



SESEC V Annex

Dialogue on Standards: Work Plan of Overseas Standards Organizations in 2024

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Seconded European Standardization Expert in China
(SESEC)

Introduction

To bolster mutual understanding, better understand major tasks of overseas standards organizations and facilitate in-depth cooperation in standardization field, China Standardization Press organized a high-end dialogue on standards in March. Presided over by Ms. Yu Xinli, President of China Association for Standardization, Dr. Yuan Yu, Ms. Hu Yanan, Dr. Betty Xu and Mr. Xu Fang, as representatives of IEEE SA, ASTM International, SESEC and ANSI respectively, were invited to brief on the current development trend of standardization, the work plan and priorities of each organization in 2024, and their suggestions for China's standardization work.

Dialogue on Standards: Work Plan of Overseas Standards Organizations in 2024



Ms. Yu Xinli

President of China Association for Standardization

The CPC Central Committee and the State Council released the *National Standardization Development Outline* in October 2021, mapping out goals and the blueprint of China's standardization development in the next 15 years.

According to the Outline, there are four quantitative indicators to be fulfilled by 2025: the rate of standards research achievements obtained from generic key technologies and applied scientific and technological plans will be raised to over 50%; the average period of standards development will be reduced to no more than 18 months; the rate of adopting international standards will surpass 85%; over 50 national technical standards innovation bases will be established.

Therefore, the year of 2024 is crucial for implementing the Outline, and realizing the development goals by 2025. China is steadily promoting the standardization work in accordance with the Outline.

In a turbulent world, China always unwaveringly upholds "promoting high-level opening up" as an important part of "speeding up fostering a new development pattern, and pursuing the high-quality development". Therefore, a dialogue on standards is organized by China Standardization Press to build a platform for international communication.

The topics of the event are as follows:

- Work plan and key tasks of the organization in 2024;
- Cooperation and communication plan with China;
- Suggestions on China's standardization work, especially association standards;
- Thoughts on trends of standardization development.

Around the globe, standardization trends share common themes. During the 23rd meeting of the Global Standards Collaboration (GSC) on April 26-27, 2023, attended by leaders from ISO, IEC, ITU, IEEE, ETSI, and many other SDOs, I observed that various SDOs share similar concerns. Drawing from my experiences at IEEE and MSF (Metaverse Standards Forum), where I serve as a board member and treasurer, I have identified the following trends:

Firstly, there is a shift from "market-driven standards" to "market-driving standards." In mature technical fields, integration to avoid redundancy is natural, giving rise to bottom-up standards that are market-driven. However, with emerging technologies such as autonomous driving, artificial intelligence, and metaverse, standards are found to be not just driven by the market but are actively driving it. To foster these fields and mitigate development challenges, standards should lead the way, particularly in areas like fundamental terms, definitions, grading, classification, ethics, and interoperability. A prime example is SAE J3016, which defines six levels of driving automation (from Level 0—no driving automation to Level 5—full driving automation) and is widely accepted across the autonomous driving industry. It serves as a benchmark, illustrating how standards can drive the market.

Secondly, the focus is shifting from standards to standard-related work, especially open source. The open sourcing of hardware, software, and data underpins key technological advancements in recent years. The ISO/IEC MPEG standards demonstrate a successful integration of standards and open source. SDOs are increasingly putting effort into standard-related work, including open-source code, datasets, prototypes, and pilots, which expands the scope of standards activities, facilitates the wide adoption of standards, and unleashes greater value of standards.



Dr. Yuan Yu

The first Chinese president in the history of the IEEE Standards Association

Thirdly, more attention is being paid to the pre- and post-activities of standards development. This includes study groups for standards proposals, workshops on standardization needs prior to standards development, and activities such as promotion, testing, and certification following standards development. For example, the MSF leads coordinated discussions on sectors that may have standardization needs in the form of an industrial alliance.

Fourthly, there is an expansion from technical to non-technical standards. Traditionally, standards have been technically oriented and developed by technical committees. However, recent demands have necessitated the development of non-technical standards in fields such as the ethics of artificial intelligence and children's rights protection in the digital era. These non-technical standards focus on the social impacts of technology and ethical guidelines for the scientific and technological industry.

Fifthly, there is vigorous participation in addressing major issues. Beyond bottom-up demands, significant social, environmental, and global challenges are increasingly becoming spontaneous concerns for SDOs, which seek to provide solutions through standardization. The most pertinent trends are "go digital" and "go green". The core driving forces at the frontier of digitalization are artificial intelligence, metaverse, and decentralization (Web3), which have drawn the attention of SDOs. SDOs are also keen on making positive strides in sustainable development and climate change through standardization.

Lastly, the digitalization of standards into machine-readable formats is pivotal. As AI applications like ChatGPT become capable of interacting in natural language, the notion that traditional standards should be machine-readable without extra effort has gained traction. However, I believe that considering machine readability during standards development is crucial for ensuring the reliability of tests, certifications, and verifications of standards.

Yu Xinli's comments:

Dr. Yuan Yu shares his incisive opinions about the six development trends of standardization work. In the past, standards were developed only when there were demands from bottom to top. Now preparations are made in advance by holding workshops, and promotion and other work are carried out after the publication of standards. The working scope of standards development organizations is expanding, with consideration of social factors such as ethics and morality during the standards development process. Standards organizations, especially ISO, take the lead in supporting the SDGs through standards, each goal of which is supported by corresponding standards. Furthermore, standards need to advance with the new realities of digital transformation.



Ms. Hu Yanan

Operation Manager of ASTM International's China Office

ASTM International is a globally recognized leader in the development and delivery of voluntary consensus standards. Today, over 12,500 ASTM standards are used around the world to improve product quality, enhance public health and safety, strengthen market access and trade, and build consumer confidence.

ASTM's members are over 30,000 top technical experts and business professionals from 140 countries. Working in an open and transparent process and using ASTM's advanced IT tools, the members create the test methods, specifications, classifications, guides and practices that support industries and governments worldwide.

The *National Standardization Development Outline* requires that the rate of adopting international standards should surpass 85%. Back in 2004, ASTM signed a MoU with SAC, which indicated that China can adopt ASTM standards without causing copyright issues.

■ Work plan and key tasks of ASTM International in 2024

The core business of ASTM is standards development and revision without any funding. The operation of ASTM is supported by the income from standards sales, which nurtures the whole process of standards development.

ASTM consists of over 100 technical committees and more than 2,000 subcommittees, respectively holding free-of-charge on-site meetings twice a year. Also, the standards development and revision process is conducted through the official website of ASTM, where members can vote and view the reports on results generated. Therefore, ASTM connects global members by a powerful network, which is one of the reasons why ASTM standards can upgrade or respond to demands quickly.

ASTM standards cover over 100 industries, which are all our focuses. **Extra efforts will be made to additive manufacturing (AM).** An office was established in Singapore in 2023, supporting the strategic research and development of AM. The office has cooperated with Shanghai Additive Manufacturing Association, and held training in AM standards with universities such as the Shanghai Jiao Tong University, to help enterprises and industries better grasp the application of standards, make products in line with international standards, and promote their products to enter overseas markets. There may be more training activities in the AM field in May.

The second focus is promoting the application of copyrighted ASTM standards. Our standards database can authorize the accessibility of all personnel in enterprises, universities and research institutions based on their IP addresses, which cuts down costs and facilitates better utilization of ASTM standards.

ASTM has digitalized approximately 12,000 current standards and 70,000 previous versions of standards, evolving from paper copies and PDF files to the online form. The standards database enables the automatic comparison of any two versions of a given standard, serving as a great timesaver for laboratory staff and R&D teams. With the gradual increase of awareness of standards copyright, Chinese enterprises are attaching growing attention to using copyrighted standards and have consulted us about their purchase.

■ Cooperation and communication plan with China

We hope that Chinese experts can participate in the standardization activities of ASTM. Anyone interested can become a member of ASTM, without any requirement or qualification restriction. Once you become a member, you can learn about the standards development and revision in ASTM, and vote on the technical contents of standards. Except from advancing utilization of copyrighted standards, Chinese experts are encouraged to express their opinions, which will be introduced into technical contents of standards to drive products and technologies to go global.

ASTM has always been open for cooperation and communication. We welcome Chinese experts from all walks of life to share their thoughts through participation in workshops or forums, and we will bring their feedback to the headquarter.

■ Suggestions on China's standardization work

Participation in standards development and revision should be a prior task. By engaging in standardization development and revision on the platform of ASTM, you can meet potential clients, promote products, or sell products in this process.

In addition, ASTM holds training projects, capacity verification projects and seminars. ASTM also has five journals covering intelligent manufacturing, materials and characterization, detection methods, and other hot topics. Our journals publish papers for free, and it is favourable for Chinese experts to submit papers. We hope to help Chinese enterprises acquire actual benefits and facilitate their products and technologies to go global.

As for association standards, here are my thoughts. Prominent achievements have been made since China implemented the standardization reform. However, challenges still exist, especially in the field of association standards. In the U.S., voluntary standards developed by ASTM, IEEE and other organizations only become mandatory when they are adopted by laws and regulations. Whereas in China, national standards are similar to legislation, and association standards are voluntary. Given differences in history and background of standardization, China should utilize multiple methods to explore the appropriate path based on the national conditions. Also, international standards are the lowest thresholds. Association standards can fully exert their value to serve enterprises and industries through ISO, ASTM and other platforms.

Yu Xinli's comments:

The most impressive part of Ms. Hu's introduction is that ASTM nurtures standards development by standards sales, which is worth learning and thinking about. The principles to justify a good standard are good text, good application, and good implementation effect. ASTM's standards digitalization efforts have covered all its standards. I hope that more Chinese experts will participate in ASTM's standardization activities, and more Chinese enterprises will purchase and use digital resources of ASTM standards.



Dr. Betty Xu

Director of the Seconded European Standardization Expert in China

The Seconded European Standardization Expert in China (SESEC) project is a visibility project cofinanced by the European Commission (EC), the European Free Trade Association (EFTA), the European Committee for Standardization (CEN), the European Committee for Electrotechnical Standardization (CENELEC), and the European Telecommunications Standards Institute (ETSI).

Commencing its operations in 2006, the SESEC project undergoes periodic reviews approximately every three years, delineating distinct phases. The project is presently situated within its fifth phase.

The overarching goal of the SESEC project is to enhance the visibility of European standardization endeavors, foster communication and collaboration between Chinese and European standardization bodies and facilitate mutual comprehension of regulatory frameworks and standards between Chinese and European enterprises. By doing so, the project endeavors to facilitate market access for European stakeholders. Concurrently, SESEC is dedicated to advancing the implementation of international standards in China, thus promoting global standard harmonization. Its ultimate goal is to diminish technical trade barriers between the EU/EFTA and China, thereby bolstering international trade and catalyzing industrial development in China and the EU.

Specific objectives of the SESEC project encompass:

- Fostering understanding and mutual trust among standards development bodies and pertinent organizations in both China and Europe;
- Promoting the visibility and impact of European and international standards within China;
- Strengthening dialogue and cooperation on standards between China and Europe, with particular emphasis on the framework agreement between the three European Standardization Organizations and the Standardization Administration of China (SAC).

Work plan and key tasks in 2024

The European Commission

In February 2024, the European Commission published the *2024 Annual Union Work Programme for European Standardisation*, which identifies the strategic policy priorities for European standardisation including 72 actions. It aims to support EU policies and legislation with the objective of contributing to a green, digital and resilient single market as well as the EU's international objectives.

In 2019, the EU formulated the policies of green transition and digital transition. Centered on these policies, the European Commission identified 8 priorities amongst the 72 actions in the standardization area, namely the high performance computing and European quantum communication infrastructure, critical raw materials, trusted Data, digital identity, air-to-air conditioning and heat pumps, cybersecurity, hydrogen technologies and components, and electrical vehicles charging infrastructure. The 2024 annual Union work programme emphasizes the implementation of the European Standardization Strategy, and standards development in strategic areas such as critical raw materials, quantum technology and artificial intelligence. These standards will play a key role in improving European industrial competitiveness, fostering economy and ensuring security.

CEN and CENELEC

Based on the European policies and laws, the goals of green and digital transitions, and the 2024 annual Union work programme, CEN and CENELEC also formulated their 2024 work programme.

CEN and CENELEC's work priorities include hydrogen, artificial intelligence, critical raw materials, data interoperability, and education on standardization.

CEN and CENELEC will also continue to implement the CEN and CENELEC Strategy 2030, whose priorities focus on digital transformation, business model innovation and improving the application rate and visibility of European standards. On March 5, 2024, the European Court of Justice delivered its judgment in Case C-588/21 P concerning public access to Harmonized Standards under Regulation 1049/2001. This will have a huge impact on European standardization organizations and on the business models of standardization bodies in the Member States.

For 2024 specifically, the following three Strategic Projects have been approved for implementation: 1. Timely Citation of Harmonized Standards; 2. Enabling Digital Transformation Strategy; 3. High-Level Forum (HLF) Rapid Response Mechanism. At the same time, they take European wind energy, hydrogen energy, raw materials strategy and legislative proposals as key areas of participation in the formulation of EU policies and regulations. In terms of international cooperation, CEN and CENELEC make it clear that they will continue to cooperate with ISO, IEC and other regions and countries such as Japan, China, the Gulf states, Africa and India. CEN and CENELEC will host a number of events in 2024, such as an alternative fuel infrastructure workshop, harmonized standards training, a cybersecurity standardization conference and the sixth Standards + Innovation Awards. CEN and CENELEC are well aligned with the standardization objectives of

the European Commission as most of the eight priorities for standardization set by the European Commission are reflected in the work of CEN and CENELEC.

ETSI

ETSI used to focus on GSM standardization. However, with the ongoing digital transition, and the evolution of communication standards and digital technologies, ETSI is increasingly involved in the development of information technology standards. In 2023, ETSI published the Work Programme 2023-2024, which covers the work plan of more than 100 technical bodies. The focus is placed on the areas such as emergency communications, driverless cars, smart building, and cybersecurity of connected devices. Now digital connectivity is everywhere and digital transition is the top priority of the standardization.

New technologies such as AI, automated driving and metaverse are closely related to and rely on the communications standardization work. In this respect, enabling groups in ETSI to develop software in support of standardization—including open-source software development—is a big step forward to enhance the quality and timeliness of the deliverables.

The work programmes of the EC, CEN, CENELEC and ETSI are complete, all of which mentioned the cooperation with China. SESEC also made our own work plan for this year. The priorities include: 1. help to build the long-term, stable trust and cooperation relationship between the European and Chinese standardization communities; 2. under the framework of the cooperation agreement between SAC and CEN/CENELEC, facilitate the establishment of cooperation in areas of mutual interest; 3. enhance the governmental communications and dialogue based on the regulatory dialogue and standardization working group between the SAC and the European Commission.

■ Cooperation and communication plan with China

Last year, bilateral talks between SAC and the EC were held in Brussels, Belgium. This year's bilateral talks will be convened in Beijing, China. We will build on this platform to establish a bridge for good cooperation between China and Europe, promoting high-level visits between the two sides. Additionally, certain meetings may be held offline, as part of the specific work in high-level forums.

We also plan to hold an EU-China digital standardization forum to expand mutual understanding and communication between the two sides. Discussions are underway between the SESEC project, the European Chamber of Commerce, and the China Academy of Information and Communications Technology (CAICT) to hold 5-6 EU-China digital standardization forums this year, covering topics such as artificial intelligence, cybersecurity, and future networks. We have made relatively good plans for this.

Furthermore, based on the cooperation agreement renewed in 2021, ETSI and China Communications Standards Association (CCSA) will conduct standardization exchanges from time to time. Both ETSI and CCSA are formal members of 3GPP, and the 3GPP annual meeting will be held in June in Shanghai, China, serving as an important platform for EU-China standardization

cooperation.

Under the cooperation framework between CEN/CENELEC and SAC, good cooperation has been achieved in working groups such as the EU-China elevator standardization group. Whereas, European standardization organizations all suggest that the best platform for Sino-European standardization cooperation is within ISO and IEC, as standards developed by ISO and IEC have global applicability.

■ Suggestions on China's standardization work

Firstly, the *National Standardization Development Outline* sets a goal that the adoption rate of international standards should exceed 85%. European standardization bodies and the business community welcome this measure, as it will greatly promote standardization work. At the same time, we hope that the Chinese industry can apply more international standards. Most European companies have fully applied ISO and IEC standards and hope to enter the Chinese market by using international standards, which is a very urgent and practical desire for European companies.

Secondly, European companies are allowed to participate in the national standards development, but we have noticed that the work procedures of some technical committees need to be improved. Take the voting process for example. In some technical committees, the voting may not be fully conducted, or the opinions of some companies may not be received in a timely manner or not be fully discussed. We hope that SAC can provide more guidance and assistance to technical committees in the standards development process to help them improve voting procedures or achieve the consensus-building processes. Some foreign companies were not invited to participate in meetings held by standards development groups, which is also an issue.

Thirdly, regarding the foreign language versions of national standards. Many foreign companies have to repeatedly translate Chinese national standards, which is a waste of social resources. If SAC could organize more translations and publish the English versions of more standards, it would be greatly appreciated.

Yu Xinli's comments:

Through Dr. Betty Xu's introduction, we have gained insights into the focus of standardization work of various European organizations this year, as well as their cooperation plans with China. I hope that the communication between Sino-European standardization institutions can be strengthened to carry out more practical cooperation. I also hope that the SESEC project can continue to serve as a bridge, helping both China and Europe to better understand each other's standardization dynamics.



Mr. Xu Fang

Chief Representative of ANSI in China

Work plan and key tasks of ANSI in 2024

Bringing diverse stakeholders together is at the heart of everything ANSI does, and it's fundamental to a flexible, open, and effective standardization system—particularly in such complicated, transformative times. In 2024 ANSI will continue to place a high priority on this, and through interactive discussions, participants from diverse sectors and forums can explore how the standards community can best navigate a changing landscape, and what can be done collaboratively to assure the global standards infrastructure is protected.

In 2022 the ANSI Board of Directors launched an effort to identify opportunities and challenges presented by the evolving standards landscape. Following a year of extensive work by Board Focus Groups to assess needs and propose actions, in 2023 the Focus Group leads aligned on an overarching, comprehensive recommendation: ANSI should launch an institute-wide campaign to educate and raise awareness about the urgent challenges to the standardization system due to the increasing politicization of standards and inform stakeholders about how to partner with ANSI and the standards community to address concerns.

A set of recommended actions were identified that are intended to:

- Educate and raise awareness on how to effectively leverage standards;
- Work collaboratively with policy makers to assure that their solutions to address shortcomings are directed to specific organizations where there are genuine issues that have not been or cannot be resolved;
- Assure that standards organizations' safeguards (i.e., procedures, policies, controls) are continually reviewed and pressure-tested so they remain fit for purpose.

ANSI has initiated these efforts, and will continue this year, working with our members and partners to assure the integrity and efficacy of our system and drive the collaboration and resilience needed to thrive in a changing standards landscape. Stay tuned to ANSI news for updates on progress.

■ Cooperation and communication plan with China

Robust and effective U.S. leadership and engagement in international standards activities is, as always, a priority for ANSI. In addition to active representation on behalf of U.S. experts in ISO and IEC, ANSI has built long-standing relationships with standards bodies and governmental entities around the globe and continually works to strengthen those connections, engage with new trading partners, and increase opportunities for U.S. industry and government. We are proud that one of our longest standing cooperative programs is with China.

ANSI continues to engage with Chinese government and other stakeholders. We currently hold MOU agreements with key agencies such as SAC, CNCA, CNIS and CATARC, and plan to continue meeting and collaborating with each of these organizations. In addition, we have resumed our annual ANSI's appreciation dinner and delegation/meetings with our Chinese government counterparts. Furthermore, we continue to promote cooperation via our ANSI in China Newsletter quarterly release in both English and Chinese.

■ Expectations for standardization cooperation with China


Active participation in international standards-setting helps inform a country's ability to adopt and reference international standards, and is therefore encouraged as best practice to support the needs of the global market. ANSI has strongly supported this message with all of its counterpart organizations around the world, including with China, and we support cooperative activities in international standards setting, as a path to avoid unique national standards. In addition, leveraging ANSI's MoU relationships with Chinese organizations, ANSI provides access to a platform for the public and private sector stakeholders from the U.S. and China to improve understanding, effectively communicate, and obtain valuable information on critical issues.





■ Suggestions on China’s standardization work

ANSI and its members have been closely monitoring the recent developments in China, such as the publication of the *National Standardization Development Outline* in 2021, its *Action Plan*, and the subsequent updates to key underpinning policies and regulations. We have submitted official comments to many of the guidance documents as they have been released, particularly those concerning national standards, industry standards, association standards, and enterprise standards.

We take note of the most recent developments in association standards, including in particular the 2023 Provisional Regulation on the Adoption of Association Standards for Recommended National Standards. This process has been of high interest to ANSI members and stakeholders, and ANSI looks forward to engaging with the relevant Chinese organizations to hear their opinions on the progress of the implementation, and any feedback from users of the standards. In general, in the development of guidance for association standards, ANSI has encouraged China to look to existing examples such as the ANSI Essential Requirements for accreditation, for information on how to ensure that the processes and procedures used by standard developing organizations meet the WTO principles and other best practices. 

Yu Xinli’s comments:

Mr. Xu gives a comprehensive introduction to the work plan and key tasks of ANSI in 2024, and its cooperation plan with China. It will help Chinese standardizers and stakeholders to have a better understanding of the U.S. standards system and ANSI, and probably will help find new cooperation opportunities. Thanks a lot for the suggestions about the development of association standards as well.

Introduction of SESEC Project



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

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

- **Promote European and international standards in China;**

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

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