innovative City of Standards Internationalization” in October 2019 due to its excellent performance.

Standardization work has become the duties of more than 20 municipal governments. Enterprises and organizations in the special economic zone have participated in the development of 6,105 international and domestic standards, and Shenzhen has assumed 73 technical committees at international and national levels. Twelve companies become the first batch of “Forerunners of Enterprise Standards”, 45 standards projects have received “China Standards Innovation and Contribution Award”, and more than 20 national standardization pilot and demonstration projects have been set up in the city. In addition, more than 500 local standards have been developed or implemented in the area.

10 INFLUENTIAL EXPERTS 十大标准化人物



Shu Yinbiao elected as the 36th IEC President

During the 83rd IEC General Meeting in Shanghai, a ceremony was held for handing over the presidential leadership on October 25, 2019. The then IEC President James Shannon and President-elect Shu Yinbiao gave speeches respectively and shook hands on the platform. Dr. Shu, the 36th IEC President since 2020, is the first Chinese expert undertaking the highest leadership role in IEC's history. He now assumes as Academician of Chinese Academy of Engineering, President of Chinese Society for Electrical Engineering and Chairman of the Board of China Huaneng Group.

Founded in 1906, IEC is the globally recognized organization for standards development and conformity assessment in electrical, electronic and related fields. It is renowned as "the UN in the electrotechnical field". It now boasts 171 members including China, who formally joined the organization in 1957.

Mai Lvbo publishes second monograph on standardization

Chinese standardization expert Mai Lvbo published his second monograph on standardization, *Standardology: Science Theory of Standard*, in May 2019. As a research fellow in China Ordnance Industrial Standardization Research Institute, Mai has been long engaged in the technological and theoretical research on standardization engineering.

In this book, the author systemically creates the theoretical system and methodology of standardology and takes standardology as a science theory for standards systematicness. Standardology and standardizology are the two core science theories in the standardization field with respective theoretical systems. The former is the cause of standardization research, and the latter serves as the result of it. Mai's first monograph *Standardizology: Science Theory of Standardization* was published in 2017.

19 Chinese experts receive the IEC 1906 Award

A total of 19 Chinese experts received the IEC 1906 Award of 2019, breaking a record in the number of Chinese prizewinners. These experts included Bian Jing, Cui Ying, Hu Jiabing, Li Mingsheng, Li Bo, Li Jie, Li Xiuying, Liang Xidong, Liu Tangli, Lu Yiming, Ma Wenyuan, Qin Daqing, Shen Jie, Song Yanlin, Sun Gang, Teng Yun, Wang Shitao and Zhang Jianhua.

The IEC 1906 Award, created in 2004 by the IEC Executive Committee (ExCo), aims to recognize the IEC experts around the world who have made outstanding contribution to the IEC international electrotechnical standardization. As one of the three key awards of IEC, it is given annually with candidates nominated by TCs and approved by IEC ExCo.

Chinese delegation stands out at 14th International Standards Olympiad

The Chinese team composed of Liu Jiacheng, Wang Haoran and Liu Yuze won the silver prize at the 14th International Standards Olympiad held in Anseong, South Korea on July 23-25, 2019, which was a historical record for China. The Olympiad attracted 49 teams composed of 147 students from 10 countries such as Japan, South Korea, Singapore, Indonesia, Malaysia and China. All students had to finish rigorous examinations including international standards drafting based on models.

The Olympiad, launched by KATS and KSA in 2006 with many prizes, aims to better disseminate and promote the international standardization knowledge among teenagers. It is of great significance in cultivating the standardization consciousness of teenagers and deepening the standardization cooperation between China and South Korea.

Dai Shifeng awarded ISO/TC 256 Outstanding Contribution Award

Standardization expert Dai Shifeng, Convenor of ISO/TC 256/WG 7, received the Outstanding Contribution Award of ISO/TC 256 at the 10th plenary meeting of the committee on October 11, 2019. He was the second Chinese expert to receive the award ever since it was established in 2017.

Dai has been actively involved in the international standardization work of ISO/TC 256 since its inception. After undertaking the convenor, he has encouraged more Chinese enterprises to participate in international standardization work and make more contribution to the TC. He was elected as the liaison of ISO/TC 256 and ISO/TC 229 at the meeting to regularly report the updates of the two technical committees.

Song Mingshun assumes Chair of ISO/TC 321

Song Mingshun, President of China Jiliang University, assumed the Chair of ISO/TC 321 on transaction assurance in E-commerce, which was officially established in Hangzhou on November 5, 2019. The technical committee was the first of its kind in China with the Secretariat located at the National Quality Surveillance and Treatment Center of E-commerce Products.

The scope of ISO/TC 321 includes assurance of transaction process in e-commerce, protection of online consumer rights including both prevention of online disputes and resolution process, interoperability and accessibility of commodity quality inspection result in cross-border e-commerce and assurance of e-commerce delivery to the final consumer.

Wang Shuo elected as IEC Young Professionals Leader

Wang Shuo from Instrumentation Technology and Economy Institute (ITEI) was elected as the IEC Young Professionals Leader during the 83rd IEC General Meeting in Shanghai in October 2019. It is the third successive year for a Chinese expert to have the honor.

Launched in 2010, the IEC Young Professionals' Programme selects 3 representatives every year to be Young Professionals Leaders from recommended young experts across the world. To better participate in the Programme, China has carried out an elite cultivation activity to pool excellent representatives of young standardization experts.

Wu Xiaodong undertakes Chair of IEC/TC 125

Chinese standardization expert Wu Xiaodong was elected as the Chair of IEC/TC 125 on personal e-Transporters with a six-year term starting from August 2019. Wu is a senior engineer at professor level, who now serves as Vice-President of Shanghai Electrical Apparatus Research Institute (Group).

IEC/TC 125, established in May 2019, is responsible for the development and revision of international standards for personal electric transporters, which is a new-type transportation equipment transformed from the application of robot technology. The personal e-transporter has been widely applied, making more urgent demands for international standards.

Jack Yao elected as Chair of AMF Standardization Committee

Jack Yao, Secretary General of CCPIT Commercial Sub-Council, was elected as the Second Vice-Chair of Asia Marketing Federation (AMF) with one-year term and the Chair of the newly established Standardization Committee at the plenary meeting of AMF on October 24, 2019.

The Committee's scope of responsibilities includes establishing a liaison mechanism with related TCs in ISO, promoting marketing related ISO standards and developing regional and international standards in new fields.

Wei Sha serves as Chair of IEEE C/SM

Dr. Wei Sha from China Electronics Standardization Institute (CESI) served as the Chair of IEEE C/SM established in October 2019. The committee is responsible for guiding, managing and supervising the establishment, development, review, release, dissemination and related application of IEEE smart manufacturing standards.

The scope of IEEE C/SM includes basic common standards on smart manufacturing, smart equipment standards, smart factory standards, smart service standards, smart empowerment technology standards, industrial internet-related standards, application standards for various industries of manufacturing, etc.

10 PROMINENT STANDARDS 十大最受关注标准

GB/T 19095-2019, *Signs for classification of municipal solid waste*

The revised standard for classification of municipal solid waste coming into effect on December 1, 2019 mainly covers adjustments in the scope of application, categories and graphic symbols of classification signs of household waste.

Compared with the previous version published in 2008, household waste is classified into 4 large categories (recyclables, hazardous waste, kitchen waste and other waste) and 11 small categories, and changes in graphic symbols of classification signs include 4 symbols deleted, 4 added, 7 retained and 4 modified in the new standard.

Currently, classification of household waste has been performed in 53.9% of residential districts in the first batch of 46 pilot cities and 70% of the 14 cities including Shanghai, Xiamen, Ningbo and Guangzhou.

GB/T 37276-2018, *Classification and accreditation for senior care organization*

The first standard on the classification and accreditation of senior care organization taking effect on July 1, 2019 is expected to provide reference for the elderly in making selections and encourage service quality improvement in those organizations. According to the new standard, senior care organizations are divided into five levels based on the evaluation of environment, equipment, operation & management, and services. Higher level represents stronger ability to provide comprehensive services. Those graded Level 5 are required to provide rehabilitation, education and visiting services apart from daily care, diet, medical care. Those institutions can voluntarily apply for grading and evaluation.

GB/T 37538-2019, *Specification for online monitoring of E-commerce transacting commodity*

SAMR and SAC issued a batch of important national standards on October 20, 2019, including the standard on online monitoring of e-commerce transacting commodity. The standard is developed on the basis of advanced experience and method of international standards in risk management and other areas. It can regulate the activities of online quality monitoring of e-commerce transacting commodity and provide technical support for the risk warning and control of product quality.

Q/DDCX 001-2019, *Safety standards for online ride-hailing services*

The Chinese ride-hailing firm renowned for “Didi Chuxing” App released and officially implemented the first safety standard for online ride-hailing services on July 22, 2019. The enterprise standard specifies detailed requirements for safety responsibility system, driver and car management, safety response and safety performance management. It constitutes 96 items and 19 safety systems.

The following four key factors ensure the standardization of safety management: safety standards, systems, processes and regulations.

The Chinese version of IEC/TS 62257-9-5:2018, *RLV Recommendations for renewable energy and hybrid systems for rural electrification--Part 9-5: Integrated systems--Laboratory evaluation of stand-alone renewable energy products for rural electrification*

The first Chinese version of IEC technical specification IEC/TS 62257-9-5:2018 issued on October 22, 2019 is expected to help Chinese enterprises keep in line with the international standards and improve product quality.

The standard proposed by the World Bank is aimed at improving the quality of stand-alone solar energy products, resolve the electricity shortage faced by one billion people in the world's poor areas, and achieve the sustainable development goals of the United Nations.

This action also helps promote the wider spread of IEC international standards in China. The country will enhance cooperation with the IEC to translate more IEC standards into Chinese, especially in the key areas relating to international trade and industrial development.

T/CESA_1036-2019, *Information technology--Artificial intelligence--Quality elements and testing methods of machine learning model and system*

This association standard on machine learning released by SAMR and SAC on May 10, 2019 marks that China's AI industry steps into a new level. The standard specifies the quality elements of machine learning model and system as well as quality indicator systems and test methods. It applies to the design, R&D and quality evaluation of machine learning model and system. Users can choose suitable quality indicators depending on the machine learning model.

ITU-T Y.Sup52, *Methodology for building digital capabilities during enterprises' digital transformation*

This international standard is built on the core outcomes of Chinese national standards GB/T 23000-2017, *Integration of informatization and industrialization management systems--Fundamentals and vocabulary* and GB/T 23001-2017, *Integration of informatization and industrialization management systems--Requirements*.

The standard specifies the concept, features and fundamentals of integration of informatization and industrialization management systems. It proposes the core concepts for building digital capabilities during enterprises' digital transformation, key processes and methodology, providing guidance for enterprises in technological application, process optimization, management reform, and accelerating digital transformation.

GB/T 37516-2019, *Specification of care services for intellectual, mental and severe physical disabilities at working age*

The first national standard for care services for intellectual, mental and severe physical disabilities at working age (age 16 to legal retirement age) was released on June 4, 2019 by SAMR and SAC and came into force on January 1, 2020.

The new standard specifies the basic requirements for the organizations providing care services for disabilities, care services, service assessment and improvement, etc. for this special group of people.



Series standards on vehicles insurance

The Insurance Association of China launched four association standards on vehicle insurance on March 28, 2019, including T/IAC 27-2019, *Specifications for Internet of Vehicles (IoV) data collection for insurance management of vehicles*, T/IAC 19.3-2019, *Specifications for the fitness test of parts used in automobile aftermarket—Part 3: Automobile cover panel*, T/IAC 19.4-2019, *Specifications for the fitness test of parts used in automobile aftermarket—Part 4: Vehicles exterior rear-view mirrors and assemblies*, and T/IAC CAMRA 20.2-2019, *Specifications for the measurement of repair time for accident vehicles—Part 2: External panel repair time*.

T/IAC 27-2019 specifies terms, definitions, scope and types of IoV data collection, exchanges and sharing in the insurance management of vehicles, as well as rules for verifying the validity, rationality and authenticity of data collected. It can facilitate the application of IoV data in the insurance industry.

GB/T 37550-2019, *Data asset evaluation index system for electronic commerce*

The first standard on data asset was developed by SAC/TC 83 on E-commerce and officially published on June 4, 2019. It specifies the principles for establishing a data asset evaluation system, index classification, index system and evaluation process, which is applicable to the quantitative calculation and assessment of the value of data asset in e-commerce.

Filling the gap in the area, the standard is conducive to the conversion of data resources into asset, and provides technical support for data trading, exchange, sharing and value increase. [CS](#)

International standard for welding symbols updated

Welding symbols are a necessary element of engineering, providing a common language for all involved in fabrication, from designers to the shop floor. The internationally agreed standard for these symbols has been updated.

ISO 2553, *Welding and allied processes – Symbolic representation on drawings – Welded joints*, combines both systems from Europe and from Pacific Rim countries that are the most widely used in technical drawings around the world. It shows, on technical drawings, how and where welds are to be made, including information such as geometry, manufacture, quality and testing of the welds. It provides for easy comparison between both systems, where needed.

This fifth edition contains updates to align with other ISO welding standards and clarifies some issues such as plug welds in circular and elongated holes, dimensioning of joint preparations, and improvements to figures.

(Source: ISO)

Standards + Innovation Awards

On November 13, 2019, on the occasion of the European conference “Boosting innovation through standards”, CEN and CENELEC launched the Standards+Innovation Awards acknowledging the important contributions of researchers, innovators and entrepreneurs to standardization and celebrating particularly relevant cases of synergies between the research and the standardization communities.

A first annual award was given to a European Research/innovation project (H2020) which has successfully contributed to standardization. A second award was given to an individual who successfully introduced her/his research outcome or innovation into standardization, thereby creating impact for her/his work. The winners of these awards were: the Smart Mature Resilience project, represented by its co-ordinator Prof. Jose J. Gonzalez; Dr Thomas Linner of the Technical University Munich.

(Source: CEN-CENELEC)



Leadership changes at Canada's national committee to IEC

A Canadian standards champion is retiring after years of involvement with the International Electrotechnical Commission (IEC). Jacques Régis's term as president of Canada's national committee to IEC (CANC/IEC) is coming to an end, wrapping up an illustrious career in the standards world that included becoming the first Canadian elected as the organization's president.

Starting in January 2020, Colin Clark will succeed Mr. Régis's as president after serving as the national committee's vice-president since 2017. Mr. Clark is currently chief technical officer at Brookfield Renewable, an SCC Governing Council member and sits on the IEC Council Board.

(Source: SCC)



Pictured: (left to right): Colin Clark, President of CANC/IEC, Chantal Guay, SCC CEO and Jacques Régis, former President of CANC/IEC at the 2018 IEC General Assembly in Busan, Republic of Korea

ANSI hosts delegation from China's National Medical Products Administration

On November 22, 2019, the American National Standards Institute (ANSI) hosted a bilateral meeting with a delegation from China's National Medical Products Administration (NMPA). Under the newly formed State Administration for Market Regulation (SAMR), NMPA is the Chinese regulatory body for Chinese drugs and medical devices and has the responsibility of developing production standards for medical devices to ensure quality and safety.

The meeting promoted dialogue on U.S. and Chinese standardization, consensus standards, and risk management in medical devices. The presentations sparked conversation on the differences and similarities in medical device standard development, which helped both countries see how they could better collaborate in the future.

(Source: ANSI)

Hydrogen and Fuel Cells Energy Summit

March 4-5, Lisbon, Portugal



The two-day event will bring together key industry stakeholders from all facets of the hydrogen industry to discuss the required economical and infrastructural innovations for a sustainable future energy carrier. The key discussions will involve monetization, latest technology implementations, material optimization, production and transportation with case studies presented from across Europe.

More information is available on the event website:

www.wplgroup.com/aci/event/hydrogen-fuel-cells-energy-summit

FutureNet World

March 4-5, London, UK



There has never been a time of more change for operators as they strive to transform their business: new business models, new operating models, new partnerships and new technology platforms as they digitally transform. The network is at the heart of innovation and this 2-day conference focused on the theme “Network Automation and AI” offers insight into how operators must evolve their networks and apply intelligence and the use of AI to take advantage of the next wave of business opportunities and future proof their business.

More information is available on the event website: www.futurenetworld.net

Vienna Cyber Security Week 2020

March 23-27, Vienna, Austria

The Vienna Cyber Security Week annual conferences on protection of critical infrastructure aim to become an international neutral multi-stakeholder platform of information, dialogue and capacity building on cyber security issues bringing together international, national, government, nongovernment, and businesses organizations.

The vision of the Austrian and International governmental and non governmental organizing partners of the Vienna Cyber Security Week is to develop and support an international collaborative community of technologically and risk informed leadership, researchers, implementers, and stakeholders for the development, sustainability, and protection of critical infrastructure against cyber threats .

More information is available on the event website: www.viennacybersecurityweek.org

CEN-CENELEC StandarDays - Discover the world of European Standards

April 2-3, Brussels, UK

Newcomers will discover the world of European standardization and all participants will understand how standardization works.

During StandarDays, you'll receive a clear and structured overview of the European Standardization System and of the CEN and CENELEC products & processes. You will learn about all the benefits of stakeholder involvement in European standardization.

More information is available on the event website:

www.cencenelec.eu/news/events/Pages/CEN-CENELECStandarDays.aspx

WSIS Forum 2020

April 6-7, Geneva, Switzerland

This Forum will provide structured opportunities to network, learn and participate in multi-stakeholder discussions and consultations on WSIS implementation. Furthermore, the 2020 WSIS

Forum (WSIS+15) will provide an opportunity to serve as a platform to track the achievements of WSIS Action Lines in collaboration with the UN Agencies involved and provide information and analyses of the implementation of WSIS Action Lines since 2005. More information is available on the event website: www.itu.int/net4/wsis/forum/2020



Research on the standardization of building economy services in China

中国楼宇经济服务标准化现状浅析

By Li Xiaowen, Lu Xuehui, Wen Mengchuan and Ren Yan

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Building economy is an important symbol of the comprehensive economic strength, the modern industry system and cluster degree of service industry, also a key indicator of urban economic development. The standardization of building economy services is of great significance to help building enterprises to improve service quality, standardize the order of industrial development and promote the high-quality development of urban economy. This paper points out the role of standardization in the development of building economy services, summarizes the status of standardization of building economy services in China in recent years, including standard development, standardization pilot and related standardization activities. In addition, according to the actual needs of building economy development in China, this paper puts forward several countermeasures for the development of building economy services standardization.

The standardization of building economy services is an important means for the high quality development of building economy. At present, about 3.4 trillion yuan of capital is invested in the building economy, and about 200 million square meters of new buildings are created in China each year. China has also made a series of explorations and attempts in the development of relevant standards, the implementation of standardization pilot, the development of building rating, etc. China's building economy enjoys a strong momentum of development, but it is still in the primary stage.

The role of building economy services standardization

The standardization of building economy services is mainly embodied in three aspects. At first, standardization could improve the level of building economy services. On the one hand, through developing relevant standards, collecting the provided service items, digging, summarizing and refining the common and repeated service rules and key points, we could form a complete set of service manuals, service flow charts and specifications, promoting the implementation of the standards by various forms of training and assessment. On the other hand, the activities of standardization could guide those who are responsible for building operation and management party to adhere to user thinking, actively understand the industry development and market innovation needs, and promote "one-stop" and "customized" services, so as to jointly solve new contradictions and problems, and improve the level of building economy services.

In addition, standardization of building economy services could regulate the building economic market. Developing related standards of building economy terms, building grade requirements, and building investment service standards could resolve market confusion, and cease the phenomenon of optional label and flaunt "Class A Office Building", "Top Office Building" by some developers of building market, as well as deceiving and inducing customers by investment intermediaries. And it could create a fair and free market environment, further improve the quality of buildings and services, and lead the normative development of the building economic market.

Moreover, standardization of building economy services could improve the monitoring of the building economic market. Through developing and implementing standards related to building economic information statistics, monitoring, etc., promoting the building of economic information platform and accelerating the enterprise communication, information sharing and the flexible supervision, we could support the development of related research, monitoring of building economic operation, significantly intensify supervision and control and increase the risk response capacity of related industry departments and trade associations.

Standards for building economy service in China

Firstly, there are some local and association standards for building economy services that have been successively issued. According to local needs and characteristics, Beijing, Shanghai, Shenzhen, Chengdu, Hangzhou, Shandong, Guangdong, Fujian and other provinces and cities have issued some local and association standards in the field of building economy services. These standards mostly focus on public services, property services, safety management, building rating, clean production and other aspects, not including such areas as, planning and design, service management, statistical monitoring.

Secondly, the development of national standards for building economy services has officially started. At present, research on national standards has been carried out on building grade evaluation, facility evaluation, building electronic information system, green building and other fields. Three recommended national standards, including building economy terms, office building public service standards and office building grade requirements, have been developed at the end of 2017, filling the gap of the national standards of building economy services in China.



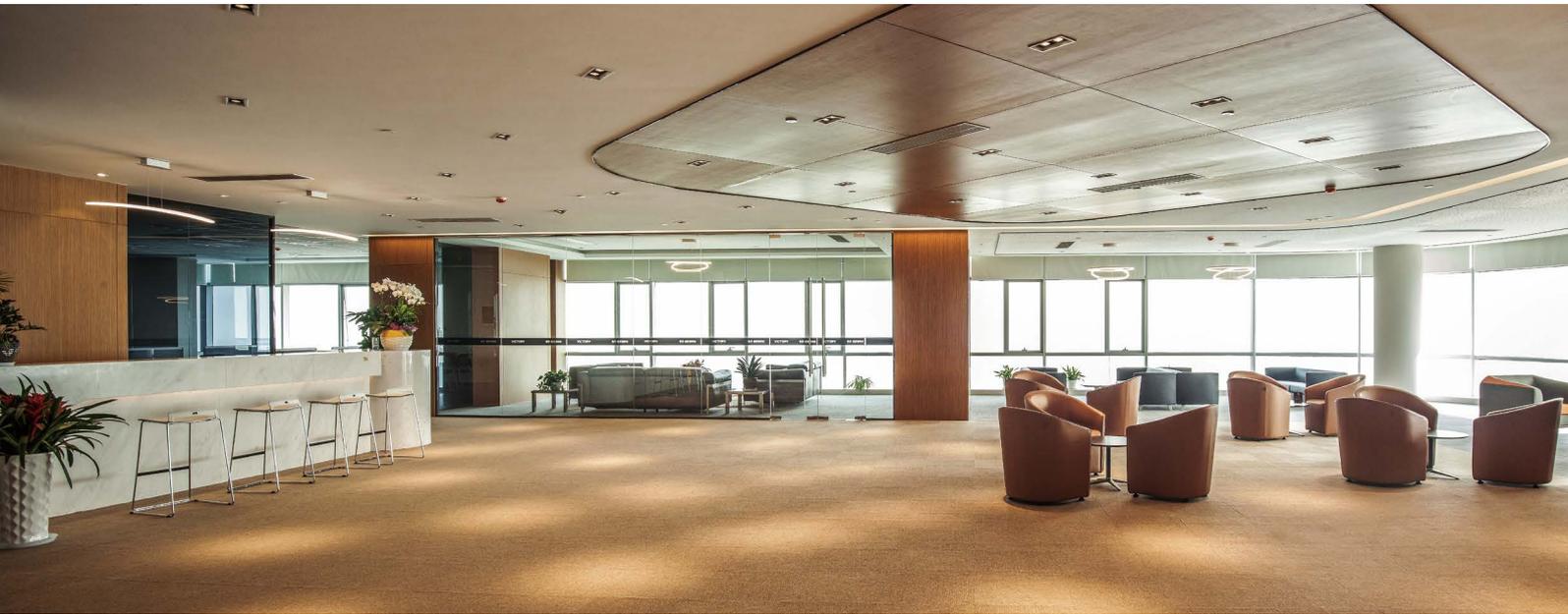


Building economy service standardization pilot in China

Since 2010, China has carried out a series of pilot construction for building economy services. In 2010, Xiacheng district of Hangzhou launched a provincial-level building comprehensive service standardization pilot project. There were 50 buildings with a tax revenue of over 10 million yuan, including 12 buildings with a tax revenue of over 100 million yuan. The total tax revenue of building enterprises reached 4.769 billion yuan in that year. In 2011, Jiangdong district of Ningbo implemented the building economic public service standardization pilot project at the municipal level, which realized the expected goal of improving service quality and customer satisfaction, increasing building economic benefits.

In 2014, Jing'an district of Shanghai promoted the standardization of three-dimensional building service stations. In order to integrate the resources of enterprises and social organizations, organically combine with job related to white-collar home, introduce various service projects suitable for the needs of white-collar workers in building, and create a comprehensive three-dimensional service to meet the needs of white-collar workers. In 2017, Chengdu national building economy services standardization pilot was approved. At present, Chengdu is actively promoting the building grade assessment, investment services, public services, green operation, security services, sign application, information services and other pilot demonstration activities.

All in all, it is important to explore and promote the experience of building economy services standardization pilot. On the one hand, it helps to explore the standardized methods and theories to promote the development of building economy. On the other hand, it improves the operation management level and service quality of building economy through practice.



Rating of buildings

In terms of building classification and evaluation, many areas have carried out a wide range of related activities, for instance, Heping district of Tianjin, Kaifu district of Changsha, new Zhengdong district of Zhengzhou, Chaoyang district of Beijing, Yuexiu district of Guangzhou, Tianhe district of Guangzhou and Chengdu. These activities help to set an industry benchmark and drive the orderly development of building economy.

Chengdu took the lead in developing the first municipal standard for grading office buildings in 2012, and revised it in 2018. The standard evaluates office buildings from six aspects, including location conditions, customer quality, ownership status, hardware requirements, service requirements and socio-economic contribution. Three batches of 46 Super Grade A and Super Grade A office buildings have been named successively following this standard. The total area of these office buildings is 3.64 million square meters, and the average occupancy rate is more than 87% at present.

Yuexiu district of Guangzhou issued the first alliance technical specification, "assessment of star-rated commercial buildings" in 2015, and carried out assessment of star-rated commercial buildings twice. The number of buildings with a tax revenue of 100 million yuan rose from 39 in 2014 to 45 in 2015 and to 60 in 2017, achieving a triple-jump.

Chaoyang district of Beijing, through learning from BOMA, LEED, WELL and other foreign building evaluation systems, and integrating local experience in environmental renovation, infrastructure construction and other aspects, developed the CBD building quality grading evaluation standard. Beijing International Trade Center, Beijing Yintai center and other 8 buildings were evaluated as the first batch of six-star Super Grade A office buildings.

Tianhe district of Guangzhou has issued the Tianhe CBD Building Sustainability Index (HKQAA SBI-THCBD), which evaluates 68 sustainable buildings based on the triple bottom line principle of environment, society and economy.



Countermeasures for enhancing standardization

Building economy has reached the standard upgrading stage after the rapid development in the early stage. Standardization plays a fundamental and strategic role in supporting industrial development, improving building quality, and promoting the deep integration of building and industry. At present, China has made positive attempts in the standardization of building economy services, which has provided reference for the development of building economy, but it is still in the initial stage.

Building economy development should adhere to the road of standardization and focus on four aspects. First, accelerate the study of standards for building economy services, and establish the standard system covering the whole chain of building operations and services, including general infrastructure, planning and design, infrastructure, service management, monitoring and control, etc. Second, develop a number of urgently needed national standards to solve the problems that appear in current industry development process. Third, identify the convergence between domestic and international standards and actively carry out research on the international standardization of building economy services. Fourth, strengthen the promotion and implementation of standardization of building economy services, give full play to the important role of domestic trade associations in standardization of building economy services, establish an effective communication mechanism with buildings, and improve the pertinency and feasibility of standard development and revision. 

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