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Index

Preview of SESEC's Upcoming Events

Webinar 3: China Cyber Security standardization 2022

Time and Date: 10:00 am, 18 January 2023 (CET, Brussels)
Presenter: Dr. Betty XU
Language: English
If you are interested in this topic, please register your participation via the following link:
https://us06web.zoom.us/webinar/register/WN_0k4mjGXxRxCQe6vaLmHkmg

Webinar 4: China ICV Standardization

Time and Date: 10:00 am, 14 February 2023 (CET, Brussels)
Presenter: Dr. Betty XU
Language: English
If you are interested in this topic, please register your participation via the following link:
https://us06web.zoom.us/webinar/register/WN_IF_joqwRQECki6f-tgOszg

Webinar 5: China Standardization Outline Implementation

Time and Date: 10:00 am, 07 March 2023 (CET, Brussels)
Presenter: Dr. Betty XU
Language: English
If you are interested in this topic, please register your participation via the following link:
https://us06web.zoom.us/webinar/register/WN_x3Na49EGQa-v_GpJAFjmuA

Takeaways

Draft for Comment on Disposal Guidelines for Patents Related to Association Standards

On 18 October 2022, the China Association for Standardization (CAS) released a call for public comments on the *Disposal Guidelines for Patents Related to Association Standards (Draft for Comments)*. The Guidelines, which are effectively a draft of national standardisation technical document, were compiled based on three year of experience in implementing the association standard T/CAS 2 – which shares the same name. The main difference is that the new draft, compared to the original one, clarifies the responsibility of all main actors involved and the relevant disclosure procedures.

China Released Certification Rules for Personal Information Protection

On 18 November 2022, the Cyberspace Administration of China and the State Administration for Market Regulation released the *Implementation Rules for Personal Information Protection Certification*. It is a supporting document for the implementation of the *Personal Information Protection Law*, which allows certification schemes as one main method for the cross-border transfer of personal information (PI). The purpose is to increase the obligations of PI processors and promote the rational use and transfer of PI. Generally, the Certification Rules set clear requirements and procedures for the applicants and certification bodies.

China Starts to Establish Basic System for Data

On 19 December 2022, the Central Committee of the Communist Party of China and the State Council issued the *Guidelines on Building Basic Data Systems to Better Leverage the Role of Data as a Production Factor*. With the exponential growth of data and its value, the release of this document is a signal of China's commitment to build a system regulating the usage of data and promoting the compliance and efficient circulation of data – which in turn will have positive implications on the economy. The Guidelines focus on basic data system construction, data sharing, high-quality supply of data, data circulation, data governance, and opening-up and cooperation.

Overview of standards for China's Data Security Law

On 1 September 2021, the *Data Security Law* was officially enforced in China. This Law puts forward requirements on establishing a standards system for data security, and to participate proactively in international data security standardization activities. Since then, TC 260, as China's standard development organizations in charge of cybersecurity, has formulated 26 national standards (7 of them already released) for data security, released 3 technical documents and practical guidelines, and participated in formulation of 5 international standards.

China to Set Standards for WLAN

China established the World WLAN Application Alliance (WAA) in September 2022, with the aim of setting up a China-led international WLAN industry platform. On 4 November, WAA held its kick-off meeting in Shenzhen; themed as "jointly creating new WLAN experience", it explored how to establish a scenario-based certification system and a complete performance standards system for WLAN, thus creating the best WLAN application experience for users.

China's Measurement System for Carbon Peaking and Carbon Neutrality Standards

On 18 October 2022, the State Administration for Market Regulation (SAMR) partnered with 8 other ministries and jointly issued the *Implementation Plan for Establishing and Improving the Measurement System for Carbon Peaking and Carbon Neutrality Standards*. The legal basis of the Implementation Plan covers a series of national issues such as the *Working Guidance for Carbon Dioxide Peaking and Carbon Neutrality in Full and Faithful Implementation of the New Development Philosophy*, the *Outline for National Standardization Development*, the *Action Plan for Carbon Dioxide Peaking Before 2030*, and the *Measurement Development Plan (2021-2035)*.

MIIT Revises Market Access Requirements for Automobiles

On 28 October, MIIT issued the *Regulations on the Administration of Market Access of Road Motor Vehicles (draft for comments)*. Public comments are allowed until 27 November 2022. The draft regulations strengthen the supervision on and raise the market access threshold of intelligent connected vehicles (ICV).

SAC Interprets the Standard of 'General Safety Requirements for Household Service Robots'

In recent years, China's household service robot industry has developed rapidly, and the sale volume of household service robots has successively entered the top 10 rankings for online home appliance sales. The *National Standardization Development Outline* and *Key Points of National Standardization in 2022* both require the development of urgently needed standards in the fields of intelligent robots and smart home appliances. In this context, the establishment of a standard system for home service robots has become a standardization hot spot.

Horizontal Policy and Cooperation

1. Sino-German Standardization Cooperation Commission Holds the 10th Meeting

#Standardisation Cooperation

On 21 November 2022, the Sino-German Standardization Cooperation Commission held the 10th meeting in a hybrid format (online and offline). The meeting was moderated by Dr Thomas Zielke, Head of the National and International Standardization and Patent Policy of the German Federal Ministry for Economic Affairs and Climate Action (BMWK), and Mr Guo Chenguang, Deputy Director of the Department of Standards Innovation Regulation of the State Administration for Market Regulation (SAMR).

The meeting introduced the standardization-related content of the *14th Five-Year Plan for the Modernization of Market Supervision*. It also presented the achievements in the past year of the four sub-working groups, including the China-Germany Standardization Strategy, Intelligent Manufacturing/Industry 4.0, E-mobility, and Intelligent Connected vehicles; it also summarized the progress of China-Germany standardization cooperation in the fields of civil aviation, autonomous and artificial intelligence application ethics, quantum technology, all-electric society, service industry, heating gas, smart energy, data audit, and geometrical product specifications. In-depth discussions were also organized on standardization education and capacity evaluation, hydrogen energy, management consulting, medical refrigeration equipment and other technical fields. The main outcome of the meeting was consensus on the positive impact that active information exchange between China and Germany on standards, policies and trends, combined with technological cooperation, have on international standardization activities as well as international economic and trade exchanges. Therefore, the two sides will continue to deepen coordination on standards and work for more practical outcomes.

More than 80 representatives from the BMWK, the German Institute for Standardization, the German Commission for Standardization of Electrical, Electronic and Information Technologies of DIN, and relevant German enterprises, attended the meeting, together with representatives from SAMR's Department of Standards Technology Regulation, Department of Standards Innovation Regulation, as well as representatives from relevant scientific research institutions, industry associations and enterprises.

2. Online Meeting Between SAC and ISO

#International Standards #Standardisation Cooperation

On 3 November 2022, Tian Shihong, China's Vice-Minister of the State Administration for Market Regulation (SAMR) and Administrator of SAC, held an online meeting with Sergio Mujica, the Secretary-General of the International Organization for Standardization (ISO).

Secretary-General Sergio Mujica gave a detailed briefing on this year's ISO Annual Meeting and Council meetings, while highly appreciating and recognizing China's active participation in ISO governance and international standardization activities. Administrator Tian Shihong reaffirmed China's commitment as a permanent member of ISO, actively fulfilling its responsibilities and obligations, deeply participating in the formulation of ISO governance and policy rules, and contributing to the sustainable development of ISO and the implementation of the ISO Strategy 2030.

3. Draft for Comment on Disposal Guidelines for Patents Related to Association Standards

#Association Standards

On 18 October 2022, the China Association for Standardization (CAS) released a call for public comments on the *Disposal Guidelines for Patents Related to Association Standards (Draft for Comments)* (hereinafter referred to as the Guidelines). The Guidelines, which are effectively a draft of national standardisation technical document, were compiled based on three year of experience in implementing the association standard T/CAS 2 – which shares the same name. The main difference is that the new draft, compared to the original one, clarifies the responsibility of all main actors involved and the relevant disclosure procedures. Such clarification will undoubtedly facilitate cooperation and communication among associations, standard participants, patent owners, and standard implementers.

Currently, official documents related to disposal of patents in national standards are *GB/T 20003.1-2014 Special procedures for the development of standards — Part 1: Standard related to patents*, and the *Interim Provisions on the Administration of National Standards Involving Patents*. Unlike these, the Guidelines target association standards: compared with national standards which often target the most fundamental aspects of products and services, association standards are formulated in response to higher level market requirements and needs, thus they are often linked to patents. At the same time, the Guidelines emphasize patent disposal management, comprehensively listing all the items to be included in the association's patent disposal management rules – including how these should be publicized and followed. Relevant associations will significantly benefit from these clarifications when developing association standards.

More specifically, the Guidelines stipulate the key terms and their definitions, disposal principles, general goals, management and responsibility, as well as the patent disclosure rules. Half of the text is dedicated to the procedures of patent disclosure across different development phases of association standards. The main rationale is that patent disclosure throughout all major phases (i.e. drafting, technical review, release and implementation) shall involve coordination with patent owners to verify their willingness to license patents, possible alternative solutions, as well as the inclusion of relevant disclosure and licensing forms if patents are effectively included in the standard (examples are annexed to the Guidelines). To facilitate the process, the Guidelines specifically list all the items that associations, standard participants, patent owners, and standard implementers must pay attention.

In short, the Guidelines represent an improved version of the association standard T/CAS 2. They streamline the original text, clarifies the roles and responsibilities of the main actors involved in patent disposal, as well as patent disclosure procedures. The Guidelines are expected to facilitate relevant associations in handling patent-related association standards, ultimately contributing to a better response to market demands.

Digital Transition

4. China Released Certification Rules for Personal Information Protection

#Personal Information

On 18 November 2022, the Cyberspace Administration of China and the State Administration for Market Regulation released the *Implementation Rules for Personal Information Protection Certification* (hereinafter referred to as "Certification Rules"). It is a supporting document for the implementation of the Personal Information Protection Law, which allows certification schemes as one main method for the cross-border transfer of personal information (PI). The purpose is to increase the obligations of PI processors and promote the rational use and transfer of PI. Generally, the Certification Rules set clear requirements and procedures for the applicants and certification bodies.

The Certification Rules consist of seven parts, including application scope, standards basis, certification modes, certification procedures, certificates and marks, and responsibilities. In particular, the certification is based on the standards *GB/T 35273 Information security technology — Personal information security specification domestic information processors*, and *TC260-PG-20222A Security Certification Specification for Cross-border Personal Information Processing Activities*. The former, GB/T 35273, serves as fundamental requirement, while the latter, TC260-PG-20222A, focuses on the requirements for outbound PI transfer. Thus, outbound PI transfer activities need to meet both standards if the relevant processors intend to apply for the certification scheme. In addition, the certification mark granted upon completion of the certification is different, depending on whether the PI processing activity involves cross-border PI transfer or not: "PIP CB" in the former case, and "PIP" in the latter case.

The latest version of GB/T 35273 was released in 2020. It emphasises the protection of the rights of individuals, outlines terms, definitions and basic principles, and explicitly elaborates the requirements for PI processing in different situations, the response to security incidents, as well as the management obligations for relevant organisations. As to TC260-PG-20222A, the latest version (Version 2.0) was issued on 6 December 2022: compared to the previous version, it makes adjustments in cross-border data transfer agreements and PI protection impact assessment, in line with the *Measures for the Security Assessment of Cross-border Data Transfer* and the *Standard Contracts Provisions for Cross-border Transfers of Personal Information (draft for comments)*.

In short, the release of the Certification Rules completes the PI protection certification scheme, by clarifying the requirements and procedures for certification. Once the list of certification bodies is approved and released, certification activities will then be formally launched. Foreign companies are advised to closely monitor these developments for cross-border data transfer, and adjust accordingly, as the new rules are being gradually but effectively implemented.

5. China Starts to Establish Basic System for Data

#Data Management

On 19 December 2022, the Central Committee of the Communist Party of China and the State Council issued the *Guidelines on Building Basic Data Systems to Better Leverage the Role of Data as a Production Factor* (hereinafter referred to as the Guidelines). With the exponential growth of data and its value, the release

of this document is a signal of China's commitment to build a system regulating the usage of data and promoting the compliance and efficient circulation of data – which in turn will have positive implications on the economy. The Guidelines focus on basic data system construction, data sharing, high-quality supply of data, data circulation, data governance, and opening-up and cooperation.

The importance of data in China has gradually evolved, from being viewed merely as a resource, then as an important asset, to a new fundamental production factor. As such, data has the unique characteristics of being intangible and non-consumable: it can be reproduced indefinitely at close-to-zero cost, posing new challenges to the traditional systems of property rights, circulation, distribution, governance and so on. Against this backdrop, it has become urgent to build production relations by establishing regulating systems reflecting the development of digital productive forces, thus unleashing the potential growth at the digital age. Specifically, the Guidelines point out the establishment of four basic systems: data property rights system, data circulation and trading system, income distribution system, and governance system.

According to the Guidelines, the data property rights system in particular will highlight the right to use and circulation in a bid to further stimulate data usage and circulation, which accounts for a large share of data-related activities. Specifically, the data property rights are separated into data resources possession rights, data processing rights, and management rights for data-related product. Furthermore, the registration of the property right system will apply to the right to use management as well. The registration mechanism related to data can be traced back to the year 2002 when the government information resources catalogue system started to be built. With the information and communication technology advancement and industrial development, however, the share of government data resources was quickly outnumbered by the industrial ones – which now account for 80% of total amount of data resources. It is expected that the new registration data system covering data from both the government and the industry is more suitable for today's digital economy.

The circulation and trading system will be constructed from four perspectives, including rules, market, ecology, and cross-border data transfer. Regarding the last point, the Guidelines require the government to proactively participate in international and regional rule-making for cross border data transfer, as well as to promote bilateral or multilateral negotiation in this field. Currently, cross-border data transfer management is built on the overarching legal framework of the *Cybersecurity Law (2016)*, the *Data Security Law (2021)* and the *Personal Information Protection Law (2021)*. As supporting measures, government authorities also released the *Measures for the Security Assessment of Cross-border Data Transfer, the Certification Requirements for Cross-border Transfer of Personal Information*, and the *Standard Contract Provisions for Cross-border Transfers of Personal Information (draft for comments)*. The three main documents define the current rule system for cross-border data transfer, with the aim of improving the efficiency and ensure more effective protection of cross-border data transfer, while guaranteeing national security via either safety assessment (mandatory in some cases), certification schemes or standard contract.

The income distribution system is set to promote efficiency and fair competition, along different stages of distribution. The initial distribution stage shall follow the principle of "who invests and contributes decides who benefits", that is, the distribution income generated from data shall prioritize creators of data value and data usage value. In the secondary distribution and tertiary distribution stages, priority shall be given to the public interest and to relatively vulnerable groups so as to control the disorderly expansion of capital in the data field, as well as other risks and challenges.

The last system, namely the data governance system, shall be designed in a way that allow multiple stakeholders to participate in data management, including government, enterprises, and other relevant stakeholders. The aim is to reduce risks and foster a resilient and inclusive management environment.

To ensure the actions to be implemented, the Guidelines specify the next steps to be taken, including policy formulation, development of the data market, optimization of data-related infrastructure, strengthening of high-quality data supply, and promotion of cooperation among government departments in different regions and levels. As the application of ICT to various industries starts to prevail

on design and manufacturing processes, foreign producers might largely get involved with data generation, process, and cross-border transfer. Therefore, it is strongly recommended to keep monitoring the development of relevant policies and rules, both those existing as well as those forthcoming ones in line with the requirements of the Guidelines.

6. Approved Projects for China's National Cybersecurity Standards

#Cybersecurity

On 30 October 2022, the technical committee of national information security standardization (TC 260) released the *List of Approved Projects in 2022 for National Cybersecurity Standards* (hereinafter referred to as the List). As detailed in the Annex below, the List contains 30 standardization projects in total, among which 17 standards are to be newly formulated, and 13 to be revised. The standards cover various areas, such as cryptography technology, authentication and authorization, information security evaluation, information security management, and big data security management.

Specifically, the standards listed reflect TC 260's support to China's data security mechanisms outlined in *Data Security Law*, which emphasize data grading and classification, data security risk assessment, as well as government data security. Such standards include: *Security requirements for processing of key data; Risk assessment method for data security; Capacity requirements for assessment organization of data security; Security requirements for government data processing*; etc. Other than the *Data Security Law*, approved standardization projects also involve personal data processing, such as *Certification requirements for cross-border transmission of personal information* and *Security requirements for processing of sensitive personal information*.

Furthermore, the list includes the controversial standard project of *Security specification for office devices* (click here to read more about SESEC's news article about its draft). Based on the standard's draft released in April, relevant clauses demand that office devices providers are established within China, fully onshoring their supply chain, and employ "politically-correct" third parties. These clauses might reduce the possibilities for overseas deices providers to participate in government procurement in China. Consequently, the draft aroused worries from major overseas providers. Despite this, China's authorities are determined to go ahead. The standardization project is now officially initiated, and it remains to be seen whether relevant articles and clauses in the draft will be softened or maintained.

In short, the standardization projects listed in the following table have been officially initiated. Relevant enterprises and organizations will, under the leadership of TC 260, proceed with the drafting work, soliciting public opinions once completed.

Annex: List of Approved Projects in 2022 for National Cybersecurity Standards.

No.	Name of the Standard Projects	WG	Newly-drafted/Revised
1	Interconnection of security products framework	WG5	Newly-drafted
2	Controllability evaluation method for security of open source software	WG5	Newly-drafted
3	Technical specification for security operation and maintenance system	WG5	Newly-drafted
4	Requirements for large Internet enterprises personal information protection supervision agency	WG7	Newly-drafted
5	Risk assessment method for data security	WG7	Newly-drafted
6	Capacity requirements for assessment organization of data security	WG7	Newly-drafted
7	Certification requirements for cross-border transmission of personal information	WG7	Newly-drafted
8	Cybersecurity testing and evaluation requirements for critical information infrastructure protection	WG7	Newly-drafted
9	Definition and description of Internet malware	WG7	Newly-drafted
10	Guidelines for cybersecurity insurance application	WG7	Newly-drafted
11	Security requirements for processing of key data	SWG-BDS	Newly-drafted
12	Security requirements for government data processing	SWG-BDS	Newly-drafted
13	Public data openness security requirements	SWG-BDS	Newly-drafted
14	Security requirements for processing of sensitive personal information	SWG-BDS	Newly-drafted
15	Security requirements for automated decision making based on personal information	SWG-BDS	Newly-drafted
16	General framework for confidential computing	SWG-BDS	Newly-drafted
17	Aritificial intelligence computing platform security framework	SWG-BDS	Newly-drafted
18	Security techniques--Hash-function--Part 1:General	WG3	Revised
19	Hash-functions--Part 2:Hash-functions using an n-bit block cipher	WG3	Revised
20	Hash-functions--Part 3:Dedicated hash-functions	WG3	Revised
21	Entity authentication—Part 2: Mechanisms using symmetric encipherment algorithms	WG4	Revised
22	Message Authentication Codes (MACs)—Part 2: Mechanisms using a dedicated hash-function	WG4	Revised
23	Public key infrastructure--Online certificate status protocol	WG4	Revised
24	Security specification for office devices	WG5	Revised
25	Technical specification for network and terminal separation products	WG5	Revised
26	General security technical specification for terminal computer	WG5	Revised
27	Chinese government desktop core configuration specifications	WG5	Revised
28	Security specification of data recovery service for storage media	WG7	Revised
29	Information security controls practice guide	WG7	Revised
30	Security requirements for data transaction service	SWG-BDS	Revised

7. Overview of standards for China's Data Security Law

#Data Security

On 1 September 2021, the *Data Security Law* was officially enforced in China. This Law puts forward requirements on establishing a standards system for data security, and to participate proactively in international data security standardization activities. Since then, TC 260, as China's standard development organizations in charge of cybersecurity, has formulated 26 national standards (7 of them already released) for data security, released 3 technical documents and practical guidelines, and participated in formulation of 5 international standards.

On the occasion of the first anniversary of the *Data Security Law enforcement* (1 September 2022), TC 260 released a form summarizing the progress and achievements of its standardization work, and the support it provides to the implementation of the *Data Security Law*. The form is presented in the Annex below; it includes general mechanisms, specific items, articles of the Law supported, needs for standard, and the standards drafted/revised/released by TC 260. General mechanisms mostly correspond to the name of the relevant chapters in the *Data Security Law*. Those standards indicated with the status "draft" indicate those standardization project which had not yet been officially approved by the time of publication; more information about these projects and their progress is available in TC 260's recently-released *List of Projects for Formulation of National Cybersecurity Standards in 2022* (click here to check SESEC's news article about the list), which shows the approved

standardization project that are ready to get kicked-off.

In terms of recommendations for next steps, TC 260 indicates four major topics: data security-related market safety, as well as other related topics. The advice is only for reference since they are not officially confirmed yet.

Annex: Summary of Standardization Activities Supporting the Implementation of the *Data Security Law*.

technology and product, data security-related risk monitoring and emergency response, data as a production factor and

(Please note that the form indicates information as it was when released on 1 September 2022. Since that time, certain information might have already been updated: for instance, the Security requirements for processing of motor vehicle data has already been released, even though the form below shows "waiting for approval").

General Mechanism	Specific Items	Articles to Support	Needs for Standard	Existing Standards
Data security system	Classification and grading system for data protection	Art. 21	Identify rules and methods for data classification and grading, as well as identification key data and core data so as to protect data in a category- and class-basis; Strengthen the protection for key data.	*Requirements for classification and grading of network data (draft for comment); Rules for identification of key data (draft for review); Security requirements for processing of key data (draft).*
Data security system	Data security risk assessment	Art. 22 and 23	Identify the method, process, and assessment report compliation requirement for data security risk assessment; Formulate critera for data security assessment organisations and personnel management, as well as qulification assessment and technical competence.	*Risk assessment method for data security (draft); Capacity requirements for assessment organization of data security (draft).*

Data security system	Data security risk information monitoring system and early warning system	Art. 22 and 29	Support data security risk information acquisition, reporting, sharing, analysis, research and judgment, monitoring and early warning; Guide data processors to carry out data processing activities to strengthen risk monitoring; Take immediate and remedial measures when data security defects, vulnerabilities and other risks are found.	*Relevant standards for cybersecurity information monitoring and early warning can be referred, for instance, GB/T 36643-2018 Cyber security threat information format; GB/T 32924-2016 Guideline for cybersecurity warning; Guide of cyber security information sharing (draft for review); Guidelines for cyber security information submission (draft for comments); General technical requirements for network security situation awareness system (draft for approval).*
Data security system	Emergency response to data security incidents	Art. 23 and 29	Clarify relevant requirements or guidelines for data security incidents, emergency plans, and emergency response; Guide data processors to take immediate measures in case of data security incidents, and inform users in time according to regulations, and report to relevant competent authorities.	*Relevant standards for emergency response to cybersecurity incidents can be referred, for instance, GB/Z 20986 Guidelines for the category and classification of information security incidents (in revision); GB/T 38645-2020 Guide for cybersecurity incident emergency exercises; GB/T 20985.2-2020 Information security incident management—Part 2: Guidelines to plan and prepare for incident response; Assessment criteria for cybersecurity emergency response capability (draft for review).*

Data Security and Relevant Industry Development	Data as a production factor and relevant market safety	Art. 7	Clarify relevant security rules on data sharing, transaction, opening up, development and utilization, and integrated computing so as to meet the needs of the healthy development of the digital economy where data is taken as the key factor, and to promote the orderly and free flow of data in accordance with the law.	*GB/T 39477-2020 Government information sharing—Data security technology requirements; GB/T 37932 Security requirements for data transaction service (in revision); Public data openness security requirements (draft); etc.*
Data Security and Relevant Industry Development	Security of intelligent public service	Art. 15	Intelligent public services shall give full consideration to the data security and protection needs from the elderly and the disabled so as to avoid obstacles to their daily lives.	
Data Security and Relevant Industry Development	Data security related technology and product	Art. 16	Standardize the development and use of data security related products; Guide and promote the application of data security technology and industry practices.	*General framework for confidential computing (draft); GB/T 29765-2021 Technical requirements and testing and evaluating approaches for data backup and recovery products; GB/T 29766-2021 Technical requirements and testing and evaluating approaches of website data recovery products.*
Data Security and Relevant Industry Development	Data security related inspection, assessment and certification	Art. 18	Support data security inspection, evaluation, certification and other professional organisations to provide services; Promote the development of services regarding data security related inspection, assessment, certification, etc.	*GB/T 41479-2022 Network data processing security requirements; GB/T 37988-2019 Data security capability maturity model; Capacity requirements for assessment organization of data security (draft); Risk assessment method for data security (draft); etc.*
Data Security and Relevant Industry Development	Security of data transaction	Art. 19 and 33	Clarify the security requirements on intermediary service organisations in data transaction , data transaction participants, transaction objects and transaction process so as to standardise data transaction behavior.	*GB/T 37932 Security requirements for data transaction service (in revision)*

Data Security and Relevant Industry Development	Professionals cultivation for data security	Art. 20	Support data security related education and training; Promote the cultivation of data security professionals.	*Relevant standards in cybersecurity can be referred, for instance, Basic requirements for competence of cybersecurity workforce (draft for approval)*
Data security and relevant protection obligations	Whole-process data security management	Art. 27	Data security management and technical measures covering the whole process of data processing such as data collection, storage, use, processing, transmission, provision, disclosure and deletion, providing guidance for data processors to establish and improve the whole-process data security management.	*GB/T 37988-2019 Data security capability maturity model; GB/T 35274 Security capability requirements for big data services (in revision); GB/T 37973-2019 Big data security management guide.*
Data security and relevant protection obligations	Data processing ethics	Art. 28	Data processing activities and research and development of new data technologies shall conform to social morality and ethics.	*Assessment specification for Machine learning algorithms (draft for review); Security requirements of genetic recognition data (draft for approval); Standardised technical document - Cybersecurity standards practice guide - Guidelines for the prevention of ethical security risks in artificial intelligence*
Data security and relevant protection obligations	Legitimate data collection	Art. 32	Data shall be collected in a lawful and legitimate manner; data shall not be stolen or obtained by other illegal means; Data shall be collected and used within the purpose and scope prescribed by laws and administrative regulations.	*Currently the standardisation activities are focused on the collection of personal information, such as GB/T 35273-2020 Personal information security specification; GB/T 41391-2022 Basic requirements for collecting personal information in mobile internet applications; etc.*

Security and opening of government data	Security of government data	Art. 38, 39 and 40	Standardize government data processing activities carried out by government departments themselves and by the entrusted third parties; Clarify security management requirements and technical requirements on government data processing, as well as safety supervision requirements for all types of data processors.	*Security requirements for government data processing (draft); GB/T 39477-2020 Government information sharing—Data security technology requirements.*
Security and opening of government data	Sharing and opening of government data	Art. 42	Regarding the government data or public data sharing and opening up, clarify requirements on personal information protection, as well as on data security technology and management; Promote the construction of government data sharing and opening-up platforms, as well as the opening up and utilisation of government data.	*GB/T 39477-2020 Government information sharing—Data security technology requirements; Public data openness security requirement (draft)*

Data security in individual industries	/	Art. 6	On the basis of generic data security standards, carry out research on the data security guidelines for industries while giving considertation to the data categorisation and classification in key industries, as well as characteristics of data processing and industry needs in data security; The guidelines will provide reference for data security work in the industry.	*1. In telecommunication sector: Guidelines of data security in telecommunication area (draft for approval);1.* *2. In Internet sector: Data security requirements for online ride-hailing services (draft for approval); Data security requirement for online shopping services (draft for approval); Data security requirements for instant messaging services (draft for approval); Data security requirements for express logistics services (draft for approval); Data security requirements for internet payment services (draft for approval); Data security requirements for online audio and video services (draft for approval);* *3. In Intelligent Connected Vehicles sector: Security requirements for processing of motor vehicle data (draft for approval);* *4. In hygien and health sector: GB/T 39725-2020 Guide for health data security.*

8. China Brings Forward the First Standard for the Network of Industrial Internet

#Industrial Internet

On 14 October, SAC released China's first standard for the network of industrial internet: *GB/T 42021-2022 industrial internet - general network architecture*.

Network is the foundation of industrial Internet and the key infrastructure for interconnecting human, machine and materials in the whole industrial process. Industrial internet network realizes the interconnection of different industrial elements including research, design, production, sales, management, and service, supports the open flow and deep integration of various industrial data, and ultimately promotes the optimal integration and efficient allocation of various industrial resources.

GB/T 42021-2022 aims at satisfying the need of planning, design, construction, upgrading and rebuilding of industrial internet networks. It stipulates the target architecture and function requirements of the network

architecture inside and outside the factory, and puts forward the network implementation framework and security requirements.

In January 2019, MIIT and SAC had jointly released the *Guidelines for Constructing a Comprehensive Standards System for Industrial Internet*, providing the standardization framework for the industrial internet ecosystem. GB/T 42021-2022 is one of the core standards of the network section in this system: it will help regulate the construction of industrial internet networks and guide basic network operators, industrial enterprises, and network service providers to establish their industrial internet.

9. China to Set Standards for WLAN

#Communication Networks & Services

At present, digitalization is profoundly changing society, economy, and industry. As one of the pillars of the digital transition, Wireless LAN (WLAN) sees a huge application demand in any field, be it in people's home networks, or in hospitals, schools, factories, etc. To meet such demand, Wi-Fi, i.e. the mainstream technical solution for WLAN, is rapidly evolving towards greater bandwidth, higher network speed and lower latency. Yet, even though Wi-Fi 6 has become the mainstream standard and Wi-Fi 7 standards are expected to be released in 2024, guaranteeing good user experience still faces significant challenges in different specific scenarios.

In this context, China established the World WLAN Application Alliance (WAA) in September 2022, with the aim of setting up a China-led international WLAN industry platform. On 4 November, WAA held its kick-off meeting in Shenzhen; themed as "jointly creating new WLAN experience", it explored how to establish a scenario-based certification system and a complete performance standards system for WLAN, thus creating the best WLAN application experience for users.

Currently, two global organizations, i.e. IEEE and WFA, have made significant efforts in the development of WLAN technology to meet people's application needs; but from the perspective of standardization, the two organizations have focused largely on the physical layers, with the aim of solving interaction problems among underlying devices. As result, there is a lack of standardization strategies and suggestions at the upper service layers – this will in fact be the focus of WAA's standardization work in the future.

"*WAA was born to fill this gap*", WAA president Zhang Ping affirmed during the kick-off meeting. "*WAA's vision is to provide to the digital world the type of WLAN that brings the best experience to users, with improved network performance and enhanced convenience. We need to establish a sound and unified WLAN performance standards and certification system, build the best WLAN application experience, and form a complete ecosystem by complementing the activities of IEEE. This is the value of WAA.*"

WAA Secretary General Yang Tao further specified: "*WAA has two priorities. The first is to establish a performance standards system to address the problem of user's performance experience: WAA will develop unified standards and conduct testing and certification on these standards – all of which are currently lacking in the industry, thus providing great benefit. The second priority is to develop a global membership: WAA will attract international experts and carry out extensive cooperation and exchanges with international organizations, so as to become a genuine international standards and industry organization.*"

At present, WAA has a total of 55 members, 18 of which are board members. These come from the Asia-Pacific region, Europe and central Asia, representing different segments of the production chain, including research institutes, network operators, telecommunications equipment providers, instruments and apparatus manufacturers, and certification bodies. However, so far WAA has not yet disclosed the full list of members.

In the future, WAA Alliance will take standards, certification, and open source as the three cornerstones of its mission and gradually optimize customer experience, from "connection experience" to "inaction experience", and then to "application

experience". WAA plans to release three sets of evaluation standards and authorize five certification laboratories in 2023, which will carry out tests in 38 subclasses of six categories, namely basic performance, coverage performance, channel resource allocation, networking, reliability, and anti-interference. This will ensure the application performance of WLAN in homes, enterprise parks, smart grids, industrial internet, smart healthcare, IoT, and other scenarios.

10. China's Research on Standardisation and Digital Economy in the Post-pandemic Era

#Digital Transition #Standardisation

On 24 October 2022, experts from the China Electronics Standardization Institute released an article elaborating on their research findings on Standardisation and Digital Economy Development in the Post-pandemic Era (hereinafter referred to as the Article). Specifically, the Article elaborates in detail the implications and characteristics of the digital economy in the post-pandemic era, as well as the role of standardisation in developing the digital economy, the barriers for digital transformation, as well as the standardisation needs and directions.

According to the *Annual Report on Standardization Development in China (2020)* released by the State Administration for Market Regulation, in 2020, 28 national standards, more than 80 local standards, and 269 association standards for epidemic prevention and control and the resumption of work and production were formulated and published; 40 international standards project proposals in related fields were also submitted to ISO and IEC. These numbers highlight the significant role that standardisation has played in supporting pandemic control efforts.

When it comes to the post-pandemic era, standardisation is expected to play a key role in supplementing laws and regulations, thus providing harmonised and updated guidance for the development of the digital sector as well as for industrial digitization, data governance and cybersecurity. Indeed, the standardisation of the digital economy promotes the application of corresponding technology, which in turn spurs the digital industrialization and development. Standards include, but are not limited to, new infrastructure standards, industrial Internet standards, cloud computing standards, etc. On the other hand, the standardisation responds the demands from digital transformation of traditional industries in terms of digital process reengineering, digital management, data sharing, intelligent manufacturing, etc.

Currently, the digital economy still faces great challenges, including prominent issues in digital transformation of individual enterprises, isolation and fragmentation of data resources, and the insufficiency of traditional digital governance model via laws and regulations. Focusing on those challenges, standardisation is thus expected to provide guidance for the transformation, facilitate data circulation, and meet the urgent demands emerging from constant updates and rapid development of the digital economy. Specifically, the Article outlines five directions in which standardisation will be prioritized: new infrastructure, industrialization of the digital sector, industrial digitization, data as a factor, and cybersecurity. For each area, there are both existing standards and ongoing standardisation projects (more details in the Annex below).

Annex: Directions, Subdivision and Standardisation Cases in Support of Digital Economy

Areas	Specific fields	Examples of standards	Areas	Specific fields	Examples of standards
Digital industrialization	Chips	YD/T 3943.1 Cloud computing compatibility test method part 1: chip and operating system YD/T 3944-2021 Evaluation method for artificial intelligence chip benchmark	New infrastructure	Information infrastructure	GB/T 34680.2-2021 Evaluation model and general evaluation indicator system for smart cities—Part 2: Information infrastructure
	Operating system	GB/T 33780.4-2021 Technical specification of electronic government common platform based on cloud computing—Part 4: Operation system		Converged Infrastructure	GB/T 36625.5-2019 Smart city—Data fusion—Part 5: Data elements of basic municipal facilities
	Big data	GB/T 38633-2020 Information technology—Big data—Functional requirements for system operation and management GB/T 38667-2020 Information technology—Big data—Guide for data classification GB/T 38673-2020 Information technology—Big data—Basic requirements for big data systems	Data as a factor	Data governance and manageme	GB/T 34960.5-2018 Information technology service—Governance—Part 5: Specification of data governance 20213308-T-469 Information technology—Big data—Data governance implementation guide
	Artificial intelligence	GB/T 40691-2021 Artificial intelligence—Affective computing user interface—Model		Data asset	GB/T 40685-2021 Information technology service—Data asset—Management requirements
	Cloud computing	GB/T 37738-2019 Information technology—Cloud computing—Cloud service quality evaluation indicator GB/T 37972-2019 Information security technology—Operation supervision framework of cloud computing service		Data circulation	GB/T 19688.4-2005 Information and Documentation--Bibliographic data element directory--Part 4:circulation applications
	Internet of things	GB/T 40026-2021 Capabilty requirements of IoT with resource openness GB/T 39190-2020 Smart home for internet of things—Design content and	Cybersecurity	Technology and mechanism	GB/T 25068.5-2021 Information technology—Security techniques—Network security—Part 5: Securing communications across networks using virtual private
	Software engineering	GB/T 25000-2021 Systems and software engineering—Systems and software quality requirements and evaluation (SQuaRE) GB/T 22032-2021 Systems and software engineering—System life cycle processes		Management and services	GB/T 38561-2020 Information security technology—Technical requirements for cybersecurity management support system YD/T 1621-2007 Evaluation criteria for competence of information security service provider
	Digital twins	20213298-T-469 Information technology - Digital twin—Part 1: General requirement (draft)		Evaluation	GB/T 36627-2018 Information security technology—Testing and evaluation technical guide for classified cybersecurity protection
Digital industrialization	Blockchains	YD/T 3905-2021 Framework of blockchain of things as decentralized service platform	Industrial digitization	Intelligent manufacturing	GB/T 40647-2021 Intelligent manufacturing—System architecture GB/T 40648-2021 Intelligent manufacturing—Virtual factory reference architecture
	Quantum computing	20203857-T-469 Quantum computing terminology and definition (draft)		Intelligent transport	GB/T 39898-2021 Technical specifications for the construction of intelligent traffic management system GB/T 37373-2019 Intelligent
	VR/AR	GB/T 38259-2019 Information technology—General specification for virtual reality head mounted display device GB/T 38258-2019 Information technology—Virtual reality application software basic requirement and test method		Intelligent energy	GB/T 38332-2019 Smart grid customer automatic demand response—Technical condition of central air conditioning system terminal GB/T 34679-2017 General technical specifications for smart mine information systems GB/T 40607-2021 Technical requirements for dispatching side forecasting system of wind or
	Industrial internet	YD/T 3865-2021 Specification for data security protection of		Smart medical	GB/T 40028-2021 Smart city—Smart medical
	Human-computer inter	GB/Z 38623-2020 Intelligent manufacturing—Human-computer interaction system—Technological requirements of semantic library		E-commerce	GB/Z 40436-2021 Electronic business—Modeling methodology user guide GB/T 40202-2021 Requirments for logistics information interchange in cross-border e-commerce
	Audio and video	GB/T 38632-2020 Information security technology—Security requirements for application of intelligent audio-video recording device		Smart home	GB/T 39190-2020 Smart home for internet of things—Design content and requirements GB/T 39189-2020 Smart home for internet of things—User interface description method
	IT governance and servi	GB/T 40685-2021 Information technology service—Data asset—Management requirements		Smart agriculture	20214120-T-469 Interface requirements of information system for smart agriculture (draft)
	Digital hardware	GB/T 38319-2019 Digital technique application of building and residence community—Technical requirements for intelligent			
	3D printing	20203755-T-604 3D printing equipment for casting sand mould—General technical			

11. First Verification Test for the Standard of ICV Personal Information Anonymisation

#ICV #Personal Information Protection

On September 29, 2022, the Sub-Committee for Intelligent and Connected Vehicles of the National Technical Committee of Auto Standardization (SAC/TC114/SC34) organized a verification test of personal information anonymization processing for the national standard *Intelligent and connected vehicles (ICV) — General requirements for data* (Hereinafter, referred to as the "Standard").

The Standard is the first standard developed for vehicle data management in China. The voluntary standard puts forward the requirements for personal information and important data in its entire process of handling.

Data is one of the basic elements for ICV's decision-making and autonomous driving, on the other hand, ICV has a huge demand for data, including vehicle data, map data, and driving environment data, etc. However, the fact that these sources of data come from diversified sources results in the problem of data being in different forms and unable to be integrated. This problem has impacted the development of the industry as well as the supervision of the government.

In this context, developing a standard to unify vehicle data is urgently needed. The standard project was therefore put forward in August 2021. It applies to Class M and N vehicles and will classify ICV data and specify the coding of each data unit so that each data element has a unique identification. The Standard, together with *Intelligent and connected vehicles — General requirement of data — Part 2: Data Structure*, will make up a standard series, supporting the data management of ICV.

The test first determined the speed range of the test, the position of the visual sensor mounted on the vehicle, and the method of transmitting collected data. During the test, the vehicle drove normally along the default route and enabled the functions of external information collection, recording and transmission. After the test, the vehicle data is read to calculate accuracy and false rate of the anonymisation results through data frame extraction and data annotation as well as evaluate the unrecognizability and irrecoverability anonymisation. The test verified the whole vehicle anonymisation test solution, which was first proposed in this Standard, validating its operability and the indicators' evaluability.

According to the standard development plan, the Standard is scheduled to be made public for comments in October and its review will be finished within 2022.

Green Transition

12. China's Seminar on Industry Green and Low-carbon Development

#Carbon Emission

In early November 2022, the Ministry of Industry and Information Technology (MIIT) held the Seminar on Industry Green and Low-carbon Development 2022 (hereinafter referred to as "the Seminar"). The purpose of the Seminar was to discuss the principles/strategy raised in the Report from the 20th CPC National Congress regarding green and low-carbon transition. Leaders from MIIT, officials from relevant MIIT departments and regional industry and information technology administrations also participated in the Seminar through virtual and offline channels.

The strategy outlined in the Report of the 20th CPC National Congress stated:

- Accelerate the green transition on developing models, and further reinforce the prevention and protection of environmental protection.
- Elevate ecological diversity, stability, and continuity, and implement carbon peak and carbon neutrality positively and stably.
- Coordinate industrial restructuring, pollution control, ecological protection, and climate change.
- Promote carbon reduction, pollution reduction, green development and growth, and give priority to ecological, economical and intensive, green and low-carbon development

The seminar also disclosed the actions that MIIT will take to implement the aforementioned strategies:

- Implement carbon peak and carbon neutrality goals with a positive attitude and step-by-step actions; divide the dual-carbon goals into all aspects and processes in industrial manufacturing to accelerate the green transition.
- Accelerate the construction of the green and low-carbon technological systems and the green manufacturing supporting system.
- Make the upgrade of green manufacturing a breakthrough point to enhance green development.
- Identify the key direction for six transitions: industrial structure upgrade, low-carbon transition for energy consumption, promotion of clean manufacturing process, better supply of green products, and the digital transition of production models.
- Further promote the implementation of advanced technologies and equipment with coordination and all measures possible.
- Innovate sector management and services to optimize policy support and standard system.

Following the strategy and action plan from the Seminar, more implementation policies or regulations are likely to be formulated in the future. Foreign stakeholders are advised to follow up on the official issuance related to their business field. Regular communication with administrations by the compliance team regarding technical and regulatory changes is also recommended for FIEs and foreign stakeholders.

13. China's Measurement System for Carbon Peaking and Carbon Neutrality Standards

#Carbon Emission

On 18 October 2022, the State Administration for Market Regulation (SAMR) partnered with 8 other ministries and jointly issued the *Implementation Plan for Establishing and Improving the Measurement System for Carbon Peaking and Carbon Neutrality Standards* (hereinafter referred to as "the Implementation Plan").

The legal basis of the Implementation Plan covers a series of national issues such as the *Working Guidance for Carbon Dioxide Peaking and Carbon Neutrality in Full and Faithful Implementation of the New Development Philosophy*, the *Outline for National Standardization Development*, the *Action Plan for Carbon Dioxide Peaking Before 2030*, and the *Measurement Development Plan (2021-2035)*. The Implementation Plan is considered a significant component of China's "1+n" policy for achieving carbon peak and carbon neutrality goals (hereinafter referred to as "the dual-carbon goals"). This document not only raises concrete working requirements for the construction of a measurement standard system but also serves as a road map for creating a fully covered, multi-dimensional and multi-layered standard system that would support China's dual-carbon goals.

The main content covered in the Implementation Plan is presented below:

- Key goals including quantitative objectives: By 2025, construct a preliminary standard measurement system for dual carbon; carbon measurement and verification standards that would cover the main emission sectors. The development of critical technologies such as carbon capture, utilization and storage (CCUS) should be coordinated with relevant standard development. Newly drafting/developing no less than 200 measurement standards, and no less than 200 technical specifications would be formulated/revised; finish more than 1000 national and sector standards (including foreign language versions); practically participate in drafting or revision of no less than 30 international standards; By 2030, construct a better standard measurement system for dual carbon. Key technical parameters of energy consumption in critical sectors would reach an international level; the guiding and constraining role of standards will be reinforced; the working focus of standardization work would switch from supporting carbon peak to carbon neutrality; By 2060, the measurement system would be established with advanced technology, management
- Framework: and 3 specific measurement systems: 4 standard systems: basic general; carbon emission reduction; carbon removal standard system; market-relevant standard system; 3 measurement systems: technical system, management system and service system;
- The main sectors involved: energy, industry, urban and rural construction, transportation, agriculture and rural areas, public institutions, people's daily life;
- The main technologies involved: carbon sink, CCUS, direct air carbon capture (DAC) etc.

For foreign stakeholders, the Implementation Plan will provide a concrete perspective that'll better help to understand and discern China's dual-carbon actions and policy direction. This will not reflect on the measurement system as it also shows consistency in concepts and principles with other dual-carbon policy or regulation documents. Meanwhile, for stakeholders who have business in the China market already, especially in the aforementioned sectors, more documents on standard system construction on the ministry and regional level are likely to be drafted in the future. Such documents may initiate impacts on the current business as they might pose

new requirements and parameters to achieve the dual-carbon goals. So the compliance team of relevant enterprises are advised to pay attention.

14. China's Standardisation Plan for Carbon Reduction in the Energy Sector

#Carbon Emission #Energy Management

On 9 October 2022, the National Energy Administration issued the *Action Plan for Enhancing Standardisation of Carbon Peaking and Carbon Neutrality in the Energy Sector* (hereinafter referred to as the Action Plan). The Action Plan is a standardisation-based, sector-specific ministerial response to the central government's call for achieving carbon peak and carbon neutrality.

The Action Plan, which is aimed at providing practical guidance and instructions, outlines general requirements as well as six key tasks and measures for implementation. In general, the Action Plan commits to promote standardisation in non-fossil energy, new power systems, new type of energy storage technology, hydrogen technology, energy efficiency, as well as carbon reduction along the entire industrial chain; each of these six areas is supplemented by one or several ad hoc actions, with specific targets and focus. Since the mission of standardisation is to contribute to development of the industry, all those six key areas reflect China's priority directions in the near future.

It is also noteworthy that, according to the *Administrative Measures on Standardisation in the Energy Sector* released in 2019, there are two major government actors in energy-related standardisation: the National Energy Administration (NEA), and the Standardization Administration of China (SAC). With regards to standard formulation in the energy sector, the difference between the two is that NEA is responsible for formulation of sector standards, while SAC is in charge of national standards. The Action Plan targets the formulation of sector standards, which are largely voluntary except for cases involving engineering and construction. Therefore, theoretically, the standards indicated by the Action Plan will not be mandatory for market access of related product and services, but might help enterprises to gain edges in procurement and bidding competitions.

The Action Plan highlights that priority will first be given to those areas that are in urgent needs of standards. For instance, rapid technological developments in energy storage have made existing standards and specifications unable to meet the application demands. Especially in the power supply side, the power grid side and the user side, the energy storage application mode and requirements are different, mostly originating from the incompleteness of the standardisation system which, in turn, hinders the application of energy storage in the power industry. In response, the Action Plan puts forward corresponding measures, such as formulating *Guidance on Building New-type of Energy Storage Standardisation System*, aimed at harmonising those requirements and meeting the needs of the market.

In the press conference held on 14 November 2022, the director of NEA's Energy Conservation and Technological Equipment Department clarified four major tasks: i) conducting research and establishing relevant standardisation systems; ii) formulating new standards and revising existing ones; iii) demonstrating good practices and examples of cooperation between the industry and standardisation bodies; iv) improving the standardisation management system.

In short, the Action Plan can be seen as a standardisation roadmap to reduce carbon emissions in the energy sector. Those sector standards formulated under the requirement of the Action Plan are expected to supplement national standards (indicating bottom requirements) by responding to and satisfying the urgent needs of the market. Yet, how those sector standards will fit in China's broader initiatives to reduce carbon emissions and serve the advancement of the industry will need to be seen.

Product Safety

15. MIIT Revises Market Access Requirements for Automobiles

#Automobile

On 28 October, MIIT issued the *Regulations on the Administration of Market Access of Road Motor Vehicles* (draft for comments). Public comments are allowed until 27 November 2022. The draft regulations strengthen the supervision on and raise the market access threshold of intelligent connected vehicles (ICV). Specifically:

- Access permission. The regulations stress that ICV products, in order to obtain market access licenses, shall follow the corresponding standards of function safety, cybersecurity, and data security, in addition to the standards and technical specifications in safety, environment protection, and energy saving. Meanwhile, ICV manufacturers shall establish, for their products, relevant systems for cybersecurity, data security, personal information protection, ICV cards security, and software updating management.
- Cyber and data security. Personal information and important data generated and collected by ICV manufacturers when sold or used in China, shall be stored within the country. If there is a need to provide these data overseas, the enterprises shall go through the security assessment organized by authorities, including CAC and MIIT, and file relevant information. In addition, ICV manufacturers shall regularly carry out network and data risk assessment of their vehicle products, strengthen risk monitoring, formulate emergency plans, and ensure rapid response when cyber security, data security or personal information security incidents occur, reporting to authorities including MIIT, MPS, CAC, etc.
- Autonomous driving. For ICVs with the function of autonomous driving, their manuals shall clearly inform consumers about the details of the autonomous driving function, such as its limitation, usage of the safety and emergency devices in the vehicles, driver's responsibility, information of human-machine interaction devices, as well as the methods to start and terminate the autonomous driving function. Article 23 of the draft regulations also prohibit advertising false or misleading information, e.g. exaggerating the products' performance or confusing the claimed manufacturers with the actual ones.
- Software upgrading (OTA). Road motor vehicle manufacturers shall report to and file with MIIT their software upgrading. A license shall be obtained by manufacturers before any software upgrade is made to the vehicle's safety, environment protection, and energy saving.

The previous edition of the regulations, i.e., the *Administrative Measures for Market Access of Road Motor Vehicle Manufacturers and Products*, had come into force on 1 June 2019. Only three years later, the document was revised and upgraded from "administrative measures" to "regulations", i.e. a higher administrative and legal level, indicating that government is strengthening the supervision of automobile products, especially the ICV.

Compared with the previous edition, the draft regulations, i) strengthen vehicle's cyber and data security, and personal information protection, ii) remove the statement of "encouraging OEM", which will result in higher access threshold in the automobile industry, and iii) put forward more requirements for the safety-in-use of vehicles, to adapt to the increasing popularity of aided driving functions. These changes, once implemented, will greatly impact the automobile industry. It is suggested that overseas manufacturers carefully analyse this document and contribute, when possible, to public comments.

16. CNIS Interprets the Standard of 'Technical Requirements for Traceability System of the Recall of Motor Vehicle'

#Motor Vehicle

On Motor vehicle recall is a post-market safety management system for motor vehicle products, China implemented the defective vehicle products recall management system in 2004. In recent years, the number and quantity of recalls have steadily increased, and effective supervision and evaluation of the implementation of recalls by producers have become an urgent problem for regulators.

GB/T 41047-2021 Technical requirements for traceability system of the recall process of motor vehicle products is the first technical standard on information monitoring and supervision of the recall process in China, it regulates general technical requirements, core metadata, data synchronization, data sharing, and system performance and safety requirements of the traceability system.

The main contents of the standard include:

- Recall implementation process: The regulation *Provisions on the Administration of Motor Vehicle Emissions Recalls* and mandatory national standard *GB 38900-2020 Items and methods for safety technology inspection of motor vehicles* clarify the relevant requirements such as inspection of the completion of vehicle recalls during the annual motor vehicle inspection process. This requires the market supervision department to share recall data with the vehicle annual inspection system of the Ministry of Ecology and Environment and the Ministry of Public Security, therefore, propose to establish a traceability system of the recall process of motor vehicle products.
- The overall structure of traceability system. The motor vehicle product recall process traceability system consists of three parts: the enterprise subsystem, the management subsystem, and the server subsystem, which are used by the vehicle product manufacturer, the industry authority, and the departments to be shared the data, respectively.
- Traceability system function requirements:
    - Enterprise subsystem: The traceability system enterprise subsystem is connected with the quality management system of the producer via a data interface. Dealers' information management system is recommended to apply a B/S structure to achieve real-time monitoring and collection of the dealer's and maintenance provider's recall process. Recall process information will be reviewed according to the technical requirement in the standard, validating the accuracy of the recall process information. This information includes whether the vehicle VIN (Vehicle Identification Number) is correct, whether the replaced parts are correct, whether the recall measures meet the requirements, etc. For recall process information after the review, regular, automatic uploading to the recall process management subsystem via the data interface is necessary.
    - Management subsystem: The traceability system management subsystem should obtain real-time recall process information from the enterprise subsystem and exchange data with the product recall information management system to achieve a connection between recall registration information and recall process information, and therefore obtain real-time information on the completion of the recall process. To ensure the synchronization of the data, the management subsystem conducts dynamic monitoring on the data interface with the enterprise subsystem and alerts for anomalies.

  - Service subsystem: The traceability system service subsystem provides a VIN-based vehicle recall information searching service which includes searching recall registration and recall process information. The traceability system service subsystem can send vehicle recall information to relevant parties to allow them to obtain real-time recall information.

- Data collection requirements. Recall process information synchronized by the enterprise subsystem to the management subsystem shall include:
  - Recall serial numbers shall be unique, which are provided in GB/T 39061, to determine the recall practice that the synchronized recall information belongs to.
  - The VIN of a recalled vehicle shall conform to the requirements in GB 16735 and GB 16737. VIN is the only vehicle identity information used to identify any recalled vehicles.
  - The date that the dealers complete the recall.
  - The repair record number of recalled vehicles at the dealership.
  - The name of the dealer performing the recall of the defective vehicle product.
  - Contact information of the recipient of the recall notice: The recipient of the recall notice may be the owner of the vehicle or other vehicle users, if the vehicle is still at the dealership, the recipient can be the person responsible for the recall at the dealership.
  - After the implementation of the recall, a dealer should submit vehicle recall process information to their producer and complete the recall process information collection and review before 24:00 of the next day. Meanwhile, after completion of the vehicle recall, the producer should synchronize recall process information to the traceability management subsystem via the recall system enterprise subsystem.

GB/T 41047-2021 has come into force on 1 April 2022. Based on this standard, the State Administration for Market Regulation Defective Product Administrative Centre (hereinafter, referred to as the "Center") established the "national vehicle recall process traceability system" and organised pilot applications with enterprises including FAW-Volkswagen and GAC-Toyota. The pilot project realized rapid collection of recall process information.

Meanwhile, based on the annual inspection requirements stipulated by the Regulations on the Administration of Motor Vehicle Emission Recalls and Items and methods for safety technology inspection of motor vehicles, and as recall process traceability systems are widely applied in the industry, the Centre is planning to share recall information with annual vehicle inspection bodies, as well as to regularly send vehicle recall information to their annual vehicle inspection systems. This would notify them of the vehicles that are in the recall scope but haven't been recalled. The Centre is also seeking to share information with insurance institutions to notify them of the vehicles that failed to be recalled.

17. SAC Interprets the Standard of ‘General Safety Requirements for Household Service Robots’

#Product Safety

In recent years, China's household service robot industry has developed rapidly, and the sale volume of household service robots has successively entered the top 10 rankings for online home appliance sales. The *National Standardization Development Outline and Key Points of National Standardization in 2022* both require the development of urgently needed standards in the fields of intelligent robots and smart home appliances. In this context, the establishment of a standard system for home service robots has become a standardization hot spot.

GB/T 41527-2022 General safety requirements for household and similar service robots is an important standard for the general safety of service robots in the system. Together with *GB 4706.1 Household and similar electrical Appliances-Safety Part 1: General requirements*, the standard stipulates the general condition of safety test, label and instruction, safety requirements and test methods for humidity resistance, leakage resistance, dielectric strength, stability and mechanical hazard, mechanical strength, structure and components etc., of household and similar service robots with a rated voltage not exceeding 250V. GB/T 41527-2022 has come into force since 11 July 2022.

The main contents of the standard include:

- In terms of labels and instructions, it regulates manufacturer and product information, operating environment description, and warning signs and instructions.
- In terms of stability and mechanical hazards, it regulates speed requirements for different types of robots to prevent the risk of collision; it also proposes requirements to prevent circumstances such as falls, loss of support, crush, etc.
- In terms of mechanical strength, it puts forward requirements for impact energy and requirements for different load conditions.
- In terms of structure, it proposes requirements for the shutdown of moving parts and user modifying critical safety parameters and functions.

18. China Revises Mandatory Standards for Tyres

#Tyre #Mandatory Standards

From September to October 2022, MIIT issued a call for comments on two revised mandatory standards for tyres: *Truck tyres (draft for comments)* and *Passenger car tyres (draft for comments)*

These two standards stipulate the technical requirements, test methods, inspection rules and determination principles, labeling, and implementation of tyres of truck and passenger cars, respectively. They apply to new pneumatic tyres of trucks and passenger cars. The 2015 editions, i.e., GB 9744-2015 and GB 9743-2015 will be replaced once the new standards come into force.

Adopted by the CCC scheme, the two standards have received extensive attention from the tyre industry since the revision had begun. According to the drafts for comments, the main changes are i) rolling resistance limit was introduced, aiming to increase vehicles' energy efficiency and thus contributing to the "carbon peak and neutrality" objectives in the tyre sector. ii) wet grip limit was added, aiming to improve the safety of tyres running on wet roads.

DOT/FMSS119, FMSS139 in the US, and ECE54, ECE30, and ECE R117 in the EU were used for reference in the development of the two standards, but China's actual situation was also considered, resulting in the introduction of rolling resistance and wet grip limits. Besides, requirements for pass-by noise of tyre is not included in the drafts.

The National Technical Committee of Tyres and Rims Standardisation, the drafting body of both standards, recommended implementing these standards 12 months after release, while the implementation date for the requirements on rolling resistance and wet grip limits can be put off another 12 months.

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 & labeling, 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.

Abbreviations

SAMR	State Administration for Market Regulation	国家市场监管总局
CAS	China Association	中国标准化协会
CCC	China Compulsory Certification	中国强制认证
CCSA	China Communication Standardization Association	中国通信标准化协会
CEC	China Electricity Council	中国电力企业联合会
CEEIA	China Electrical Equipment Industrial Association	中国电器工业协会
CELC	China Energy Labeling Center	中国能效标识中心
CESI	China Electronic Standardization Institute	中国电子标准化研究所
CMDSA	Center for Medical Device Standardization Administration	医疗器械标准管理中心
CNCA	Certification and Accreditation Administration of China	中国国家认证认可监督 管理委员会
CNIS	China National Institute of Standardization	中国国家标准化研究院
CNREC	China National Renewable Energy Center	中国国家可再生能源中 心
EPPEI	Electric Power Planning and Engineering Institute	电力规划设计总院
IEC	International Electrotechnical Commission	国际电工委员会
ITEI	Instrumentation Technology and Economy Institute	机械工业仪器仪表综合技术与经济研究所
MEE	Ministry of Ecology and Environment	中国生态环境部
MIIT	Ministry of Industry and Information Technology of People's Republic of China	中国工业和信息化部
MoH	Ministry of Health	卫生部
MoHURD	Ministry of Housing and Urban-Rural Development	住房与建设部
MOT	Ministry of Transport	中国交通运输部
MOST	Ministry of Science and Technology	中国科学技术部
NDRC	National development and reform commission People's Republic of China	中国国家发改委
NIFDC	National Institute of Food and Drug Control	中国食品药品检定研究 院
SAC	Standardization Administration of China	国家标准化管理委员
SGCC	State Grid Corporation of China	国家电网
TC	Technical Committee for Standard Development	标准化技术委员会