

China Regulatory and Compliance Observation

November edition 2023



Table of Contents

Message from BESTAO	2
Horizontal	3
1. China will establish Certification System for Product Carbon Footprint.....	3
2. MIIT Seeks Comments on Mandatory Safety Standards for Electrical Equipment in Machinery	3
3. China to Revise Mandatory Noise Standards for Harvesting, Earth-Moving Machinery, Tractors	4
Agricultural and Forestry Machinery.....	6
4. Solicitation of Opinions on Two Agricultural Machinery Informatization Standards	6
5. Summary of Agricultural Machinery Promotion Work in China in November	6
6. Four Safety Standards for Snow Throwers Come into Effect	7
Construction and Mining Machinery	9
7. Reference Guide for Digital Transformation in the Construction Machinery Industry	9
8. SAMR Issued Implementation Details for Lifting Appliance Safety Regulations	10
9. New Batch of Earth-moving Standards to be Implemented	11
10. Construction of Green Mines to be Further Strengthened	12
Cyber and Data Security	14
11. MIIT Formulates Penalty Guidelines for Data Security Violations.....	14
12. Briefing on TC260 Working Meeting	14
Emission Control.....	16
13. Progress of China VII Emission Standard for Heavy-Duty Vehicles.....	16
ESG	19
14. China Develops New Standard for Carbon Footprint Calculation	19
China RoHS.....	20
15. China Initiates Mandatory Standard Project for RoHS	20
BESTAO policy review to this Issue:	21
What can be expected in the following editions:	21
About BESTAO Consulting Co. Ltd.....	22

Message from BESTAO

Dear Readers,

We're very pleased to present you with the November 2023 edition of China Regulatory and Compliance Observation for AEM.

In this edition, newest development of policies, certification and technical standards in the agricultural and construction machinery industries in November 2023 are elaborated.

The horizontal section dwells on the products carbon footprint certification to be established and the mandatory standard development and revision projects that almost cover all machinery.

Under the agricultural machinery section, the development of informatization and promotion of agricultural machinery are summarized.

The construction and mining machinery section brings you with the dynamics of China's digital and green transition policies, as well as SAMR's clarification for the regulation on lifting appliance safety.

Other important topics covered in this issue include the latest development of China's cyber and data security policy and standards, progress of China VII emission standard for heavy-duty vehicles, and China's newest carbon footprint calculation standard.

The policy briefing of this edition is a summary of the development of China's Agricultural Mechanization in 2022.

Enjoy the reading.

Best Regards,

AEM project team of BESTAO



Horizontal

1. China will establish Certification System for Product Carbon Footprint

On 13 November, the National Development and Reform Commission (NDRC), the Ministry of Industry and Information Technology (MIIT), the State Administration for Market Regulation (SAMR), the Ministry of Housing and Urban-Rural Development (MoHURD), and the Ministry of Transport (MOT) jointly issued the *Opinions on Accelerating the Establishment of a Product Carbon Footprint Management System*.

The document indicates that China will establish a unified product carbon labelling certification system at the national level, promoting enterprises to save energy and reduce carbon emissions by clearly labelling a product's carbon footprint data.

NDRC, SAMR, MIIT, MoHURD, MOT, and other government departments, will formulate management methods for product carbon labelling certification, clarifying its scope of application, label styles, certification processes, and management requirements.

Enterprises will be encouraged to actively participate in the product carbon labelling certification and use carbon labels on products, packaging, advertisements, and other locations.

To support the implementation of this certification scheme,

- SAMR, in collaboration with NDRC, will expedite the formulation of national standards for the basic elements of product carbon footprint calculation. These will specify the boundaries, calculation methods, data quality requirements, and traceability requirements for product carbon footprint calculations.
- NDRC will identify key products for the prioritized formulation of calculation standards.
- Industry regulators, such as MIIT, MoHURD, MOT, and the Ministry of Agriculture and Rural Affairs (MARA), will collaborate with industry associations, leading enterprises, and research institutions to formulate association standards for calculating the carbon footprint of key products. Once the time is ripe, these association standards can be adopted by the government as national standards or sector standards.
- Industry regulatory departments, in coordination with NDRC and SAMR, will issue a list of recognized standards, providing unified rules for enterprises and institutions to follow.

With the date set for achieving the “carbon peak” approaching, China faces increasing pressure to control and reduce carbon emissions. It is foreseeable that this certification system will play a crucial role in this process, potentially becoming a de facto mandatory admission requirement. BESTAO will keep AEM updated on the development of this certification scheme.

2. MIIT Seeks Comments on Mandatory Safety Standards for Electrical Equipment in Machinery

From November 23, 2023, to January 23, 2023, the Ministry of Industry and Information Technology (MIIT) is seeking opinions on the mandatory national standard **Electrical equipment and system of industrial machines-Safety requirements (draft for comments)**.

This document specifies safety requirements for electrical equipment and systems throughout their entire lifecycle. It applies to electrical, electronic, and programmable electronic devices and systems used in machinery (including a group of cooperating machines) with a nominal power supply voltage not exceeding 1000V AC or 1500V DC, and a rated frequency not exceeding 200Hz. The requirements cover the design, manufacturing, production, use, and maintenance of this equipment.

This document will replace the mandatory standards **GB 19436.3-2008 Electrical safety of machinery - Electro-sensitive protective equipment - Part 3: Particular requirements for Active Opto-electronic Protective Devices responsive to Diffuse Reflection(AOPDDR)**, **GB 5226.3-2005 Safety of machinery-Electrical equipment of machines-Part 11: Requirements for HV equipment for voltages above 1000Va.c.or 1500Vd.c.and not exceeding 36kV**, and **GB 28526-2012 Electrical safety of machinery - Functional safety of safety-related electrical, electronic and programmable electronic control systems**.

This standard is a core standard in the field of electrical safety of machinery, applicable to the majority of AEM products. Although there is currently no government document explicitly requiring that products, when entering the Chinese market, shall demonstrate evidence of their component compliance with relevant mandatory standards, AEM should still ensure that the electrical and electronic components in their products meet the requirements of this standard to reduce compliance risks.

3. China to Revise Mandatory Noise Standards for Harvesting, Earth-Moving Machinery, Tractors

In November 2023, the National Standardization Administration of China (SAC) issued a notice soliciting opinions on a batch of new national standard revision projects. This includes three revision projects related to mandatory noise standards for AEM products.

No.	Standards	Implementer	Problems to be addressed	Main technical changes
1	<i>Harvesting machinery—Noise limits</i>	TC201 (Agricultural machinery)	When the previous version of this standard was formulated, the power of combine harvesters in the market ranged from 50 horsepower to 65 horsepower. However, the power of certain combine harvesters available in the current market has surpassed 200 horsepower. So, the original noise limits are inadequate for models with large feeding capacities. The revision of this standard focuses on addressing the applicability issues of combined harvesters with large feeding capacities.	The noise levels will be categorized according to the power of the diesel engine mounted: $P < 18 \text{ kW}$, $18 \text{ kW} \leq P < 37 \text{ kW}$, $37 \text{ kW} \leq P < 75 \text{ kW}$, $75 \text{ kW} \leq P < 130 \text{ kW}$, $P \geq 130 \text{ kW}$, each with specified noise limits for combine harvesters.
2	<i>Tractor—Limits of emitted noise</i>	TC140 (Tractor)	The previous version of this standard from 2008 has been implemented for the last 15 years. During this period, the maximum power of tractors in the domestic market has evolved from 55	Limits for environmental noise at the driver's operating position will be specified for agricultural and forestry tractors. These limits will be

No.	Standards	Implementer	Problems to be addressed	Main technical changes
			horsepower to the current 280 horsepower and above. Significant changes in structural forms and technological levels have occurred, with many new technologies and materials being applied to tractors. As a result, the original standard is no longer suitable for the current actual noise levels of tractors.	applicable to wheeled tractors, crawler tractors, boat-type tractors, and walking tractors.
3	<i>Earth-moving machinery – Noise limits</i>	TC334 (Earth-moving machinery)	The previous version of this standard, released in 2010, has been implemented for 12 years. During this period, vibration reduction and noise reduction technologies for earthmoving machinery products in the Chinese market have significantly improved, and the actual noise levels of these products have seen considerable enhancements. Relevant safety standards, product standards, and method standards within the earthmoving machinery standard system have also been revised. Considering keeping the advancement of this standard, its coordination, and consistent with other standards, it is necessary to promptly revise this standard.	Noise limit requirements will be added for forklifts and horizontal directional drilling machines; Noise limit requirements for existing machine types such as loaders and excavators will be increased; The implementation is still divided into two stages, but the implementation times will be adjusted; The noise measurement methods will be revised in accordance with the latest released safety standard GB/T 25684 Earthmoving Machinery - Safety series standards

It is noteworthy that these three standards will be concurrently developed in English. It is recommended that AEM members pay attention to the progress of these standards. If possible, they may leverage their FIEs in China to participate in the relevant Technical Committees (TC) and provide input during the formulation process.



Agricultural and Forestry Machinery

4. Solicitation of Opinions on Two Agricultural Machinery Informatization Standards

- **Standard for remote monitoring.**

From November 27 to December 27, 2023, the Intelligent Equipment Technology Research Center of the Beijing Academy of Agriculture and Forestry Sciences is soliciting opinions on the sector standard **remote monitoring system for agriculture machinery operation—communication protocol and data format of the terminal (draft for comments)**. The Intelligent Equipment Technology Research Center of the Beijing Academy of Agriculture and Forestry Sciences is the main drafter of this standard.

The standard aims to address the lack of a standard in China for the terminal-remote monitoring management system communication protocol and data format during agricultural machinery operations, covering the entire process of mechanized operations from cultivation to harvest. This standard will provide comprehensive support for integrating terminals into the machinery purchase subsidy program and contribute to the deeper application of the BeiDou Navigation Satellite System in agricultural systems.

- **Standard for collaborative operation.**

From November 28 to December 30, 2023, Tsinghua University is soliciting opinions on the sector standard *'technical requirements for data exchange in the collaborative operation of multiple agricultural machineries (draft for comments).'* Tsinghua University is the main drafter of this standard.

The standard aims to address current issues in the process of multi-agricultural machinery cooperative operations, such as untimely data exchange, insufficient content, non-uniform formats, and low efficiency. It specifies the content and technical requirements for data exchange between multiple agricultural machines during cooperative operations and between agricultural machines and the management control center. This will serve as the foundation for intelligent and unmanned agricultural machinery cooperative operations, ensuring increased efficiency, precision, and quality in China's public agricultural machinery services.

Both standards mentioned above are locally formulated and have not referenced any standards from other countries. If AEM requires the standard texts and wishes to provide feedback, please contact us."

5. Summary of Agricultural Machinery Promotion Work in China in November

- **Update on the development of the agricultural machinery promotion appraisal scheme**

On November 24, the Ministry of Agriculture and Rural Affairs (MARA) announced a compilation of 36 newly formulated and revised "outlines for the appraisal and promotion of agricultural

machinery". This includes revisions to 20 outlines and the formulation of 16 new outlines.

The revised outlines cover various agricultural machinery categories, including agricultural wheeled and tracked tractors, row planters, combined harvesters for grains, corn harvesters, rotary tillage seeders, single-grain (precision) seeders, rice milling machines, straw (bale) balers, rapeseed harvesters, field management machines, peanut harvesters, potato planters, seed pre-treatment equipment/rice seed germination machines, root and tuber Chinese medicinal herb planters, fresh corn huskers, root and tuber Chinese medicinal herb harvesters, automatic feeding machines, leafy vegetable harvesters, combustion CO2 generators, and seed drills.

The newly formulated outlines cover various machinery, including row cultivators, compactors, combined tillage machines for straw returning, precision sticky seeders, rotary tillage ridge-seeding machines, frost protection machines, orchard blossom thinners, multifunctional tracked management machines, rapeseed reaping and drying machines, mixed grain combined harvesters, green onion harvesters, specialized rapeseed harvesting platforms, livestock farm pen environmental

control systems, broadcast seeders, metal grain silos, and rapeseed threshers.

These outlines for promotion appraisal of agricultural machinery serve as a prerequisite for conducting such appraisals, enabling eligibility for purchase subsidies. It is recommended that relevant AEM members study these outlines and undergo promotion appraisals. If you need the text of these outlines, please contact us.

- **Other agricultural machinery promotion schemes**

In November, the MARA Agricultural Mechanization Central Station successively released the "2023 Selection Results for Advanced and Applicable Facility Vegetable Planting Machinery" and the "2023 Selection Results for Soybean Primary Processing Machinery." These selections are measures taken by MARA to promote the application of advanced agricultural machinery and will have a stimulating effect on machinery sales. The 2023 selection results include overseas companies (such as YANMAR Agricultural Machinery's fully automatic vegetable transplanting machine). It is recommended that relevant AEM companies participate in such selections to enhance the visibility of their products.

6. Four Safety Standards for Snow Throwers Come into Effect

On November 27, SAC published four safety standards for snow throwers, and these standards came into effect on the date of publication.

No.	Standards	ISO standards adopted	Implementation date
1	GB/T 43326.1-2023 Snow throwers—Safety requirements and test methods—Part 1: Terminology and common tests	ISO 8437-1:2019, MOD	Nov 27, 2023
2	GB/T 43326.2-2023 Snow throwers—Safety requirements and test methods—Part 2: Pedestrian-controlled snow throwers	ISO 8437-2:2019, MOD	Nov 27, 2023
3	GB/T 43326.3-2023 Snow throwers—Safety requirements and test methods—Part 3: Ride-on snow throwers	ISO 8437-3:2019, MOD	Nov 27, 2023
4	GB/T 43326.4-2023 Snow throwers—Safety requirements and test methods—Part 4: Additional national and regional requirements	ISO 8437-4:2019, MOD	Nov 27, 2023

While these standards are voluntary in nature, being the sole safety requirements for snow thrower products in China at present, they are expected to play a crucial role in the market. These standards may be referenced in commercial tenders or government procurement, influencing product sales. Additionally, as these standards are modifications of adopted ISO standards, it is advised that AEM's snow thrower manufacturing companies research the differences between these standards and the ones they currently use to understand potential market barriers."



Construction and Mining Machinery

7. Reference Guide for Digital Transformation in the Construction Machinery Industry

On November 16, 2023, the Ministry of Industry and Information Technology of China published the *Reference Guide for the Integration and Application of Industrial Internet in the Construction Machinery Industry* (referred to as the Reference Guide).

According to the *Data Map of the Integration of Informatization and Industrialization (2020)*, in 2020 China's integration development index in the machinery industry was 51.9, while the numerical control rate of key processes was 34.8%, and the digitization level was considered average among all industries. The Reference Guide represents a concrete effort to address this issue, aimed at providing guidance for the further adoption of the Industrial Internet in key industries. Specifically, the document focuses on the construction machinery manufacturing industry. The ultimate objective is to promote cost reduction, improve efficiency throughout the industry, enhance product quality stability, and establish an environmentally friendly and safe production system.

The Reference Guide encompasses ten chapters:

- 1) General
- 2) Integration and application scenarios
- 3) Implementation framework of integration and innovation
- 4) Construction of industrial Internet network facilities
- 5) Construction of industrial Internet identity resolution systems
- 6) Construction of industrial Internet platforms
- 7) Construction of industrial internet security protection systems
- 8) Organization and implementation
- 9) Development recommendations
- 10) Appendixes:
 - a) List of major industrial internet providers in China
 - b) Introduction of typical solutions
 - c) Explanation of technical terms

The first section defines the specific application scope of the Reference Guide, which is construction machinery manufacturing, corresponding to the sector code 351 of GB/T 4754-2017. In other words, it specifically applies to the following industries:

- 1) Mining machinery manufacturing
- 2) Oil drilling and production equipment manufacturing
- 3) Deep-sea oil drilling equipment manufacturing

- 4) Construction engineering machinery manufacturing
- 5) Machinery manufacturing for construction materials production
- 6) Metallurgical equipment manufacturing
7. Machinery manufacturing for tunnel construction

For AEM and its members, the Reference Guide can represent a useful reference when dealing with manufacturers in China that are addressing the digital transformation, as it comprehensively outlines potential scenarios, frameworks, and other crucial elements that should be considered during the process. Therefore, the document can help AEM and its members gaining a deeper understanding of the recommended considerations involved in digitizing the construction machinery manufacturing industry in China.

8. SAMR Issued Implementation Details for Lifting Appliance Safety Regulations

On November 10, 2023, the State Administration for Market Regulations (SAMR) issued Notice No. 20 regarding the **Regulations on Safety Technology for Lifting Appliances** (TSG 51-2023) (hereinafter referred to as the Regulations¹). The Regulations was issued on May 23, 2023 and will be implemented on January 1, 2024. To clarify and facilitate the implementation of the Regulations, SAMR specified the following details.

Overload limiter for mechanical parking equipment

Overload limiter shall be installed in accordance with the requirements of article A5.12(5) (see below for the translation) of the Regulations. This applies to mechanical parking equipment of multi-layer circulation, roadway stacking, plane moving, vertical lifting and special lift for automobiles. Overload limiter is not required to be installed for the mechanical parking equipment of simple lifting, lifting and transverse movement, horizontal circulation and vertical circulation.

A5.12 Overload detection device

(5) Mechanical parking equipment should be equipped with an overload limiter. When the weight of the car exceeds 95% of the rated load, the overload limiter should send an alarm signal, while automatically cut off the lifting power supply when the weight reaches 100% to 110% of the rated load.

Implementation of the first inspection of lifting appliances installation notice

When the installation notification is carried out in accordance with Regulation 6.4.1(3) (see below for the translation), the installation unit shall implement the notification work for the hoisting machinery that has an installation process. If a hoisting machinery does not involve an installation process, the notification process is not required.

6.4.1 General Requirements

(3) For the lifting appliances that is tested for the first time, whether it is installed by the user or commissioned by the installation unit, the user shall handle the installation notification procedures.

¹ For basic information on the Regulations, please refer to #6 item in **20230615 BESTAO-AEM China Compliance May 2023**.

For AEM and AEM members, official regulatory clarifications in China are generally published when specific issues are frequently encountered during the implementation. As a result, the Regulations are of particular significance for foreign stakeholders. It is also recommended to maintain contacts with relevant regulators and closely monitor possible new clarifications in the future as new issues emerge.

9. New Batch of Earth-moving Standards to be Implemented

On November 30, SAC/TC334 (Earth-moving machinery) confirmed the implementation date for 11 national standards within their competence, specifically:

No.	Standard No.	Standard Name	Standard to be replaced	Connection with International standard	Issued Date	Implementation Date
1	GB/T 25622.1-2023	Earth-moving machinery—Operator's manual—Part 1: Contents and format	GB/T 25622-2010	IDT, ISO 6750-1:2019	2023/11/27	2024/6/1
2	GB/T 25684.14-2023	Earth-moving machinery—Safety—Part 14: Requirements for compact tool carriers	Newly developed	IDT, ISO 20474-15:2019	2023/11/27	2024/6/1
3	GB/T 25684.15-2023	Earth-moving machinery—Safety—Part 15: Requirements for block handlers	Newly developed	N/A	2023/11/27	2024/6/1
4	GB/T 8419-2023	Earth-moving machinery—Laboratory evaluation of operator seat vibration	GB/T 8419-2007	IDT, ISO 7096:2020	2023/9/7	2023/9/7
5	GB/T 8595-2023	Earth-moving machinery—Operator's controls	GB/T 8595-2008	IDT, ISO 10968:2020	2023/9/7	2023/9/7
6	GB/T 14781-2023	Earth-moving machinery—Wheeled machines—Steering requirements	GB/T 14781-2014	IDT, ISO 5010:2019	2023/9/7	2023/9/7
7	GB/T 25619-2023	Earth-moving machinery—Coupling of attachments to skid steer loaders	GB/T 25619-2010	IDT, ISO 24410:2020	2023/9/7	2023/9/7
8	GB/T 25628-2023	Earth-moving machinery—Tooth	GB/T 25628-2010	N/A	2023/9/7	2023/9/7
9	GB/T 43135-2023	Earth-moving machinery—Block handler—Terminology and commercial specifications	Newly developed	N/A	2023/9/7	2023/9/7

No.	Standard No.	Standard Name	Standard to be replaced	Connection with International standard	Issued Date	Implementation Date
10	GB/T 43137-2023	Earth-moving machinery— Hydraulic breakers— Terminology and commercial specifications	Newly developed	IDT, ISO 16417:2020	2023/9/7	2023/9/7
11	GB/T 43138-2023	Earth-moving machinery— Lifting and typing-down attachment points— Performance requirements	Newly developed	IDT, ISO 15818:2017	2023/9/7	2023/9/7

For AEM and AEM members, the majority of the new standards are identical adoptions of ISO standards, which implies significant facilitation for foreign multinational corporations and exporters entering the Chinese market. By contrast, the national standards newly developed by Chinese experts may require further attention. However, the fact that none of these standards are mandatory suggests a potentially limited impact on products currently being sold or planned for sale in the Chinese market.

10. Construction of Green Mines to be Further Strengthened

On November 15, 2023, the Ministry of Natural Resources (MNR) issued a call for comments on the **Notice on Further Strengthening the Construction of Green Mines** (Draft for comments – hereinafter referred to as the Notice). The Notice is the result of a joint effort by multiple national ministries and authorities, including the Ministry of Ecology and Environment (MEE), the Ministry of Finance (MoF), the General Administration for Market Regulation (SAMR), the National Administration of Financial Regulation, and the China Securities Regulatory Commission (CSRC). The purpose is to optimize the green and low-carbon transition within the mining industry.

A similar document was issued by six ministries in March 2017, named **Implementing Opinions on Accelerating the Construction of Green Mines**. Compared to the previous document, the new Notice represents a significant upgrade as per its industrial development needs and new low-carbon requirements. Specifically, the Notice is formulated on the basis of a thorough investigation on existing green mine

constructions in different regions, and is intended to serve as a general guideline to regulate and facilitate a more efficient green mining management. The main goal outlined is to have all large-scale and 80% of medium-sized mines (that are licensed and in production), to obtain the green mining level qualification by the end of 2028.

The Notice contains 8 chapters and 3 annexes, which cover:

- General requirements and main goals;
- Responsibilities and roles of mining enterprises to accelerate technology application and the development of green and low-carbon mining;
- Optimization of third-party assessment for on-site evaluation; establishment of green mine dynamic management based on industry-specific catalogues;
- Enhancement of policy support, including on preferential taxation and innovation;
- Further improvement of the standardization system and the evaluation system, while

encouraging the formulation of regional and enterprise standards;

- Optimization of the management level and monitor requirements, and improvement of the working system to clarify roles and responsibilities of all relevant regulators.

AEM and AEM members are advised to note that the Notice directly targets the following types of mining machinery and equipment:

- Favourable equipment: large-scale automatic hydraulic shovel loading equipment, hydraulic excavators or loaders, dump trucks, and large self-moving crushers are categorized as “advanced equipment” that are encouraged to be applied to green mines.
- Noise control requirements: mining drilling, crushing and air pressure and other high noise equipment should be equipped with noise reduction, vibration reduction and vibration isolation measures.

AEM members that had already been meeting the main content and requirements of the 2017 **Implementing Opinions on Accelerating the**

Construction of Green Mines, the new changes introduced by the Notice mainly include:

- Specific requirements are elaborated regarding the attributes of third-party assessment bodies and their personnel qualifications. Traceable responsibilities and assessment procedure, together with supervising management measures and punishment measures for violations are also specified.
- The dynamic management based on industry-specific catalogues is enhanced. Putting forward that the catalogue would be updated based on the qualified and disqualified status of the relevant enterprises. Scenarios on disqualifies for eliminating the enterprise from the catalogue are also clarified in the draft Notice.
- Assessment and key indicators for green mine qualifications are specified, improving applicability and operability.
- Quantitative requirements are established regarding the supervision and on-site inspections for relevant regulators.



Cyber and Data Security

11. MIIT Formulates Penalty Guidelines for Data Security Violations

On November 23, MIIT (Ministry of Industry and Information Technology) initiated the solicitation of opinions on the *"Administrative Penalty Discretion Guidelines for Data Security in the Industrial and Information Fields (Trial)"* (hereinafter referred to as the "Guidelines"). This document aims to further refine the provisions of penalties related to the Data Security Law, establish an administrative penalty authority system for data security in the industries within MIIT's jurisdiction, unify the scale of administrative penalties for data security, and guide industry regulatory authorities in carrying out administrative penalties for data security. The deadline for feedback is December 23, 2023.

The Guidelines explicitly define the scope of the locations where data security violations occur, encompassing the place of residence, network access points, and other relevant areas. It proposes dispute resolution methods for jurisdiction at different levels, including supervisory jurisdiction, territorial jurisdiction, transfer jurisdiction, and cross-jurisdiction. It also suggests that the same data security violation by data processors in the industrial and information fields should not be subject to administrative penalties more than twice.

The Guidelines delineate three categories of triggering conditions for illegal acts: failure to fulfil data security protection obligations, illicit provision of data to overseas entities, and non-cooperation with supervision. These triggering conditions take into account factors such as data level and quantity, the time of public interest

harm, direct economic losses, and scope of impact. The severity of data security violations is classified into "light," "medium," and "serious" circumstances. It clearly defines the discretion steps such as non-punishment, lenient punishment, mitigated punishment, and severe punishment, detailing the applicable conditions for each administrative penalty.

Regarding the data crossing the border, which is of widespread concern to overseas stakeholders, the Guidelines state that providing data stored in China in the industrial and information Fields to foreign industrial, telecommunications, and radio law enforcement agencies without the approval of MIIT constitutes one of the situations of illegally providing data overseas. If it involves "key data", "core data", or exceeds 10 million "generic data", it will be considered moderately serious; if it involves "key data" or "core data" processed by two or more data processors, or exceeds 100 million "generic data", it will be deemed serious. Regulatory authorities will determine whether to impose no penalty, lenient penalty, mitigated penalty, or severe penalty based on the severity of the circumstances, violation records, subjective or passive involvement, and cooperation with supervision.

Alongside the Guidelines, the *"Administrative Penalty Discretion Benchmark for Data Security in the Industrial and Information Fields"* was also released. This document lists 14 illegal acts and provides specific standards for penalties for each level of discretion for each violation.

12. Briefing on TC260 Working Meeting

From 1 to 4 November 2023, the National Information Security Standardization Technical

Committee (SAC/TC260) held its second "Standards Week" of 2023 in Wuhan, Hubei

Province. This edition of the Standard Week comprised a plenary session, four thematic seminars, as well as the meetings of six working groups under TC260: (i) cryptography, (ii) identification and authorization, (iii) security assessment, (iv) communications, (v) security management, and (vi) big data security. All these sessions focused on promoting the development of standards for AI security. Approximately 800 participants attended the week-long event, including representatives from China's cybersecurity authorities, the heads of the working groups, and members of TC260.

For foreign stakeholders, the meeting conveyed two important signals. Firstly, the work on data-related standards is nearing completion, and certain projects regarding data-related standards have been consolidated. Secondly, one of the key focuses of Special Working Group of Big Data Security (SWG-BDS) of TC260 in the foreseeable future will be on AI-related standards, aimed at providing primary support to recently released regulations such as the *Interim Measures for the Administration of Generative Artificial Intelligence Services*. These signals closely align with the current policy trends, which have established a comprehensive regulatory framework for cybersecurity and data security, and responded to the rapid technological development of generative Artificial Intelligence in China. To facilitate a better understanding for foreign stakeholders, the following section will provide a detailed overview of the specific developments that took place during the "Standards Week":

- **Merging of data-related standards:**

Merging the rules for data grading and classification. The standard project 20210995-T-

469 *Information Security Technology - Identification Guide of Key Data* is integrated into the standard project 20220787-T-469 *Information Security Technology - Rules for Data Classification and Grading*. The latter encompasses the principles, framework, methodology, and process for data classification and grading. After the integration, the identification guide of key data (20210995-T-469) will become a normative annex of the rules for data classification and grading (20220787-T-469).

Merging the security requirements for different types of data. The standard project 20230792-T-469 *Information security technology — Security requirements for processing of key data* has been merged into the standard project *Requirements for data security protection*. Similar to the previous point, the Requirements for data security protection provide detailed explanations regarding the security protection requirements for data of various grades and classifications.

- **Advancing standardization projects related to generative artificial intelligence:**

Information security technology — Basic security requirements for generative artificial intelligence (expected to be released soon, supporting the filing requirements specified in the *Interim Measures for the Administration of Generative Artificial Intelligence Services*)

Information security technology — Generative artificial intelligence data annotation security specification (ongoing)

Information security technology — Security specification for generative artificial intelligence pre-training and fine-tuning data (ongoing)



Emission Control

13. Progress of China VII Emission Standard for Heavy-Duty Vehicles

The research and development of China's national standard for emission control of heavy-duty vehicles, known as the China VII Standard, was initiated in October 2020. The first phase of research was completed in December 2021. In September 2022, the second phase of research commenced, focusing on addressing the primary issues identified during the initial research. In April 2023, the project team conducted the second working group meeting to report on the progress of various topics.

Currently, the research and development working group for the China VII Standard includes 33 participating enterprises, covering areas such as engines, complete vehicles, after-treatment systems, and testing institutions. This includes companies such as Cummins, Volvo, Daimler, and other European and American enterprises.

The second phase of research for the China VII Standard includes the following topics:

- Engine Pollutant Emissions:
 - Determination and limit requirements of pollutant items
 - Study of emission characteristics under low-load conditions
 - Requirements for non-traditional fuel technologies
 - Collaborative limit schemes for pollutants and greenhouse gases
 - Cost analysis
- Whole Vehicle Emissions:
 - Optimization of PEMS testing procedures
 - Feasibility of pollutant items and testing equipment
 - PEMS testing methods for hybrid and unconventional fuels
 - Data analysis methods (work-based window method, 3BIN, etc.)
 - Research on CO₂ emission management
- Whole Vehicle Greenhouse Gas Emission Testing and Evaluation Methods
 - Research on chassis dynamometer testing procedures (boundary conditions, pre-processing, load, etc.)
 - Greenhouse gas testing items of chassis dynamometer (CO₂, CH₄, N₂O)
 - Development of VECTO localization simulation software (component digital models, parameter localization)
 - Comparative research between VECTO software and chassis dynamometer testing
 - Research on CO₂ normalization methods for actual road PEMS measurements
- Enterprise Average Greenhouse Gas Emission Plans:

- Research on European heavy-duty vehicle enterprise average plans
- Study of the U.S. heavy-duty vehicle ABT management system
- Tracking and study on China's commercial vehicle fuel consumption standards
- Design and impact analysis of enterprise average greenhouse gas emission plans
- Research on supporting incentives and flexible implementation
- Study and verification of enterprise average target plans
- Calculation and verification of typical enterprise pilot programs
- OBD and OBM:
 - Research on engine OBD type inspection and verification methods
 - Fault verification items and methods for whole vehicle OBD
 - Research on the regulatory system for whole vehicle PVE
 - Research on OBM monitoring items, models, and limit standards
 - Study on fault diagnosis requirements for OBM-related components
 - Research on remote monitoring projects, frequency, application, and terminals
 - Compilation of whole vehicle type inspection items (OBD, NOx control, OBM, remote monitoring, etc.)
- Regulatory System:
 - Review of the existing regulatory system
 - Research on the latest regulatory requirements in Europe and the United States
 - Comprehensive review of new regulatory requirements considering greenhouse gases, OBM, and remote monitoring
 - Clarification of inspection items, sampling ratios, and determination rules at each stage
 - Weakening research on engine OBD type inspection
 - Requirements for whole vehicle OBM type inspection
 - Requirements for whole vehicle remote monitoring type inspection.

The main directions of the second-phase research include: i) Collaborative control of pollutants with CO₂, N₂O, NMOG, and HCHO; ii) Continued tightening of limits, primarily focusing on NO_x and PM, while considering other energy sources such as hydrogen and methanol; iii) Further expansion of the evaluation system, emphasizing actual whole-vehicle emissions; iv) Collaboration: Emphasis on coordination and alignment with international regulations.

Major Issues and Recommendations Identified in the Second-phase Research (Partial):

a) Engine Pollutant Emissions:

The requirement of 0.23g/kWh faces challenges, especially for cold conditions and small four-cylinder engines. Balancing NO_x and N₂O emissions needs attention.

b) Whole Vehicle Emissions:

Establish a separate limit for the first-cycle work as cold-state data; follow the EPA2Bin method for subsequent data, establishing separate limits for Bin1 and Bin2; reference European drafts and EPA 2027 for limit considerations.

c) Whole Vehicle Greenhouse Gas Emissions:

Coordinate limit targets with fuel consumption standards; Manage N₂O and CH₄ limits together with pollutants and convert the volumes exceeding limits to CO₂ emissions; consider greenhouse gas emissions from air conditioning systems; focus on chassis dynamometer testing, with software simulation as an alternative method.

d) Enterprise Average Greenhouse Gas Emission Plans:

For the baseline year, calculate the average GHG emissions within each vehicle subgroup by dividing the declared GHG emissions per vehicle for all fuel vehicles in the industry by the maximum load; multiply this average by the expected adoption rate of zero-emission vehicles and the internal combustion engine emission reduction ratio to obtain the GHG emission target for the subgroup.

e) OBD and OBM:

Simplify fault level classification for engines; introduce whole-vehicle OBD functionality verification (PVE); monitor the operation of OBM-related components and software; verify the overall vehicle robustness after OBD optimization; adjust IUPR limits for monitoring items.

Introduce whole-vehicle PVE test requirements; verify the accuracy of remote monitoring data transmission and OBM system outputs.

f) Regulatory System:

Coordinate control for both whole vehicles and engines; weaken OBD requirements; coordinate control for pollutants and greenhouse gases; conduct whole-vehicle verification for OBD and OBM; implement enterprise average management for greenhouse gases.

While the research and development results do not represent the final standards, they still reflect the future development direction of the China VII Standard. For more detailed information, please contact us.



ESG

14. China Develops New Standard for Carbon Footprint Calculation

On November 2, 2023, the National Environmental Management Standardization Technical Committee (SAC/TC207) and the National Carbon Emission Management Standardization Technical Committee (SAC/TC548) issued a call for opinions on the national standard **Greenhouse gases — Carbon footprint of products — Requirements and guidelines for quantification (Draft for Comments)**. The deadline for feedback is January 6, 2024.

This standard aims to support a slew of carbon reduction policies, including, among others, the **Action Plan for Carbon Peak by 2030**,¹ the **'National Standardization Development Outline**, the **'Implementation Plan for Accelerating the Establishment of a Unified Specification for Carbon Emission Statistics and Accounting System**,² and the **'Implementation Plan for Carbon Peak in Industrial Sectors**.³ These policies propose the development of carbon footprint standards and the requirements for conducting carbon footprint accounting. This standard is also a means for China to enhance the international competitiveness of local enterprises and address international green trade barriers (such as carbon footprint-related entry requirements enacted by countries like the US and the EU).

Currently, China has adopted several international carbon footprint standards like ISO 14040:2006 and ISO 14044:2006 and has also formulated a few sector-specific and product-specific standards for products' life cycle assessment. However, these standards lack coordination and unity. To address the problem, SAC/TC 207 proposed this standard project. The draft for comments is based on 'ISO 14067:2018 Greenhouse gases - Carbon footprint of products - Requirements and guidelines for quantification', but has made the following changes.

- Added requirements for compiling product carbon footprint-product category rules, providing a reference for the development of rules for specific product categories.
- Added product carbon footprint calculation formulas and global warming potential (GWP) reference values in the product carbon footprint impact assessment, facilitating understanding of quantification methods.
- Added a template for product carbon footprint research reports, providing a reference for specific report compilation.
- Added requirements for product carbon footprint declarations or information exchange, providing a reference for self-declaration or third-party verification of product carbon footprints.”



China RoHS

15. China Initiates Mandatory Standard Project for RoHS

In November 2023, the Standardization Administration of China (SAC) initiated the solicitation of opinions for a new RoHS mandatory standard project titled ***Requirements for certain restricted substances in electrical and electronic products***. This project is intended to replace the existing China RoHS standards GB/T 26572 and SJ/T 11364.

The new standard will specify the labelling requirements for electrical and electronic products sold within China. It will also set maximum allowable content requirements for hazardous substances in electrical and electronic products included in the China RoHS Catalog, along with defining compliance determination rules for these products. The standard will be applicable to the majority of electrical and electronic products sold within China.

Simultaneously, an English version of the standard project will be initiated.

China's RoHS efforts have been underway for nearly two decades. However, due to the fact that the supporting standards for RoHS are ostensibly voluntary, they are often questioned by enterprises during market supervision. Additionally, market supervision, customs inspections, and industry research have revealed that some products (including complete machines, components, electronic materials, etc.) currently sold or imported in the market still lack information on harmful substance content as required by SJ/T 11364. Furthermore, some products falling under the China RoHS Catalog do not meet the quantity requirements specified in GB/T 26572. This standard aims to address these issues.

BESTAO policy review to this Issue:

- BESTAO Policy Review - Summary of 2022 China Agricultural Mechanization Development White Paper

What can be expected in the following editions:

In the following editions, China Regulatory and Compliance Observation for AEM will still cover policies, laws, regulations, certification and standards for agriculture and forestry machinery, construction, and mining machinery of China, which will include but not limited to:

1. Briefing on China Agricultural Mechanization Development White Paper
2. Trend of Agricultural Machinery Purchase Subsidies after 2023
3. Development of Intelligent Coal Mine in China
4. Translation of GB 19517-2023 "national technical specification for the safety of electric equipment"

About BESTAO Consulting Co. Ltd.

Founded by senior experts with solid industry experience, BESTAO Consulting provides regulatory compliance solutions across a wide range of industries to our global clients who wish to enter Chinese markets. Our areas of expertise include Government Affairs, Industry Policies, Technical Regulations and Standards, Certifications and Market Access, Tannings and Translation Services.

Accessing the Chinese market has become increasingly more important for overseas companies of all kinds and having a better understanding of the requirements to enter this large and complex market will give you the advantage over your competition. BESTAO Consulting can help you understand the Chinese regulatory environment to gain access quick and effective access to the Chinese Market.

What We Offer:

- The government affairs team supports our clients in identifying key stakeholders in China to build connections and improve business development.
- Our consulting team helps our clients understand China's legal framework, technical regulations, standardization system and certification schemes, including but not limited to Product Safety, CCC, China RoHS, Energy label, Medical Device Registration, Special Equipment Certification, etc. We advise our clients on market access requirements and draw comparisons between EU/US and China.
- Our intelligence collection team gathers up-to-date information on China's technical regulations and standardization in sectors like electrical and electronics products, consumer products, mechanical products, automotive, etc. We also make tailor-made observations for our clients upon their requests. We make sure that our clients stay informed on the latest developments in regulations, certification, and standardization in China.
- Our training team is dedicated to conducting workshops for overseas companies to facilitate their entry into Chinese markets.
- Our translation team provides high-quality English translations of laws, regulations, standards, and technical specifications.
- We also offer China representative, "virtual office" services and tailor-made China regulatory retainer services for overseas clients.

For more information on how BESTAO can help your company enter and grow in the Chinese market, please contact us at:

BESTAO Consulting Co., Ltd.
Building No.5, Niuwangmiao, Chaoyang District
Beijing, 100102. P R China
Phone: +86 10 6599 6261
Fax: +86 10 6474 9117
Email: assistant@bestao-consulting.com
Website: www.bestao-consulting.com