SESEC IV
Selected Translation
MIIT Priorities for Standardization Work in 2021

April | 2021

Seconded European Standardization Expert in China
(SESEC)

Key Points Regarding Standards on Industry and Information Technology in 2021

The general requirements for standards on industry and information technology in 2021 are to adhere to the guidance of Xi Jinping's Thought on Socialism with Chinese Characteristics for a New Era and to comprehensively implement the spirit of the 19th National Congress of the Communist Party of China, as well as the second, third, fourth and fifth plenary sessions of the 19th Communist Party of China Central Committee. Standards on industry and information technology will be based on the overall construction of China as a manufacturing power, a cyberpower, a quality power and a digital China. With the aim of promoting high-quality development, the goals are to vigorously upgrade standards, strengthen the overall promotion of standards for the industry chain as a whole, intensify the formulation of key and basic public welfare standards, accelerate the review and revision of old and outdated standards, vigorously promote advanced association standards, support active participation in global standardisation activities, advance the industrial base, modernise the industry chain and enhance the independent and controllable capacities of key industries and segments.

The main expected objectives are to launch the formulation and revision of over 1,500standards, including more than 800 standards geared to key and basic public welfare and aimed at supporting the construction of a manufacturing power, a cyberpower, a quality power and a digital China; to carry out application and demonstration projects for over 100association standards in more than 10 key areas; to increase the conversion rate of international standards in key areas up to 90% and encourage Chinese enterprises and institutions to take the lead in formulating over 100 international standardisation projects.

I. Strengthening the coordinated promotion of standards for the industry chain as a whole

The objectives are as follows:

1. Speed up the establishment of standard atlases of the whole industry chain for key industries. Focusing on the atlases of key industries, stabilise the industry chain and unblock the supply chain, map out existing standards and standards which are being implemented in relevant segments; identify the shortcomings of existing standards, analyse new demands for standards and develop standard atlases, reflecting the key segments, technical consensus and development trends of the industry chain and supply chain.

2. Push forward construction of standards systems with a focus on the industry chain as a whole; break the traditional barriers between industries and sectors, break through bottlenecks in the industry chain and deepen cooperation among upstream, midstream and downstream standards in the industry chain; accelerate the establishment and improvement of cross-industry and cross-field standardisation cooperation

mechanisms; encourage leading enterprises to drive upstream and downstream small and medium-sized enterprises to jointly develop standards; promote the formation of a unified and coordinated standards system.

II. Carrying out research and development into standards for basic and key areas

The objectives are as follows:

3. Strengthen the development of basic and mandatory standards for industries; develop standards for new materials and key materials, such as high-end steel materials, high-temperature alloy materials for aero-engines, new chemical materials, aluminium materials for civil aircraft, graphene, special electronic materials, natural fibres and recycled chemical fibres; improve the technical level of standards on rare earth materials, evaluation of functional materials under extreme environments for steel and fertilizers and support development of technology standards on short process steel-making in electric arc furnaces; strengthen the formulation of standards for mother machines, such as machine tools, basic manufacturing equipment, medium and high-class CNC systems and servomotors, as well as instruments, basic spare parts, electronic components, industrial software and special equipment; speed up the formulation and revision of sectoral standards on industrial engineering; accelerate the drafting of mandatory national standards for key consumer products, automobile safety, limits on the content of toxic and hazardous substances, limits on energy consumption per unit of product and on product energy efficiency, civil explosive products, cement, graphite and fluorite mining and general radio frequency technical requirements for wireless charging devices.

4. Accelerate the development of standards which are urgently needed for the transformation and upgrading of traditional industries; vigorously promote the development of standards on the intelligent manufacturing of ship assemblies, intelligent ships, liquefied gas ships, power equipment, general petrochemical equipment, heavy machinery, energy-saving and environmental protection equipment, agricultural machinery and equipment, fertilizer, elderly supplies and steel logistics; support the development of standards on general modules for industrial robots, perception, moving and operation modules, interface and security, as well as on commercial mobile cleaning robots, disinfection service robots, pick-up, transferring and grinding robots in the die-casting industry; strengthen the formulation of safety standards for passenger vehicles, commercial vehicles, hazardous chemical transport vehicles and key components; increase the supply of standards in key areas such as textiles, light industry and food and promote the consumer goods industry to increase varieties, improve quality and create brands; speed up the formulation of supporting standards on test methods under the guidance of the mandatory national standards for civil explosives; significantly improve product quality standards and constantly improve key indicators, such as the reliability, stability and functionality of products.

5. Strengthen the development of standards for the digital transformation and integration of the manufacturing industry; carry out research into standards relating to the integration of informatisation and industrialisation, digital management of supply chains, digital management and migration to the cloud of production equipment and digital simulation of manufacturing industry; concentrate efforts on formulating key standards for the application of new technologies in intelligent manufacturing, supply chain collaboration, digital twin, supplier classification, integrated services and digital workshops; concentrate efforts also on formulating standards for the equipment and application of intelligent manufacturing technologies in industries such as steel, petrochemicals, non-ferrous metals, building materials, textiles, automobiles, household appliances and furniture, electrical engineering and civil explosives; strengthen research into standards for the application of artificial intelligence key technologies within the manufacturing sector and carry out research into service-oriented manufacturing standards; promote the coordinated development of industrial Internet, identity

resolution, platform and security standards; vigorously carry out research into standards for 5G plus industrial Internet and industrial Internet big data centres and support the formulation of application standards in industrial Internet plus safety production.

6. Promote the standardisation development of new technologies, new industries and new infrastructure; conduct research into and formulation of standards on 5G and on next-generation mobile communication, IPv6+ and next-generation Internet, domain name service and management, high-speed broadband, future network, interconnection, mobile Internet of Things, cloud computing, big data, data centres, blockchain, quantum information, satellite communication and navigation positioning, network and data security, security protection for critical information infrastructure, personal information protection, intelligent terminal protection for minors, information technology services, human-computer interaction and information accessibility, new radio technology and electromagnetic compatibility, radio transmitting equipment, electric vehicles and charging and battery swapping systems, fuel cell vehicles, additive manufacturing, UAV, integrated circuits, advanced computing, new displays and talent cultivation; steadily promote the development of integrated and innovative standards for the Internet of Vehicles (intelligent and connected vehicles), new application scenarios of ultra-high definition videos, smart cities, smart homes, smart health and elderly care, 5G plus health care and information consumption.

7. Develop standards in industrial low-carbon and green manufacturing; conduct research into and formulation of standards for low-carbon, carbon emissions, energy saving, energy efficiency improvement, water conservation, water efficiency improvement and comprehensive utilisation of resources in industries such as steel, building materials, non-ferrous metals, petrochemicals, light industry, textiles, electronics and other industries; foster research and development of standards on green low-carbon industrial parks, green factories, green design products, green supply chain management, green building materials evaluation, industrial energy conservation supervision, energy conservation diagnosis, renewable energy utilisation, industrial wastewater utilisation, construction of green data centres, recycling of power batteries, re-manufacturing, etc.; draw up standards on vehicle fuel consumption limits, test methods and identification; start research into life cycle assessment standards for steel, light industry, automobiles, textiles and other industries.

III. Optimising and improving the supply structure and level of standards systems

The objectives are as follows:

8. Draw up guidelines for the construction of mandatory national standards systems. On the basis of integrating and simplifying mandatory standards, focus on the development of guidelines for the establishment of mandatory national standards systems for industry and information technology relating to product security, ecological environment security, network and data security, safety production of ships, aircraft, civil explosives and communication industries; target and draw on the experience of international advanced standards and further define the framework structure, standard project planning and schedule of mandatory national standards systems.

9. Strengthen top-level design of standards systems in key areas; revise the guidelines and roadmaps for establishing standards systems in the fields of intelligent manufacturing, industrial Internet, industrial energy saving and green development, electric vehicles, Internet of Vehicles (intelligent and connected vehicles), smart homes, cloud computing, lithium-ion batteries and photovoltaic – in accordance with the needs of technological progress, rapid industrial development and integrated development; start the development of guidelines for establishing intelligent manufacturing standards systems in steel, petrochemicals, non-

ferrous metals, building materials, textiles, automobiles and power equipment industries; actively push forward guidelines for establishing standards systems in the fields of intelligent ships, IoT basic security, 5G plus industrial Internet, 5G plus healthcare, industrial Internet plus safety production, blockchain, etc.

10. Optimise and improve the supply structure of sectoral standards systems; give priority to the formulation of key and basic public welfare standards, reduce gradually the number of sectoral standards on general technologies and products and increase the proportion of key and basic public welfare standards by 5% year-on-year; strengthen the review and revision of sectoral standards, with comprehensive reviews and timely revision of sectoral standards that have been implemented for more than five years; encourage the modification of sectoral standards with amendments and improve the speed of the revision process.

11. Vigorously cultivate and develop high-quality association standards; continue to implement 100 demonstration projects for the application of association standards; guide social organisations to develop innovative association standards in advance, in order to meet the urgent needs of industry and the market in a timely manner; provide all-round support for the formulation of advanced association standards with a technical level superior to national and sectoral standards; encourage the evaluation of association standards by quality grading; foster the realisation of 'high price for high quality'; coordinate professional standardisation organisations to evaluate and improve the effectiveness of demonstration projects for the application of existing association standards.

IV. Continuing to participate closely in global standardisation activities

The objectives are as follows:

12. Continuously improve the consistency level of domestic and international standards; evaluate and analyse the conversion of international standards within the field of industry and information technology to identify further weaknesses; work towards the highest level of international standards, raise the technical level of domestic standards to advanced international standards and increase the conversion rate of international standards in relevant fields to 90%, focusing on key areas such as weak segments and consumption upgrade, in combination also with the actual situation of industrial development.

13. Take an active part in the formulation of international standards and technical regulations; support domestic industry associations, enterprises and institutions to participate closely in the formulation of international standards and technical regulations of the International Telecommunication Union (ITU), the International Organization for Standardization (ISO), the International Electrotechnical Commission (IEC) and the World Forum for Harmonization of Vehicle Regulations (WP29); establish international standards together with international counterparts, contribute actively to China's technical proposals and improve the risk prevention and controllability of international standards.

14. Support exchanges and cooperation in the field of standardisation between China and foreign countries; encourage domestic associations and professional standardisation organisations to strengthen exchanges and cooperation with international counterparts, focus on areas of common concern, reach consensus on standardisation and constantly expand the circle of friends of international standardisation; concentrate efforts on the needs of *Belt and Road* construction, organise and formulate foreign language versions of sectoral standards and mandatory national standards; promote the internationalisation of technology, products, engineering and services in China.

V. Promoting actively the effective implementation of key standards

The objectives are as follows:

15. Concentrate efforts on the implementation and evaluation of key standards; evaluate the technical level and implementation effect of mandatory national standards that have been implemented for more than two years in key areas; accelerate the establishment of a statistical and analytical reporting system for the implementation of key standards; continue to promote the full-text disclosure of sectoral standards and encourage industry associations and technical organisations for standardisation to conduct promotion and training on key standards for producers, users, testing and certification institutes, etc.

16. Support the adoption of advanced applicable standards; promote the inclusion of national standards, sectoral standards and advanced association standards within the formulation of industrial policies and plans; encourage enterprises to implement advanced standards in R&D, production and management; guide enterprises across the industry chain to work towards standards formulation and implementation; evaluate association standards through quality grading, strengthen comprehensive quality management, improve the quality of products and services, enhance awareness of standardisation.

VI. Creating a good environment for standards and policies

The objectives are as follows:

17. Further consolidate the responsibilities of all parties involved in standardisation; evaluate industry associations, standardisation technical committees, standardisation associations and professional standardisation institutions which undertake tasks such as examining sectoral standards; publish the list of preliminary examination agencies for sectoral standards and clarify the business scope, terms of reference and requirements; further consolidate the responsibilities of standardisation technical committees (working groups) and standardisation associations throughout construction, formulation, review and explanation of the standards system.

18. Strengthen the supervision and guidance of standards formulation; organise a comprehensive clean-up of implementation of the sectoral standardisation project plan; monitor and urge completion of standardisation projects which have not been completed on schedule and complete them within one year in principle; adjust or cancel promptly any sectoral standard projects that cannot be completed on account of objective factors; suspend from undertaking new sectoral standard formulation tasks any standardisation technical committee involved in sectoral standard projects that are overdue by more than2 years without proper reason and accounting for more than 10% of sectoral standard projects.

19. Strengthen the construction of sectoral standards systems and mechanisms; strengthen the whole process of behaviour norms and examination time assessment, from establishment of sectoral standardisation projects to their submission for approval; establish a fast track for sectoral standards on new technologies and new products and ensure that various enterprises, including foreign-invested enterprises and small and medium-sized enterprises, equally participate in the formulation of sectoral standards in line with the law; encourage high-quality enterprises, such as leading manufacturing enterprises, to participate in the formulation of relevant standards; accelerate promulgation of the *Measures for the Administration of Professional Standardisation Technical Committees* of the Ministry of Industry and Information Technology and regulate the establishment, adjustment and transition of relevant professional standardisation technical committees.

20. Promote the informatisation of sectoral standards; on the basis of existing practices, fully implement the informatisation management of the whole process for sectoral standards, from proposal to

establishment, drafting, comments solicitation, technical examination and submission for approval; strengthen the real-time supervision of the sectoral standard formulation process; strengthen the supervision of relevant technical committees for standardisation (working groups) and standardisation associations, and urge them to disclose in a timely manner relevant information on the standardisation process for sectoral standards.

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 three SESEC projects in China, SESEC I (2006-2009). SESEC II (2009- 2012) and SESEC III (2014-2017). In April 2018, SESEC IV was officially launched in Beijing, China. Dr. Betty XU was 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 sectorial project priorities by the SESEC project partners: Internet of Things (IoT) & Machine-to-Machine(M2M) communication, communication networks & services, cybersecurity & digital identity, Smart Cities (including transport, power grids & metering), electrical & electronic products, general product safety, medical devices, cosmetics, energy management & environmental protection (including eco-design & labelling, as well as environmental performance of buildings).

SESEC IV China Standardization and Technical Regulation Bimonthly Newsletter

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

In this Bimonthly Newsletter

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