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## Consumption upgrade?

Standards have know-hows.

消费日益升级? 标准来助力



CHINA STANDARDIZATION PRESS

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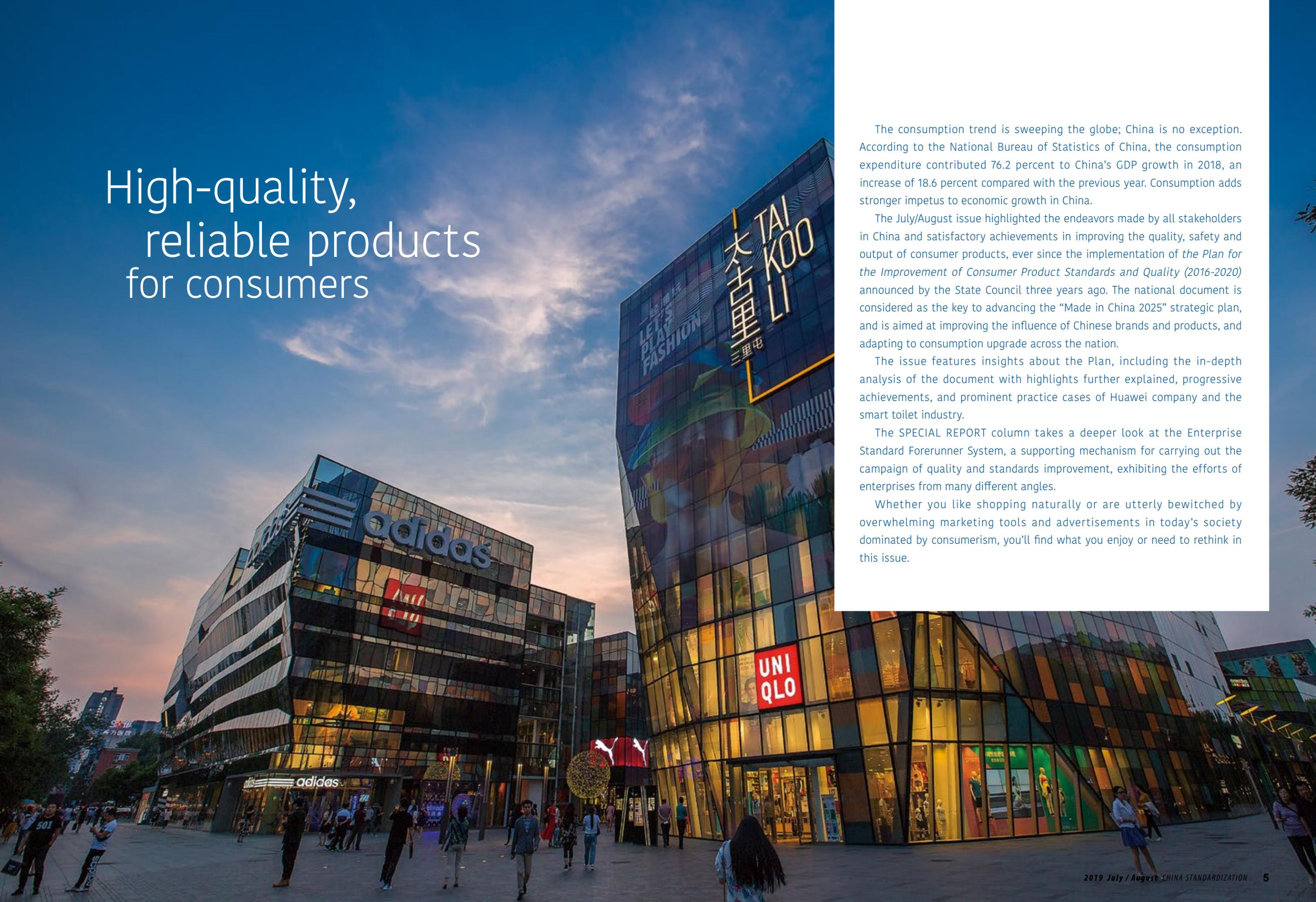
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中国英才将角逐“IEC青年专家领袖”



# High-quality, reliable products for consumers



The consumption trend is sweeping the globe; China is no exception. According to the National Bureau of Statistics of China, the consumption expenditure contributed 76.2 percent to China's GDP growth in 2018, an increase of 18.6 percent compared with the previous year. Consumption adds stronger impetus to economic growth in China.

The July/August issue highlighted the endeavors made by all stakeholders in China and satisfactory achievements in improving the quality, safety and output of consumer products, ever since the implementation of *the Plan for the Improvement of Consumer Product Standards and Quality (2016-2020)* announced by the State Council three years ago. The national document is considered as the key to advancing the "Made in China 2025" strategic plan, and is aimed at improving the influence of Chinese brands and products, and adapting to consumption upgrade across the nation.

The issue features insights about the Plan, including the in-depth analysis of the document with highlights further explained, progressive achievements, and prominent practice cases of Huawei company and the smart toilet industry.

The SPECIAL REPORT column takes a deeper look at the Enterprise Standard Forerunner System, a supporting mechanism for carrying out the campaign of quality and standards improvement, exhibiting the efforts of enterprises from many different angles.

Whether you like shopping naturally or are utterly bewitched by overwhelming marketing tools and advertisements in today's society dominated by consumerism, you'll find what you enjoy or need to rethink in this issue.

■ HEADLINE |

## The most stringent food standards to be developed by 2035

Upgrading food safety standards to the international advanced level is stressed in the *Opinions on Deepening Reform and Guaranteeing Food Safety* issued by the Central Committee of the CPC and the State Council in May.

It puts forward developing the most stringent standards to ensure that every one can trust the food they eat, mainly through the following work:

- Speed up the development and revision of common food safety standards related to pesticide and veterinary drug residues, food contaminant and pathogenic microorganisms. The number of limit indicators for pesticide and veterinary drug residues is expected to reach up to 10,000 by 2020, which will be in line with international food code. Accelerate the development of standards catering to the urgent needs of industrial development and regulation.



- Innovate standardization work mechanism. International food safety standards can be referenced and converted. Streamline standard development and revision processes and encourage enterprises to implement enterprise standards more stringent than national standards or local standards. Actively participate in the development of international food code as well as the evaluation analysis and management decision making of emerging risk factors.

- Strengthen standards implementation. Intensify the explanation, propaganda and training on food safety standards, and prompt food producers and traders to accurately understand and use those standards and guarantee their mandatory nature. Track and evaluate the use of those standards.

## Standards and innovation lead to green life



The leading role of green technology standards is highlighted in the guiding opinions on building market-driven green technology innovation system recently issued by the National Development and Reform Commission and the Ministry of Science and Technology of China.

Green technology innovation is becoming an important momentum for green development. It reduces pollution control, and boosts ecological civilization and high-quality development, as China has established a robust system for supporting green, low carbon circular economy.

To that end, the leading role of green technology standards is underlined in the Opinions. It defines the key areas for the development and revision of

such standards, such as eco environmental pollution protection and control, resources conservation and recycling, green urban development, and new energy. The document also defines its key performance and technical indicators, and encourages the research on common standards of green technology with the evaluation and verification of such results.

On the other hand, mandatory standards on product energy efficiency, water efficiency, energy consumption limits, carbon emission, and pollutant emission are to be improved in accordance with the law. The evaluation of such standards is to be conducted on a regular basis, and standards are updated and revised if needed.

Standards shall also be developed for the assessment and certification of green technological innovation. A special action will be launched to cultivate ten leading enterprises with the annual output value higher than RMB 50 billion in the area, support 100 enterprises to create national green enterprise technological centers and certificate 1,000 enterprises conducting green technological innovation.

## Advancing the high-quality development of manufacturing industry

The 18th Forum on Industrial Automation and Standardization, which focused on the digitalization and networking of manufacturing equipment and production process, took place in Beijing on May 22. It was hosted by the secretariat of national standardization committee on industrial-process measurement and control (SAC/TC 124).

Themed on standardization promoting high-quality development of manufacturing industry, the event probed into the development trend of cutting-edge technologies in advanced manufacturing field and displayed key solutions for quality and efficiency improvement of enterprises. It attracted some 600 representatives from 17 areas including energy, aerospace, machine tools, shipping, robotics and rail transport.

“We shall intensify efforts in building a manufacturing standards system and promote the integration of international and national standards,” stressed Xu Changxing, Deputy Director General of Standards Technology Management Department, SAMR, in the opening address.

Attendees were also inspired by keynote speeches on hot issues like digital twins, reconfigurable manufacturing, collaborative optimization of energy efficiency of production process, and new-generation industrial wide band. The speakers shared the technologies enabling the transformation of manufacturing industry to automation, digitalization, networking and intelligence, implementation experience as well as specific products and solutions, and demonstrated relevant systems.

For instance, CRRC Corporation Limited introduced its smart manufacturing model covering the whole industry chain and all business areas. After technological transformation, operation cost was reduced by over 20 percent, product R&D cycle down by 33 percent, production efficiency up by 30 percent, and energy utilization rate up by over 5 percent.

Those exchanges and sharing at the forum provide valuable insights for identifying the R&D direction of cutting-edge fundamental technologies and fostering technological innovation in enterprises.



## Workshop looks at the forefront of standards data application



National Library of Standards of CNIS organized a workshop on the forefront of standards data application in Suzhou, Jiangsu Province on June 13-14, bringing together some 70 researchers and technical experts from related institutions and enterprises including Jilin Provincial Institute of Standards, Shenzhen Institute of Standards and Technology, Mystuff Standard Firm and IHS Markit, to exchange latest development and innovation of data research and application in the area.

With a distinct advantage in standards document and resources, CNIS will increase efforts in the research on standards data, providing technical support for improving standardizers' ability in standards data processing, application, research and services.

## Smart grid standardization empowers energy networking

The State Grid Corporation of China developed and released the *Action Plan on Constructing the National Technical Standard Innovation Base of Smart Grid (2019-2021)* to fulfill innovation-driven development strategy and promote the transformation of innovations to technical standards.

It put forwards two major tasks: constructing a technical standards system in the smart grid field and promoting the application of advanced standards in the field. Such work is safeguarded by the special fund for “technological innovation + standards development” and a coordination mechanism with standardization organizations.

The innovation base as an effective measure for boosting the high-quality development of smart grid by standardization is beneficial to the simultaneous development of science and technology, standards, and industry, finally safeguarding the healthy, advanced development of energy networking.

## First national standard on data asset announced

The standard on data asset GB/T 37550-2019, *E-commerce data asset evaluation index system*, the first of its kind in China, developed by CNIS was officially published on June 4.

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.

## Nursing homes to be graded and evaluated by standard

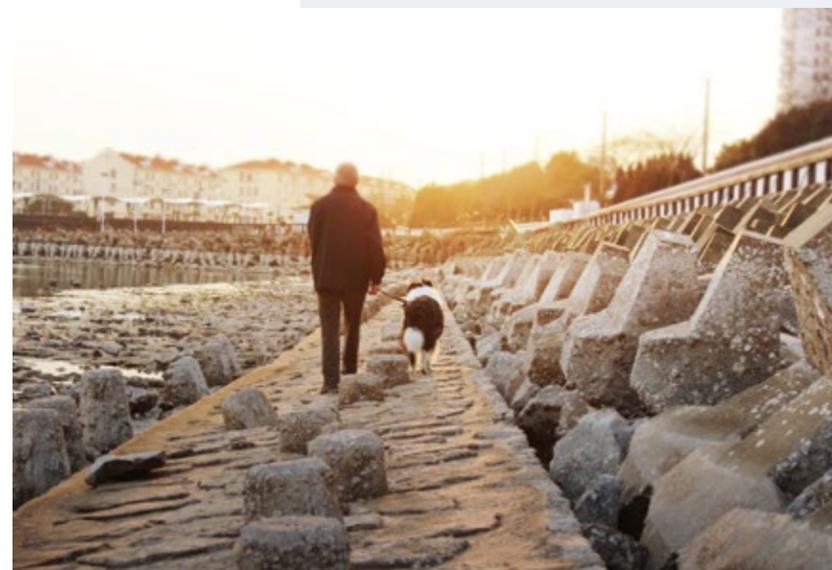
China's elderly population continues to rise, with 249.49 million citizens aged 60 or above by the end of 2018, representing 17.9 percent of the country's total population. The need for elderly care services arise rapidly.

The first standard on nursing homes grading and evaluation came into effect on July 1, which is expected to provide reference for the elderly in making selections and encourage service quality improvement in those institutions.

Nursing homes are divided into five levels based on the evaluation of their environment, equipment, operation & management, and services. For instance, services can be assessed in terms of hospital admission and discharge, diet, sanitary service, medical care, and hospice nursing. Those institutions can voluntarily apply for grading and evaluation. Higher level represents stronger ability to provide comprehensive services.

Despite voluntary, the standard is an important monitoring measure. Subsequently, the Ministry of Civil Affairs will issue corresponding regulations and management measures to ensure its implementation. Nursing homes failing to meet the standard should be closed down or suspended for rectification. It will additionally develop and publish a mandatory national standard on service quality and safety in nursing home within the coming two years.

The implementation of the new standard will promote the development of nursing service industry in the long run, since nursing homes need to earn profits by increasing investment and upgrading both hard and soft services to attract more elderly, especially private-owned ones.



## HIGHLIGHTS |

### SAC contributes ideas to ISO Strategy and extends standards cooperation with BSI

SAMR Vice-Minister and SAC Administrator Tian Shihong as the leader of the Chinese delegation attended the 109th ISO Council Meeting in Costa Rica and subsequently the fourth meeting of the China-UK Standardization Cooperation Commission in the UK from June 10 to 17.

At the ISO Council Meeting, Tian submitted China's proposals on ISO Strategy 2030, such as addressing the needs of green and sustainable development from the perspectives of ecological and resource management, enhancing the combination of standards with metrology and conformity assessment, etc.

He hoped that ISO would develop more international standards of public concern and urgently needed in trade, ensuring ISO standards make life easier, safer, more orderly and better. The Chinese delegation also had meetings with ISO President and Secretary General as well as representatives from key national standards bodies (NSBs) and the Ministry of Economy, Industry and Commerce of Costa Rica.

Subsequently, Tian leading the Chinese delegation visited the UK, and met with Kelly Tolhurst, Minister for Business, Energy and Industrial Strategy of the country.

The two sides reached a consensus on collaboratively developing and implementing common international standards, facilitating market access, etc. SAC and BSI also signed a MoU to strengthen cooperation on promoting standards harmonization.

Besides, the desired results were achieved at the fourth meeting of the China-UK Standardization Cooperation Commission, which brought together 40 representatives from the two sides for in-depth discussions on a range of issues such as smart cities, shared economy, green finance, international standards on legal environment of business and standards cooperation on building the Belt and Road.



### China and Germany standardization cooperation further enhanced

The 8th China-Germany Standardization Cooperation Committee Meeting was held from May 19 to 22 in Xiamen, South China's Fujian Province, which attracted more than 120 participants from related trade associations, research institutes and enterprises in the two countries.

The launching ceremony of the working group on China-Germany standardization strategy was addressed by SAMR Vice-Minister and SAC Administrator Tian Shihong. He reviewed the history of China-Germany standardization cooperation, and introduced the various reform measures taken in Chinese standardization field, such as standardization institutional reform and improvement of standards development and revision process.

Fully affirming the achievements made by the two sides over the past year, Tian put forward the requirement of China-Germany standardization cooperation towards wider, deeper and more practical development in strengthening strategic cooperation, promoting new breakthroughs, expanding new cooperation fields as well as enhancing the cooperation on Belt and Road.



### Cui Gang meets with SON delegation

Cui Gang, Director General of Department of Standards Innovative Management, SAMR, met with the visiting delegation of Standards Organization of Nigeria (SON).

Cui introduced the standardization institutional reform, the action plan for connectivity of standards on joint efforts to build the Belt and Road Initiative, the development of technical committees, new standards system and other status quo in China. He hoped that the two sides could extend cooperation, promote mutual recognition of standards, upgrade standards harmonization and further advance bilateral trade.

On this basis, the two sides will identify areas of practical cooperation and sign cooperation agreements by utilizing the role of standards as "soft connectivity" in economic and technical cooperation of the two nations.

## HIGHLIGHTS |

### Progress on the development of international compliance management standard

The international seminar on the practice and development of compliance management standards, hosted by CNIS, was held in Beijing on June 5, attracting over 50 participants from ISO/TC 309/WG 4 on compliance management system as well as domestic and foreign enterprises, research institutes and associations.

Keynote speeches were given by Dr. Peter Jonas from Austrian Standards Institute, Ms. Barbara Neiger from a leading management consulting company in Austria, and Professor Bartosz Makowicz at European University Viadrina Frankfurt (Oder) on latest practices and development trends of compliance management. And in-depth exchanges and discussions were made among all the participants.

During the event, the third plenary meeting of ISO/TC 309/WG 4 took place, promoting the consensus reached on the clauses of ISO 37301 and vigorously driven the standard development, establishing a communication platform for understanding and applying international standards on compliance management in China.

### Fruitful exchanges on asset management standardization in Nanjing

The plenary meeting of ISO/TC 251 on asset management and the 2019 Asset Management International Standardization Workshop were successfully held in Nanjing from May 6 to 10, welcoming 34 foreign experts from 14 countries and nearly 100 domestic experts.

The meeting was hosted by SAC and co-organized by CNIS and Jiangsu Institute of Quality and Standardization. Rhys Davies, Chairman of the ISO/TC 251, and Qiu Yueming, Vice-President of CNIS attended the opening ceremony and delivered speeches.

At the meeting, participating representatives from ISO/TC 251 and relevant experts held fruitful discussions on the standards under development, new standards proposals, and application and implementation of series standards on asset management system in manufacturing and related industries. Later at the workshop, representatives from 10 countries reported and exchanged information on the standardization of asset management.



### ISO/TC 321 secretariat settles in Hangzhou

The signing ceremony of co-constructing the secretariat of ISO/TC 321 (transaction assurance in e-commerce) by Hangzhou Municipal Administration for Market Regulation and Yuhang District Government was held in Hangzhou on June 19.

The secretariat is undertaken by National E-Commerce Product Quality Monitor and Disposal Center administrated by Hangzhou Municipal Administration for Market Regulation.

The technical committee is responsible for the standardization in the field of transaction assurance and upstream/downstream directly related processes in e-commerce. It currently has 12 participating members and 16 observing members. The secretariat will hold the inaugural meeting and the first general meeting in Hangzhou in early November.

### Breakthrough in the Sino-German comparative test platform

Comparative test results of three-door refrigerators were unveiled at the news conference on Sino-German joint efforts in establishing comparative test platform “Choice Guide” in Beijing on May 15.

The event brought together representatives from home appliance manufacturers such as Haier Group and Miele as well as related institutions and enterprises including China Consumers Association (CCA), German Corporation for International Cooperation (GIZ), CNIS, China Home Electric Appliance Research Institution and China Standard Science and Technology Group.

Comparative test platform “Choice Guide” was put into operation in 2017 under the management of China Standard Certification Co., Ltd. It was established under the developPPP project initiated in 2015 by eight Chinese and German institutions including GIZ. The platform draws on the experience of Stiftung Warentest, an authoritative Germany certification body in the area and is well adapted to the situation of China.

At the event, handover of the platform was completed between the Chinese and German representatives, who also jointly issued an operation manual for “Choice Guide” comparative test. Three-door refrigerators of nine manufacturers were selected for comparative test of performance, energy consumption, preservation ability and accessibility. Their strengths and weaknesses were described in an objective manner based on scoring criteria.

Comparative test that has been operated in developed countries for decades is actually an activity of standards comparison and compliance to evaluate goods and services based on the practical needs of consumers, pointed out CNIS Vice-President Li Aixian at the conference. She expressed high hopes for China Standard Certification Co., Ltd. to put more efforts in helping enterprises improve product quality and consumers choose satisfying products.

# Consumption upgrade?

**Standards have know-hows.**

消费日益升级? 标准来助力

By Jin Yingguo 金英果

SAC released the “special action plan for consumer product national standards (2019)” on June 4 to reinforce the construction of standards system in the field of consumer products and promote the improvement of their standards and quality. This action is also a strong echo of the *Plan for the Improvement of Consumer Product Standards and Quality (2016-2020)*, a practical measure adopted three years ago with the aim to adapt to China’s consumption upgrade. Where is it headed now?

China’s e-commerce platforms have achieved record sales during the mid-year “618” online shopping festival running from June 1 to 18. The cumulative value of delivered orders this year witnessed a 37 percent increase from last year’s festival sales.

Sales of home appliances surpassed RMB 800 million in just three minutes and 47 seconds, while air conditioners worth more than RMB 100 million were sold in just 15 seconds. More than 50,000 smart phones were sold in the first three minutes of the event. The sales of beauty care products, eye cream, lipsticks, perfume, and baby and maternal products also rose massively, according to the data of Tmall, a widely known Chinese website for business-to-consumer online retail. All those figures show a consumption upgrade trend in China.

Early in May, sales volume of daily consumer commodities grew over 10 percent, and medium- and high-end products like cosmetics and telecommunications equipment also contributed more to economic growth, says National Bureau of Statistics of China. It is reported that consumption expenditure contributed 76.2 percent to China’s GDP growth in 2018, an increase of 18.6 percent compared with the previous year. Consumption adds stronger impetus to economic growth in China.



## Policy response to consumption upgrade

The consumption of daily commodities is greatly impacted by product quality and price-performance ratio, so supply quality shall be improved to stimulate consumption demand, which is also conducive to the transition from “Made in China” to “Created in China”, from high-speed to high-quality, and from Chinese Product to Chinese Brand, pointed out President Xi Jinping, underlining the role of product quality in economic growth.

Premier Li Keqiang reiterated the importance of consumer product standard and quality, requiring that we shall raise the level of standardization to promote the improvement of consumer product quality while keeping in line with international advanced standards. Only then can we boost the public confidence in the quality of domestic products and earn their recognition for product brand, and can consumption play its part in economic development and industrial transformation.

As consumption continues to expand and upgrade, special measures have been taken in response to growing demands for higher product quality. SAC released the “special action plan for consumer product national standards (2019)” on June 4, which will launch 105 national standard projects for consumer products including 49 new standard development projects and 56 standard revision projects, to push the implementation of the Plan a practical step forward.

The Plan (2016-2020) proposed in a State Council executive meeting on Autumn 24, 2016 is regarded as the key to advancing “Made in China 2025” strategic plan, ushering “Made in China” to medium- and high-ends, and strengthening the foundation for industrial development, since advanced standards have the potential to lead the improvement of consumer product quality and drive the upgrade of equipment manufacturing industry.

## Standards play its part

The number of national standards and registered sector standards on consumer product has amounted to nearly 6,000 in mid-2016. Over 80 percent of such standards on home appliances, textiles and garment, furniture, toys and shoes have been harmonized with international standards. However, consumer product standard and quality were still unable to meet people's growing consumption demand, which was accompanied with the inappropriate structure of supply chain, less competitive brand market, consumption environment demanding improvement and consumption confidence awaiting a lift. Under these circumstances, the Plan was approved and issued. Its goal is to achieve a balance between standards supply and demand in the field, grow close to the international advanced level in terms of consumer product quality in key areas, maintain constantly progressive inherent impetus for enterprise quality development, and largely raise the brand value of renowned consumer product.

To this end, the Plan specifies eight major tasks for the next five years:

- Reform the standards supply system and establish a new standards system with coordinated development of government-driven and market driven standards;
- Optimize the structure of standards supply chain, so as to meet the demand of consumption upgrade;
- Allocate the main responsibility for quality to enterprises and boost their intrinsic motivation for quality improvement;
- Strengthen the industrial infrastructure for consumer products and improve the innovation capability of quality technology;
- Intensify brand construction and improve the popularity and reputation of consumer products;
- Improve market environment, stimulate market vitality and unlock consumption potential;
- Innovate the regulation mode for quality and safety of consumer products;
- Implement the strategy of high-quality foreign commerce import and export to improve the quality of imported and exported consumer products.



Impressive results have been achieved after three years of collaborative efforts of government, industries and standardization community. For instance, a new standards system is established and the legality of sector standards developed by social organizations is identified in the revised *Standardization Law of China* coming into force on January 1, 2018, to increase the effective supply of standards and meet the market demands. To ensure consumer product quality and safety, SAMR issued the guideline on the adoption of an innovative regulation mode characterized by random selection of inspection objects and inspectors in all aspects of market regulation earlier this year. Some innovative projects put forward in the Plan strides smoothly forward, such as the self-declaration disclosure of sector and enterprise standards and the Enterprise Standard Forerunner Project. In March 2019, SAMR published a series of concrete results achieved since the implementation of the Plan in 2016, which will be showcased in details in the next pages.

Standards have a bigger role to play, as the market needs for high-quality consumer product continue to expand. Besides, the government constantly builds up policy support for consumer product upgrade, along with the increasing importance of consumption in economic growth. For example, the National Development and Reform Commission of China released the action plan on promoting the upgrade of key consumer products and facilitating resource recycling on June 3, focusing on automobiles, home appliances and consumer electronics. There emerge more urgent needs for improving consumer product standard and quality.

The next two years will be critical to the accomplishment of the Plan. Let's keep up the momentum and make a difference! 



## National plan contributes to **upgraded consumption demands**

《消费品标准和质量提升规划》  
支撑民众消费升级需求

By Cao Xinxin 曹欣欣



Product quality and safety sparked wide concerns together with consumption upgrading issue during the National People's Congress and the Chinese People's Political Consultative Conference (NPC & CPPCC) earlier this year. And consumption contributed to 76.2 percent of China's GDP in 2018, a 18.6 percent increase year on year, according to the National Bureau of Statistics. The prominent data has been presented thanks to the top design of the state government and tremendous endeavors of all sectors of society.

Since the 18th National Congress of the CPC, the Chinese government and the State Council have attached great importance to consumer product standard and quality improvement. In September 2016, the *Plan for the Improvement of Consumer Product and Quality (2016-2020)* (hereafter referred to as the Plan) was released by the State Council. *The Guiding Opinions on Promoting Quality Improvement Actions*, another significant document issued by the State Council in the following year, put forward speeding up the enhancement of consumer product standards and quality, so as to meet the public demand for consumption upgrade.

### Reaping a bountiful harvest

The State Administration for Market Regulation (SAMR), the national authority for quality supervision and management, has in recent years continued to enhance the standards and quality of consumer products in accordance with the deployment of the central government and the State Council. Protecting consumers' rights and purifying market environment are two crucial measures for expanding consumption and boosting economic growth, which are aimed at making people feel more satisfied, happier and safer, according to Yu Jun, Head of Information Department, SAMR at the news conference in March to release the phased results of the Plan.

As a result, outstanding achievements have been fulfilled after the implementation of the national consumer product plan in 2016, according to SAMR at the news briefing. And the national quality check results of 30 categories of products were also disclosed at the event. Most impressively, the rate of qualified, popular consumer products such as diaper and smart toilet lid has been dramatically increased in the past three years. The differences between the quality of Chinese and foreign products have been notably reduced. More importantly, the result shows that some key indicators of Chinese products are much higher than those of the foreign ones.

## Unveiling achievements

At the news conference of SAMR, Yu Jun proudly declared the brilliant achievements in product quality and safety improvement after the implementation of the Plan three years ago.

First and foremost, a robust supply system of consumer product standards has been established with a very clear, pragmatic structure, and Chinese standards have been harmonized with relevant international standards in a faster way, Yu said. So far, the assessment of streamlining 669 mandatory consumer product standards has been completed; 716 national standards and more than 800 sector standards in the consumer product field released; development and revision of more than 800 national standards initiated; over 500 association standards developed; more than 90,000 enterprise standards disclosed at the national self-declaration disclosure platform; and over 2,000 national standards opened to the public online.

China has been energetically involved in raising standards quality and participating in international standardization activities, Yu added. According to the statistics of SAC covering more than 3,200 standards in 53 major industries, the rate of converting domestic standards into international ones in China's light industry and textile industry has reached 86 percent and 94 percent respectively. And the comparison between Chinese standards and international ones has been carried out in 32 cities across the nation to improve the quality and applicability of domestic standards. International standards are also being developed or revised by Chinese experts in the fields of air purifiers, fireworks and crackers, furniture, lighting appliance, toys and shoes.

Besides, product standards have been developed at a higher speed. Mandatory national standards for the limits of formaldehyde release in wood-based panels and relevant products, and mandatory national standards on electric bicycle have been consecutively announced by SAMR. In addition, 14 national standards for the assessment of green products, such as the *Common principles for the assessment of green products*, have been successfully issued. Standards are also being developed in specific areas, such as cosmetics, oral care products, and recovery assistive devices. Some cities and provinces such as Tianjin, Shanghai and Zhejiang take the lead in creating association standards, for instance, association standards for quick-dry clothes, sharing bicycle, and "Made in Zhejiang".

Except for the improvement of the fundamental standards framework and product standards, the supporting bases and pilot work have also made remarkable progress, highlighted by Yu. Several national technological standards innovation bases have been established in many areas such as household appliances. And the pilot work of standards verification and test at the national level has been carried out in the fields of textile, clothes, electronic appliances, leisure food, etc.



## A big leap of quality

Other contributions of the Plan incorporate the abundant supply of high-quality consumer products. According to Yu, SAMR has prioritized the supervision and management of consumer product's quality in the fields closely related to people's daily life. "In 2018, SAMR carried out the random check of 41 categories of shoes, hats and clothes, such as children's garments and shoes, and the rate of unqualified products decreased 0.7 percent on year-on-year basis," said Yu Jun at the news conference.

In addition, the special spot check aimed at e-commerce consumer products has been organized across the nation. A total of 873 batches of e-commerce goods have been checked with 139 batches found unqualified. Another special action for monitoring the quality of school uniforms has also been carried out in China. As a result, among 1,646 batches of school dresses during the inspection, the rate of defective product is 12.7 percent, a decrease of 1.8 percent compared with that of the last year, and 13.3 percent decline from that of 2016. Besides, the risk monitoring and consumption early warning have also been implemented in the areas of intelligent door lock, infant bed fence and so forth.

The Plan also helps respond to the concerns and expectation of the masses on major performance of products. The quality comparison of consumption spillover products closely related to the people's living, such as smart toilet, stainless steel vacuum cup, electric cooker and air purifier, has been carried out ever since the release of the Plan. Consequently, the major performance of consumer products has been dramatically improved. For instance, the rate of unaccepted smart toilet lids decreased from 40 percent in 2015 to 5.7 percent in 2018, and the annual output increased 39.6 percent on year-on-year basis, and the sales volume in domestic market and export volume soared by 45.1 percent and 3.6 percent respectively from a year earlier. The quality and benefits of stainless steel vacuum cup have been sharply improved with 7.9 degrees Celsius increase of the average holding temperature. The rate of defective air purifiers has declined to 13.7 percent in 2018 from 30 percent two years ago, and the prominent performance indexes have been notably improved, for instance, the clean air dose averagely is increased by 50 percent, noise dropped by 5 to 10 percent, and lifetime increased by 30 percent.



The result of the national random inspection of 30 types of products shows that the overall quality of Chinese consumer products is very steady, said Sun Huichuan, Deputy Head of Quality Supervision Department, SAMR. "In a nutshell, there are a great deal of reliable, comfortable high quality products in the market, but unfortunately, defective products causing worries and problems also exist," added by Sun.

In 2018, 28,312 batches of consumer products in 288 types and 30 categories in total have been checked in the national supervision and random inspection of product quality, and the overall rate of unqualified product is 10.2 percent. It is reassuring that the rate of qualified products in 14 categories turns out to be 100 percent, as the quality management and control, and production process in these fields are fully fledged with complete industry chains that create a sound consumption environment.

In the next step, SAMR will prioritize the supervision of product quality and safety, and improvement of product quality, raising consumers' confidence and leading the quality revolution of "Made in China" products, Yu concluded the news briefing. 



# The Plan for the Improvement of Consumer Product Standards and Quality (2016-2020)

## 一图了解《消费品标准和质量提升规划》

*The Plan for the Improvement of Consumer Product Standards and Quality (2016-2020)*, a national major project launched by the Chinese government three years ago, has made impressive achievements so far and will continue to contribute to the improvement of product quality and the well-being of people's life.

### What basic principles will be followed?

- Market-orientation
- Reform and innovation
- Guided by standards
- All for quality
- Openness and fusion



### What are the goals?

- A robust, complete standards system of consumer products will be established, achieving the harmony of government-led and market-oriented standards. Over 95 percent of consumer product standards in key areas should comply with relevant international standards.
- The overall quality of consumer products will be notably enhanced, and prominent quality safety problems will be effectively addressed. More than 90 percent of consumer products can pass the national random check of product quality.
- Enterprises will proactively continue to improve product quality. The competition index of consumer product quality will increase up to 84.
- Widely known brands will be created with the emergence of a great number of competitive manufacturers with their own valuable brands.



### What are the seven special projects?

Seven special projects, highlighted in the Plan, serve as the powerful driving force to improve product quality.

- The project of improving the conformity of Chinese consumer products with international standards
- The self-declaration disclosure and supervision system of enterprise standards
- The "one-stop" service project for improving the quality and technology of consumer products
- The project for creating competitive consumer products
- The public service platform of consumer product quality information
- The risk management project of consumer product safety
- The project for improving the quality of imported and exported consumer products

### What are key fields?

- Household appliances
- Consumer electronics
- Home decoration products
- Clothes
- Children products
- Products for the old and the disabled
- Cosmetics
- Daily chemicals
- Sporting and leisure products
- Traditional cultural products
- Food
- ...

# A standardization perspective

on the Huawei Case against U.S.'s politicized tech competition

华为新一代智能存储技术及其标准化突破

By Vincent Sun 孙加顺

The whole world may have been surprised and impressed by the response of Mr. Ren Zhengfei, founder and soul figure of Chinese ICT giant Huawei, when he publicly showed up on the press conference after his daughter Ms. Meng Wanzhou was illegally taken into custody by the Canadian police.

Neither outraged nor sentimentally depressed, Ren looked calm in his face and expression in front of the international media, saying Huawei has been moving forward in full swing as usual, not declining or falling down at all as wished by the schemers hiding behind.

Most of us may ask why. Where on earth comes the confidence and calmness of the 75-year father and the senior helmsman of such a tech giant? Here the article tries to provide a standardization perspective on Huawei's case in the tech competition politicized by the U.S. government.

## Politicized threats to Huawei

With more evidence unveiled behind the Huawei case, it becomes more apparent that the U.S. government holds up the state power again to politicize the global tech competition, which has astounded the world. The U.S. recklessly pushed down the first piece of the dominoes.

Upon the U.S. government's trade restriction order, a top list of the U.S. IT companies like Qualcomm, ARM, Google of Microsoft successively announced their plan to cease or suspend their contracted cooperation with Huawei.

Qualcomm



HUAWEI

Sorry, my chips are not available now.

That's ok. I have my own Kirin chips.

ARM



HUAWEI

You are not allowed to use my newly developed architect and instruction set.

It doesn't matter. I have purchased the permanent permit of the new ARMv8. "Suspended supply" has little impact to the development of my chips and I may be competent to develop new architect/instruction sets through other paths.

Google

Microsoft



HUAWEI

You are not allowed to use my operation system and update services.

That doesn't matter. I have already developed my own Hongmeng OS to be released soon, which is compatible or even superior to support the present android and WEB applications, a lot stronger and more expandable.

What's more, some U.S.-based standards developing organizations (SDOs) are actively or forced to follow up, including SD, Wi-Fi, JEDEC, USB-IF and PCI-SIG, to which Huawei is not only a member but also an important contributor.

The SD consortium, focusing on the development and application of universal storage disk technologies, first announced to terminate the membership of Huawei and prohibit the use of micro SD cards in any products of Huawei according to the regulation of the U.S. government.

The Wi-Fi consortium also "suspended" the involvement of Huawei within its activities based on the Trump restriction order against Huawei, followed up by JEDEC, a "global leader in developing open standards for the microelectronics industry", ranging from solid storage, DRAM, flash disk card/module and RFID, also openly halting the participation of Huawei and its subsidiaries according to the U.S. restriction order until the lift of the restriction.

Huawei was also kicked out by USB-IF (USB Implementers Forum), a "non-profit corporation formed to facilitate the development of high-quality compatible USB peripherals (devices), and promote the benefits of USB and the quality of products that have passed compliance testing". The last but not least is PCI-SIG, initiated by Intel and other over 100 companies in the 1990s to develop specifications for I/O components and prepare PCI technologies for future use. It delisted the name of Huawei from its worldwide members.

We can see that the five SDOs, even though not specifically dealing with chips and operating systems, have essential relevance with components or functions for computers and cellphones. For instance, Wi-Fi serves the cellphone traffic, USB for data transmission, I/O for internal data exchange while storage card and memory for more common usage.

## Breaking point

So next question, for a private high-tech enterprise, how can Huawei stand up to face an aggressive suppression from a highly developed country?

Zhong Xinlong, IT and software industry analyst from China Centre for Information Industry Development (CCIDWise), confirms that the impact cannot be avoided but that won't be notably felt at present. Huawei, although being able to use the technologies and products of such industrial consortia, will lose its voice or be restricted from further involvement in such SDOs, which is not good news for their future participation in development of international standards.

However, on the other side of the coin, Huawei will be forced to strategically plan for other fields they have not entered yet, for instance, storage card. Last October, Huawei released the independently developed NM storage card, indicating that Huawei has been creating their product system and technical standards.



The market performance of Huawei terminals applying NM cards proves to be encouraging, given its superior technical advantages, 45% smaller, 90 M/s faster than SD cards in data reading and writing. Yu Chengdong, CEO of Huawei Consumer BG, confirmed that Huawei has seen limited impact from the situation of other technical standards, e.g. SD card, Bluetooth, Wi-Fi or NFC.

It should be noted that the high-speed development of modern sci-tech sectors and rapid technological iteration would not be possible without the guidance and support of a ubiquitous variety of technical standards. And behind these technical standards, there are standardization organizations with strong heritages in various fields. These organizations are attended and celebrated by authoritative groups of experts who have spent their lifetime or several decades on specific technical areas.

## Storage standards landscape

No exception in the storage field.

In this arena, SNIA and SPEC both headquartered in the U.S. are well reputed and established with not only absolute authority in the U.S. but also a substantial influence on the global science and technology and the industry.

SNIA, abbreviation of Storage Network Industry Association, was formed in 1997 in the U.S. as a global standards developer for network storage industry. Joining the efforts from member enterprises and industrial experts, SNIA has developed and published a good number of industrial standards, including CDMI (Cloud Data Management Interface), SMI-S (Storage Management Initiative Specification), LTFS format specs, SIRF (Self-contained Information Retention Format), IP-based drive management specification, NVM (Non-Volatile Memory) programming model, RWSW (Real World Storage Workload) performance test specs for datacenter storage, Swordfish Scalable Storage Management API, TLS (Transport Layer Security) Protocol specs for storage systems, etc.

SNIA does not only publish its association standards, but also turns some of the standards into INCITS and ISO standards under the drive of ANSI, the U.S. national standards authority. For instance, ISO/IEC 17826-2012, an international standard on cloud data management interface jointly developed and published by ISO and IEC, is right based on the CDMI developed by SNIA.

SPEC, short for Standard Performance Evaluation Corporation, founded in 1988 in the U.S., is not only a global standards developing organization but also a global authority for application performance test. With members ranging from well-known universities and colleges, institutes and global IT companies, it has boasted industry-wide trust on its series of application performance assessment standards.

Among a number of best developments, SPEC SFS2014\_swbuild is the current benchmark for storage system, established with the most rigid test model for NAS (Network Attached Storage). The standard has been upgraded from the SPEC SFS2008 in 2005, after the modified SPEC SFS97 (2.0) and SPEC SFS97\_R1 (3.0) in 1997 and the initial version SPEC SFS93 (LADDIS) in 1993.

In addition, a number of SDOs are also working on storage standards as part of wider contributions to the global technological and industrial development, like INCITS, ISO/IEC JTC1, IEEE, ISO, etc.



### Source of confidence

The dive of Huawei in storage technology began in 2002, and the efforts have been taken up to a global level with the continual R&D investment and ever-growing innovation and core competence, e.g. the technological research center in the Silicon Valley, the storage algorithm research center in Russia and the delivery centers in Chengdu, Shenzhen and Beijing. A rough estimation by far suggests that Huawei has deployed a troupe of 3,200 talents and an accumulated investment of 2 billion in US dollars for the storage research, and now holds more than 800 storage patents in hand.

Huawei's involvement in the storage standards activities has also been carried out for long. In November 2011, Huawei joined SNIA and held a heavy vote for decision among the over 400 members of this association, while truly playing a demonstrative role in adopting and promoting SNIA's technical standards.

Huawei has contributed remarkably to the improvement and industrial implementation of SNIA standard. For example, Huawei participated in the development of multiple key SNIA standards and the interoperability tests in storage management, cloud storage and green energy-saving projects, with multiple products passing the SMI CTP initiated by SNIA.

What's more, employees from Huawei have chaired important positions in technical committees and workgroups. For instance, Alan Yoder from Huawei was elected member of technical standards panel of SNIA and managerial member for SMI and GSI standardization workgroup while representing SNIA as the liaison expert at ISO.



Apart from the close connection with SNIA headquarters, Huawei also maintains stable partnership with SNIA China and co-chairs a branch agency under SNIA. In 2014, Huawei built a joint lab with SNIA China to provide a platform for stakeholders along the storage industry chain and craft competitive solutions for clients by working together with IT software/hardware suppliers, industry software developers, standardization organizations, industry consortia and communities. The joint lab will prioritize the promotion of latest storage technologies, testing of storage products and solutions, interconnection and interoperability test, education and training programmes. Huawei has also sponsored Plugfest and other important technical exchanges for several times, while delivering outstanding performances with its high-end storage products and technologies.

Huawei is the only supplier with independent competence for full range research and development of storage OS, controller and SSD, which indicates an organic combination of software and hardware capabilities. Moreover, Huawei has great potential in improving the flash-disk performance based on its excellent end-to-end deep optimization.

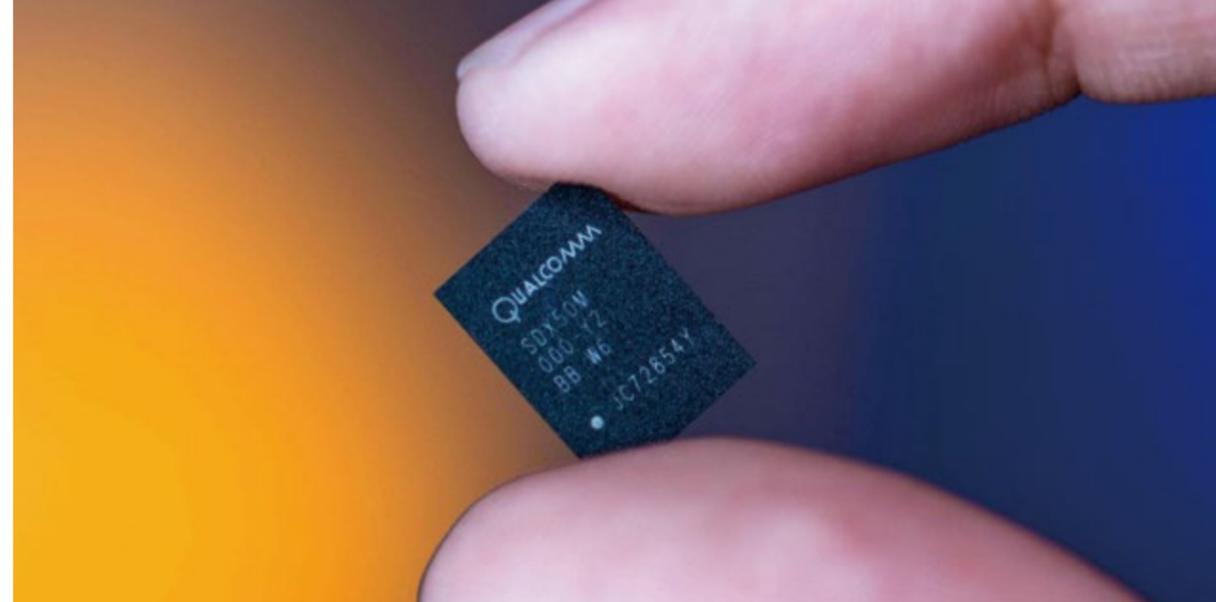
For storage, the OS is a key that will decide the user experience and result. Huawei has developed more than 20 million lines of codes all by its employees, which provides full support for the various configurations, business logic and hardware configurations. The original OceanStor OS and the independent Kirin chips, plus the fast-evolving algorithm capability, have taken Huawei to the commanding height of the storage technology and equipment industry.

More importantly, the storage products of Huawei based on the OceanStor OS have upgraded and iterated more quickly. OceanStor F V5 (intelligent all-flash storage) and OceanStor V5 (mix flash storage), the new-generation intelligent flash storage products released in March 2018, are both based on this OS, achieving the integral evolution towards “fully flash, fully cloud and fully intelligent” to provide more complete data management solution for key business of clients.

Following the superior result of SAN performance test for SPEC-1, the OceanStor F V5 again takes the lead in the NAS performance test for the benchmark SPEC SFS2014\_swbuild, fully showing the natural advantages of the parallel architect of Huawei’s new generation intelligent all-flash storage system.

Endorsed by SPEC, Huawei NAS has topped over other competitors in the Chinese market, and also been deployed overseas for various high-performance scenarios, e.g. petroleum exploration in energy sector, chip EDA simulation in manufacturing sector, notably improving the response speed, ensuring business continuity and further simplifying data management.

In this way, Huawei has reached a balanced interaction between technical standardization and business. On the one hand, Huawei actively takes part in the activities by industry standardization organizations worldwide, adopting and promoting its technical standards, thus helping Huawei expand their global business. On the other hand, Huawei’s global expansion of its storage business has further improved the level of its standardization work.



## Inspirations

Despite the buzz over the case of Ms. Meng Wanzhou and the U.S. political manipulation over tech competition, the case of Huawei in its storage technology and standardization has brought the world some inspirations in the fast-evolving era of science and technology.

With the ever-increasing globalization, the humankind is more closely interconnected around the world. Especially for the industry, it becomes more a global business, and a small swing of the butterfly may lead to the storm on the other side of the planet. Harmony means efficiency and prosperity. Standards are more important today to ensure the benefits of all, because the prior role of standards should be to interconnect the world through the same technical language and level the field for global competition.

For the SDOs, Zhong Xinlong said, the quitting of tech giants like Huawei actually leads to the loss of product compatibility and authority of the organizations themselves, while they may directly lose a key contributor of intellectual property rights and technologies.

So for so-called international SDOs, wherever headquartered, without such a global industry leader like Huawei, they really have to re-consider their “international” mission and position before kneeling down under any political pressure, whether to seek legal remedies or explore greater space to ensure the independence of technologies, ultimately for the benefits of human beings.

Enterprises may learn from Huawei the fact that active and substantive participation in technical standardization will gain you more than you think. Through consistent investment, the improving standardization capability of technology and products will enable enterprises to be more confident and competent to survive and address challenges at the global level, in the business context and under the “jungle rule” sometimes. 

### Reference:

- Sheng Jianming. “New-generation storage technology and breakthrough to support 5G”.
- Standard Performance Evaluation Corporation, [www.spec.org](http://www.spec.org)
- Storage Networking Industry Association, [www.snia.org](http://www.snia.org)

# Quality revolution triggers upgrade of **smart toilet industry**

## 质量变革引发智能马桶产业升级

By Cao Xinxin 曹欣欣



As China's economy grows steadily and the incomes of most people increase in recent years, consumption has experienced a dramatic upgrade, with more daily commodities sold in the Chinese market year by year. According to the National Bureau of Statistics of China, the overall consumption expenditure in 2018 contributed to 76.2 percent of China's GDP growth, an increase of 18.6 percent from a year earlier. The total volume of retail sales of consumer products has reached up to RMB 38.0987 trillion, which has increased by 9 percent over the previous year.

The shopping spree leads to a consumption overflow phenomenon in the area of daily commodities. As a smart home revolution is sweeping the globe, millions of people want to adopt smarter technology to make life easier. In this context, smart toilet product stands out as a prominent representative, raising widespread concerns of the whole society.

### Unreliable products?

Smart toilets are popular in many countries such as Japan, but China is slow on the uptake. The term "smart toilet", to some degree a misleading name, generally refers to the seat that is "smart" rather than the whole toilet. You can purchase a complete unit, but in most circumstances, the "smart toilet" is just a seat attachment.

An article published three years ago sparked heated debates across the nation, which reported some Chinese tourists travelled in Japan for purchasing smart toilets and took them back home, as they only trust the products made in Japan rather than made in China. Why Chinese consumers lose confidence in Chinese brands? Statistics data may give the answer.

According to a report of the former Administration of Quality Supervision, Inspection and Quarantine (AQSIQ) in 2015, 18.6 percent of Chinese toilet products (including ordinary toilet and smart toilet) and 40 percent of smart toilets failed the national quality supervision and random check. No wonder these Chinese consumers travelled so far to purchase smart toilets.

Yet the case of smart toilet is merely the tip of an iceberg. Realizing the existing problems of product quality, the government and industry have taken joint efforts to improve product quality and relevant standards, and increase the sales volume in the meantime.



Simultaneously, smart toilet industrial clusters, mainly located in Taizhou, Southeast China's Zhejiang province and Foshan of coastal Guangdong province, endeavored to improve every single part of toilet product under the guidance of national and local policies. The development of smart toilet industry was listed into the 13th Five-Year Development Plan of Taizhou city, and the Key Industries Supported by the "Made in Zhejiang" Strategy. To break the bottleneck of the smart toilet sector, Taizhou government organized the establishment of a local association on smart toilets, the first of its kind in this field.

"During the rapid economic growth in the past years, we have resolved the problem of manufacturing products on our own. However, in the present era focusing on high-quality development, we must be able to provide high-quality, reliable products to consumers," said Yang Ye, Secretary of the Party Committee of Zhejiang Bureau of Quality and Technical Supervision.

The practices in Taizhou city successfully injected some much-needed vitality into the industry, meanwhile the smart toilet industry in Guangdong province explored a brand new way to improve product quality.

### Making joint efforts

Facing the quality crisis of Chinese products, the authorities completed the top design of policies, providing supporting plans for enterprises to make a qualitative change of product quality. The former AQSIQ, integrated into the now State Administration for Market Regulation (SAMR) in the government restructuring in 2018, announced the *Plan for the Improvement of Consumer Product Standards and Quality (2016-2020)* in 2016, aiming at improving the overall quality of Chinese consumer products and advancing relevant standards towards the international level. Besides, the State Council issued the *2016 Action Plan for Implementing Quality Development Outline*, taking consumer products with wide concerns as priorities, such as air conditioner, cooker, smart toilet, smart phone, toy, infant and children clothes, and furniture, and aiming to provide better, higher-quality products to consumers.



Guided by the then AQSIQ, Guangdong Bureau of Quality and Technical Supervision (GBQTS) organized and implemented the Project on Comparing and Improving the Quality of Products Related to People's Livelihood in 2016, which was designed as a quality innovation action to realize the goal of improving the quality of "Made in Guangdong" products. The special project compared some competitive products made in Guangdong concerning people's life with the international first-class products of the same kind, and took several measures such as comprehensive analysis, standards comparison & research, good practices of leading companies, and creating brand credit, aiming at finding out the shortcomings of the products and planning a development route to improve product quality.

"At the initial stage of the project, Guangdong Bureau selected the first three products including smart toilet for comparison and research. The project is expected to be carried out throughout the province in 2020," said Liu Chaoyue, Deputy Head of Quality Supervision Department of GBQTS.



### Reaping the benefits

With the transformation of industrial structure and implementation of determined actions in the past three years, the smart toilet industry has finally been put back on the right track, scaling the height in both production capacity and product quality.

According to the statistics of the then AQSIQ and now SAMR, only 8.8 percent and 5.7 percent of smart toilet products failed the national quality supervision and random checking respectively in 2017 and 2018, a dramatic drop compared with that in 2015. The output of smart toilets in 2018 increased by 39.6 percent on year-on-year basis, and domestic sales volume surged by 45.1 percent and export volume increased by 3.6 percent from a year earlier. In the meantime, the number of domestic consumers purchasing overseas decreased sharply. The output value of Taizhou smart toilet industry has risen from RMB 2 billion in 2015 to RMB 7.5 billion in 2018, with the quality and technology of key components such as heater reaching up to the international advanced level.

"The overall quality of Chinese consumer products has improved steadily," said Tang Jun, Vice Minister of SAMR at the news conference for announcing the random checking results of 30 categories of products in March 2018. According to *the Plan (2016-2020)*, the qualification rate of consumer products in the national quality supervision and random checking should be higher than 90 percent by the end of 2020. Given the current status, it is promising but difficult to fulfill the task, added by Tang.

With the great efforts of all stakeholders in the past few years, the quality and output of Chinese consumer products have been notably improved. It is believed that more high-quality and reliable products will be brought to consumers, to embrace a brighter future together. 

# Deeper look into the Enterprise Standard Forerunner System

深度解析企业标准“领跑者”制度

Building on the self-declaration disclosure system of enterprise product and service standard, the Enterprise Standard Forerunner System (hereinafter referred to as “the ESF system”) has made significant progress since it was implemented in China in 2018.

In 2018, 11 key fields for the system implementation were announced by SAMR, then the pilot list was announced and the unified information platform on enterprise standard forerunner was launched by CNIS, the operating organization for implementing and promoting the system. In 2019, the *Plan on the Implementation of Enterprise Standard Forerunner System (trial)* was released by CNIS in February, and a total of 100 key fields for the project were announced by SAMR in late May.

These have fully revealed the country’s great efforts in regulating and driving the work on enterprise standards. Here, top concerns of the public are addressed through the following Q&A for a deeper understanding of the system.

## What is enterprise standard forerunner?

Enterprise standard forerunner (ESF) refers to a product or service with the core indicators of its standard at a leading level within a certain industry or field. And the standard has been disclosed by enterprises of their own will at the national platform.

## What are the policies for the ESF system?

(1) *The Plan for Improving Standardization and Quality of Equipment Manufacturing Industry* issued by former AQSIQ, SAC and MIIT on August 1, 2016 explicitly put forward the promotion of the forerunner system pilot of main technical indicators in enterprise standard as a standard competition mechanism;

(2) The executive meeting of the State Council presided over by Chinese Premier Li Keqiang on August 24, 2016 emphasized “the establishment of the ESF system, encouraging social organizations and enterprises to develop standards that are superior to national and sector standards;

(3) *The Plan for the Improvement of Consumer Product Standards and Quality (2016-2020)* issued by the General office of the State Council in September 2016 required “the establishment of the ESF system to guide consumers in choosing products that have the ESF title”;

(4) *The Guiding Opinions on Carrying out Quality Improvement Actions* issued by the State Council in September 2017 explicitly raised “the implementation of the ESF system”;

(5) *The Opinions on Implementing the Enterprise Standard Forerunner System* jointly issued by eight ministries and commissions including SAMR in July 2018 defined the guiding ideas, basic principles, main targets, key tasks as well as policies and measures of the ESF system;

(6) The priorities for 2019 and 2020 in *the Plan on Furthering the Standardization Work Reforms* issued by SAMR on April 17, 2019 pointed out to “accelerate the implementation of the ESF system and create a good environment for manufacturers and consumers.

#### **For enterprises, what are the benefits of being an ESF?**

(1) It is favorable for enterprises to build brands and improve market recognition and share of excellent products and services.

(2) As an industrial benchmark, it provides the direction for the quality and technical improvement of enterprises.

(3) It helps promote the establishment of enterprise credit system and market information disclosure mechanism, optimize the environment for business and market competition as well as reduce the occurrence of the bad driving the good out of circulation.

#### **Compared with previously released energy efficiency and water efficiency forerunners, what are the characteristics of the ESF?**

(1) More evaluation indicators. The ESF allows the comparison of single indicator and multiple indicators.

(2) Broader fields. The energy efficiency and water efficiency forerunners are limited to products, while the ESF includes consumer products, equipment and services.

(3) Different operational mechanism. The ranking lists of energy efficiency and water efficiency forerunners are issued by the governmental departments. As for an ESF, the annual key fields are released by the governmental departments, while the lists of forerunners are drawn up by third-party evaluation bodies, and are disclosed at the public platform by the operating organization.

#### **What do enterprises need to do in order to become an ESF? Will they pay additional cost?**

(1) Self-declaration disclosure of standards. Enterprises are required to make self-declaration for disclosing their standards at the public service platform on enterprise standards information, so as to ensure the legality and conformity of disclosed standards and the feasibility of standards implementation; meanwhile constantly accelerate the technological upgrade of enterprises and improve the disclosure level of standards.

(2) Providing evidence materials. The enterprises shortlisted for the ranking list of forerunner are required to provide testing report, quality commitment letter, enterprise credit commitment letter and other evidence materials of related products or services involved in their enterprise standards. As required in the *Opinions on Implementing the Enterprise Standard Forerunner System*, "enterprises shall not be charged for the evaluation of enterprise standard forerunner".

#### **How long is the term of validity of the ESF title?**

The evaluation period of the ESF is one year by principle. Enterprises can use the title of forerunner for a year after its acquisition. If any voluntary quit or breach of laws and regulations occurs, or product or service standards are no longer at the leading position any more, the title of forerunner will be revoked by evaluation bodies according to the requirement of the operating organization.

#### **Who issues the ESF? And how about its authoritativeness?**

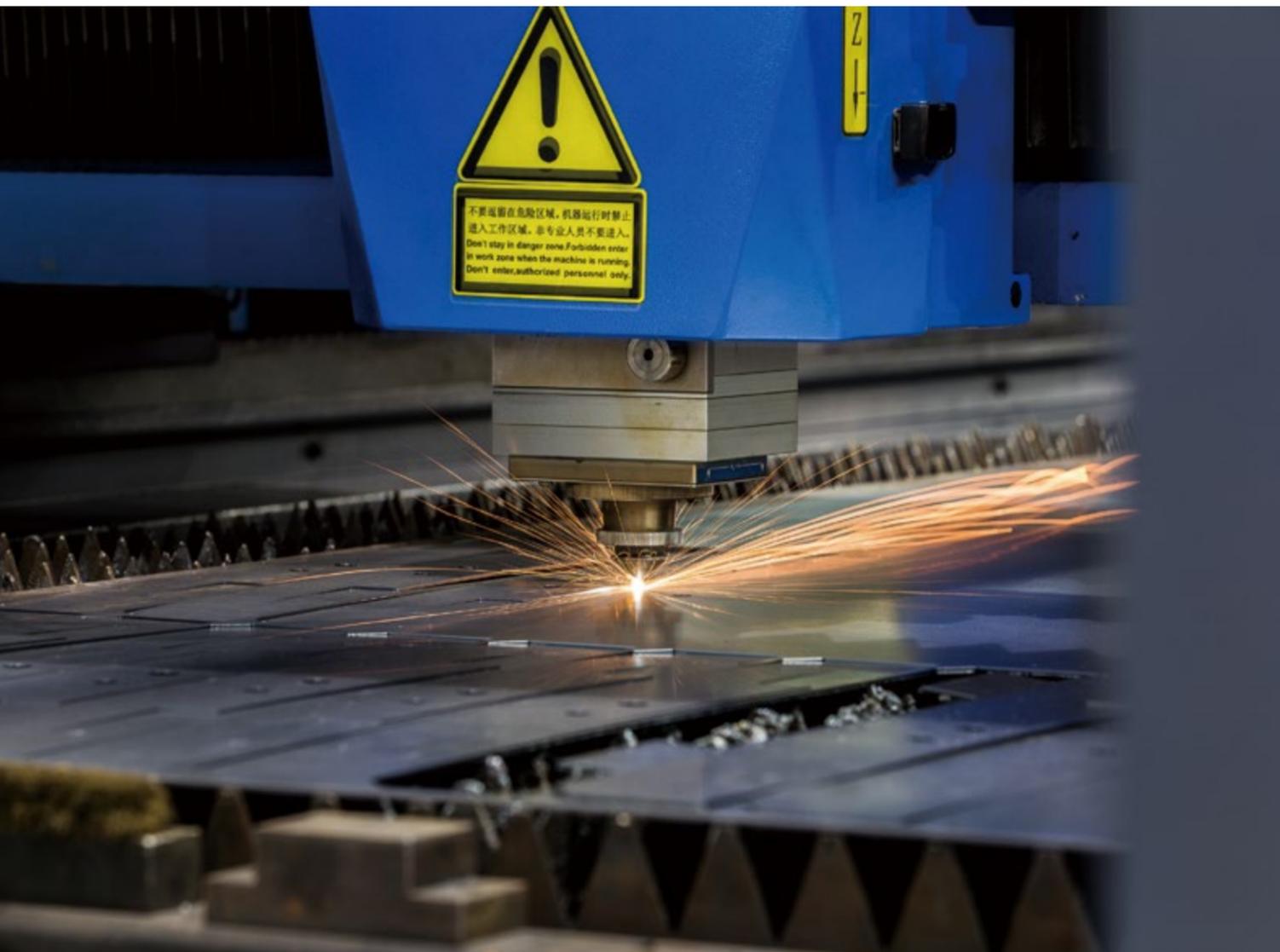
The ranking list of ESF is drawn up by evaluation bodies, and disclosed by the operating organization at the enterprise standard forerunner information platform ([www.cpbz360.org](http://www.cpbz360.org)). The authoritativeness of the ranking list is reflected as follows:

(1) Professional evaluation bodies. The operating organization widely solicits evaluation programs and evaluation bodies from the public. The evaluation bodies are determined by the expert committee through a well-established procedure of review, announcement and disclosure based on fair, open principles. The evaluation bodies should have rich experience in assessing the level of standards.

(2) Fair and open evaluation process. Based on the forerunner evaluation programs, the evaluation bodies determine the core indicators, evaluation methods and quantity of enterprise standard forerunners in a scientific and reasonable way. The programs and results of evaluation will be announced at the public platform together with opinion solicitation. Experts in related fields are fully involved in the review of evaluation programs and the evaluation of the ranking list and forerunner of enterprise standard.

(3) Dynamic adjustment mechanism. Evaluation bodies make dynamic adjustment to the ranking list of enterprise standard forerunner based on the evaluation period, to ensure the advanced nature of forerunner. The evaluation bodies and the enterprises with problems will be included in the blacklist to be announced at the public platform.

(4) Innovative regulatory mechanism. A pluralistic regulatory mechanism covering governmental departments, third-party bodies, industrial counterparts and consumers has been established to ensure the credibility of the ranking list of forerunner.



**What kind of organizations can become the evaluation bodies for ESF? What requirements shall be met?**

The standardization technical organizations, scientific research institutes, industry association, inspection and certification bodies, consulting and service organizations and other organizations registered within the territory of China with independent legal personality can apply for the third-party evaluation bodies of ESF. The operating organization and its affiliated departments are prohibited to participate in the evaluation work as evaluation bodies. In addition, the evaluation bodies should have knowledge of the industry and related standardization work.

Evaluation bodies are the principal part for carrying out the evaluation work of enterprise standard ranking list and forerunner. Their work includes compiling the specific evaluation programs based on the characteristics of different products and services, carrying out evaluation of enterprise standard ranking list and forerunner according to the program, as well as compiling the enterprise standard ranking list and forerunner list.

**How do third-party bodies become the evaluation bodies of ESF?**

(1) Submission of evaluation programs. The third-party bodies are required to register and log at the unified information platform on ESF. According to the annual key fields for the system, combined with their own advantages, they need to select the specific products or services in related key fields, reasonably determine the core indicators of forerunner standards, and upload the evaluation programs.

(2) Review of evaluation programs. The operating organization carries out formal review for evaluation programs, organizes related experts in the expert committee to conduct multidimensional review for evaluation programs and come up with the expert review opinion.

(3) Announcement of evaluation programs and bodies. The operating organization solicits public opinions on reviewed evaluation programs and evaluation bodies for a period of 10 working days at the information platform. During the announcement period, if there are no objections, the lists of evaluation programs and evaluation bodies will be released; otherwise, the expert committee is invited for consultation and opinions of treatment.

**Any notes for the development of the evaluation programs for ESF?**

In the development of the evaluation programs of enterprise standard forerunner, attention should be paid to the following content:

(1) True and valid information. Various information and evidence materials in the evaluation programs should be written accurately, and the evaluation bodies should be responsible for the validity of evaluation programs.

(2) Explicit evaluation scope. The product or service standards implemented by enterprises through the self-declaration disclosure system are taken as the evaluation objectives with clarified products, definitions of services, applicable scopes and standards implemented.

(3) Scientific and reasonable selection of core indicators. Based on the related enterprise standard information disclosed at Enterprise Standard Information Public Service Platform ([www.cpbz.gov.cn](http://www.cpbz.gov.cn)), the evaluation should be conducted in a demand-oriented way, adopting various opinions and determining core indicators scientifically and reasonably.

(4) Impartial evaluation methods. Scientific and reasonable evaluation methods are established to decrease the impact of subjective elements on evaluation results.

(5) Properly determined evaluation period and implementation objective. According to the technology refresh cycle of products or services and industrial characteristics, the evaluation cycle is determined scientifically to dynamically adjust the ranking list of forerunner and the ongoing evaluation of forerunner.



**What are the evaluation procedures of ESF? What should be noticed?**

(1) Standards screening. The enterprise standards disclosed through self-declaration at the public service platform are screened to ensure enterprise standards in line with related laws, regulations and mandatory standards. Furthermore, standards texts shall conform to the compilation norm, the level of indicators shall not be lower than those in existing national and sector standards, and there exist corresponding product models or service types in the market.

(2) Determination of enterprise standard ranking list and forerunner list. Evaluation bodies, based on the related standards after screening, carry out the evaluation work according to the evaluation programs, come up with the ranking list of enterprise standards, and determine the quantity of standards in the ranking list in a reasonable way. The forerunner list comes into being after the agreement on shortlisted enterprises and submission of evidence materials conforming to certain norms.

**How long is the evaluation period for enterprise standard ranking list and forerunner?**

The evaluation of ranking list of enterprise standard is dynamically adjusted, without regular evaluation cycle. The ranking list is released either monthly or quarterly. The evaluation cycle of enterprise standard ranking list is around one year.

**Is there any relevance among each year's key fields?**

The key fields each year are relevant, and the evaluation starting from the previous year will go on in the next year. However, if any of the following circumstance occurs, the key fields will be dynamically adjusted as well:

- (1) Being removed from key fields. A field will be removed from the list of key fields if it lacks sufficient foundation in the evaluation in the previous year, or fails to meet the national development and consumer demands.
- (2) Fine tuning of key fields. The scope of key fields can be slightly adjusted based on overall consideration of multiple elements including industrial technological development, hotspots and practical consumer needs.

**How does enterprise publicize and use the ESF title?**

Enterprises can properly promote their brand and product winning the ESF title by means of multiple resources such as traditional media, network media and new media, in conformity with laws and regulations.

**Under what conditions will the ESF title be revoked?**

If one of the following circumstances occurs to an enterprise with the ESF title in its validity period, whose title will be revoked by evaluation bodies according to the requirements of operating organization:

- (1) Major changes in the enterprises' production equipment and technology, which seriously impact the performance of products;
- (2) Upgraded enterprise standards with decreased level of core indicators;
- (3) Serious environmental protection and safety issues and product quality problems;
- (4) Products fail to reach the disclosed standard level during random inspection;
- (5) Violations of intellectual property rights;
- (6) Practising fraud in the selection of ESF or other honesty problems found;
- (7) Record of bad behaviors in the national enterprise information disclosure system, such as Credit China and the public platform of environment information.

**Is standard the only element to be evaluated in the application for ESF? Is product test report needed?**

The evaluation of enterprise standard forerunner not only focuses on the advanced level of standard itself, but also practical implementation effect. The standards shortlisted for the ranking list and forerunner list of enterprise standard are required to have corresponding product models and service types in the market, meanwhile enterprises shall provide support materials including test report that can prove the conformity between standards and product models and service types.

**Is the qualification of the third-party evaluation body for the ESF of certain product permanent? Will it be canceled under certain conditions?**

Every year, the key fields for the forerunner project will be announced after the re-solicitation of evaluation bodies for certain product models and services. The qualification of evaluation bodies will be canceled in the following cases:

- (1) Honesty and fairness issues occur in related organizations or individuals;
- (2) The released ranking list and forerunner list of enterprise standard are not fair and just and cannot be explained in a proper way;
- (3) The evaluation bodies that voluntarily quit the evaluation work for ESF are required to notify the operating organization in advance and handover their work according to the related rules set out by the operating organization.

Credit issues of evaluation bodies will be reported to the relevant regulation departments and the evaluation bodies will be included in the blacklist. The operating organization will announce the above information at the information platform and re-solicit the evaluation programs and evaluation bodies in the specific field.

**How to obtain the information of ESF? Is there any unified information platform?**

The public can obtain related policies and regulations and work progresses of ESF through the unified information platform, where the evaluation programs, evaluation bodies as well as ranking list and forerunner list of enterprise standard are announced and disclosed. Related information and text of enterprise standard can be inquired and obtained at the platform as well.



**Any incentive policies for ESF?**

- (1) Evaluation results are adopted by government departments;
- (2) Government procurement prefers forerunners;
- (3) Special fund;
- (4) Credit aid is supplied;
- (5) Large-scale supermarket and online e-business promote the marketing of forerunners;
- (6) Financial bonus from local governments.

**Can evaluation bodies for ESF provide standardization-related consulting services for enterprises? How do local areas participate in the ESF project?**

The evaluation bodies for ESF can provide consulting services on standardization for enterprises on the premise of not affecting the fairness and justice of the evaluation work of the ranking list and forerunner of enterprise standard.

Local standardization administrative departments can encourage the advanced enterprises within the administrative territory to disclose advanced standards and compete for ESF; recommend the characteristic industries in the specific areas to become the key fields and the third-party bodies within the administrative territory to undertake the evaluation work for forerunner; adopt the ranking list and forerunner list of enterprise standard, develop and implement support policies to make enterprises benefit from standard forerunner. [ES](#)

(Source of Chinese material: CNIS; Translated by Jin Jili)

To put the governmental opinions on the Enterprise Standard Forerunner System into place, the key fields in 2019 was officially announced by SAMR in late May through the concerted efforts with related departments under the State Council.

Compared with the 11 key fields in 2018, the key fields of this year cover a total of 100 products and services, ranging from household appliances, decoration materials, clothing and shoes, machinery to services such as aging services and online banking services.

## 11 key fields 2018

<b>Air purifier</b>	Wood furniture	<b>Ceramic tile</b>
<b>Washing machine</b>	<b>Headphone</b>	<b>Toilet</b>
<b>Refrigerator</b>	Photovoltaic product	<b>Knitted underwear</b>
<b>Air conditioner</b>	Desk lamp	

## 100 key fields 2019

	Smart door lock	Socket	Sanitary napkins
	LED lamp	Straw	Ceramic knives
	Projector	Bath lotion	Duplicator
	<b>Headphone</b>	Wet wipes	Duplicating paper
	Audio product (including loudspeaker box)	Toilet paper	Spectacle lens
	Silk quilt	Towel	Spectacle frame
	Travel suitcase	Sports shoes	<b>Knitted underwear</b>
	Handbag and knapsack	Children's shoes	Children's clothing
	Leather shoes	Shirt	Down garment

	Cooker	Range hood	Vacuum cleaner
	Electric flat pan	<b>Air purifier</b>	<b>Refrigerator</b>
	Electric rice cooker	Water purifier	<b>Air conditioner</b>
	Microwave oven	<b>Washing machine</b>	Electric fan
	Soybean milk maker	Electric storage water heater	Water dispenser
	Gas cooker		Room heater
	Upholstered furniture	Water proofing paint	Mixed paint
	Children's furniture	Anti-corrosive primer	Waterproof membrane
	Wood flooring	Powder coating	Bathroom furniture
	Plaster tablet (wallboard)	Interior wall coating	<b>Toilet</b>
	<b>Ceramic tile (plate)</b>	Latex paint	
	Blind hinge	CNC lathe	3D printing (additive manufacturing) equipment and its raw materials and products
	Breaker	Fruit grading machine	Water (geothermal)-sourced heat pump unit
	Water meter	Automatic packaging machinery	Multistage centrifugal pump
	Water chilling unit	Rotary cultivator	
	Ventilating fan (hood)	Forklift truck	
	Heat exchanger	Shield machine	
	CNC shearing machine	Industrial robots and manipulators	
	Diamond circular saw		
	CNC die cutter		
	Bill sorting machine	Barcode payment terminal	
	Automated teller machine (ATM)	Point of sales (POS)	
	Aluminium alloy	Molybdenum and molybdenum alloy	Rare earth alloy
	architectural profile	Carbon fibre	High-temperature alloy
	Electric cable	Solar-grade polysilicon	Permanent magnet material
	Ductile iron pipe	Waterproof mortar	Bearing steel
	PVC-U pipe	Titanium thin bar	
	PP pipe		
	Aging services	Online banking services	
	Car repair and rescue services	Bank outlet services	

(Source of Chinese material: SAMR; Translated by Jin Jili)

## Connecting the dots in a circular economy: a new ISO technical committee just formed



A new ISO technical committee for the circular economy has just been formed to provide a global vision of what a circular economy really is and a model that any organization can adopt.

ISO/TC 323, *Circular economy*, is currently made up of experts from over 65 different countries and growing. The committee intends to produce a set of internationally agreed principles, terminology, a framework of what a circular economy is, and develop a management system standard. It also will work on alternative business models and method for measuring and assessing circularity.

(Source: ISO)

## DIN and SAE present new terminology standard for automated vehicles

SAE International and the German Institute for standardization (DIN) announce the new specification DIN SAE SPEC 91381, *Terms and definitions related to testing of automated vehicle technologies*.

As Automated Vehicle (AV) research and development intensifies and nears projected commercialization, various industry stakeholders have expressed the need to establish a common language and understanding among industry stakeholders, particularly with regard to the latest technological developments around AV testing.

In the current discussion on automated driving, specific terms such as “controlled environment” or “scenario” are frequently misrepresented or used in multiple contexts. Terms also differ among countries and even within them. The DIN SAE specification contains terms and definitions related to the testing of automated vehicles. The industry benefits from the standard by having unambiguous terms and definitions for simulating and testing automated vehicles.

(Source: DIN)

## New standard launched to increase city resilience



BSI has published a new British Standard, developed with the support of the World Bank, UNISDR, UN Habitat, OECD and representatives from UK cities to preserve the health and wellbeing of cities in the face of rapid urban expansion, climate change or disruptive events such as pandemics.

It would allow our cities to enhance their ability to absorb and adapt in a changing environment. Such resilience will minimize the disruptive and deflating effect of shocks and stresses on city strategy and future direction.

BS 67000, *City resilience*, provides practical guidance and tools highlighting how to organize, prioritize, plan and deliver increased city resilience through a process of continual improvement.

(Source: BSI)

## CEN and CENELEC sign UNECE Declaration on Gender Responsive Standards

On May 14, CEN and CENELEC attended the official opening of the signature of the Declaration on Gender Responsive Standards and Standards Development of UNECE, the United Nations Economic Commission for Europe, together with many other national, regional and international standardization bodies.

The Declaration aims to assist national standards bodies and standards developing organizations in identifying actions to support the creation of gender responsive standards. These include improving the gender balance of participants in standards development; ensuring that the content of standards takes into account gender specific sensitivities; and monitoring standards implementation to achieve gender balance.

(Source: CEN&CENELEC)

## WSC Academic Day -- Benefits of International Standards

October 11, Belgrade, Serbia



The central theme of WSC Academic Day 2019 concerns the economic, social and environmental benefits of international standards. This event aims to bring together academics and standards bodies working to collect and analyze empirical data on the concrete benefits of international standards, to share their methods, results and challenges.

More information is available on the event website:

<https://www.iso.org/contents/event/2019/wsc-academic-day.html>

## 2019 Qingdao Forum on International Standardization

October 27-29, Qingdao, China

At this year's event themed on "standards protecting the Earth", international standards developers, standards users and other stakeholders will gather together at five sub-forums on modern marine industry, international smart manufacturing, green and environmental protection, and standardization talent cultivation, with the goal of promoting wider application of international standards and global interconnectivity.

More information is available on the event website: <http://www.qfscn.org>



## The 83rd IEC General Meeting

November 21-25, Shanghai, China



This year's event themed on "Better Quality Better Lives—Reliability, Safety, Efficiency" is organized by the IEC National Committee of China, which is represented by the Standardization Administration of China (SAC).

In the new wave of industrial revolution, the role of standards and conformity assessment as quality infrastructure for economic and social development has been further consolidated. Standards become the carrier of innovation and green growth. Conformity assessment ensures the quality of products and services across borders and brings people a safe and better life. IEC aims for a better future for all

More information is available on the event website: <https://gm2019.iec.ch>

## The 2nd China International Import Expo

November 5-10, Shanghai

Themed on "New Era, Shared Future", the second CIIE will have a planned area of 300,000 square meters for enterprise and business exhibition, larger than the first term. New areas for outdoor exhibition will also be launched, making it possible for the display of autonomous driving vehicles and large-scale mechanical devices. Come to the expo for new opportunities.

More information is available on the event website: <https://www.ciie.org/zbh/en>

## Boosting Innovation through standards -- Your gateway to the market

November 13, Brussels

CEN and CENELEC, the European standardization organizations, warmly welcome researchers, technologists and innovators to this dedicated one-day event to engage, share, learn, and build a long-lasting partnership, showcasing how standards support scaling of research and innovation in the markets.

More information is available on the event website:

<https://www.cencenelec.eu/news/events/Pages/EV-2019-029.aspx>



# Random check on

## association and enterprise standards underway in China

### 中国开展团体标准和企业标准随机抽查

By Jin Yingguo 金英果

SAMR issued the guideline for conducting random check on association standards and enterprise standards in early June, to ensure the implementation of “the random check and disclosure” regulation at all aspects of market regulation.

## Regulatory innovation

This innovative regulation is the inherent requirements of deepening reforms to delegate power, streamline administration and optimize government services, and accelerating the transformation of government functions, according to the opinions on promoting the special regulation mode at all aspects of market regulation announced by the State Council earlier this year. The aim is to improve credit awareness and self-control of market participants and minimize interference with their production and operating activities, in a way to promote the shift from government regulation to co-governance by the whole society.

It has been proven that compared with previously adopted patrolling and arbitrary check, random check has considerable merits, such as avoiding duplicate law enforcement and repeated check, reducing regulation cost while improving effects, easing the tensions between regulatory powers and objects, alleviating the burden of enterprise, and enhancing credit support. This measure also suits the new trends of commercial system reform and requirements of strengthening during- and after-event regulation. All in all, it is conducive to creating a fairer market environment and a legal environment of business.

## Moving forward together

Against this background, SAMR speeds up the completion of the new regulatory mechanism, which is founded on credit, with “the random check and disclosure” regulation as a fundamental, special means in key areas as a supplement, to facilitate fair, normative and effective regulation.

To this end, a list of items for random check is compiled, a database of objects and inspectors for the check is established and kept updated, and practices for the check are normalized. The publicity system for the action is expected to put into operation by the end of this year.

According to SAMR’s notification on conducting “the random check and disclosure” regulation in an all-around way, within 20 days after the completion of random check, the results except for those unfit for disclosure in accord with the law shall be open to the public at the publicity system or through similar channels. In addition, the blacklist or other relevant information may be passed on to other departments, to put in joint efforts for eliminating misconducts and improving legal consciousness of the market entity.

## All for healthy development

Amongst the items on the checklist are the standards published on the National Association Standards Information Platform (<http://www.ttbz.org.cn>) and Enterprise Standard Information Public Service Platform (<http://www.cpbz.gov.cn>) for self-declaration disclosure.

Standards are examined in accordance with the *Standardization Law of China* in the following aspects:

1. Whether technical requirements are less stringent than relevant technical requirements of mandatory national standards.
2. Whether standards are technologically advanced and economically viable; standards with the subject of standardization falling into the category for elimination in the latest version of the *Directory Catalogue on Readjustment of Industrial Structure* do not conform to the requirements of the *Standardization Law*.
3. Whether standards are numbered in accordance with the numbering rules developed and promulgated by the administrative department in charge of standardization under the State Council.

Apart from the *Standardization Law*, the *Management Regulation for Association Standards* issued in January is also used as the basis for the random check on association standards. Besides, the random check on enterprise standards shall include whether enterprises disclose the functional indicators of products and services and the performance indicators of products, in the case that enterprises implement enterprise standards they have developed by themselves.

Third-party efforts or experts may be employed for the above work, since those standards are highly technical and cover wide areas of professions.

As an indispensable part of China's standards system, association and enterprise standards grow exponentially in the past two years, after the introduction of promoting measures and increased incentives. Following the *Social Organization Standardization -- Part 2: Evaluation of Good Practice* published last July, the *Management Regulation for Association Standards* was issued this January, reflecting the government's determination to guide and monitor the development of association standards.



Likewise, enterprise standards have been nurtured through the implementation of the "Enterprise Standard Forerunner" Project launched in July last year. SAMR and other seven ministries and commissions jointly issued the opinions on implementing such project with the aim of promoting product and service quality improvement via the leading role of standards and guiding the influx of market resources into forerunner enterprises. Later in October, the information platform for enterprise standard forerunner was officially put into use, which was reinforced by the publication of the *Plan on the Implementation of Enterprise Standard Forerunner (Trial)* on February 20, 2019 and priority fields of the 2019 Enterprise Standard Forerunner Project on May 28, 2019.

Due to the collaborative efforts of all stakeholders, as of June 30, a total of 8,818 association standards have been published by 2,470 social organizations registered at the National Association Standards Information Platform, and about 1.07 million enterprise standards are listed out on the Enterprise Standard Information Public Service Platform for self-declaration disclosure. The texts of a number of enterprise standards are available to the public for free.

Now is the perfect time for this innovative check to curb potential adverse trends and guide their healthy development. 



## Young experts selected to compete for the “IEC YP Leaders”

### 中国英才将角逐“IEC青年专家领袖”

By Jin Jili 靳吉丽

The second training session on 2019 IEC YP & International Standardization YP Elite Programme, hosted by Shenzhen Institute of Standards and Technology (SIST) was held in Shenzhen, South China's Guangdong province from May 15 to 17, welcoming approximately 50 young experts from scientific research institutes, industrial associations, universities and related enterprises across the country.

### Taking the lead

Over the past few years, Shenzhen has taken the lead in creating the most attractive environment for the growth of standardization talents through multiple measures such as establishing a complete system of policies and regulations, cultivating practical talents for industrial standardization, training international standardization talents and consolidating the standard education basis, said Qin Shijie, Deputy Director-General of Shenzhen Administration for Market Regulation, during his address at the event.

With the trust and affirmation of SAMR, Shenzhen has undertaken the selection and education of IEC Young Professionals for three consecutive years, Qin added. He hoped that the trainees of this year would strive to become explorers and practitioners, contributing to the development of international standardization.

The contest is composed of several sections including keynote speech, simulation of conference, panel discussions and defense of knowledge, which are designed to examine the trainees' comprehensive capabilities in organization and coordination, oral expression in English as well as response and defense. It will help them to get a deeper understanding of the standardization knowledge such as development and revision procedure of IEC standards.

### A broad stage

Three participants selected in the event will attend the 83rd IEC General Meeting and the 10th IEC YP workshop that will take place in Shanghai in October. By then, three young experts will be elected as the IEC YP Leaders of 2019 among over 200 representatives from more than 80 countries, according to SIST.

The IEC Young Professionals Programme, started since 2010, brings together the world's upcoming experts and provides them with opportunities to shape the future of international standardization and conformity assessment in the field of electrotechnology.

As for China, a breakthrough from scratch has been realized in fostering international standardization talents, with Chinese experts elected as IEC YP Leader in 2017 and 2018 respectively based on the International Standardization YP Elite Programme.

As the international standardization talent training base was established in Shenzhen in 2018, and the School of Quality and Standards of Shenzhen Technology University was founded in April this year, the major city of Guangdong province will foster qualified international standardization personnel in the long term, driving local standards and Chinese standards towards the broad international stage. 



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