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Spotlight

Series of celebrations for World Standards Day in China
中国举行世界标准日系列庆祝活动

Special Report

2025 ASEAN-Oriented Standardization Cooperation Forum held
2025面向东盟的标准化合作论坛成功举办

Global Vision

United for impact
—ISO Annual Meeting 2025 held in Rwanda
携手共建影响力
——2025 ISO年度大会在卢旺达成功召开

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Changping District, Beijing, China 102218
Website
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Editorial Department
Tel: +86 10 56597342, 56597341
E-mail: caoxx@cnis.ac.cn, jinjl@cnis.ac.cn
Subscription & Advertisement
Tel: +86 10 56597351

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Tel: +86 13001139715

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For more information

The voluntary national standard
GB/T 29772-2024, *General requirements of electric vehicle battery swap station,*
has taken effect since July 1, 2025.

The implementation of the standard is expected to help electric vehicle battery swap stations to adapt to diversified needs and vehicle models, promoting the industry's orderly and healthy development.

Celebrating World Standards Day: a global commitment to a better world

In October, as autumn colors unfolded, standardizers worldwide celebrate the World Standards Day. This annual event highlights the critical role of standards in business and daily life and honors the immense contributions of the global standardization community.

Under the theme “Shared vision for a better world: Spotlight on SDG 17—Partnership for the goals”, China’s State Administration for Market Regulation (SAMR) and the National Standardization Administration of China (SAC) held a commemorative event in Beijing on October 14.

The event showcased China’s significant progress in standardization. Key achievements announced included: the public release of over 30,000 national standards earlier this year, which have garnered 150 million online views and 17 million downloads; the official launch of the Standard Intelligent Development System (SIDS); and the recognition of 76 Chinese experts with awards from IEC and ISO. Ma Dejun, Vice President of both the China Association for Standardization and the China Battery Industry Association, received the prestigious IEC Lord Kelvin Award, who became the first Chinese expert to earn this highest lifelong honor.

The event featured video addresses from Sergio Mujica, ISO Secretary-General, and Jo Cops, IEC President. Both leaders praised SAC’s active role in international standardization. Mujica encouraged Chinese experts to “actively participate in this year’s discussions and activities, as together we strive to create a better and brighter future for all”. Cops commended China as an exemplar of true partnership, stating, “Together, we have achieved much. But the road ahead is even more exciting.”

Further activities were organized by the China National Institute of Standardization (CNIS), including themed meetings, lectures, and an outdoor standards promotion event.

The 2025 ASEAN-Oriented Standardization Cooperation Forum was held in August in Nanning, which focused on “Innovative collaboration in AI standardization, empowering the building of China-ASEAN community with a shared future”. You can find more details in our SPECIAL REPORT column.

The GLOBAL VISION column presents the reports on the ISO Annual Meeting 2025, which was held in Kigali, Rwanda, on October 6-11. The meeting, themed “United for impact”, focused on advancing international standards to achieve sustainable development goals.

This season is a fruitful period of dialogues, thoughts, and exchanges, yielding significant progress for the global standards community.

THE EDITORIAL COMMITTEE
OF CHINA STANDARDIZATION PRESS

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China Standardization Press

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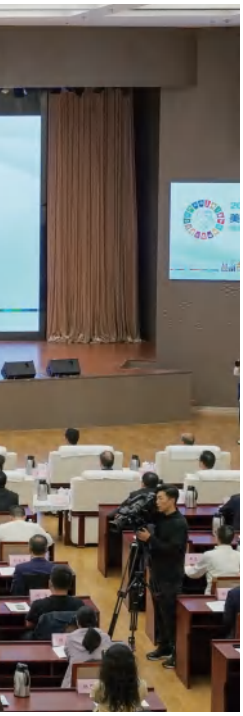


SPECIAL REPORT
特别报道

GLOBAL VISION
国际视野

Supplement 最新标准公告 (free of charge)

The overall conversion rate of international standards into China's national standards reaches 86%

At the policy briefing held by the State Council Information Office on October 31, Guo Huanxin, Director-General of the Department of Metrology, State Administration for Market Regulation (SAMR), said that the overall conversion rate of international standards into China's national standards has reached 86% by the end of September 2025, achieving the goal set in the National Standardization Development Outline, and providing sound support for green and low-carbon development.

SAMR has accelerated the establishment of a standards system for green and low-carbon products, which is aligned with the international market while tailored to China's national conditions. During the 14th Five-Year Plan period (2021-2025), it has strengthened standards development and implementation to facilitate trade, and given full play to the technical supporting role of standards in high-quality economic and social development.

First, strengthening the construction of the national standards system. In 2022, SAMR in collaboration with multiple departments released China's first standards system for carbon peak and neutrality, providing top-level guidance for advancing the development and revision of green and low-carbon standards across various sectors.

Second, vigorously adopting international standards. In accordance with the rules of the World Trade Organization (WTO) and ISO, China has revised and issued the Measures for the Adoption of International Standards, emphasizing the principles of "precision in adoption" and "efficient conversion" to accelerate the integrated development of domestic and foreign trade. Since June 1, 2025, when the Measures took effect, the international standard conversion process has been streamlined by nearly six months. In the field of carbon emission, carbon footprint and collection, China has adopted 410 relevant international standards.

Third, enhancing participation in international standardization activities. By fully leveraging bilateral and multilateral cooperation mechanisms, China has promoted the mutual recognition and collaboration on standards in the field of carbon information disclosure and carbon emission monitoring, actively participated in the activities of the ISO Climate Change Coordination Committee and the ISO ESG Coordinating Committee (ISO/ESG CC), and contributed to the development of IEC's Smart Energy Roadmap. Additionally, China has strengthened cooperation with Belt and Road partner countries and BRICS nations, jointly advancing the development of international standards in the green and low-carbon sector.

During the 14th Five-Year Plan period, in terms of green and low-carbon development, Chinese experts served as the convenors of 228 working groups, and participated in the development and revision of 342 international standards, making significant contributions to the achievement of the UN SDGs.

The final of the National University Student Standardization Olympiad 2025 held

From October 18 to 19, the final of the National University Student Standardization Olympiad 2025 was successfully held at China Jiliang University in Hangzhou City, Zhejiang Province. The final attracted over 400 attendees, including members of the review expert group, representatives of organizing units, competitors, and instructors.

The Olympiad was launched in April, and set up 3 tracks for students with different educational backgrounds, undergraduates and graduates majoring in standardization, undergraduates and graduates not majoring in standardization, and vocational high school students, who competed under 6 themes such as standardization for carbon peak and neutrality, smart city standardization, and digital economy standardization. Additionally, it set up other 4 special tracks, namely "data elements and AI standardization", "goods encoding standardization", "cultural heritage protection, inheritance, and cultural tourism standardization", and "Belt and Road international track" for overseas competitors.

The competition attracted 757 teams with over 5,000 students and instructors from 132 universities at home and abroad. After preliminary and regional selection rounds, 81 teams from universities such as Zhejiang University, the University of Chinese Academy of Sciences, and the National University of Singapore advanced to the national finals.

The 2 grand prizes, 16 first prizes, 25 second prizes, and 38 third prizes were announced at the final, along with other 2 special awards. The grand prizes were won by the team from Guangdong Technology College for their Guidelines on High-quality Development and Promotion of Zhaoqing Local Specialties, and the team from Shanghai Polytechnic University for their Management Standards for the Transportation of Retired Power Batteries from New Energy Vehicles.

The Olympiad has been successfully held for five consecutive years, and attracted a total of over 10,000 competitors since 2021. Guided by SAMR, this year's Olympiad was organized by the China Association for Standardization, China Jiliang University, and the National Standardization University Alliance.

First national standard for food digital factory released

The food industry is evolving toward intelligence and digitalization, but is faced with challenges such as inconsistent standards and poor system compatibility due to lack of unified technical guidance.

GB/T 46511-2025, *General technical requirements for food digital factory*, the first general technical national standard for food digital factory, was released recently. It bridges the gap in the industry, serving as the technical support and implementation framework for the intelligent and digital transformation of enterprises in the food industry.

The standard specifies the basic technical elements of digital factories, including the real-time monitoring in the production process, intelligent early warning of quality risks, and full-chain traceability capabilities. It can guarantee the product safety from the source, according to Liu Peng, Associate Researcher of the China National Institute of Standardization.

SAMR releases China's first national standard on livable cities

GB/T 46391-2025, *Sustainable cities and communities—General requirements for livable cities*, officially came into effect on October 5, which is the first national standard setting up the evaluation framework of livable cities.

The standard is applicable to livability enhancement in urban planning, construction, management, and evaluation at all levels, and provides a reference for the engagement of communities, enterprises, and social organizations.

The livable city indicator system in the standard constitutes of six dimensions, environment, society, economy, culture, governance, and fundamental infrastructure. GB/T 46391-2025 is a key measure to implement national deployments, and aims to address specific issues in current urban development, such as the overemphasis on hardware over software, disunity of standards, and insufficient social participation, which will provide technical support for improving modern urban governance and lives of residents.

WASIC empowers high-quality development of global automobile industry

Hosted by China Automotive Technology and Research Center Co., Ltd. (CATARC), the World Automobile Standards and Innovation Conference (WASIC) was jointly held by China Automotive Standardization Research Institute and CATARC Technology Co., Ltd. on October 27-29 in Shenzhen City, South China's Guangdong Province.

Themed "Accomplishing sustainable mobility by joining global forces through the link of standards and regulations", WASIC is a key platform for global automotive standardization, focusing the coordination of global automotive technical standards and regulations, innovative standardization concepts, China's experiences and other hot issues. It brings together expertise from both domestic and international industries to share cutting-edge practices and achievements.

The conference brought together representatives from international organizations such as the United Nations Economic Commission for Europe (UNECE), ISO, IEC, SAE International, the International Automobile Federation (FIA), and the African Organization for Standardization (ARSO), as well as representatives from standardization bodies of 26 countries, including the U.S., Egypt, Thailand, Vietnam, Laos, South Africa, Colombia, Chile, and Switzerland.

Yu Xinli, President of China Association for Standardization, Wu Feng, Deputy Secretary-General of China Society of Automotive Engineers, Yu Keli, Vice President of China National Resources Recycling Association, representatives from domestic institutions, and experts from leading companies addressed the event. They delivered speeches on critical topics, including the core value of standardization in the automotive industry, the upgrading of technical standards for new energy vehicles, safety regulations for intelligent and connected vehicles, the application of AI in automotive standardization, and the coordination between industrial efficiency and sustainable development.

During the conference, bilateral and multilateral meetings were held to promote global cooperation on automotive standards. Also, fruitful achievements were released, including the launching of the China Automobile Standards Internationalization Center (Bangkok).

Chinese expert elected IFAN Vice-President

The International Federation of Standards Users (IFAN) held the 52nd IFAN Members' Assembly and associated meetings on October 20-22 in Milan, Italy, which was hosted by the Italian standards body UNI.

Xia Weijia (Vivian), Member of the IFAN Board and Director of International Standards Department of China Association for Standardization (CAS), was elected Vice-President of IFAN with a term of office from 2026 to 2028. It is the first time for a Chinese expert to take the position, which marks a further step of China's participation in international standardization.

The IFAN workshop "Standards Education: A Strategic Priority" was held on October 21. Approximately 50 representatives including standards education experts, President of UNI, ISO Secretary-General, and IEC Secretary-General joined the workshop, and discussed the intrinsic driving forces, opportunities and best practices of standards education.

Xia Weijia introduced China's efforts in standards education and popular science activities for teenagers at the workshop. The attendees recognized the importance of standards education for teenagers, and expressed their appreciation for the diverse standards promotion activities for teenagers across China.

IFAN plays an important role in global standardization work. It gathers enterprises, professional associations, academia, certification institutions and government departments to form an international network, representing the common interests of standards users. IFAN works closely with ISO, IEC, CEN and other standards organizations to make sure that standards users' voices are heard in the process of international standards development. Through research on users' demands and workshops, IFAN supports standards development, and promotes standards implementation.

As a national member of IFAN since 2002, CAS has actively promoted the capacity of China's standards users to adopt international standards and participate in international standardization activities.

IEC releases a standard on environmental testing

In recent years, the application scenarios of electrical and electronic products have become increasingly diverse worldwide. The impact of climatic environmental tests on the performance of related products has attracted much attention, and formulating scientific and reasonable environmental test plans has become an important step to ensure product quality and reliability.

IEC has attached great importance to the construction of the International Electrotechnical Commission Quality Assessment System for Electronic Components (IECQ), and released IEC 60068-3-14:2025, *Environmental testing—Part 3-14: Supporting documentation and guidance—Developing a climatic sequential test*. It is the first IEC standard led by China in the field of environmental testing, providing a generic process for developing a climatic sequential test programme by sequencing test methods prescribed in the IEC 60068-2 series.

ISO/TC 8/SC 27 holds the first plenary meeting in Shanghai

The first plenary meeting of ISO/TC 8/SC 27, *Ports and terminals*, was held on October 21 in Shanghai, which attracted representatives from 15 member states and 5 international organizations, as well as over 100 experts and scholars.

The establishment of ISO/TC 8/SC 27 was proposed by China and approved in early 2025. It will construct an international standards system for ports and terminals, and provide sound support for the sustainable development of global supply chains in terms of efficient operation, green and low-carbon development, as well as safety and resilience.

Themed event of World Standards Day 2025 held in Beijing

2025年世界标准日主题活动在京举行

By Jin Jili
文/靳吉丽

Focusing on "Shared vision for a better world: Spotlight on SDG 17—Partnership for the goals", the themed event of World Standards Day 2025 was held on October 14 in Beijing. Presided over by Xiao Han, Director-General of Standards Innovative Department of SAMR, the event was attended by Deng Zhiyong, Vice Minister of SAMR and Administrator of SAC, and addressed by Sergio Mujica, ISO Secretary-General, and Jo Cops, IEC President, via videos.

Partnerships in international standardization

Sergio Mujica said in the video, standards provide shared frameworks for effective global collaboration across sectors and economies. They help drive cooperation that is transparent, accountable and result-driven. Standards are key tools that accelerate progress toward the United Nations Sustainable Development Goals. In collaboration with the IEC and ITU, ISO is committed to turning ambition into measurable results.

Jo Cops pointed out that IEC thrives through strong membership partnerships. Key examples include energy access for off-grid communities through our Global Impact Fund projects, AI acceleration while ensuring safe, responsible adoption, and climate action by demonstrating how international standards support renewable energy and bridge the gap between policy and real impact. None of this work is possible alone. We need collaboration for global progress.

They both highlighted the role of SAC and its active participation in international standardization activities. Sergio Mujica expected Chinese experts to "actively participate in this year's discussions and activities, as together we strive to create a better and brighter future for all". Jo Cops said, "China exemplifies true partnership. Together, we have achieved much. But the road ahead is even more exciting."

China's achievements in standardization

At the event, a promotional video was played to showcase China's achievements in standardization at both national and international levels in recent years. Currently, there are more than 1,300 standardization technical bodies in China, with over 62,000 members involved in standards development. Since over 30,000 national standards that do not adopt international standards were publicly available earlier this year, the online views have reached 150 million, with downloads exceeding 17 million, each national standard being downloaded more than 500 times averagely.

Chinese experts have actively participated in international standardization activities. Over 16,000 registered experts have submitted more than 2,300 international standards proposals so far, making a contribution to advancing the development in intelligent shipping, aerospace, quantum technology and other areas.

The Standard Intelligent Development System (SIDS) of the country was launched at the event. As Liu Hongsheng, Director-General of Standards Technical Management Department of SAMR, introduced, SIDS realizes the full-process online standards development. It shifts the entire process of standards development from offline to online, and transforms the traditional multi-stage serial workflow into a parallel one.

The SIDS supports the intelligent auxiliary compilation of standards content. Relying on millions of standards data and digital foundation of the National Digital Library of Standards, it uses an intelligent standards editor to assist in generating standards content, and avoids overlapped and redundant technical indicators.

In addition, the SIDS enables the intelligent-driven application of standards. It supports the construction of a high-quality semantic knowledge base, and enhances the efficiency and accuracy of intelligent standards retrieval, laying a technical foundation for developing customized and intelligent data products and services.

Role models of standardizers

The list for the recipients of IEC and ISO awards was announced by Liu Chengyang, Deputy Director-General of Standards Innovative Management Department, SAMR. A total of 76 Chinese experts won the awards of IEC and ISO this year. Ma Dejun, Vice President of China Association for Standardization and Vice President of China Battery Industry Association, was awarded the IEC Lord Kelvin Award, who became the first Chinese expert to receive the highest lifelong honor of IEC. Additionally, 32 experts received the IEC 1906 Award, one expert was honored as the IEC Young Professional Leader, and 42 experts received the ISO Excellence Award.

Ma Dejun shared his explorations and practices in international standardization over the past 35 years in his speech. He has dedicated himself to international standardization in fields such as household appliances, smart homes, smart cities, brain-computer interfaces, robotics, and active assisted living. He has served as Vice Chair of IEC/TC 61 on safety of household and similar electrical appliances and Chair of IEC/TC 59/SC 59N on air cleaners and IEC Syc AAL on active assisted living.

Ma put forward his suggestions for domestic standardizers engaging in international standardization. Firstly, accelerating the integration of digital economy rules, and actively participating in international standards development in cutting-edge fields such as data element circulation, digital security and AI governance, to contribute Chinese wisdom to the development of global digital economy.

Secondly, strengthening coordination and technical exchanges with other countries in key areas including photovoltaic power, wind power, energy storage and hydrogen energy, and enabling a unified global green energy system, to provide technical support for achieving the dual carbon goals.

Thirdly, strengthening standards cooperation with countries involved in the Belt and Road Initiative, BRICS countries, and SCO member states, and promoting standards mutual recognition, technical interconnectivity, and industrial integration, to make standards meet the development needs for a green, intelligent, and win-win future.

As a recipient of the ISO Excellence Award, Hou Fei, a senior researcher from China National Institute of Standardization, shared his experience in participating in international standards development, especially ISO 25556:2025, *Ageing societies—General requirements and guidelines for ageing-inclusive digital economy*, published in May this year as the first ISO standard on digital economy from the perspective of population aging.

As the project leader and convenor of the working group for developing the international standard, Hou conducted in-depth exchanges with more than 20 countries and regions through questionnaires, seminars, and case sharing. Later, a consensus was reached in the Asia-Pacific region, laying a solid foundation for the approval of the standard project.

In addition to the international standard on age-inclusive digital economy, Hou also led the development of international standards for high-quality services by digital means, consumer information and online service terms, and digital learning services and AI applications. He hoped that these standards will serve China's economic and social development, and contribute to the transformation, upgrading, and sustainable growth of the global service industry.

Since the beginning of this year, various government departments and local authorities have actively implemented the national program on driving equipment renewal and trade-in of consumer goods with improved standards and the national program on promoting high-quality economic development with standards upgrading. So far, 553 national standards have been developed among the task of developing 583 ones. Over 200 mandatory national standards in fields such as electric bicycles and cybersecurity have been released and implemented.

China has held the secretariats of international technical bodies in areas including ports and terminals, and led the development of 360 international standards in fields such as brain-computer interfaces. It has made a breakthrough in its participation in the international standardization activities of ISO and IEC, further strengthening the role of standards in supporting high-quality development.

Recipients of IEC and ISO awards

IEC Lord Kelvin Award

Ma Dejun

IEC 1906 Award

Wang Qiuliang	Pei Zheyi	Geng Hua	Wei Hongqi	Lu Tielin	Lu Chunyang
Zhang Xiaojing	Ma Weimin	Li Xiangjun	Li Fang	Lan Yanrui	Shi Tuo
Zhu Miao	Zhao Guang	Pan Guoliang	Liu Yingjiu	Hu Anping	Meng Xiaochao
Yu Hongmei	Lai Hangman	Xie Jiemin	Zhang Liang	Huang Qingdan	Li Hongmei
Yang Lin	Rao Hong	Li Qun	Shao Minfeng	Yao Liangzhong	Yin Kuiying
		Fan Min	Wang Quan		

IEC Young Professional Leader

Chang Shendong

ISO Excellence Award

An Xiaomi	Shang Di	Chen Zhuo	Li Jianhui	Luo Qianhua	Jia Zhiyang
Quan Maohua	Zhang Donghui	Yang Huiting	Hou Fei	Huang Hui	Geng Jinju
Yao Lei	Liu Meng	Zou Chuanyu	Chen Yongquan	Sun Liangwei	Zhang Junjiao
Wang Qing	Xu Ke	Hu Haidong	Lu Xiuqin	Bai Wenlin	Shen Rong
Gao Ang	Yang Xiaofeng	Shen Gongtian	Cao Lili	Han Zhiwei	Wang Qi
Han Linhai	Ning Na	Yang Feng	Li Bangguo	Liu Delu	Li Huachang
Gao Xiaoyun	Shi Yao	Li Chen	Zhu Tao	Tian Zijian	Yan Aijun

CNIS holds a series of activities to celebrate World Standards Day

中国标准化研究院举办系列活动庆祝世界标准日

By Fang Luofan
文/方洛凡

The World Standards Day (WSD), the big day of global standardizers, is celebrated annually on October 14. Themed "Shared vision for a better world: Spotlight on SDG 17—Partnership for the goals", this year's WSD places greater emphasis on joint efforts and cooperation for SDGs.

China National Institute of Standardization (CNIS) held a series of activities from October 13 to 16 to reach extensive cooperation with standards institutions and experts, and popularize the concept of standardization through on-site presentation.

Meeting on technological cooperation and achievement release held in Beijing

As the warm-up of SAMR's themed event to celebrate the WSD, CNIS held the meeting on technological cooperation and achievement release on October 13. It was designed to implement the National Standardization Development Outline, further promote the concept of standardization, and enhance the publicity and popularization of standardization. Leaders from relevant departments of SAMR, leaders of CNIS, representatives from relevant units and enterprises, and standardizers attended the meeting, which was addressed by Wang Kun, President of CNIS, and presided over by Dai Xinhua, Vice President of CNIS.

CNIS signed a strategic cooperation framework agreement with five organizations, the National Information Center, Management Committee of Chongqing Liangjiang New Area, Xinjiang Uygur Autonomous Region Market Supervision and Administration Bureau, China Jiliang University, and National Institute of Measurement and Testing Technology. They strive to jointly build a standards research ecosystem, promote the integrated development of standardization and technological innovation, and facilitate the application of research results. Focusing on standardization research, technological innovation, talent cultivation, and industrial development, the partnership marks a new chapter of in-depth integration and mutual progress.

The achievements made in key fields of scientific research and key projects were released at the meeting. The research results included the Blue Paper on Environmental, Social, and Governance (ESG) Standardization 2024, the 2025 Annual Report of Cities' Comprehensive Development Index, the Blue Paper on the Evolution of Standards Digitalization, and the Standards Cited in Regulations: International Cases and Chinese Practices.

Also, CNIS set up booths to demonstrate copies of national standards whose development was led by CNIS, its research achievements in 2025, and ergonomic experimental equipment, helping participants gain a vivid experience of the role that standardization plays in daily life.

Committed to serving national strategies and improving public welfare, CNIS provides technical support for the high-quality development of standardization through concrete actions, striving to extend standards to key areas of people's livelihoods. It not only joins hands with standardization research institutions nationwide, but also vigorously participates in global standards governance.

In collaboration with relevant departments, SAMR (SAC) has been vigorously promoting the integrated development of standardization and technological innovation. Focusing on large-scale equipment upgrades and consumer goods trade-in programs, a batch of important national standards has been released so far. Meanwhile, SAMR (SAC) has been actively participating in the development of international standards in emerging fields such as UAVs, quantum technology, the Internet of Things, and artificial intelligence, providing strong support for high-quality economic and social development.

Efforts will be made to further improve the mechanism for the coordinated development of standardization and technological innovation, establish a standards system that underlies the growth of new quality productive forces, steadily expand the continuous opening up of standards, and enhance the vitality of standardization research institutions.

The meeting pools the wisdom of industry, academia, research, and application, unfolding a blueprint that leverages standards to drive social progress and jointly create a better world.

Illuminating a better life through standards: CNIS introduces standardization to the public

To enhance public awareness of standardization, disseminate standardization knowledge related to daily life, and enhance understanding of standardization work, CNIS collaborated with the Beitaipingzhuang Sub-district on October 14 to launch an outdoor science popularization activity themed "Illuminating a better life through standards". The activity translated professional standardization knowledge into practical guidance on daily life, attracting hundreds of residents.

Several sub-institutes of CNIS, set up booths for interaction, featuring ergonomic assessments, food flavor sensory experience, and optical examinations for eyes. Through informational displays, live demonstrations, and interactive experiences, they made standardization knowledge accessible for the public.

At the ophthalmic and vision testing zone, parents and children gathered around display boards. Ms. Wang, a local resident, noted down the recommended lighting parameters, and said "I will change our bulbs as soon as possible, and never ignore the importance of proper lighting environment." Many visitors received eye examinations and personalized vision protection recommendations during the event.

The booth of human factors and ergonomics offered a stunning high-tech experience with smart wearable devices and smart home exhibits. Many elderly residents tried on the exoskeleton robot equipment and found it much easier to walk and climb stairs—"It is perfect for manual laborers or seniors!"

CNIS experts on agricultural and food standardization demonstrated how coffee grind sizes correspond to brewing methods, and explained processing differences among the six major tea categories, based on ISO 18794:2018 for coffee and T/CTSS 58-2022 for tea.

The activities help residents learn about the vital role of standards in daily life. CNIS will organize more such activities, helping the public embrace a better future under the guidance of standards.

CNIS holds the chief scientist appointment ceremony and academic lecture

To further build a high-level talent team and advance standardization research in key and emerging fields, CNIS appointed Jiang Jun, Professor at the University of Science and Technology of China, and Zhang Qiang, Researcher at the Hefei National Laboratory and Executive President of Jinan Institute of Quantum Technology, as its Chief Scientists on October 13.

At the ceremony, Wang Kun, President of CNIS, presented the letters of appointment to the two scientists. This appointment supports CNIS's mission to advance China's strength in science and technology.

The two scientists delivered academic lectures on "AI for scientists" and "quantum information technology" respectively. The event was attended by more than 100 participants.

CNIS holds the expert symposium on development strategies

CNIS held an expert symposium to discuss its development strategies for the next decade in Beijing on October 14, which was a part of its series activities to celebrate the WSD. The symposium brought together 23 senior experts, including Ma Guanghui, Li Jinghong, Chen Jun, Zhou Chenghu, academicians of Chinese Academy of Sciences, and Lian Weiliang, former Deputy Director of National Development and Reform Commission. More than 60 representatives from CNIS attended the meeting.

Wang Kun, President of CNIS, presided over the symposium, and Li Zhiping, Vice President of CNIS, delivered a report outlining the development strategies of CNIS. Drawing on their respective professional fields, experts provided insightful recommendations for the future development of CNIS, covering aspects such as optimizing the sectoral layout, promoting international cooperation, strengthening standards research in key and emerging fields, establishing a standards assessment system, and establishing a talent cultivation and incentive mechanism.

The event effectively leveraged the role of think tank, providing high-level support for the decision-making of CNIS in building itself into an authoritative high-end standardization think tank in China and a world-class standardization research institution.

CAS sets up committee on smart elderly care facilities

中国标准化协会智慧康养设施专业委员会正式成立

By Fang Luofan
文/方洛凡

This year's WSD draws attention to partnerships for the SDGs. Therefore, China Association for Standardization (CAS) held the inauguration ceremony of the professional committee on smart elderly care facilities on October 11 in Shenzhen.

With the theme of "integrating global expertise in senior wellness, establishing age-friendly standards for China", the event was attended by Yu Xinli, President of CAS, Ma Dejun, Vice President of CAS and Chair of IEC SyC AAL, Zhang Shaojun, Director of Qingdao Branch of China Quality Certification Centre, Fang Chengyu, Chairperson of ISO/TC 37 on language and terminology, as well as scholars and enterprise representatives from Japan, South Korea, Germany, and Denmark.

Aging population has become a common challenge for human society recently. According to UN statistics, the global population aged 65 and above is projected to exceed 1.5 billion by 2050. According to authoritative forecasts, China's silver economy is expected to reach 20 trillion yuan by 2030, demonstrating robust potential for development.

Smart health care, which integrates AI technology and health care services, is key to the improvement of the living quality and happiness of the elderly. Proper standards system for elderly care underlies the quality of products and services, and drives the industrial innovation.

In her address, Yu Xinli highlighted that the committee on smart elderly care facilities brought together leading institutions, renowned enterprises, and experts in the field, to provide a clear, comprehensive, and feasible roadmap for standardization in the health and wellness industry. The committee will establish a standards system mutually driven by the government and market, setting clear market rules and serving the development of the industry.

Focusing on the demands of standardization in enterprises, CAS held an online lecture on October 14, providing technical guidance on the creation and evaluation of standardization good behaviors.

WSD-themed activity and the 4th Standards Innovation Conference held in Beijing

海淀“世界标准日”主题活动多项标准化成果集中亮相

By Fang Luofan
文/方洛凡

Hosted by the Market Supervision and Management Bureau of Haidian District, the WSD-themed activity and the 4th Standards Innovation Conference were held on October 14 in Beijing.

Themed “contributing to building a world-leading science and technology park through standardization and innovation”, the event brought together representatives from government departments, domestic and international standards organizations, research institutions, universities, and enterprises. Participants discussed the core value and practical paths of standardization in empowering technological innovation, spearheading industrial upgrading, and supporting the construction of a world-leading science and technology park.

At the event, the forerunners of enterprise standards in 2024, national standardization pilot units, organizations undertaking national standards verification projects, and the top 10 enterprises in standards development were awarded, highlighting the latest achievements in standards development, international engagement, and policy support in Haidian.

Typical application cases of four association standards were showcased, covering fields of business secrets, pest control in the catering industry, smart cooking robotics, and intellectual property of generative AI. Also, the Haidan Standardization Public Service Empowerment Team was launched, which includes units such as the Market Supervision and Management Bureau of Haidian District, Beijing Institute of Standardization, Beijing Association for Standardization, and China International Association for the Promotion of Science and Technology.

The team will leverage the professional expertise of these organizations, and provide targeted services to address the practical needs of enterprises in standards development, international certification, and achievement transformation.

Haidian has led the development of 63 international standards and 657 national standards, and has invested 7.6 million yuan in a district-level standards innovation and development fund. Haidian will systematically advance the construction of a globally influential demonstration zone for standards innovation through three key paths, strengthening forward-looking layout, deepening opening up and cooperation, and optimizing the ecosystem, said Nie Junjie, Director of the Market Supervision and Management Bureau of Haidian District.

2025 ASEAN-Oriented Standardization Cooperation Forum held

2025面向东盟的标准化合作论坛成功举办

By Mo Jialin, Song Yang, Ke Honggang, Jin Jili
文/莫佳琳 宋洋 柯洪刚 靳吉丽

The 2025 ASEAN-Oriented Standardization Cooperation Forum was held in Nanning, South China's Guangxi Zhuang Autonomous Region, on August 27 with the theme of "Innovative collaboration in AI standardization, empowering the building of China-ASEAN community with a shared future".

Hosted by the Administration for Market Regulation of Guangxi Zhuang Autonomous Region, the forum was co-organized by China Electronics Standardization Institute, China Automotive Technology and Research Center Co., Ltd., China Inspection and Testing Society, iFLYTEK Co., Ltd., and Nanning Municipal Administration for Market Regulation.

Standards promote win-win cooperation

Wei Tao, Chairperson of the People's Government of Guangxi Zhuang Autonomous Region, and Bai Qingyuan, Vice Minister of SAMR, attended and addressed the opening ceremony. Lu Xinning, Vice Chairperson of the People's Government of Guangxi Zhuang Autonomous Region, presided over the opening ceremony.

Wei Tao stated that standards promote international trade and accelerate industrial upgrading. Guangxi has actively advanced the institutional opening up in areas such as standards, and steadily deepened cooperation with ASEAN countries, contributing to the connectivity of standards between China and ASEAN. Currently, AI is becoming the core engine of the new round of scientific and technological revolution and industrial transformation. This forum, which aims to jointly discuss and build a new path for AI standardization, will vigorously facilitate the in-depth integration of standards, technologies, and industries.

According to Wei, Guangxi will work with all parties to strengthen the fundamental capabilities of AI standards, accelerate the construction of infrastructure such as standards, metrology, certification and accreditation, and inspection and testing that helps the development of AI, and advance the digital transformation and intelligent upgrading of standards.

Guangxi will join hands with ASEAN countries to build a mutual recognition system of AI standards, develop and share related key standards in fields such as smart cities, intelligent connected vehicles, and computing power networks, and advance the compatibility and connectivity of standards systems. In addition, it will establish a talent team on AI standardization together with ASEAN countries, and provide strong intellectual support for the innovative cooperation in AI standardization, better serving a closer China-ASEAN community with a shared future.

Bai Qingyuan stated that SAMR will continue deepening standardization cooperation with ASEAN countries, promote the continuous expansion of bilateral trade, and foster the deeper integration of industrial chains. It will drive the in-depth harmonization of standards systems to facilitate the liberalization of trade and investment, and strengthen cooperation in specific fields under the subcommittee on standards, technical regulations and conformity assessment, injecting new impetus into the stability of regional industrial and supply chains.

Efforts will be made to deepen standardization cooperation in emerging fields, and carry out the development and application demonstration of standards in areas such as AI, digital economy, smart cities, new energy vehicles, and green infrastructure, empowering the in-depth integration of regional innovation and industrial chains through standardization cooperation. Further efforts will be made to strengthen capacity building and people-to-people exchanges, and establish standardization cooperation alliances and the ASEAN Standardization Expert Committee, providing intellectual support for China-ASEAN trade development, Bai said.

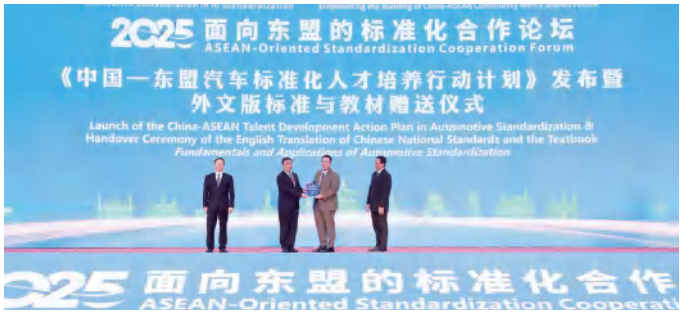
Fruitful outcomes released

At the forum, fruitful outcomes were released. Cooperation agreements were signed, and several institutional mechanisms were established, including the expert committee under the standardization cooperation and exchange center of China and ASEAN countries and the China-Laos Electric Power Standards Cooperation Committee. Cooperation initiatives were also launched, such as the Nanning Initiative on Leveraging Standards to Support Sustainable Development of Artificial Intelligence and the China-ASEAN Cooperation Initiative on Artificial Intelligence Plus Healthcare Standardization.

The China-Cambodia Artificial Intelligence Standardization Cooperation Working Group and the China-Laos Electricity Standards Cooperation Committee were established. A number of cooperation alliances and joint research projects were also launched, including the China-ASEAN Artificial Intelligence Plus Modern Agriculture Standardization Cooperation Alliance, the Artificial Intelligence Plus Manufacturing Standardization Cooperation Alliance, and the Artificial Intelligence Plus Dual Carbon Metrology Cooperation Alliance.

A series of cooperation achievements such as the China-ASEAN Talent Development Action Plan in Automotive Standardization was released. The list of the second batch of electric vehicle standards of both sides was exchanged, and the handover ceremony of the English translation of Chinese national standards and the textbook *Fundamentals and Applications of Automotive Standardization* was held.

At the event, Chinese and foreign guests delivered addresses or keynote speeches. They expected to join hands in advancing AI and its standardization, promote the mutual recognition of standards and industrial coordination between China and ASEAN countries in emerging fields including AI, deepen international exchanges and cooperation on standards, and empower regional economic growth.



Parallel sub-forums expand dialogue

During the forum, three parallel sub-forums were held on automotive standardization, metrology technology, and conformity assessment respectively for the first time, which achieved the organic integration of various elements of national quality infrastructure (NQI). They not only deepened the traditional standardization cooperation, but also blazed new trails for the cooperation between China and ASEAN countries in broader fields.

The sub-forum on automotive standardization, which is also the 7th China-ASEAN Cooperation Dialogue on Automotive Standards & Regulations, centered on the theme "Green, low-carbon and intelligent mobility: standardization empowering the coordinated development of new energy vehicles and intelligent connected vehicles". Experts from institutions and enterprises, including China Automotive Standardization Research Institute and the Automotive Product Working Group of ASEAN Consultative Committee for Standards and Quality (ACCSQ), shared the latest research findings and practical experience on electrification and intelligence.

Organized by the Metrology Testing and Research Center for Belt and Road Countries (Guangxi), the sub-forum on metrology technology was addressed by Zhu Meina, Deputy Director-General of Department of Metrology, SAMR, and Ke Ky, Secretary of State, Ministry of Industry, Science, Technology & Innovation, Cambodia. Four Chinese experts and six experts from ASEAN countries exchanged views on topics such as AI and carbon peak and neutrality.

At the sub-forum on conformity assessment, which was organized by China Inspection and Testing Society, and Guangxi Zhuang Autonomous Region Institute of Product Quality Inspection, representatives from leading enterprises of China and ASEAN countries, international organizations, and domestic universities shared their latest research findings centering around the theme "Innovative application of AI technologies in conformity assessment to facilitate international trade".

Broader road for AI development

During the forum, a meeting on supporting innovative cooperation in AI industry with standards was innovatively convened for the first time, which focused on standardization needs for AI application in key fields such as digital economy, modern agriculture, biomedicine, as well as carbon peak and neutrality. The meeting invited eight experts in AI and standardization areas from enterprises and research institutions to share insights and give suggestions for the development of industry-specific AI standardization.

The meeting served as a bridge to promote joint research and alignment of technical standards, enhance the integrated development of standardization capabilities and AI in local enterprises, and contribute to the development of an AI ecosystem characterized by R&D in Beijing, Shanghai and Guangzhou, integration in Guangxi, and application in ASEAN countries.

The forum, as one of the high-level forums under the framework of the China-ASEAN Expo, is the highest-level event for standardization authorities between China and ASEAN, which was held successively in 2019, 2021 and 2023, formerly known as the China-ASEAN Standardization Cooperation Forum. It was the first time for the standardization cooperation and exchange center of China and ASEAN countries to hold the forum, which was supported by ACCSQ.

With 19 items of practical cooperation outcomes, this year's forum was the one with the highest standard, largest scale, most achievements and widest influence to date. It was included in the overall framework of the 22nd China-ASEAN Expo from September 17 to 21, and was introduced and promoted as the first major event to people from all walks of life at home and abroad.

The forum has effectively advanced China-ASEAN standardization exchanges and cooperation, built consensus on standardization cooperation, and enhanced the international influence of standardization work in Guangxi and even in China. It has become an essential platform for China-ASEAN standardization exchanges, playing a vital role in driving the ASEAN-oriented institutional opening up of standards.

Addresses at the opening ceremony and speeches at the forum

Dennis Chew
Regional Director of IEC Asia-Pacific Regional Centre (IEC-APRC)

AI continues to reshape industries at a rapid pace, which reminds us of the growing importance of standardization. Standards and conformity assessment are essential to addressing the socio-technical dimensions of AI—ensuring its safe, ethical, and inclusive adoption across different sectors.

Technology is never just technical. It reflects the values, intentions, and responsibilities of those who design and implement it, and it impacts everyone who uses it. That is why we must take a broader, socio-technical perspective. Standards are the tools that help us put AI in use—effectively and responsibly in ways that respond to human needs.

To support this, we are working closely with organizations around the world. Through our joint technical committee with ISO, we have developed standards that span the entire AI ecosystem. These address both technical capabilities and non-technical requirements—such as business, regulatory, and policy needs, as well as ethical and societal concerns. We are tackling issues like safety, bias, data quality, and more.

Through global collaborations—such as the AI and Multimedia Authenticity Standards Collaboration, a multi-stakeholder initiative—we are also addressing urgent challenges like online misinformation, deepfakes, and AI-generated content.

Later this year, the 2025 International AI Standards Summit in Seoul—organized by IEC, ISO, and ITU—will bring together experts from around the world to further strengthen international dialogue on responsible AI.

As we advance the technologies of the future, we do so with a clear vision: an all-electric, connected, and sustainable world.

One way we are turning this vision into reality—beyond our technical standards work—is through the IEC Global Impact Fund. Through this Fund, we are partnering with organizations that can help us translate the value of our work in electrical, electronic, and ICT standards and conformity assessment into tangible benefits for underserved communities. Our first initiative is expected to bring clean, reliable electricity to tens of thousands of people in rural Kenya—leveraging emerging technologies, including AI.

These are just a few examples of the steps we are taking toward our shared vision.

But we cannot do this alone. Each of you has a role to play in shaping a future where technology serves both society and the planet. Let us work together to ensure that the infrastructure of tomorrow is not only intelligent—but also safe, inclusive, and sustainable.

It has been almost two years since the third China-ASEAN Standardization Cooperation Forum was organized and much has happened particularly in digital economy landscape with the continued developments in AI. This makes the theme of the forum very relevant.

China has been ASEAN's largest trading partner since 2009, while ASEAN has become China's largest trading partner since 2020.

The upgraded ASEAN-China Free Trade Agreement (ACFTA) has strengthened the cooperation through shared commitments on standards, technical regulations, and conformity assessment procedures (STRACAP), as one of the important elements in realizing the benefits of the ACFTA.

ASEAN recognizes the critical role that digitalization and digital systems and technologies play in supporting trade facilitation and enhancing greater interconnectivity and integration of the regional economy.

Underpinning this is the alignment of digital standards across the region, which will not only help to set out specifications and procedures to ensure consistent implementation of processes, technologies, and methods, but also help to enable a high benchmark for the quality, reliability, safety and security of goods and services being delivered into a market. The adoption of harmonized standards therefore increases benefits to the overall regional economy by facilitating access to larger (potentially global) markets and enabling economies of scale, including enhancing productivity while reducing costs of business in the region.

To pursue this, ASEAN has established the Digital Trade Standards and Conformance Working Group (DTSCWG) that coordinates priority areas of focus on standards and conformance.

On another note, China and ASEAN cooperation on automotive is progressing with the implementation of the ASEAN-China Green Vehicle Initiative. ASEAN appreciates the activities extended by China to ASEAN through the capacity building programme on electric vehicles. Recognizing China's technological advancement in EVs and the selfless support to ASEAN on capacity building programmes, ASEAN is in a better place to further enhance its capability in this field. We are pleased to share that in line with the ASEAN Leaders Declaration on Developing Regional Electric Vehicle Ecosystem in 2023, ASEAN is finalizing the ASEAN EV Implementation Roadmap by this year. To further advance the EV Roadmap, ASEAN has started exploring policy recommendations and guidelines on battery passports and emergency response as a priority deliverable in 2025.

Isagani Creencia Erna
Assistant Director/Head of Standards and Conformance Division, ASEAN Secretariat

Dr. Kyaw Soe Lwin
Vice Chair of the ASEAN Consultative Committee for Standards and Quality (ACCSQ); Director of National Standards and Quality Department, Department of Research and Innovation, Ministry of Science and Technology, Myanmar

The ACCSQ is the sectoral body responsible for advancing standards and conformance initiatives in the ASEAN region. We play a key role in implementing measures to address technical barriers to trade, which includes harmonization of standards or technical requirements among the ASEAN member states, acceptance of conformity assessment results through mutual recognition arrangements, and harmonization of regulatory regimes or technical regulations in agreed product sectors. Through our work, we develop policies and strategies that underpin ASEAN's trade facilitation and integration efforts, thereby laying the foundation for the ASEAN single market and production base.

Our cooperation with China takes on added significance as we look forward to the signing of the ASEAN-China Free Trade Agreement (ACFTA) 3.0 Upgrade Protocol, including the improvements to the standards, technical regulations and conformity assessment procedures (STRACAP), will bring ASEAN-China cooperation on standards to a higher level. This will not only deepen trade and investment ties but also enhance trust and confidence in our regulatory systems. It will also enhance cooperation in mutually agreed areas extending the thrust of greater information exchange, capacity building programmes and avenue to contribute to trade facilitation between ASEAN and China.

I am also pleased to note that this year's forum is convened under the timely and forward-looking theme. Indeed, we are living in an era where the digital revolution, and particularly AI, is reshaping the global development landscape. Standardization in AI is of great importance and plays a key role in unlocking opportunities for digital transformation, strengthening competitiveness, and promoting inclusive regional development.

We appreciate the efforts of our Chinese hosts in preparing this forum and the series of events around it. These activities reflect the commitment of China and ASEAN to ensure that our cooperation remains dynamic and responsive to the evolving needs of our region. I therefore encourage all delegates to actively participate, exchange perspectives, and explore new avenues of collaboration. Your contributions will enrich our shared journey toward building a stronger China-ASEAN partnership through standardization.

In closing, let me reaffirm the commitment of the ACCSQ to continue working closely with our Chinese partners. Together, through innovative cooperation and shared responsibility, we can ensure that standardization serves as a bridge which connects our economies, empowers our people, and advances the construction of a truly shared future.

H.E. Sok Puthyvuth
Secretary of State, Ministry of Post and Telecommunications, Cambodia

In Cambodia, the Royal Government has entrusted the Ministry of Post and Telecommunications (MPTC) with the national mandate to lead AI governance. This mandate reflects our commitment to ensure that AI technologies are developed and deployed in ways that are safe, trustworthy, inclusive, and aligned with our socio-economic priorities. It also affirms Cambodia's determination to contribute to a coherent regional approach—one that fosters innovation while safeguarding fundamental values and the public interest.

Over the past year, Cambodia has progressed through several important milestones. First, we completed the national consultation workshop on the draft National AI Strategy. Second, we are now at the final stage of submitting this strategy to the Royal Government of Cambodia. Third, we successfully launched UNESCO's Readiness Assessment Methodology (RAM) for AI in early July this year.

At the heart of today's forum is standardization. For AI, standards are not merely technical specifications—they are instruments of trust. They encode shared expectations about safety, robustness, transparency, interoperability, and accountability. They enable vendors and users to meet at a common baseline, lower transaction costs, and open pathways to cross-border collaboration. In practical terms, standards help regulators supervise more effectively, help companies scale innovations responsibly, and help citizens gain confidence that AI serves people's well-being.

For a region as diverse and dynamic as ours, the value of cooperation on standards is especially clear. When our approaches are interoperable and broadly aligned with international best practice, we can reduce fragmentation, foster trade, and accelerate the diffusion of beneficial technologies. When we engage constructively with international bodies—such as the IEC—and with partners like ITU, UNIDO and UNESCO, we can enrich our collective understanding and ensure that the standards we adopt are globally relevant yet responsive to local needs.

Cambodia stands ready to deepen cooperation with China, with ASEAN partners, and with the international standardization community. We see three immediate opportunities. First, to share implementation experience—what works in practice for risk management, conformity assessment, and incident reporting in the AI context, informed by tools such as UNESCO's RAM. Second, to support capacity-building—especially for smaller economies and enterprises—so that compliance with standards becomes an enabler, not a barrier, to innovation and market access. And third, to encourage pilot projects that apply standards to priority sectors—such as manufacturing, agriculture, health, and public services—so we can demonstrate concrete benefits for people and businesses.

We will continue to work hand-in-hand with China, with ASEAN, and with our international partners to harmonize standards, strengthen safety, and unlock inclusive growth.

H.E. Dr. Aung Ze Ya
Deputy Minister, Ministry of Science and Technology, Myanmar

In this rapidly evolving digital era, AI has become a transformative force, reshaping economies, industries, and societies. However, the full potential of AI can only be realized through collaboration, standardization, and mutual trust among nations.

The Ministry of Science and Technology collaborating with relevant ministries and organizations has been formulating the AI strategies and policies in line with ASEAN guidelines which also mentioned to develop AI standards.

The Ministry of Science and Technology is under processing to sign an MoU concerning enhancing AI cooperation between the National Development and Reform Commission of China and the Ministry of Science and Technology of Myanmar. Innovation alone is not enough without common standards, because AI systems risk fragmentation, security vulnerabilities, and inefficiencies that could hinder regional progress.

Standardization ensures interoperability, security, and ethical governance of AI technologies. It builds trust among businesses, governments, and citizens. China and ASEAN, as key players in the digital economy, must work together to harmonize AI regulations to facilitate cross-border data flows while protecting privacy, establish ethical guidelines for responsible AI deployment to ensure fairness and transparency, and promote open collaboration in research, talent development, and policy alignment.

China's expertise in AI governance frameworks, such as its New Generation AI Development Plan, can complement ASEAN's dynamic digital economy. Together, we can create a unified yet flexible approach to AI standards that benefits the entire region.

The vision of a shared future is not just about economic gains—it is about creating a secure, inclusive, and sustainable digital ecosystem. By working together on AI standardization, China and ASEAN can prevent technological fragmentation and ensure seamless digital connectivity, address common challenges, such as cybersecurity threats and job displacement due to automation, and lead global discussions on AI governance, representing the interests of developing economies.

The future of AI is not a zero-sum game—it is a collaborative journey. Let us seize this historic opportunity to innovate together, standardize wisely, and build a community where technology serves humanity. We can create a foundation for sustainable growth, economic resilience, and technological progress to deepen our partnerships and pave the way for a more connected and prosperous ASEAN-China community.

AI has evolved far beyond being merely an advanced technology, and become a vital digital infrastructure empowering our society. It is now being widely applied—accelerating digital transformation, enhancing productivity, improving the quality of products and services, and opening new frontiers of innovation.

To fully unlock the potential of AI, investments must not only aim at data storage, computing power, and large-scale model development, but also address both cross-cutting and sector-specific concerns through providing the invisible architecture of trust—a modern and smart quality infrastructure system including standardization, metrology, accreditation, and conformity assessment.

Standardization plays a critical role in AI governance to ensure safety, interoperability, transparency, and inclusiveness, while safeguarding ethical principles. Standards help reduce the energy footprint of data centers, guide the development of low-carbon digital infrastructure, and ensure AI is both innovative and responsible. In manufacturing, AI standards foster data interoperability and cybersecurity; in healthcare, they define accuracy thresholds, safety protocols, and data privacy safeguards; in climate-related applications, they provide methodologies for reliable measurement, reporting, and verification.

Zou Ciyong
Deputy to the Director General and Managing Director of the Directorate of Technical Cooperation and Sustainable Industrial Development, UNIDO

Yet, the global landscape reveals uneven access to AI technologies. A widening AI divide, particularly in the Global South, risks deepening inequalities. This divide limits inclusive AI development while also depriving the global community of diverse insights and contributions. AI should therefore remain open, interoperable, and accessible to all. Open-source initiatives, harmonized standards, and multilateral cooperation are essential to bridge that divide.

Today's forum exemplifies how regional collaboration can advance AI innovation and application. By establishing working groups, launching alliances, and fostering sector-specific dialogues, China and ASEAN are demonstrating leadership in making AI an enabler of sustainable and inclusive growth.

UNIDO stands ready to support these efforts, in alignment with the Global Digital Compact, through:

- **Normative engagement** to amplify Global South perspectives in global AI governance;
- **Capacity development** to strengthen AI literacy and industrial skills, supported by our AIM Global Centre of Excellence in Shanghai;
- **Ethical frameworks** promoting equity, resilience, and sustainability;
- **Global connectivity** linking ASEAN–China collaboration with our networks in Africa, BRICS, and beyond.

Shi Zhongjun
Secretary General of ASEAN-China Centre

The robust ties between ASEAN and China are an undeniable testament to the successful regional architecture in the Asia-Pacific region. Both sides have steadily made significant achievements in many areas, most notably in trade and investment. We celebrate milestone mechanisms including the creation of the Regional Comprehensive Economic Partnership (RCEP) which is the global largest trading bloc, and the negotiations on ASEAN-China FTA 3.0 Upgrade Protocol, which is expected to take effect by the end of this year. For many years ahead, I am sure that we will see the further development of our collaboration across fields including emerging technologies like AI and robotics, smart agriculture, maritime cooperation, green economy, and space economy.

As the ASEAN-China relations are moving forward with these potentials, we realize that standardization is a workable vital area that ASEAN and China can promote for more seamless regional connectivity and economic integration. Standardization can be understood as the "common language" of our economic activities, harmonizing our products and services requirements from safety standards, quality assessment, to consumer, professional and environment protection. The alignment of harmonized standards in the region should be counted as first step for better regional integration.

The China-ASEAN Standardization Cooperation Forum is such an essential platform to drive the standardization process, covering new energy vehicles, equipment manufacturing, traditional Chinese medicine, AI, metrological technology and ecological forestry. While some breakthroughs have been achieved, the standardization process still faces certain limitations and difficulties. There are differences in trade policies and regulations among countries with inconsistent standards systems. Unbalanced infrastructure and digitalization levels have restricted the implementation of standards. Meanwhile, there is a shortage of standardization talent, and small and medium-sized enterprises (SMEs) lack the ability to apply the rules.

As the theme of the forum indicated, I am expecting more use of AI technology to empower the ASEAN and China's efforts on standardization including:

First, establish a systematic and regular joint research mechanism for standards harmonization and the use of AI for the purpose. Second, strengthen talent cultivation and exchange in AI standardization. Third, promote the AI application in standardization.

The ASEAN-China Centre is an intergovernmental international organization jointly established by China and the ten ASEAN countries. We look forward to joining everyone to promote the in-depth development of AI standardization, forming a solid ground for regional integration, and building a more secure and prosperous China-ASEAN community with a shared future.

The ASEAN has introduced a guide on AI governance and ethics, which focuses on encouraging alignment within ASEAN and fostering the interoperability of AI frameworks. Myanmar has taken the opportunity in shaping ASEAN's AI landscape. The Ministry of Science and Technology (MOST), in collaboration with the Ministry of Transport and Communications and other key stakeholders, has started two landmark initiatives: the National Artificial Intelligence Development Policy, and the Myanmar National Artificial Intelligence Strategy (2025-2030).

Dr. Phyu Phyu Win
Director General of Department of Research and Innovation, Ministry of Science and Technology, Myanmar

Our national standards and quality regulatory frameworks provide the critical foundation for AI development. We have law on standardization which was acted in 2014.

Under our Standardization Law, we have a governance framework to ensure Myanmar standards are both competitive and aligned with international best practice. The National Standards Council, chaired by the Minister of Science and Technology and comprising leaders from both public and private sectors, plays a pivotal role by setting strategic policies, developing Myanmar standards and mandating critical standards where it is necessary to safeguard quality, safety, and interoperability.

Under the National Standards Council, the Standards Working Committee collaborating with 28 specialized subcommittees developed 875 Myanmar Standards including ASEAN harmonized standards among them.

Myanmar is in the early stages of AI adoption, with a few industries exploring AI-powered solutions in healthcare, education, finance and e-government. Therefore, we need AI standardization that aligns with global best practices, ensuring ethical and secure AI deployment and promoting interoperability to drive innovation and competitiveness.

Myanmar would like to align with global AI best practices by adopting key international standards. Under the POA of the draft AI strategies, we are prioritizing the implementation of ISO/IEC 42001:2023—the world's first AI management system standard, ISO/IEC TR 24368:2022—addressing critical ethical and societal concerns in AI deployment, and the ISO/IEC 27000 family—strengthening information security management for AI systems.

We need more AI standardization that aligns with global best practices, ensuring ethical and secure AI deployment, and promoting interoperability to drive innovation and competitiveness through regional or biliteral cooperation on AI standardization. We already have the standardization cooperation and exchange center of China and ASEAN countries, and we will effectively utilize this center as the AI standardization development platform.

We would like to propose concrete collaboration with China in four key areas: AI standardization and governance for regionally harmonizing AI future; establishing ASEAN-China platform, and setting up some strategic cooperation frameworks in AI standardization; cooperation on policy, strategy and technology deployment to strengthen AI standards, regulation and conformity assessment; and human capability development, technical exchange, capacity building programs and innovative research on AI.

The widespread application of automotive AI brings new safety risks, necessitating new considerations within traditional safety frameworks. The dynamic functional boundaries of automated driving systems and the data-driven development model adopted by AI systems make it difficult to apply existing standards and regulatory frameworks directly, posing significant challenges to regulatory mechanisms. Against this backdrop, the United Nations has established an informal working group on automotive AI, and the Ministry of Industry and Information Technology of China has repeatedly emphasized accelerating the development of an automotive AI standards system in its annual key priorities for automotive standardization, charting a course for the industry's regulated development.

Gong Jinfeng
Deputy General Manager of China Automotive Technology and Research Center Co., Ltd.

To address these challenges, China has made substantial efforts in the field of automotive AI standardization. In terms of building consensus and formulating plans, the China Automotive Technology and Research Center Co., Ltd. (CATARC), together with the industry, released China's first "5+1" standardization development initiative for AI technology in the automotive sector. This initiative clarifies five key focus areas and one standardization development roadmap. Concurrently, the Research Report on the Standards System for Automotive Artificial Intelligence was developed with a standards system framework encompassing six major domains and 15 sub-domains.

On July 15, 2025, CATARC initiated the establishment of the Automotive AI Standardization Promotion Center, creating a platform for exchange concerning technological research, pre-standardization, and promotion/application. The center's research scope covers critical areas such as automotive AI safety management systems, risk and governance, model evaluation, and testing. It has also established a special international expert panel, inviting senior global industry experts to become members and provide professional advisory suggestions.

Furthermore, the center launched the first global automotive AI integrated special project—SAFER AI, focusing on the trinity of "safety assessment—engineering research—standards development". This lays the foundation for international collaborative research on common technologies, pre-standardization, and database construction, and looks forward to advancing related work jointly with ASEAN countries.

Looking ahead, China will promote the development of automotive AI and deepen cooperation with ASEAN from five aspects: first, improving the theoretical foundation related to automotive AI and strengthening basic research; second, promoting the concept of automotive AI safety and enhancing safety awareness across the industry; third, facilitating the safe application of automotive AI and promoting the implementation of technologies; fourth, constructing a standards system for automotive AI to support the improvement of regulatory frameworks; fifth, actively participating in the coordination of international standards and regulations for automotive AI and deepening international cooperation.

In Cambodia, we see standards not just as technical requirements, but as the backbone of quality, safety, and trust in products and services. Over the years, the Institute of Standards of Cambodia has worked to build a strong NQI that aligns with international best practices, enabling our industries to integrate more effectively into the regional and global marketplace.

We have now adopted around 1,200 national standards, many harmonized with ISO and IEC, to support key sectors such as agriculture, manufacturing, construction, and energy. These standards not only improve quality but also help our exporters meet the requirements of international markets.

AI is transforming the way we live, work, and trade. For Cambodia, AI offers exciting potential in smart agriculture, manufacturing quality control, infrastructure monitoring, and digital trade facilitation. However, AI also presents new challenges in ethics, safety, interoperability, and data governance. This is where international standards play a critical role.

Cambodia is closely following the work of ISO/IEC and other technical committees developing AI standards, to ensure that our policies are aligned with global principles and adapted to our local needs. Cooperation with countries like China, which has made significant progress in AI research and deployment, will be essential to accelerate our readiness.

Our cooperation with China in the field of standardization is growing. China is a key partner in trade, investment, and technology transfer for Cambodia.

We see strong opportunities to deepen our collaboration in three areas:

• **Capacity building**—strengthening technical skills in testing, inspection, and certification;

• **Standards harmonization**—aligning our standards to support smoother trade flows;

• **Digital and AI integration**—applying modern tools to make conformity assessment faster, more transparent, and more reliable.

H.E. Chan Sopha
Director General of Institute of Standards of Cambodia

In iFlytek, we are committed to the R&D of core AI technologies particularly in speech and language aspects. Meanwhile, we actively promote standardization work and undertake the preparation of the national technical standards innovation base for intelligent speech technology.

Adhering to the path of "technological R&D–standards development–industrial application", we steadily conduct the original research on key technologies and leverage standards to lead the industrial and large-scale application of technologies.

Positive progress has been made over the past years. In terms of R&D of technologies related to ASEAN languages, our speech recognition and synthesis technologies now support 10 ASEAN languages, realizing the translation between Chinese and foreign languages. In terms of cognitive large models, we have developed the multilingual large model supporting 130 languages, and will soon release a model for the 10 ASEAN countries to promote cross-language communication and cooperation.

In terms of standardization, we have participated in standards development since 2003, and later promoted the implementation of a series of Chinese standards for speech recognition, speech synthesis, and other aspects. In 2023, ISO/IEC 24661:2023, *Information technology—User interfaces—Full duplex speech interaction*, was published as the first international standard for intelligent speech interaction led by China.

In the automobile sector, we have led the development of a series of standards for intelligent speech interaction. In the education sector, we have actively participated in the construction of the standards system for educational large models, and have jointly released the first relevant standard with the World Digital Education Alliance.

In the intelligent hardware sector, we have participated in the construction of national and industrial technical specifications for intelligent hardware to drive the in-depth integration of AI and intelligent hardware. A series of association standards on assessment requirements for quality grading and forerunner released last year can not only standardize existing products but also guide the development of intelligent products.

In the future, taking the multilingual advantages in ASEAN, we hope to build a standards system for speech recognition, translation, and interaction based on China's practical experience, so as to promote the application of AI in many fields such as education, automobile, and hardware.

Gao Jianqing
Vice President of iFlytek Co., Ltd. and Executive Vice President of AI Research Institute of iFlytek

The ASEAN Consultative Committee on Standards and Quality (ACCSQ) is responsible for reducing technical barriers to trade arising from differences in standards, mandatory technical regulations, and conformity assessment procedures. For each product sector, corresponding Product Working Groups (PWGs) have been established.

In 2020, the Digital Trade Standards and Conformance Working Group (DTSCWG) was established. This working group is ASEAN's specialized body responsible for digital trade standards and conformance affairs, aiming to complement the numerous sectoral bodies working on specific areas under the ASEAN Digital Integration Agenda. The ASEAN Standards Roadmap for Digital Trade is one of the key initiatives of the DTSCWG to support the development of digital trade in the ASEAN region.

Since its establishment in 2020, Australia, the U.S., and the U.K. have actively participated in the DTSCWG. Notably, Australia, through the implementation of a multi-year ASEAN-Australia project on digital trade standards, has assisted ASEAN in conducting digital trade standards research and developing the ASEAN Standards Roadmap for Digital Trade.

The U.S., through the Department of Commerce and in cooperation with the US-ASEAN Business Council, has supported the DTSCWG in understanding cybersecurity standards. The parties plan to hold a Cybersecurity Standards and Conformance Roundtable in December 2025. The U.K. and the British Standards Institution (BSI) have supported the DTSCWG in conducting e-commerce related activities. Recently, they jointly advanced the project titled ASEAN Standards Framework for Cross-Border E-Commerce and held workshops on digital trade standards mapping (in the cybersecurity domain) and capacity building.

Currently, the DTSCWG has not yet identified dialogue partners specifically for the AI domain. Taking this forum as an opportunity, the DTSCWG is willing to explore potential cooperation opportunities with China in this field.

ASEAN leaders have adopted several documents containing six priority economic deliverables (PEDs), which include the ASEAN Economic Community Strategic Plan (2026-2030). To support the implementation of this strategic plan, the DTSCWG is formulating its work plan 2026-2030 to advance the harmonization of standards, technical regulations, and conformity assessment procedures in the digital trade sector. A component of this work plan is the implementation of the ASEAN Standards Roadmap for Digital Trade, which is expected to be completed by June 2026.

Khem Vireak
Chair of ACCSQ Digital Trade Standards and Conformance Working Group, Deputy Director General of Institute of Standards of Cambodia

AI is driving the full-stack technological refactoring, which requires collaborative efforts within the "standards–open source–industrial development–ecosystem" framework. As AI technologies evolve, there will be a huge demand for standardization work in the following six aspects.

Firstly, as AI models grow larger, computing power, transmission capacity, and storage capacity will become bottlenecks, and super pod/cluster architectures will become the mainstream in the future, which call for new standards for AI infrastructure to meet the industry's growing needs.

Secondly, in terms of serving consumers, AI agents will lead terminals into a new era of human-computer interaction and intelligent collaboration. A unified, open, and standardized communication protocol for AI agents needs the joint efforts of standards organizations and open-source organizations.

Thirdly, intelligent vehicles have become a strategic focus for the global automobile industry. Various standards organizations must collaborate and explore to rapidly improve standards, regulations, and certification and accreditation for L3 autonomous vehicles, and boost the coordinated development of the entire industrial chain.

Fourthly, standards organizations in the network field have collaborated to propose the concept of "self-intelligent networks" and the vision of "zero waiting, zero fault and zero contact; self-configuration, self-healing and self-optimization". This has become a broad consensus within the industry.

Fifthly, MCP and A2A protocols have triggered an overall disruptive trend in AI application technologies, posing new challenges to AI standardization. This requires even closer collaboration between standards and open source.

Sixthly, emerging international professional standards organizations in cutting-edge technologies, including WLAN Application Alliance (WAA) and Global Intelligent Internet of Things Consortium (GIIC), can have extensive standardization cooperation with ASEAN countries in the future.

The ASEAN standards cooperation mechanism is expected to become a long-term and stable platform for standardization cooperation, which can realize further development by establishing institutions, following trends, building platforms, promoting application, developing standards, advocating open source, driving industries, facilitating integration, and cultivating talent.

Wang Xuemin
Vice President for Standards and Industry Development, Huawei Technologies Co., Ltd.

Mohd Azrul Bin Che Aziz
Senior Assistant Director of the Standardization Division, Department of Standards Malaysia, Ministry of Investment, Trade and Industry

In just the past few years, AI has moved from the realm of science fiction to a widespread force in our daily lives. As AI becomes more powerful and more deeply integrated into our society, how do we ensure that it is developed and deployed in a way that is safe, trustworthy, and beneficial for all? The answer, in a word, is standardization.

At its core, standardization is about creating a common language. It's about building a shared framework that allows us to build trust and ensure reliability. AI needs these same pillars. So, who is doing this work? The global effort to standardize AI is led by the ISO/IEC JTC 1/SC 42.

SC 42 is the world's leading and most comprehensive committee dedicated to AI standardization. It is a unique and essential body because it addresses the entire AI ecosystem. We're not just talking about the nuts and bolts of the technology itself, but also the broader context of governance, ethics, data, and applications. SC 42 brings together experts from around the globe—from industry, academia, government, and civil society—to create the foundational standards that will guide the responsible development of AI for decades to come.

Through collaborative efforts, SC 42 has already produced a number of key standards, such as ISO/IEC 22989 on AI concepts and terminology, which gives us a common vocabulary for discussing AI, and ISO/IEC 23894 on AI risk management, which provides a framework for assessing and mitigating risks. This work is ongoing and incredibly important, with 37 published standards and a further 47 under development. It's about building the rulebook as we go, ensuring that as AI continues its journey, we have a map to guide us.

This work, however, cannot happen in isolation. It is an open, inclusive, and consensus-driven process. The standards we develop are not born from a single perspective or a single nation; they are the result of rigorous debate and collaboration among a diverse community of experts. This forum, and others like it, are critical for sharing ideas, raising concerns, and ensuring that our standards reflect the global, multi-faceted reality of AI today. It is through these discussions that we can refine our understanding and build solutions that are not only technically sound, but also globally relevant and socially beneficial.

Standardization is not a brake on innovation; it is the very framework that will sustain it. It is what will transform a chaotic sprint into a stable, trustworthy, and ultimately more impactful marathon.

I encourage all of you, especially the experts and innovators from China and the ASEAN member states, to get involved. Whether as a stakeholder, a technical expert, or simply an engaged citizen, your voice is needed to help shape these standards and, in doing so, build a truly responsible and reliable future for AI in our region and beyond.

In the era of large models, the algorithmic innovation of foundation models often consumes an enormous amount of human resources, computing power, and time. Only by open source can researchers avoid "reinventing the wheel". Meanwhile, the massive amounts of data and end-to-end evaluation resources need to achieve sharing and efficient utilization through open-source collaboration and standardization.

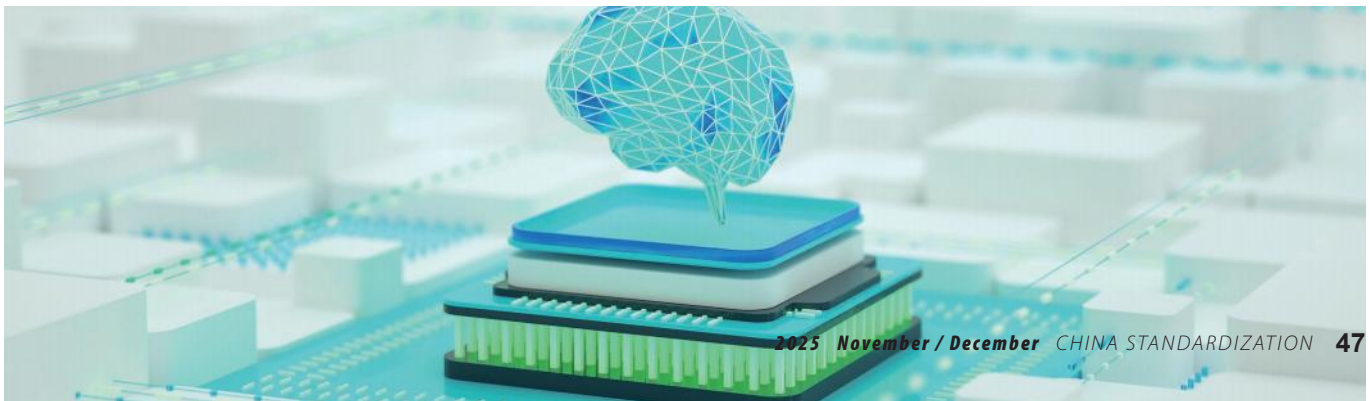
In terms of data, since 2023, BAAI has developed a number of high-quality Chinese datasets together with over 80 institutions. To address issues such as uneven data quality and insufficient motivation for contribution, BAAI has promoted the development of data quality standards and introduced a points system. This not only ensures that data meets quality standards but also encourages more institutions to contribute to high-quality data.

In terms of computing, BAAI has developed FlagOS, a unified open-source system applicable to multiple architectures, in collaboration with domestic and international teams. FlagOS is compatible with a variety of AI accelerator cards, and supports the wide application of language models, multimodal models, and embodied intelligence models. Additionally, BAAI has developed a standard for unified communication library. The standard has become a national standard, and will be submitted to ITU in October, laying an international framework for open computing.

In terms of evaluation, BAAI has led the development of IEEE P3419 on large language models, which covers key dimensions of evaluation, including frameworks, methods, processes, and datasets. Currently, evaluation tools based on this standard are available on platforms such as Hugging Face. In 2024, BAAI also enabled the open source of Chinese evaluation methods and datasets, contributing them to the AI Verify Foundation.

Open source and standardization are the dual drivers for advancing the inclusive development of AI. Open source enables the sharing and reuse of research findings, while standardization provides the unified basis for collaboration. Only through their mutual reinforcement can we promote the application of AI technologies to benefit more countries and regions around the world.

Lin Yonghua
Vice President and Chief Engineer of Beijing Academy of Artificial Intelligence (BAAI)



China Mobile always regards AI as its strategic development direction, and fully implements the "AI+" action plan. It has positioned itself as a provider, aggregator, and operator in the AI era, upholding its mission as a central State-owned enterprise in the area of AI technological innovation.

In terms of foundation models, China Mobile has independently developed the Jiutian foundation large model, and launched the 3.0 version in July 2025. It is the first of its kind to complete the dual filing of large models and algorithms with the Cyberspace Administration of China, and was selected as one of the top 10 national strategic technologies of central State-owned enterprises in 2024.

In terms of engineering implementation, China Mobile has innovatively developed the Mixture of Models and Agents (MoMA). MoMA can intelligently perceive and schedule optimal models and AI agents, helping users tackle pain points in the selection and application of large models and AI agents, optimize the effect of application, and reduce operational costs. It has also built the Jiutian large model platform, which provides integrated services covering model production and application.

In terms of industrial empowerment, China Mobile has extensively empowered its digital and intelligent transformation with large models. It has built the world's most advanced self-intelligent network and largest intelligent customer service system, empowering various business lines. In addition, it has deeply empowered leading enterprises and public institutions in various sectors, supporting their high-quality AI development.

In terms of globalization, China Mobile has jointly established an AI joint laboratory with Sinar Mas Group in Indonesia to develop region-specific AI solutions, and made significant progress in areas such as the Indonesian large model.

In terms of standardization, China Mobile has collaborated with the industry to advance standards development in the AI field. It has held 19 positions in various industry organizations, including the national standardization working group on AI, and led and participated in over 100 international and domestic standards. It has also led over 60 international and domestic standards and research projects on network intelligence.

Jin Di
Deputy General Manager of the AI and Smart Operations Center, China Mobile Research Institute

Speeches at the sub-forum on automotive standardization

Lyu Hengxu
Deputy Director of China Automotive Standardization Research Institute, China Automotive Technology and Research Center Co., Ltd.

China Automotive Standardization Research Institute of CATARC is specialized in the standardization research and application in the automotive industry. The secretariat of SAC/TC 114 on automobiles is held by CATARC. Up to now, a standards system has been established, which consists of 1,586 standards (874 sectoral standards, 593 voluntary national standards, and 119 mandatory national standards).

China's electric vehicle standardization work started in 1998. As of August 2025, 139 standards have been released to advance the safety, energy consumption, energy supply and carbon management of electric vehicles. At the same time, the research on carbon footprints of automobiles and power battery products as well as enterprise carbon accounting has been carried out, and a unified carbon accounting system has been established. The first batch of sectoral standards is expected to be released in 2025, which will provide basic support for the green and low-carbon development of the automotive industry.

The intelligent connected vehicle industry has entered a new stage of development. So far, 68 standards have been released and 26 ones are under development, with a focus on areas such as driving assistance system, autonomous driving, information and data security, networking technologies and automotive electronics.

For standards under development, efforts will be made to further strengthen the alignment of their content and access management requirements, and promote the development of mandatory national standards for combined driving assistance, autonomous driving, parking assistance and other functions. For standards that have been released, such as those for vehicle information security, software upgrading, data security and emergency calls, the implementation work will be carried out in the next two years, and further research will be conducted to realize the consistent application of standards.

Since 2018, China and ASEAN have continuously deepened cooperation in the automotive field. They have formed a stable communication path through a regular dialogue mechanism established in 2023. Looking ahead, China will continue to strengthen exchanges and cooperation with ASEAN countries, proactively share the research outcomes and practical experience on automotive standards and regulations, and support the building of regional standards system, jointly promoting the standardization and international coordination of the automotive industry.

SGMW is committed to promoting the global development of the automobile industry with the popularization of new energy vehicles. Focusing on the transformation and upgrading of electrification and intelligence, SGMW innovatively led the Guangxi New Energy Vehicle Laboratory, supported the rapid upgrading of two million-level new energy platforms, and drove the development of five 10-billion-yuan industrial clusters in 2023, achieving the comprehensive layout and the transformation and upgrading of the manufacturing system toward "intelligence, digitalization, and leanness".

In terms of standards development, SGMW has participated in 42 standardization technical bodies including SAC/TC 114 on automobiles, led the development of 15 national and sectoral standards, and participated in the development of 302 standards, including 2 international standards. Among them, UNECE R51 on vehicle exterior noise measurement test has marked a successful instance of China's in-depth participation in the development and revision of UN regulations.

In April 2018, China-ASEAN Automotive Standards and Regulation Research Center was officially inaugurated at the Indonesia company of SGMW, establishing a model for Chinese automobile standards to go global. In 2021, SGMW comprehensively and deeply participated in the development and revision of ISO/IEC international standards and UN regulations in the automotive field.

Since 2023, SGMW has actively promoted the development process of the national DC charging standard in Indonesia. By August 2024, the standard has obtained the SNI certification in Indonesia. At present, charging piles in line with the Indonesian national standard are gradually deployed and installed in the market. In September 2024, the special project of China-ASEAN Green Vehicle Institute was approved. As the project leader, SGMW has driven the entire value chains of industrial policies, regulations and standards to go global, expanding the export scale of new energy vehicles.

In the next step, SGMW will continue to boost the development strategy of standards internationalization, participate in the development and revision of international standards and regulations, and enhance the influence of Chinese automobile brands globally, contributing to the high-quality development of the automotive industry.

Liu Changye
General Technology Officer, TDC General Manager, SAIC GM Wuling Automobile Co., Ltd. (SGMW)

Speeches at the sub-forum on metrology technology

Zhu Meina
Deputy Director-General of Department of Metrology, State Administration for Market Regulation (SAMR)

At present, AI is reshaping the global industrial landscape at an unprecedented depth. As the cornerstone supporting technological innovation and industrial development, metrology is radiating new vitality in the AI era. It is not only a verification scale for algorithm accuracy and a trust anchor for sensing systems, but also a strategic link for China and ASEAN to deepen industrial collaboration. Metrology runs through the entire innovation chain of AI, providing verifiable and reproducible scientific basis for technological innovation and industrial development.

This sub-forum focused on cutting-edge topics in metrology such as AI, carbon management, and new quality productive forces, which aimed to pool wisdom and promote the cross-border "AI + metrology" collaboration to serve the building of the China-ASEAN community with a shared future.

The metrological cooperation between China and ASEAN has always been rooted in extensive consultation, joint contribution and shared benefits. Building on Lancang-Mekong Cooperation mechanism, the six Lancang-Mekong countries have released the Joint Statement on Lancang-Mekong Metrological Cooperation (2025-2028), which clarifies the cooperation goals and key tasks for the next three years in areas such as capacity improvement in key fields including clean energy, metrological traceability system building, and metrological mutual recognition. To further deepen China-ASEAN metrological cooperation, SAMR has supported Guangxi in establishing the Metrology Testing and Research Center for Belt and Road Countries, building a solid platform for regional mutual recognition of measurement values.

Taking this forum as an opportunity, we look forward to working with ASEAN countries to advance metrological cooperation in key fields: first, build a hub for AI metrological technology, carry out interdisciplinary and systematic research, and strengthen the structure of measurement systems and their dynamic optimization capabilities; second, jointly establish an innovation ecosystem with wide applicability to enable the implementation of intelligent metrological applications in multiple scenarios; third, jointly create a new paradigm for green and low-carbon metrology to support the coordinated advancement of regional dual carbon goals.

Accurate metrology empowers precise cooperation. With the consensus reached today, we will draw a blueprint for the China-ASEAN metrological cooperation to inject momentum into the building of a closer China-ASEAN community with a shared future.

H.E. Ke Ky
Secretary of State, Ministry of Industry, Science, Technology & Innovation (MISTI), Cambodia

Over the past decades, the relationship between China and Cambodia has grown into a model of mutual trust, strategic partnership, and win–win cooperation. Rooted in deep historical ties and strengthened by a shared vision for development, our countries have steadily expanded collaboration in trade, investment, infrastructure, culture, and people-to-people exchanges. In recent years, this friendship has been elevated to a "diamond cooperation framework," symbolizing resilience, longevity, and mutual benefit. Within this framework, cooperation in science, technology, and innovation (STI) as well as the development of a strong NQI has become an essential pillar for supporting industrial modernization, improving productivity, and aligning with global standards.

Cambodia fully recognizes that NQI—comprising metrology, standardization, accreditation, and conformity assessment—is fundamental for building trust in goods and services, enhancing competitiveness, and safeguarding consumer protection. With China's valuable support and expertise, Cambodia has made steady progress in strengthening its quality infrastructure system. A significant milestone was achieved on April 17, 2025, when MISTI of Cambodia and the State Administration for Market Regulation (SAMR) of China signed an MoU on cooperation in metrology. This MoU provides an important framework for strengthening bilateral relations in the field of metrology, enabling the exchange of technical knowledge and personnel, and advancing our technical capabilities in support of sustainable development.

Beyond the bilateral level, Cambodia's partnership with China is also deeply embedded in the broader ASEAN–China cooperation framework. China has long been ASEAN's largest trading partner, and our economic integration has been strengthened through initiatives such as the Regional Comprehensive Economic Partnership (RCEP). Within this context, NQI cooperation are vital to ensuring the smooth flow of goods, reducing technical barriers to trade, and supporting the creation of a high-quality, interconnected market. Cambodia, together with its ASEAN partners, benefits from China's active role in promoting harmonization of standards and enhancing regional mechanisms for conformity assessment and accreditation. This not only facilitates trade but also builds resilience in the face of global challenges such as supply chain disruptions, climate change, and digital transformation.

This is why today's forum is of great importance. It offers us a valuable platform to exchange experiences, strengthen technical collaboration, and explore forward-looking solutions that will shape the future of our region. I am confident that through our joint efforts, the outcomes of this forum will pave the way for even closer cooperation, creating a more interconnected and prosperous future for all our peoples.

Since the concept of AI was first proposed in 1956, AI technology has permeated through thousands of industries. By June 2024, the number of generative AI users in China reached 230 million, over 190 large models were launched, and the core industrial scale reached nearly 600 billion yuan. However, problems are now prominent, such as unsatisfactory product quality, potential safety hazards, lack of standards, false information, privacy disclosure, and copyright disputes.

In this context, AI metrological technology has come into being. It aims to establish measurable, traceable, and comparable measurement benchmarks for algorithms, hardware, and applications. Its core tasks include defining the terminology, constructing the indicator system, studying evaluation methods, and developing standard devices.

Countries such as the U.S., the U.K., and Germany have taken the lead in making the layout, set up specialized institutions, and promoted the coordinated development of policies, organizations, and technologies. Meanwhile, China has issued policies such as the Guidelines for the Construction of the National Standards System for New-generation Artificial Intelligence, established the national metrology technical committee on AI, built national key laboratories and data application bases, and constructed an AI metrological framework system. It has developed a platform for algorithm measurement uncertainty evaluation and tools for neural network test sufficiency verification, forming a metrological system covering theories, standards, technologies, and applications.

In the future, we still face major challenges—how to adapt to the rapid iteration and disruptive development of technologies, objectively quantify the level of intelligence, and build a sustainable application ecosystem. To this end, we put forward suggestions as follows: first, strengthening systematic planning and formulating a medium- and long-term development plan for AI metrology; second, strengthening basic research and enhancing the capability of original innovation; third, promoting industrial integration and building a feedback mechanism of metrology and industry.

Metrology is crucial for the high-quality development of AI. Only by establishing a scientific, unified, and credible AI metrological system can we ensure that AI develops steadily toward long-term success in a safe and controllable way, providing solid support for the intelligent transformation in China and even the world.

Miao Yinxiao
Director General of Beijing Aerospace Institute for Metrology and Measurement Technology

The National Metrology Center (NMC) of Cambodia functions under the authority and leadership of the Ministry of Industry, Science, Technology and Innovation (MISTI). The NMC plays a central role in providing accurate, reliable, and traceable measurement services in accordance with the Law on Metrology, promulgated on August 11, 2009.

The Royal Government of Cambodia considers that the metrology is recognized as a foundational element of our NQI and a strategic enabler of the National Strategic Development Plan (NSDP)—especially as we embrace digital transformation and deepen regional integration. Under the leadership of MISTI, Cambodia has laid the groundwork for a modern NQI, encompassing metrology, standards, testing, and accreditation. These elements are essential to ensuring fair trade, consumer protection, public safety, and industrial competitiveness.

Cambodia is actively advancing the development and implementation of carbon measurement technologies to support its national commitment to achieving carbon neutrality by 2050, as outlined in the Long-Term Strategy for Carbon Neutrality (LTS4CN), approved by the Ministry of Environment on December 30, 2021. Key efforts include the establishment of a monitoring, reporting, and verification framework, particularly within the transport sector, as well as the adoption of community-based carbon measurement approaches. These initiatives aim to ensure the accurate tracking of greenhouse gas emissions, enable the assessment of mitigation measures, and facilitate the generation of carbon credits to support local, community-driven conservation efforts. In support of these objectives, the NMC is in the process of formulating metrological administrative regulations to ensure the accuracy and reliability of measuring instruments used in carbon monitoring—such as gas analyzers, GPS-based biomass survey tools, and other environmental monitoring devices.

Cambodia fully endorses the vision of a China-ASEAN community with a shared future fostering a region where innovation benefits all citizens; standards safeguard quality and safety; and cooperation drives inclusive and resilient growth. We believe that harmonized AI standardization and enhanced metrology systems are powerful tools for building national capacities and fostering regional trust. As we integrate AI into Cambodia's metrology as well as science, technology and innovation (STI) infrastructure, our approach will be guided by sound policy framework, robust technical standards, and strong international partnerships.

H.E. By Pitou
President of National Metrology Center of Cambodia

The metrological development has gone through four major stages: using human body features as standards, taking natural objects as benchmarks, the era of man-made objects, and the era of quantum metrology.

China has built four core metrological systems. Firstly, the legal and regulatory system. Centering on the Metrology Law of China enacted in 1985, it includes 6 administrative regulations, 18 departmental rules, and more than 40 local regulations. Having undergone amendments, this system now adapts to the needs of the times.

Secondly, the administrative management system. It has formed a four-level structure of national, provincial, municipal, and county levels to achieve unified national governance.

Thirdly, the technical support system. This system is supported by 94 national verification schemes, 921 verification regulations, 651 calibration specifications, relying on organizations such as the National Institute of Metrology, China (NIM), 79 national-level metrology stations, and seven regional metrology centers, as well as over 30,000 registered metrological professionals.

Fourthly, the quantity transmission and traceability system. With 208 national metrological standards at its core, it covers 74,000 metrological standards for public use and 18,000 reference materials. It has obtained the international recognition for calibration and testing capabilities of 1,879 items, forming a complete traceability chain.

As AI is becoming ingrained in industries, there are high demands for data accuracy, model reliability, system stability, and numerical uniformity, which increasingly rely on metrological support. The calibration of intelligent sensors, traceability of algorithm data, and perception in autonomous driving all require metrological guarantees.

Coordinated efforts are made in the following aspects: scientific metrology consolidates quantum benchmarks and cutting-edge technologies, providing a unified foundation for AI; legal metrology strengthens supervision related to people's livelihood to ensure the reliability and fairness of AI applications; and industrial metrology assists enterprises in building measurement systems to promote the stable implementation of AI.

With its fundamental and supportive role, metrology has become an important cornerstone for the high-quality development of AI.

Ma Aiwen
Vice Chairman and Secretary-General of Chinese Society for Measurement

Dr. Mar Lar Win
Director of National Institute of Metrology of Myanmar

In recent years, the National Institute of Metrology of Myanmar (NIMM) has actively promoted international cooperation, continuously enhancing its technical capabilities and regional influence. On August 7, 2024, the institute signed an MoU with the National Institute of Metrology of Thailand (NIMT); on November 28 of the same year, it signed an MoU with the National Institute of Metrology of China; and on July 29, 2025, it jointly signed the Lancang-Mekong Metrology Cooperation Joint Statement with the National Institute of Metrology of China, marking a new milestone in regional metrology cooperation. Additionally, the institute is advancing the signing of MoUs with countries such as Russia and Belarus in the fields of standardization, conformity assessment, metrology, and certification.

Currently, the institute is collaborating with the National Institute of Metrology of China and the Myanmar Oil and Gas Corporation on a joint research project titled Joint Research in Online Calibration Method and Its Application for Ultrasonic Flow Meter Used in Natural Gas Pipeline between China and Myanmar. This three-year project aims to develop digital online calibration technology and a full-range adaptive prediction model to enhance precision and reliability in the field of energy metrology. This project also represents the second intergovernmental joint research initiative between China and Myanmar, holding significant strategic importance.

In terms of laboratory development, the institute's Mass Laboratory has successfully passed the ISO/IEC 17025:2017 accreditation for the fourth consecutive time, while the Pressure Laboratory obtained its initial accreditation in 2024. On June 27, 2025, both laboratories were successfully re-evaluated by the National Accreditation Board for Testing and Calibration Laboratories of India. The institute has also conducted an interlaboratory comparison on dimensional metrology with the National Institute of Metrology of Thailand. The standard gauge blocks were sent to Thailand in May, which will soon be returned for joint analysis. Furthermore, the institute has launched new calibration services for 20-liter storage tanks and glassware, further expanding its service scope.

In the area of regional cooperation, the institute actively participates in the Lancang-Mekong Metrology Cooperation Conference, promoting collaboration in the field of clean energy. It is currently focused on establishing an advanced solar photovoltaic testing center and developing a certification system for solar energy products that complies with international standards such as IEC. This initiative aims to provide quality, performance, and safety assurances for solar products in Mekong River countries. Through training, knowledge exchange, and technical support, the project seeks to enhance the region's capabilities in solar testing, inspection, and certification, thereby fostering the sustainable development of renewable energy.

Looking ahead, the National Institute of Metrology of Myanmar still faces numerous challenges. There is a need to further raise awareness among the public and industries about the importance of metrology, expand service offerings, and strengthen the traceability of laboratory measurements. The institute is committed to evolving into a modern service organization accessible to all metrology users. At present, there is an urgent need for equipment support and technical enhancement, particularly in the field of photovoltaic testing, to better serve the national energy transition strategy and build a modern metrology service institution for all users.

Metrological digitalization includes not only systems, devices and certificates, but also metrological professionals' experience, which is a process where machines replace humans and assist humans.

With the new round of technological revolution, the International Committee for Weights and Measures (CIPM) has explicitly listed digital transformation as one of the seven major metrological challenges in the CIPM Strategy 2030+. Metrological digitalization faces the dual challenges of introducing metrology into the digital world and realizing the metrological digitalization. This requires us to promote machine operability, data reproducibility, and big data interoperability, while achieving metrological evaluation of AI and deeply integrating technologies such as big data, AI, blockchain, and the Internet of Things (IoT).

To advance the digital transformation, the National Institute of Metrology, China (NIM) has established an overall framework for metrological digitalization. It clearly takes digital language, precise time, identity authentication, precise location, time stamping, and digital security as the core to build the metrological technical specification, information technology specification, and digital security architecture. Practical results have been achieved in areas such as the digital precise time stamping service system and the intelligent generation of calibration certificates.

To realize comprehensive digital metrology, it is also necessary to build massive standard reference databases. Relying on the National Metrology Science Data Center, China is accelerating the construction of a metrology science data system covering standard reference data, metrological research data, measurement-based standard data, metrological testing data, and metrological information data, integrating data resources, digital tools, and security facilities. At present, NIM is applying digital metrology to multiple scenarios.

Metrological digitalization can establish measurement trust more efficiently and conform to the new round of industrial revolution featuring the interconnection of all things. To realize this beautiful vision, it is necessary to recognize core challenges, identify entry points based on the reality, and adopt a coordinated national approach to promote the collaboration and complementary advantages of metrological institutions and enterprises.

Wu Fangdi
Chairman of China Metrology Association

Dr. Maryness I. Salazar
Supervising Science Research Specialist and Head of the National Metrology Laboratory, Industrial Technology Development Institute, Department of Science and Technology of the Philippines

The establishment of the Philippines' national metrology system began with the enactment of the National Metrology Act of 2003, which laid the foundational framework for the system. In 2004, the Implementing Rules and Regulations of the Act were signed, clarifying the establishment of the National Metrology Infrastructure System and the National Metrology Board, and designating the Industrial Technology Development Institute (ITDI) under the Department of Science and Technology as its secretariat. The National Metrology Laboratory (NML) under ITDI is tasked with the crucial responsibility of developing, maintaining, and disseminating national measurement standards. Initially established in 1998 under a project framework, the NML was formally integrated into ITDI as a department in 2009 following organizational restructuring. Now known as the National Metrology Division, it comprises eight technical sections and three support units, providing services such as calibration, training, testing, consultancy, proficiency testing, and the sale of reference materials.

In 2012, a strategic document drafted by the NML team, the Strategic Proposal for the National Metrology Infrastructure of the Philippines, became a key guiding policy. This strategy positioned metrology as a part of public undertakings, an engine of competitiveness, and a pillar of national development, establishing ten core pillars covering national policy, institutional networks, international cooperation, technical capabilities, and industry engagement, among other areas. Since then, the Philippines has continuously advanced its capacity building, joining the BIPM Key Comparison Database and actively participating in the Asia-Pacific Metrology Programme (APMP) and the Asia-Pacific Legal Metrology Forum (APLMF), while also establishing partnerships with ASEAN member states.

However, the Philippine metrology system still faces challenges: the NML has not yet been legally designated as the National Metrology Institute (NMI), lacking institutional autonomy, financial flexibility, and the authority to represent the country in international metrology affairs. To address this, the Philippines is promoting new legislation aimed at transforming the NML into a National Metrology Institute, which would grant it autonomy, the right to sign international mutual recognition arrangements, and the ability to expand support for industry and regulatory bodies.

The journey of the Philippines holds representative significance within ASEAN. Metrology is not merely a scientific activity but also a tool of governance, an economic asset, and an embodiment of national sovereignty. Its development requires multi-stakeholder collaboration—relying not only on laboratory work but also on legal policies, cooperative negotiations, societal awareness, and educational advancement. The Philippines has already established a clear vision and strategy and is working closely with China and other ASEAN partners. It is essential to ensure that metrology is not just a guarantee of accuracy but also a safeguard of fairness, a protector of safety, and a driver of shared development.

When this is achieved, borders will no longer be barriers but bridges.

Modern industry relies on precise and traceable measurements. The National Institute of Metrology of Thailand (NIMT) has launched a calibration process digitalization initiative to enhance efficiency, reduce errors, and align with international metrology practices. Its experience offers significant reference value.

Traditional calibration, dependent on paper and spreadsheets, faces issues such as low efficiency, high error-proneness, and difficult auditing. NIMT's digitalization initiative focuses on four key objectives: improving operational efficiency, increasing measurement accuracy, enhancing transparency and traceability, and boosting interoperability across institutions.

Dr. Narin Chanthawong
Leader of the Nano Metrology Group, Dimensional Metrology Department, National Institute of Metrology, Thailand

Rather than adopting a single monolithic system, the solution integrates four core components: equipment management & tracking systems (EMTs), which electronically store equipment records and calibration certificates, enabling centralized, searchable document management and supporting audits and quality control; digital calibration certificates (DCCs), which replace paper certificates with PDF/A (with XML) or pure XML formats, ensuring compliance through validation and government digital signature services; deep learning optical character recognition (OCR), a customized process for data extraction that has reduced calibration processing time by approximately 24.7% while improving data accuracy; integrated workflow & audit planning, a system that is planned to track audit findings and corrective actions (CARs), addressing current inefficiencies in CAR tracking and aligning with ISO/IEC 17025.

During implementation, NIMT confronted challenges and developed corresponding strategies: for limited infrastructure/budget, we prioritized cloud-compatible components and adopted a phased deployment; for data complexity & legacy system integration, we established a centralized database and a conversion layer; for insufficient staff digital skills, we enhanced capabilities through targeted training and user-friendly tools; for data security & compliance, we relied on secure EMT storage, access controls, and adherence to regulations; and for policy coordination difficulties, we built a flexible system and engaged stakeholders early.

The initiative has already yielded results. OCR speeds up processes and reduces errors, electronic records simplify audits, staff digital skills have improved, and the modular architecture facilitates future expansion. For industry engineers, key takeaways include adopting a phased implementation, ensuring data traceability, investing in personnel training, and planning for legacy system integration.

NIMT's practice provides an actionable model for metrology institutes and industrial laboratories worldwide. It not only achieves gains in efficiency and data quality but also lays the foundation for future advanced metrology services.

Speeches at the sub-forum on conformity assessment

Yao Lei
Director-General of Department of Certification, SAMR

With the accelerated process of economic globalization and regional integration, conformity assessment, as a crucial component of quality infrastructure, is playing an increasingly prominent role. In August 2024, SAMR, together with 7 other ministries and commissions, issued the Action Plan for Accelerating High-level Opening up of Certification and Accreditation (2024-2030).

In recent years, China and ASEAN have achieved fruitful results in the field of conformity assessment. The Alliance for New Energy Vehicle Testing and Certification of China and ASEAN Countries, established in May 2023, has promoted the internationalization of new energy vehicle quality certifications. In 2025, an MoU on conformity assessment cooperation was signed with Cambodia in April, and the China-ASEAN Free Trade Area 3.0 Upgrade Protocol was negotiated in May, reaching a high-level consensus on cooperation in areas such as standards, technical regulations, and conformity assessment.

Conformity assessment is also facing new opportunities and challenges. For future cooperation, efforts can be made in the following three aspects. First, adhere to innovation-driven development and leverage the advantages of certification and accreditation. We will promote the in-depth integration of innovation chain, industrial chain, and supply chain, explore digital conformity assessment models, and strengthen the alignment with international prevailing rules and standards based on the demands in key regional projects.

Second, adhere to opening up and mutual recognition, and deepen cooperation in certification and accreditation. We will promote the diversified and international development of industrial chain and supply chain, explore mutual recognition methods, and achieve new mutual recognition outcomes in fields such as food and agricultural products, consumer goods, and equipment manufacturing, realizing genuine international mutual recognition.

Third, adhere to capacity building and enhance the level of certification and accreditation. We will promote the standardized and efficient development of industrial and supply chains, facilitate the innovative cooperation of the two sides in areas such as certification and accreditation technologies, and jointly address challenges brought by emerging technologies. At the same time, we will share experience and technologies through training courses, seminars, and technical exchange activities, and improve the technical and management capabilities of conformity assessment work of both sides.

According to the inspection and testing statistics in 2024, the inspection and testing industry in China shows unique characteristics: the industry revenue and per-unit output value have steadily increased, while the number of institutions and reports has decreased; the proportion of large-scale institutions has increased, while the proportion of small and micro institutions has decreased; the capacity for high-end supply has increased, while the proportion of low-end supply has decreased.

The industry is showing a trend of intensive and professional development, with continuous optimization of structural layout and steady improvement in quality and efficiency.

Tang Jiping
Deputy Director-General of Department of Accreditation, Inspection and Testing, SAMR

Conformity assessment cooperation has become a new highlight and new engine for China-ASEAN cooperation. In recent years, SAMR has signed MoUs on conformity assessment cooperation with its counterparts in Thailand and Laos. These cooperation documents are designed to promote cooperation and mutual recognition between China and relevant countries in the field of conformity assessment, reduce international trade costs, and advance the interconnection of quality infrastructure.

SAMR has organized the implementation of international inspection and testing proficiency testing programs for six consecutive years, and launched the international food testing proficiency testing program for Belt and Road countries earlier this year in cooperation with UNIDO. Inspection and testing institutions from Belt and Road countries are invited to participate in these programs, laying a technical foundation for mutual trust and recognition of conformity assessment results.

Looking into the future, China is willing to deepen cooperation with ASEAN countries to achieve mutual benefits and win-win results in the following aspects. First, strengthen the exchanges and communication on conformity assessment policies, regulations and standards, establish and improve cooperation mechanisms, enhance mutual understanding, and increase the transparency of policies.

Second, continue to explore and expand the scope of conformity assessment mutual recognition, especially in strategic emerging industries such as AI and new energy, improve the level of mutual recognition, and reduce technical trade barriers.

Third, actively carry out the technical training and proficiency testing activities to improve the technical and service capabilities of conformity assessment institutions, and encourage related institutions to establish branches in each other's countries to provide convenient and efficient services for enterprises.

On this occasion, I would like to highlight some of the progress of the cooperation between the Ministry of Agriculture and Environment, Lao PRD, and Guangxi Province, China.

The most significant progress is the establishment of Guangxi Agricultural Demonstration Center in NAFRI, Vientiane, capital of Lao PDR.

Another important progress is the establishment of Guangxi Commerce Chamber to Lao PDR based in Vientiane, Lao PDR.

Last but not least, the signing of an MoU between the Department of Agriculture, Ministry of Agriculture and Environment, Lao PDR, and the Administration for Market Regulation of Guangxi Zhuang Autonomous Region, China, and Guangxi Trade Chamber to Lao PDR in October 2024.

The MoU has the overall objective of cooperating to promote and facilitate agricultural development, investment and trade between Lao PDR and China.

Under this MoU, we have made progress on cooperation of establishment of standards for some plants and plant products including mango, durian, and banana in Lao PDR.

In addition, we have been developing Good Agriculture Practice (GAP) standards for the safety of the produces for some of plants and plant products including banana, durian, watermelon, and citrus fruits.

It is noted that these standards will help building the technical capacity of Lao PDR to gradually meet the requirements for export of plants and plant production to China, contributing to the progress of technical agricultural transferring and development, investment and trade between ASEAN countries especially Lao PDR and China.

Before ending my statement, I want to take this opportunity to convey my appreciation to the progress made by the China-ASEAN Artificial Intelligence + Modern Agricultural Standardization Cooperation Alliance that has made an innovative contribution to agricultural development between ASEAN and China (Guangxi).

Bounchanh Kombounyasith
Director General of Department of Agriculture, Ministry of Agriculture and Environment, Lao PDR

In recent years, Nanning Customs has established a modern inspection and testing system and provided efficient customs clearance support for the international passage in Guangxi Zhuang Autonomous Region. By the end of 2024, ASEAN remained Guangxi's largest trading partner for 25 consecutive years; the bilateral trade volume reached 397.48 billion yuan, a year-on-year increase of 17.1%.

Through the coordination with local departments, we have carried out innovative practices to build the Guangxi port inspection and testing system, proposed and included the system in key tasks of Guangxi, and promoted the precise alignment of testing capabilities with trade demands, achieving remarkable results.

We have introduced ASEAN technical regulations and standards, and revised 12 local standards, promoting the going global of standards. The national standard GB/T 44475-2024, *Zhuang brocade*, has filled the gap in standards for textiles as intangible cultural heritage.

Relying on the information platform for China-ASEAN SPS cooperation, we have built a database of 42,000 entries of standards from 10 ASEAN countries, and integrated 200,000 entries of limited data, enabling one-click query of limited information for agricultural and food products, and providing convenient services for enterprises.

The Kafeng Laboratory of Pingxiang Customs has been established and expanded to cover 2,248 testing items. In collaboration with institutions such as the Guangxi Institute of Product Quality Inspection, it has met the customs clearance needs of fruits including durians.

Through close cooperation, we have proposed the initiative of China-ASEAN trade facilitation corridor. Negotiations on the China-ASEAN Free Trade Area 3.0 Upgrade Protocol are completed this year, injecting new vitality into regional trade.

The following suggestions are put forward: first, establish a China-ASEAN coordination mechanism for inspection and testing standards, promote the experience of Guangxi, and take the lead in achieving standards mutual recognition in sectors of agricultural products and food; second, collaborate with ASEAN countries to establish a regional laboratory alliance to realize the mutual recognition of testing results, and explore the model of "one test, mutual recognition by both sides"; third, participate in the international mutual recognition of authorized economic operators to expand the scope of third-party result acceptance, strengthen personnel training and technical exchanges, and enhance regional inspection and testing capabilities.

Zhang Xiao
Chief Inspector of Nanning Customs District P.R.China

China and ASEAN have been each other's largest trading partner for five consecutive years. In 2024, their bilateral trade volume reached 982.3 billion dollars. However, behind the prosperous trade, differences in food laws and regulatory systems between China and ASEAN have brought many compliance challenges.

There are significant differences among ASEAN countries in terms of regulatory models, food safety standards and enterprise management systems. In the case of food standards, differences in details such as definitions, index limits and labeling specifications of products have imposed considerable pressure on enterprises' import and export activities.

Thus, the testing, inspection and certification (TIC) industry has become a key force in promoting unimpeded trade. TIC institutions can help enterprises meet the regulatory requirements of target markets and reduce trade barriers through comprehensive services; participate in the development and revision of international standards to promote regional standards mutual recognition; build regulatory databases and early warning systems with digital tools to provide intelligent compliance management solutions; and assist enterprises in differentiated marketing through innovative services such as product certification, integrate global resources to provide tailored technical support and training, and promote the upgrading of the industry ecosystem.

With nearly 150 years of history, SGS has established branches in many ASEAN countries, and its laboratory in Vietnam takes the lead in fields such as pesticide residue testing and PFAS testing. SGS Digicomply, the digital compliance platform developed by SGS, covers food regulations of nearly 170 countries and provides data analysis and risk early warning with a combination of AI technology. Relying on its global network, SGS can quickly respond to the standards requirements in different regions, provide test reports that comply with international, national and industrial norms, and cover localized needs such as ISO series standards certification, GFSI-recognized standards certification, and halal certification, helping enterprises enter the ASEAN market efficiently.

In the future, the TIC industry will continue to work with governments, industries and enterprises to build a new ecosystem for China-ASEAN trade compliance and inject lasting impetus into the unimpeded development of regional trade.

Gu Xiaoyu
Vice President of SGS-CSTC Standards Technical Services Co., Ltd.

SunwayLink, the platform of Sunway World for data intelligence development, integrates a large number of AI algorithm models. The platform provides one-stop AI algorithm modeling capabilities and fully connects to large language models such as DeepSeek and Qwen for AI agent development, enabling the agents to assist in testing, inspection, and qualification assessment.

AI has three major application scenarios in testing, inspection, and qualification technical assessment.

Firstly, AI empowers the entire testing and inspection process to build an all-round intelligent testing business ecosystem. AI can break down the testing and inspection business processes into segments, build agent assistants for multiple process nodes, and integrate with the laboratory information management system (LIMS) to achieve seamless invocation and intelligent execution of business activities. An ecological solution where AI agents serve the entire testing chain will improve the quality and efficiency of AI-driven testing businesses with reduced risks.

Secondly, large AI models are applied to digital supervision services. AI can leverage algorithms and large model technologies to access the database of testing and inspection institutions, and use the unstructured data provided by the institutions to conduct data rationality review, identifying violations and irregularities in testing activities. The SunwayLink has built AI agents for system document review, violation clue screening, business data review, and inspection report review. Through AI technology, it screens violation clues and provides reminders and early warnings for reviewers.

Thirdly, AI agents empower the review of technical documents for testing and inspection qualification assessment. The SunwayLink provides a qualification pre-review platform based on large AI models for qualification assessment institutions. When the institutions submit materials, the platform can conduct online AI analysis of the materials, and provide pre-review results for various abnormalities. The structured pre-review results enables easier review for assessors, giving special reminders of abnormalities with significant impacts.

Wu Changzheng
Vice President of Beijing SunwayWorld Science & Technology Co., Ltd.

In the digital world, wireless local area network (WLAN) is directly related to the application experience of billions of users and the intelligent upgrading of thousands of industries. WAA drives testing and certification through technical standards, and closes the loop for standards implementation via testing and certification. With ongoing explorations and practices, it promotes the healthy and sustainable development of the WLAN industry.

WLAN has become a core part of digital infrastructure: it bears 70% of end-point traffic worldwide, making it a veritable digital cornerstone. However, with the increasing diversification, complexity, and intelligence of application scenarios, WLAN also faces many challenges, such as frequent network interruptions at home caused by multi-device access, uneven signal coverage in industrial parks, information leakage risks in public places, as well as slow equipment upgrading and insufficient operation capabilities in smart city construction.

WLAN systems that comply with underlying technical requirements are far from enough to solve these problems. Currently, the certification for WLAN products focuses on radio frequency performance, protocol compliance, and interoperability, but overlooks the application experience that users care about most. With the vision of "providing the best WLAN experience for the digital world", WAA has established three core goals: creating an open and international WLAN industry development platform, establishing a scenario-based WLAN certification system and a complete performance standards system, and building the best WLAN application experience.

WAA has built the application scenario-based standards in the six dimensions of bandwidth, latency, roaming, connectivity, coverage, and security. It has achieved accurate evaluation through quantitative indicators. Based on the technical standards for performance experience in scenarios such as home and industrial parks, WAA has conducted testing and certification with its capability raising from 802.11ax to 802.11be, and achieved the generational upgrading. So far, 8 WAA certification certificates have been issued in the application scenarios of homes and industrial parks.

Looking into the future, WAA is exploring the in-depth integration of AI and WLAN. Established in 2025, the AI WLAN Research Group will optimize network experience through Edge AI, develop new businesses such as green and energy-saving buildings based on WLAN sensing, and transform the network from passive support to active service.

Jiang Yi
Secretary for Standardization, World WLAN Application Alliance (WAA)

With the exponential growth of smart devices, demands for various types of intelligent connectivity have become increasingly prominent. A large number of AI agent devices will emerge, requiring wireless short-range connections to possess capabilities of high concurrency anti-interference and deterministic low latency. With the advent of embodied intelligence, AI devices also need to interact with the environment. Therefore, short-range connections must have the ability of integrated connectivity for communication, sensing, and positioning, while supporting low power consumption on the end side.

SparkLink is a new-generation technical standard for wireless short-range communication with integrated connectivity capabilities for communication, positioning, and sensing. It is developed by the International SparkLink Alliance headquartered in Shenzhen, China. SparkLink technology boasts unique advantages such as 20 μs low latency, 1 μs precise synchronization, high concurrency of over 256, high reliability of 99.999%, low power consumption, and decimeter-level precise positioning.

These advantages bring new experience of wireless intelligent connectivity to smart applications. In terms of smart terminal devices, SparkLink headsets achieve all-weather lossless audio experience for the first time, SparkLink styluses deliver continuous stepless haptic sensation similar to that of traditional Chinese brushes, and SparkLink car keys achieve decimeter-level positioning and enable a single device to possess both in-vehicle and out-of-vehicle sensing. SparkLink smart cockpit screen projection, based on advanced anti-interference and multi-channel concurrency technologies, supports concurrent screen projection from multiple devices. Leveraging the high-precision positioning capability, SparkLink pointing remote controls enable accurate and smooth pointing control.

The International SparkLink Alliance has gathered 58 developer partners. A total of over 400 SparkLink products have passed the testing of 3 authorized testing laboratories. The SparkLink testing standards system was released at the China Radio Conference in December 2024, which provides a fundamental guarantee for the interconnectivity and interoperation of different SparkLink products.

The SparkLink technical standards are expanding to more AI intelligent services. The International SparkLink Alliance will work with partners in the short-range connectivity industry to jointly explore a short path for efficiently connecting the intelligent world, and build a global standards and testing system for future wireless short-range connectivity.

Wu Yong
Chief Expert of Industry Development, International SparkLink Alliance

AI drives the high-quality development of conformity assessment, serving the transformation and upgrading of industries and supporting the intelligent supervision of industries. The role of the new-generation AI technology in the field of conformity assessment is mainly reflected in the following application scenarios.

First, consolidating the new digital infrastructure for intelligent testing. Embodied intelligent robots can replace laboratory technicians in the full-process testing and realize unmanned operations. By analyzing sample information, historical data, and relevant standards, AI technology can automatically design optimal testing schemes, reducing reliance on senior engineers while ensuring the effectiveness and repeatability of testing. Multimodal generative AI can understand various types of original records and automatically generate complete testing reports in specified formats, further releasing human potential.

Second, expanding the new digital dimension of certification audits. Multimodal large models have significant advantages in document processing. They can realize intelligent acceptance of certification applications, automatically complete the formal review of materials, provide result feedback, and clarify improvement directions, balancing quality and efficiency. During the review phase, AI upgrades traditional manual document review to standardized intelligent analysis, reducing the degree of manual intervention.

Third, building a data-driven new industry foundation. In-depth analysis of inspection and testing data by multimodal large models can activate a large amount of idle data in the field of conformity assessment, extract professional knowledge, and form an industry knowledge base. Through historical data analysis, AI can accurately grasp the status of the industry and predict its development trends, providing support for the decision-making of competent departments and the innovation in the industrial chain.

Fourth, establishing a new pattern of intelligent and precise supervision. AI promotes the transformation of supervision models from passive response to active prevention, and from experience-driven to data-driven. In the field of inspection and testing, AI can achieve a full coverage of risk investigation in the intelligent review of reports, improving efficiency and accuracy. In the certification system, a full-chain digital closed-loop management can realize the online and intelligent certification process, ensuring recordable processes and predictable risks. In addition, AI can generate heatmaps of national quality issues and standards application, providing accurate basis for the policy making and industrial guidance of regulatory departments.

Dr. Dai Qunte
Senior Engineer of China Certification & Accreditation Institute, SAMR

The effective application of AI requires the coordination of three core elements: data provides the basis for testing rules and standards; algorithms guide AI to analyze and judge; and computing power supports the efficient processing of massive information. These elements are mutually reinforcing and indispensable. Meanwhile, AI encompasses subdivided technologies such as machine learning, which can provide customized solutions for different needs.

The value of AI extends beyond cost reduction and efficiency improvement, which also reshapes the service model of an industry through the integration of technologies and scenarios, as well as data support. It breaks limitations of manual testing and frees up human resources, allowing professionals to focus on tasks with higher value such as technological R&D. In the selection of application scenarios, priority is given to addressing pain points, with a focus on areas with high frequency of use that require professional knowledge to ensure that technologies solve real-world problems.

It is necessary to align technical capabilities with business needs. At the same time, data management must be standardized to provide high-quality raw materials for AI, and projects should be advanced in accordance with the process of "confirming needs–verifying feasibility–implementing cooperation".

Today, remarkable results have been made in multiple application scenarios of AI. In terms of text processing, AI label review system automatically processes information, compares standards, and generates reports, reducing the processing time by 80% and achieving an accuracy rate of over 95%. In terms of laboratory consulting, AI intelligent query system provides round-the-clock responses, addressing over 90% of routine consulting needs. In terms of image recognition, AI for marine organism identification shortens the processing time from over 100 minutes to 20 minutes, with an accuracy rate of over 90%. In terms of textile testing, AI outputs results in seconds, eliminating human errors and enhancing credibility.

The AI architecture diagram in CTI extends from hardware equipment, data management systems, AI technology models to diverse application scenarios. This drives the industrial transformation from human-driven to intelligence-driven. In the future, the integration of AI and data will become even closer, providing solid support for industrial development, product safety, and ecological protection.

Liu Panchao
R&D Director of Centre Testing International Group Co., Ltd. (CTI)

China and ASEAN member states such as Thailand, Indonesia, and the Philippines are major sugar-producing or sugar-consuming countries worldwide, and sugar trade plays an important role in bilateral trade exchanges. However, there are significant differences in standardization, conformity assessment, and quality management of sugar products among these countries, which not only affect the efficiency of trade circulation but also increase the difficulty in cross-border cooperation.

Taking white sugar as an example, China and Thailand have more comprehensive quality grading systems, dividing white sugar into four grades, while countries such as Indonesia, the Philippines, and Malaysia only have two grades. China requires the color value of refined sugar to be below 25 IU and the residual sulfur dioxide content to not exceed 100 mg/kg. In contrast, ASEAN countries have relatively looser requirements for color value (approximately below 50 IU) but stricter requirements for residual sulfur dioxide content (usually below 50 mg/kg).

In addition, there are differences in sugar certification and supervision models. In China, the certification process is relatively systematic and supervised by multiple departments. However, in some ASEAN countries, supervision is relatively loose due to government support for exports.

At present, the sugar industries in China and ASEAN countries are facing the challenge of industrial chain optimization and upgrading. Eliminating the differences in sugar product standards can effectively promote the optimization of resource allocation between the two sides. For example, China can export its advanced sugar-making equipment and technology to ASEAN countries, while raw sugar or primary products in ASEAN can be imported to China for deep processing, so as to form an efficient regional industrial chain and create a win-win pattern.

It is imperative to deepen China-ASEAN standardization cooperation on sugar products. To this end, the following suggestions are put forward: first, strengthen the coordination of standardization and conformity assessment to promote the mutual recognition of standards; second, establish a joint supervision mechanism to implement the model of “inspection in one country, mutual recognition in the region”; third, promote cooperation within the whole industrial chain to advance industrial upgrading, and innovate cooperation models; finally, establish a corresponding policy framework to provide support and guarantee for cross-border cooperation.

Li Kai
Professor at Guangxi University

China-ASEAN cooperation is stepping into a new stage. In the era where AI is reshaping the global industrial landscape, unified and mutually recognized conformity assessment standards not only ensure product quality and safety but also unleash the vitality of regional economy.

The predecessor of China-Vietnam Testing Company was a core enterprise exporting fresh durians from Vietnam to China. In 2023, it achieved the export of approximately 38,000 tons of durians to China, accounting for 30% of Vietnam's total fresh durian exported to China. It was the coordinated alignment of inspection and quarantine standards between China and Vietnam that enabled high-quality Vietnamese agricultural products to enter the Chinese market efficiently, benefiting consumers in both countries.

In October 2023, the company transformed its focus to technological services and officially renamed itself China-Vietnam Testing Company. This transformation stems from the judgment on the trend of regional cooperation. As the scale of China-ASEAN trade expands, the market demand for professional inspection and certification services has become increasingly urgent. For this purpose, the company has established in-depth strategic cooperation with China Certification & Inspection Group (CCIC) to jointly develop the traceability service market for Vietnamese agricultural products exported to China and build a full-chain service system covering production, inspection and customs clearance.

In practice, high standards and strict compliance are not trade barriers, but bridges of trust. Taking Vietnamese agricultural products exported to China as an example, the traceability system jointly established with CCIC has realized traceable origin, controllable process, and preventable risks, which not only shortens customs clearance time but also strengthens Chinese consumers' confidence in the quality of Vietnamese products.

The company is now actively cooperating with the Ministry of Agriculture and Rural Development of Vietnam and General Administration of Customs of China to open the channel for exporting frozen wild aquatic products from Vietnam to China. It is estimated that the annual export volume will reach 100,000 tons, with a trade volume exceeding 300 million dollars. To this end, the company has conducted multiple port surveys and held special seminars with CCIC to make thorough preparations for traceability and inspection services after the channel is opened.

Xiao Jiayong
General Manager of Vietnam-China Testing Company (Vietnam)

编译/靳吉丽 曹欣欣;
(Addresses and speeches are edited and translated by Jin Jili and Cao Xinxin)

Source: ISO

United for impact
—ISO Annual Meeting 2025 successfully held in Rwanda

携手共建影响力
——2025 ISO年度大会在卢旺达成功举办

By Cao Xinxin
文/曹欣欣

The ISO Annual Meeting 2025 was successfully held in Kigali, capital of the Republic of Rwanda, on October 6-10. The event included the opening and closing ceremonies, sessions with different themes, governance meetings and social activities. It was hosted by Rwanda Standards Board (RSB), the ISO member, marking a historic first for East Africa.

With the theme of "United for impact", the Meeting aimed to advance the role of international standards in achieving the global sustainable development. It attracted about **1,115 in-person participants** and more than **7,160 online views** from some **140 countries**.

Rwanda's commitment to leveraging standards for economic growth and global collaboration

Hon. Prudence Sebahizi, Rwanda's Minister of Trade and Industry, underscored the country's commitment to leveraging standards for economic growth and global collaboration in his opening address.

"This event reflects our belief that international cooperation is key to addressing the world's pressing challenges," Sebahizi said. "Rwanda is proud to showcase how standards accelerate innovation, support inclusive development, and empower communities. Hosting this meeting is both a milestone for our country and an opportunity to strengthen partnerships and inspire global impact."

"Rwanda's participation in this meeting underscores our commitment to using standards as an engine of innovation, competitiveness and inclusive development. Through sustained investment in areas such as quality infrastructure and capacity building, we have strengthened our ability to trade, attract investment and open new pathways for small businesses," Sebahizi added.

He took the program called "Grow with the standards" as an example. This program supports enterprises in adopting improved standards of quality. This initiative embodies the shared vision for sustainable growth, promoting industrialization, innovation, digital transformation, environmental stewardship, and social inclusion. Since its adoption in 2017, it has made remarkable progress, where more than 1,000 small and medium enterprises were on board. Of these, 41.6% are women-owned, while 27.7% are youth-owned.

A unique space to strengthen the role of standards in addressing global issues

ISO President Dr. Sung Hwan Cho indicated that the event would serve as a pivotal gathering uniting ISO members, governance bodies, and key stakeholders globally. "The theme 'United for impact' calls us to harness our collective strength in a world that needs bold, lasting change," Dr. Cho said. "The ISO Annual Meeting is our most important global platform to explore how international standards can address the world's evolving challenges. It is a unique space to reflect on emerging trends, exchange ideas, and strengthen the role of standards in advancing global issues."

"This week-long hybrid programme reflects our belief that meaningful change emerges from global collaboration. By uniting diverse voices across borders, we drive bold, inclusive solutions through international standards—ensuring no one is left behind," Dr. Cho emphasized.

Rwanda's hosting of ISO Annual Meeting 2025 positions the country as a continental leader in standardization and quality infrastructure, reinforcing its vision as a regional hub for innovation and trade, according to Dr. Cho. "We are proud to be holding this year's Annual Meeting in Rwanda, and are deeply grateful to RSB for their partnership and leadership in bringing the global standards community together," he added.

Bold ideas and diverse perspectives to drive transformative changes

Source: ISO

ISO Secretary-General Sergio Mujica encouraged participants to bring bold ideas and diverse perspectives to the table, emphasizing the importance of collective action in driving meaningful, transformative change. In his view, international standards are key to unlocking economic opportunity, advancing inclusive digital transformation, and recognizing the vital role of people in shaping a resilient and sustainable future.

"Open to anyone with an interest in standards, the ISO Annual Meeting provides a unique opportunity to engage in forward-looking dialogue with global leaders and representatives from the ISO community, national standards bodies, civil society, international organizations, the private sector, as well as policy makers, academics and young professionals," Mujica said.

The Rwanda government places standardization, conformity, assessment and metrology at the heart of its development strategy

The opening ceremony reached a high point with closing remarks from **Rwanda's Prime Minister Dr. Justin Nsengiyumva**, who highlighted the power of international unity to deliver real impact.

"Hosting the ISO annual meeting here is worth a privilege and a reflection of our shared belief. I believe that collaboration and common standards can shape a better future for all," Dr. Nsengiyumva said.

"This gathering is more than just a meeting. It is a platform for countries, ISO members and partners to exchange knowledge, strengthen collaboration, and reaffirm the importance of market relevant standards," Dr. Nsengiyumva said. "Standards facilitate trade, drive innovation, enhance climate resilience, and offer practical solutions to global challenges. Standardization must remain a cornerstone of equitable and sustainable development. These means aligning standards across markets, building ecosystems that supports business access, and deepening cooperation to share knowledge and best practices."

"In Rwanda, the government has placed standardization, conformity, assessment and metrology at the heart of our development strategy," he emphasized. These tools have helped build a more competitive business environment. They have strengthened public safety, improved the quality and reliability of products and services, supported tourism, stimulated industrial growth and accelerated innovation and technology adoption. They have also enabled the economy to compete more effectively, regionally and globally.

During the event, **RSB Director General Raymond Murenzi** highlighted Rwanda's progress in global standardization in his address. To date, the country has developed and adopted over 2,250 ISO standards, which support socio-economic activities and open doors for Rwandan products and services in global markets. RSB is committed to strengthening ties with ISO, peer national standards bodies, and partners to advance standardization locally and beyond.

During the event, sessions were held with different topics such as why biodiversity matters to your business; the growth, responsibility, and the road ahead with AI; gateways to global markets; how to turn needs into opportunities; and the youth, tech and future, which attracted global experts and reviewed by audience from all over the world.

The ISO Annual Meeting is a hybrid international event brought to each continent on a rotating basis, enabling the participation of members and communities from across the world. It has not only showcased Rwanda's achievements in implementing standards across key sectors including digital economy, manufacturing, and agriculture, but also opened opportunities for knowledge exchange and capacity building.

A better future builds on standards

以标准为基，创美好未来

By Fang Luofan
文/方洛凡

ISO held five open programs in the period of October 6-10. With different themes, the activities brought together global leaders and change-makers to get ready for trade, AI, and biodiversity in the future, and advocate sound solutions to pressing current issues.

Trade in action: Gateways to global markets

Trade flows through ports, factories, and digital platforms. But turning agreements into real-world commerce requires more than political will; it demands practical tools, trusted systems, and solid partnerships.

This open discussion was attended by Silvio Dulinsky, ISO Deputy Secretary-General, Hon. Prudence Sebahizi, Minister of Trade and Industry of Rwanda, Hon. Frederick Gume Ngobi, State Minister for Cooperatives at Ministry of Trade, Industry and Cooperatives of Uganda, and Mohamed Ali, Director of Trade in Goods and Competition at African Continental Free Trade Area (AfCFTA) Secretariat. It was addressed by Ngozi Okonjo-Iweala, Director-General of WTO, via video.

Silvio Dulinsky highlighted three aspects when thinking about trade, standards and national quality infrastructure. The first is that trade shapes lives. He took an example of Patrick, who created a small wine company in Botswana that exports to neighboring southern African countries. The company has created 20 jobs and impacted the lives of a community of more than 50 families through the value chain. Thus, when we think about trade, it is not only about big corporations, but truly impacts lives of small communities.

The second is about unlocking potential. The Kigali Logistics Platform (KLP) is the largest dry port in Rwanda. Inaugurated in 2019 and with an investment of 35 million dollars, it reduces the logistics cost of the value chains operating on KLP by more than 50 million dollars per year. Many economic studies demonstrate that it is one of the most favorable policies that governments can put forward to promote economic development.

The third is driving technological development and innovation. In Africa, cars are imported and adapted in small workshops to fit local needs. It is a whole system behind that and what they are developing is actually a partnership, with many schools and universities providing the technical skills and innovating in the processes that are required to modify those cars.

From risk to action: Why biodiversity matters to your business

From disrupted supply chains to raw material scarcity, the impacts of biodiversity for businesses are real and exaggerating. This session puts biodiversity loss on the business agenda, exploring why it is important and how to take action.

It was presided over by Shiulie Ghosh, a professional moderator and journalist, and attended by Franck Lebeugle, Director of the Standard Setting Department of AFNOR, Marco Lambertini, Convener and Secretariat Executive Chair of Nature Positive Initiative, Angela Graham Brown, Director of Nature Action at the World Business Council for Sustainable Development (WBCSD), Fatmata Lovetta Sesay, a resident representative from UNDP Rwanda, Hon. Dr. Bernadette Arakwiye, Minister of Environment of Rwanda, and Yvette Ishimwe, Founder & CEO of Iriba Water Group.

More than 65% of Rwanda's population depends directly on nature for livelihoods of agriculture, forestry, and tourism, according to Hon. Dr. Bernadette Arakwiye. The loss of biodiversity is not just an environmental issue, but an existential threat to economy and the well-being of people. Therefore, she unveiled the Rwanda's National Biodiversity Strategy and Action Plan (NBSAP), which marks a significant step in advancing Rwanda's commitments to protect and restore nature.

At the event, ISO 17298:2025, *Biodiversity—Considering biodiversity in the strategy and operations of organizations—Requirements and guidelines*, was released. It is the world's first international standard dedicated to helping organizations take action on biodiversity.

Franck Lebeugle further expounded on the standard. ISO 17298 is completely aligned with the Kunming-Montreal Global Biodiversity Framework (GBF), and gives a practical roadmap for all kinds of organizations to integrate biodiversity into the strategy for businesses, including clear steps to identify links with biodiversity.

Cultivating change: Youth, tech and the future of agriculture

The session explores how the digital-native generation is reimagining agriculture and what their bold ideas mean for innovation across all sectors.

Youth delegates from renowned local universities participated in the session. Many of them major in agriculture, animal science and veterinarian medicine. It is of significance to invite the young to join, because the conversation ultimately leads to the future that they will help shape.

The discussion was presided over by Nelly Rwagitare, Curator of Global Shapers Community—Kigali Hub, and attended by Cynthia Umutoniwabo, Founder and CEO of Loopa, Mikel Ngueajio, Adjunct Instructor of Carnegie-Mellon University Africa, and Hon. Dr. Mark Cyubahiro Bagabe, Minister of Agriculture and Animal Resources of Rwanda. Together, they found out how standards innovation and youth leadership can transform agriculture and food security.

The agriculture today is very smart. Anyone who wants to be a part of it must embrace technology, and that is the bottom line, said Hon. Dr. Mark Cyubahiro Bagabe. He pointed out that is actually what makes agriculture very appealing to young people. The purpose of engaging in agriculture is to make it profitable. We cannot make it a business unless we standardize. Standards are more than just compliance. Standards are a passport to competitiveness, transforming ideas into globally accepted high-value enterprises. They can bring premium markets, partnerships, and global supply chains.

Cynthia Umutoniwabo shared her experience, as the CEO of a company transforming organic waste into fertilizer that are needed for farmers. Last year, she attended an ISO meeting online, and it was like a wake-up call. She realized the importance of getting her products certified. Fortunately, she made to get help from RSB for technical support, and became more competitive on the market.

The business of impact: Turning needs into opportunities

The session was presided over by Shiulie Ghosh, and attended by Ruth Komuntale, CEO of ECOCA, Anna Pietikäinen, Head of Regulatory Policy Division, Public Governance of OECD, Kathleen Riach, Professor in Management at University of Glasgow, James Nkamwesiga Kasigwa, Executive Director of Uganda National Bureau of Standards.

It focused on how international standards can drive change both in the community and at a global level, which will pose direct impact on how people live and how they thrive. The speakers explained how community-driven initiatives are using standards to improve lives and how social needs can be translated into business opportunities.

Ruth Komuntale introduced the work of ECOCA. ECOCA empowers African families by providing electric cooking system, solar panels, and related stuff, to free them from the heavy labor of

Source: ISO

collecting firewood or so, and save families' precious time to be more productive. "The Uganda National Bureau of Standards will not let us bring in anything unless we have provided our product certificates of conformity with international standards for each and every consignment," she said. "Standards are not only helping us to deliver a quality product to the market. They are helping African families and institutions to select clean energy solutions, cope with dignity and safety, and transform daily meal preparation into a cornerstone of healthier living."

Futureproof with AI: Growth, responsibility, and the road ahead

AI has deeply mingled with the tools we use, the systems shaping decisions, and almost all industries. This session cut through the hype in this high-level session and explore how AI can be scaled responsibly, with standards that build trust and deliver real value.

The session was presided over by Shiulie Ghosh, and attended by Catherine Muraga, Managing Director of Microsoft Africa Development Center, and Hon. Yves Iradukunda, Minister of State for the Ministry of ICT and Innovation of Rwanda. The speakers had an open discussion on the power dynamics behind AI development and why responsible AI is not just a concern for tech giants.

Dr. Sung Hwan Cho, ISO President, made a short speech at the session. He said that the advances to come will transform our industries, health care and daily lives. Such profound change requires strong shared foundations. For a future based on trust, transparency and security, international standards provide the foundations. They ensure that systems are safe, reliable and interoperable worldwide. They help scale production, support global trade and foster public confidence in the technology.

"ISO and IEC's joint technical committee on AI is shaping the future through international standards. Our AI standards support responsible governance, offering a practical tool kit and scale develop and deploy the technology."

He believed that deeper partnerships and stronger coordination are essential to bring clarity and coherence to global AI governance. ISO, IEC and ITU are to be hosting the 2025 International AI Standards Summit in South Korea on December 2-3. "It is time to combine our strength to unite for impact across sectors and borders, ensuring that all voices are heard. Together through the unifying force of international standards, we can shape the future in which the benefits of AI are enjoyed by all!" he addressed.

Where are we headed with the metaverse?

The metaverse is seen as the next technological revolution and tipped to generate up to $5 trillion in value by 2030, worldwide. However, many questions remain, and moving too fast could be detrimental if issues like privacy and interoperability are not ironed out soon. So what exactly is the metaverse and how can standards help?

Metaverse can be used to try out new processes or ideas, from changing the layout of the factory floor to anticipating potential mishaps so the right measures are in place to prevent them. They can bring global team members together for training or operate machines virtually, all of which accelerate production time and reduce risks and maintenance costs.

Yet many questions remain as the metaverse evolves. Issues such as privacy, ownership, safety and sustainability, for example, are still not entirely addressed. Standardization is and will be essential, and a number of standards organizations, including IEC, ITU, ISO, IEEE and the Metaverse Standards Forum, are actively analyzing metaverse technologies.

Recognizing its complexity and the need to anticipate standardization needs, the IEC has published a societal and technology trend report that explores the emerging landscape of the industrial metaverse, highlighting the gap in current standardization efforts.

Industrial metaverse gives an overview of current metaverse applications with real use cases, highlights the many ways in which standards can support it, and gives a snapshot of the many standardization activities currently underway. It details a number of areas where more standards are needed, particularly as it relates to terminology and governance, in addition to interoperability of metaverse systems themselves.

The report, developed by experts from the IEC Metaverse Sub-Working Group within the IEC Market Strategy Board (MSB), makes a number of recommendations to address standardization gaps. It also highlights the opportunities that the metaverse offers to the IEC in terms of improving the development of standards and conformity to them such as testing and certification.

(Source: IEC)

ITU Global Youth Celebration

November 16, Baku, Azerbaijan

The ITU Global Youth Celebration (GYC-25) is more than just a celebration. It reaffirms our commitment to youth as essential partners in building a connected, inclusive, and sustainable digital future.

This is where bold ideas meet real action. Get ready for an electrifying mix of inspiration, learning, and co-creation all fueled by youth leadership and digital innovation.

You can hear from young visionaries driving digital development in their communities and beyond, engage in powerful conversations with global decision and policy makers, role models, and prominent stakeholders, explore cutting-edge tech, and experience behind-the-scenes visits to Azerbaijan's most dynamic technological centers.

For more information on the event website: **https://www.itu.int/itu-d/meetings/gyc-25/#**

Drafting for compliance: best practices for standards in support of the Toy Safety Directive and General Product Safety Regulation

November 25, online

This webinar is jointly organized by CEN and CENELEC, and Ernst & Young (EY), with the participation of the European Commission Desk Officer, who will deliver the opening remarks. This session will focus specifically on the Toy Safety Directive and General Product Safety Regulation. Additional sector-specific webinars will follow in the coming months.

The webinar aims to support your work by offering practical insights from HAS Consultants, including best practices for drafting content linked to legislation as well as common mistakes and how to avoid them. In addition, CCMC will present key reminders related to drafting rules and processes, and EY will provide an overview of the HAS system and assessment process.

The webinar will conclude with a Q&A session, giving you the opportunity to interact directly with the HAS Consultants and clarify any questions. For more information on the event website: **https://www.cencenelec.eu/news-events/events/2025/2025-11-25-webinar-drafting-for-compliance-toy-safety-directive-gpsr/**

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