China Regulatory and Compliance Observation

May 2023
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Message from BESTAO

Dear Readers,

As always, we’re pleased to present you with the May 2023 edition of China Regulatory and Compliance Observation for AEM.

Policies, laws, regulations, certification and standards for agricultural machinery, construction, earth-moving, and mining machinery etc. of China in May 2023 are elaborated.

In the horizontal section, you’ll read about the newly released standardization framework of industrial sectors on carbon peak and carbon neutrality.

This edition elaborates latest publications on agricultural machinery, particularly national revision plan on appraisals in 2023.

The construction, earth-moving and mining machinery sector provides some updates on standards, including some new sector standards on electrical earth-moving machinery.

Other important topics covered in this issue including China RoHS, data security and China VI updates for road vehicles.

In this edition’s policy review, two briefings on China’s data security governance will outline the general framework and the cross-border data management key points.

Enjoy the reading.

Best Regards,

AEM project team of BESTAO
Horizontal

1. National carbon standardization system in place for industrial sectors


It points out the standard formulating directions for industrial sectors in regard to carbon-relevant topics. In general, the standardization system that is outlined in the Guidelines Draft will:

- Cover manufacturing process, technological development, product life cycle, and industrial chain, particularly in carbon reduction in key products and manufacturing process, etc.
- Focus on coordination of standard systems in energy-saving, green manufacturing, etc.
- Promote coordinated development of national, sector, and association standards.
- Integrate emerging technologies like 5G, industrial internet and AI, etc.
- Learn from international standardization existing works and developing trend and enhance international communication and cooperation.

Specifically for AEM and AEM members, the Guideline Draft set up 5 sub-categories under the system, and sector 3 “technology and equipment” are related to machinery products. The framework design is as follows:
Standards in following directions/trends that are elaborated in the Guidelines Draft may be related to AEM and AEM members:

- Standards that support: hydrogen fuel internal combustion engines and other hydrogen energy replacement; structural optimization of raw materials or fuels used in high-emission non-road mobile machinery (such as construction machinery, agricultural machinery, etc.)
- Standards that will promote clean and high-efficient combustion of fossil fuels.
- Standards that improve energy-saving and carbon reduction; or equipment that controls greenhouse gas emission.
- Standards related to renewable resources, as well as low-cost hydrogen production technologies and equipment.
- Lead top manufacturers in the country to actively participate in standardization work, and encourage them to formulate enterprise standards that are stricter than national ones.

Actively participate in international carbon-related standard work with organizations like ISO, IEC, and ITU; submit proposals for international standards to share China’s experience and practice.
Agricultural and Forestry Machinery

2. Updates on agricultural machinery promotion appraisal scheme

On 25 May, MARA issued a *plan for developing and revising agricultural machinery promotion appraisal outlines in 2023*. The plan shows that MARA will develop new outlines for 18 types of agricultural machinery and revise 18 other outlines that are currently effective.

- The 18 new outlines cover field rollers, strip-tillers, straw-returning combine land preparation machines, rotary tilling and ridging planters, precise seed-sticking machines, track orchard management machines, orchard blossom thinning machines, defrosting machines, multi-grain combination machines, oilseed rape cutters, rape shellers, green onion harvesters, rubber cutters, special cutting tables for rapeseed harvest, spreaders, metal grain storage silos, hill tractors, and electric wheeled tractors.

- The 18 outlines to be revised to cover planters, grain combining harvesters, corn harvesters, rotary tillage planters, no-till planters, rice polishers, binding machines, rapeseed harvesting machines, farm management machines, peanut harvesters, potato planters, rice seed sprouting machines, Chinese herbal medicine planting machines, fresh corn huskers, herbal medicinal excavators, automatic feed pushers, leaf vegetable harvesters, and combustion-type CO2 generators.

On 31 May, MARA released the promotion appraisal outline for the regenerative rice harvester (DG/T 297-2023). The outline took effect on the same day.

The agricultural machinery promotion appraisal scheme is one of the pillars of China’s agricultural machinery subsidy system. AEM members should heed the changes in the outlines related to their products.

3. AMCS accredits appraisal bodies for agricultural machinery promotion

On 8 May, MARA Agriculture Mechanization Central Station (AMCS) accredited the first batch of appraisal bodies for agricultural machinery promotion in 2023. These bodies and their product scopes are as the table below.

<table>
<thead>
<tr>
<th>No.</th>
<th>Appraisal station</th>
<th>Product scope</th>
<th>Validity duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Heilongjiang Agricultural Machinery Test and Appraisal Station</td>
<td>Assisted driving (system) equipment (Beidou navigation terminal for agriculture (excluding fishing boats))</td>
<td>5 years</td>
</tr>
</tbody>
</table>
The aforementioned bodies have been endorsed by the government, so are the first choice for AEM members to conduct promotion appraisal.

4. White paper reveals Beidou application in agricultural machinery

On May 18, 2023, the GNSS & LBS Association of China published the *White Paper on the Development of China's Satellite Navigation and Location Services Industry 2023* (hereinafter referred to as “the White Paper”). It elaborates the application data and status of China’s Beidou in different sectors, and some key facts and data of the role that Beidou plays in agricultural machinery is disclosed.

According to the White Paper, the service form and scope of Beidou has continued to expand in 2022 for the agricultural sector. The locally-manufactured agricultural machinery installed with Beidou terminals has played an important role in the grain production: more than 50 thousand harvesters with Beidou service carried out cross-region operation in summer harvest 2022 and the number in the autumn harvest is 12 thousand, which are mainly used for wheat, rice and corn in the Northeastern and Northern
provinces of China. More than 2,000 trillion data was generated by Beidou, and was reported to have highly improved the production efficiency of agricultural machinery.

Other key data regarding Beidou service application disclosed by the White Paper include:

- By the fourth quarter of 2022, based on incomplete statistics, more than 1.6 million units of Beidou terminals are used in agricultural sectors, among which, more than 170 thousand units are automatic driving systems, and about 1.33 million units are used for remote maintenance and positioning services, more than 90 thousand units are applied in fishing boats.

- 13 Chinese provinces have launched the construction of a total of 26 unmanned farms supported by Beidou services in the year of 2022, and is reported to have reduced 60% of labor cost, and achieved a 50% increase on agricultural machinery efficiency, along with a 50% improvement on energy consumption.

The expanding of Beidou service in China’s agricultural machinery is a result of the country’s efforts on intelligent transition, therefore the trend is expecting to continue in the coming years. Such situation may initiate market challenge and opportunities for AEM members with relevant products, therefore it is advised to observe more information and development of Beidou applications in the sector.
5. Recommending catalogue announced for low noise construction machinery

On May 19, 2023, the Ministry of Industry and Information Technology (MIIT) announced the *Guiding Catalogue of Low Noise Construction Equipment (first batch)* jointly with three ministries: the Ministry of Ecology and Environment (MEE), the Ministry of Housing and Urban-Rural Development (MOHURD) and the State Administration for Market Regulations (SAMR).

The equipment recommendation work starts in January of 2023, and the key requirements for the products are: i) equipment should be sold and used in China; ii) the noise value of the applying products should be better than the national standard (*GB 16710-2010 Earth-moving machinery - Noise limits*) requirements. Further detail of the requirements was elaborated in issue #8 of “20230215 BESTAO-AEM China Compliance January 2023”.

The listed products include rollers (vibratory and oscillation, non-vibratory and non-oscillation), crawler tractor-dozers, wheel loaders, graders, and excavators. The product of two MNCs appears on the list with the following details:

<table>
<thead>
<tr>
<th>Product Model</th>
<th>Engine net power/Motor power rating (kW)</th>
<th>The Sound power level of exterior emitted noise/dB(A)</th>
<th>Emission sound pressure level at operator’s position/dB(A)</th>
<th>Manufacturer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excavator</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DX150LC-10</td>
<td>71.3</td>
<td>98</td>
<td>72</td>
<td>Doosan China</td>
</tr>
<tr>
<td>DX130-10</td>
<td>71.3</td>
<td>100</td>
<td>72</td>
<td></td>
</tr>
<tr>
<td>DX225LC-10</td>
<td>123.4</td>
<td>102</td>
<td>70</td>
<td></td>
</tr>
<tr>
<td>DX380-10</td>
<td>210</td>
<td>103</td>
<td>71</td>
<td></td>
</tr>
<tr>
<td>DX380HD-10</td>
<td>236.4</td>
<td>102</td>
<td>69</td>
<td></td>
</tr>
<tr>
<td>EC220ELC4</td>
<td>129</td>
<td>100</td>
<td>67</td>
<td>Volvo China</td>
</tr>
<tr>
<td>EC360ELC4</td>
<td>220</td>
<td>103</td>
<td>73</td>
<td></td>
</tr>
</tbody>
</table>

AEM and AEM members are advised to observe and apply for being in the category if the product is compliant with requirements as it is a way of gaining official product endorsement. In addition, the announcement clearly stated to “encourage relevant regulators at a regional level to issue promotion policy for a wider application of the low noise construction equipment”, which is very likely to lead to a market advantage.
6. Safety regulations for lifting appliances issued for implementation

On May 23, 2023, the State Administration for Market Regulation issued the Regulation on Safety Technology for Lifting Appliances (formerly named “Lifting Appliances Safety Technical Regulations,” with relevant information covered in issue #9 of “20220615 BESTAO-AEM China Compliance-May 2022”).

This regulation applies to lifting appliances within the scope of China’s Special Equipment Catalogue. The implementation date of the regulation was announced for January 1, 2024, which means production (design, manufacture, installation, transformation, repair, the same below), use, inspection, and testing of lifting appliances shall comply with the provisions of these regulations since then. Its implementation will replace the following existing technical regulations:

- Regulations for Safety Technical Supervision for Lifting Appliances-Bridge Crane (TSG Q0002—2008)
- Type Test Rules for Lifting Appliances (TSG Q7002—2019)
- Periodic Test Rules for Lifting Appliances (TSG Q7015—2016)
- Rules For Supervision and Inspection of Major Repair for Lifting Appliances (TSG Q7016—2016, including its No. 1 amendment)
- Notice on the Definition of Lifting Machinery Related Terms by the State Administration for Market Regulation (issued in 2020)

Compared with the call-for-comment draft issued in 2022, this final version made multiple changes in the contents and most importantly, it deleted the requirement in the first chapter which stated as “the manufacturing, installation, transformation, repair, operation parties and inspection/testing institutions of lifting appliances must conform to the standard series of GB/T 3811-2008 Design Rules for Cranes and GB/T 6067.1-2010 Safety Rules for Lifting Appliances - Part 1: General Requirements.” The two standards are no longer cited by the Regulation.

However, this regulation is a significant safety document for lifting appliances, and it has cited multiple national voluntary standards and sector standards, therefore AEM members with such products are advised to assess the impact of this document and take actions necessary.

7. Carbon reduction action plan issued for heavy machinery

In May of 2023, China Heavy Machinery published the full text of the Energy Saving and Carbon Reduction Action Plan of Heavy Machinery (hereinafter referred to as “the Action Plan”). It raised 95 working tasks to support the goals set up in the Carbon Peaking Implementation Plan of Industrial Sectors (issued in July of 2022 by the MIIT).

For AEM and AEM members, the Action Plan outlines developing trends of mining machinery and lifting appliances under the topic of energy saving and carbon reduction in the China market. The details are summarized as follows:

Mining machinery:
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- Enhance the application of newly emerging technologies (AI, IoT, cloud computing, etc.) in R&D, manufacturing, and recycling of mining machinery;
- Support smart manufacturing systems that can optimize emission and quality management to improve efficiency;
- Promote online monitoring of carbon emissions through new technologies and track full lifecycle carbon prints;
- Standards of green design assessment and green manufacturing will be revised for mining machinery.
- Eliminate unfitting and high-energy consuming machinery in accordance with the laws and regulations and optimize product structure.

Products and technologies that will be highly promoted in the China mining machinery market:

- Green, safe, and high-efficient equipment assemblies for mines;
- Unmanned equipment for opencast mines;
- New energy equipment;
- High-efficient energy-saving dust removal products and pollution control robots etc.;
- Ones that can reinforce the recycling of renewable resources (raw materials and batteries etc.)

Lifting appliances:

- Manufacturers of lifting appliances in China are required to set up clear carbon reduction measures throughout the manufacturing process;
- Reinforce the integration of green and low carbon production with new technologies (internet, big data, AI, 5G, etc.)
- Focus on key manufacturing techniques and processes.
- Organize and plan to issue low-carbon technology catalogues for lifting appliances;
- Encourage the sector and enterprises to match with international advanced level in regard to energy consumption limits; restrict and eliminate low-tech, and high energy consumption equipment.
- Key technical developing trends include: green design, light weight design, energy recovery and storage, fossil fuel to electricity, key technology for basic parts, research in green and low carbon evaluation index, research for green material application, and online testing and control technologies;
- Formulate standards and regulations for green and low-carbon evaluation for lifting appliances, and a unified certification and labelling system, for the sector to build up a streamlined green certification system.
- Draft catalogue for encouraging, restricting and eliminating product catalogue, as well as standards on green and low carbon testing/certification, and carbon emission calculation methods for key fields.
Products and technologies that will be highly promoted in the China mining machinery market:

- Promote the application of mature low carbon techniques such as additive manufacturing, anti-fatigue manufacturing, lightweight manufacturing, high-density wheel near net forming, electric single beam crane main beam welding forming and crane interior painting etc.
- Encourage the development and wider application of intelligent lifting appliances (intelligent metallurgical crane, intelligent port handling crane), electrical machinery (front lifting crane, electric container stacking crane, oil to electric wheeled container gantry crane), and low carbon equipment such as port continuous ship loaders, solar cranes and lightweight cranes.
Earth-moving and Mining Machinery

8. Mandatory machinery safety standards submitted for approval

On May 5, 2023, China Machinery Industry Federation (CMIF) issued an approval submission notice on two national mandatory standards:

<table>
<thead>
<tr>
<th>Standard/Project No.</th>
<th>Standard Name</th>
<th>Application scope</th>
<th>Standards to be Replaced</th>
<th>TC in Charge</th>
<th>Implementation Suggestion</th>
</tr>
</thead>
<tbody>
<tr>
<td>20203576-Q-339</td>
<td>Mining machinery—Safety technical specification</td>
<td>This document specifies the safety technical requirements for equipment safety in the mining machinery field. It applies to the design, manufacturing, installation, application, maintenance, recycling, testing, and certification of mechanical equipment used in the mining, grading, and processing of various solid minerals.</td>
<td>Partly replace: GB 16541-2010, GB 16542-2010, GB 18451-2001, GB 20180-2006, GB 20181-2006, GB 21008-2007, GB 21009-2007, GB 21011-2007, GB 25519-2010, GB 25520-2010, GB 25521-2010, GB 25522-2010, GB 25523-2010, GB 25524-2010, GB 25525-2010, GB 25526-2010, GB 25527-2010</td>
<td>TC88 (Mining Machinery)</td>
<td>Set up an interim period of a minimum of 12 months after the publication date</td>
</tr>
<tr>
<td>20211250-Q-339</td>
<td>Rotating electrical machines—Safety technical specification</td>
<td>This document specifies the general safety technical requirements, test methods, and inspection rules for rotating motors. It applies to the design, manufacture, inspection, certification, and maintenance of all rotating motors (including motors and generators) except aerospace motors and traction motors.</td>
<td>GB 20237-2006, GB 20294-2006</td>
<td>TC26 (Rotating Machinery)</td>
<td>Set up an interim period of a minimum of 6 months after the publication date</td>
</tr>
</tbody>
</table>

For international reference, the mining machinery standard does not adopt nor cite any international standards as there are presently no similar ones. However, for the standard on rotating electrical machines, its safety requirements are per GB/T 755-2019 Rotating electrical machines—Rating and performance (an identical adoption of IEC 60034-1:2017). The main technical requirements for this standard coordinated with UL1004 of the United States, and CSA100 of Canada. For further comparison:

<table>
<thead>
<tr>
<th>Main Market</th>
<th>Technical Regulations</th>
<th>Standards</th>
<th>Conformity Assessment Process</th>
<th>If different from the Chinese standard (Y/N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU</td>
<td>LVD Directive</td>
<td>EN 60034-1</td>
<td>CE mark (market access)</td>
<td>N</td>
</tr>
<tr>
<td></td>
<td>EMC Directive</td>
<td>EN 60335-1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ErP Directive</td>
<td>EN 60034-30</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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**Main Market** | Technical Regulations | Standards | Conformity Assessment Process | If different from the Chinese standard (Y/N)
---|---|---|---|---
**USA** | Regulation of electrical safety | UL1004 | UL mark | Y
| 10CFR Part431 Energy Efficiency | NEMA MG.1 IEEE 112 | CC mark (market access) | Y

**Canada** | Regulation of electrical safety | CSA22.2 No. 100 CSA22.2 No.77 | CSA mark (market access) | Y
| EEACT | CSA C390-10 | EEV mark (market access) | Y

For the comparison of the voltage and frequency status of China with other main markets:

<table>
<thead>
<tr>
<th>Region</th>
<th>Voltage (V)</th>
<th>Frequency (Hz)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Single phase machines</td>
<td>Three phase machines</td>
</tr>
<tr>
<td>China</td>
<td>220</td>
<td>380</td>
</tr>
<tr>
<td>EU</td>
<td>230</td>
<td>400</td>
</tr>
<tr>
<td>USA</td>
<td>115</td>
<td>115</td>
</tr>
<tr>
<td>200</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>230</td>
<td>230</td>
<td></td>
</tr>
<tr>
<td>460</td>
<td>460</td>
<td></td>
</tr>
<tr>
<td>575</td>
<td>575</td>
<td></td>
</tr>
<tr>
<td>Canada</td>
<td>115</td>
<td>115</td>
</tr>
<tr>
<td>200</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>230</td>
<td>230</td>
<td></td>
</tr>
<tr>
<td>460</td>
<td>460</td>
<td></td>
</tr>
<tr>
<td>575</td>
<td>575</td>
<td></td>
</tr>
</tbody>
</table>

### 9. New earth-moving machinery sector standards call for comments


Nine standards have possible connections with AEM and AEM members, with detail as follows:

<table>
<thead>
<tr>
<th>No.</th>
<th>Standard No.</th>
<th>Standard Name</th>
<th>Status</th>
<th>Standard to be Replaced</th>
<th>Relation with International Standards</th>
<th>Implementation Suggestion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>JB/T 8845</td>
<td>Wheel loaders transmission control valves—Technical specifications</td>
<td>Revision</td>
<td>JB/T 8845—2000</td>
<td>None similar international or foreign standard discovered</td>
<td>Set up an interim period of minimum 6 months after publication date</td>
</tr>
<tr>
<td>2</td>
<td>2022-1826T-JB</td>
<td>Jaw crushing bucket for Construction machinery</td>
<td>Newly-developed</td>
<td>N/A</td>
<td></td>
<td>Set up an interim period of minimum 6 months after publication date</td>
</tr>
<tr>
<td>No.</td>
<td>Standard No.</td>
<td>Standard Name</td>
<td>Status</td>
<td>Standard to be Replaced</td>
<td>Relation with International Standards</td>
<td>Implementation Suggestion</td>
</tr>
<tr>
<td>-----</td>
<td>--------------</td>
<td>---------------</td>
<td>--------</td>
<td>--------------------------</td>
<td>--------------------------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>3</td>
<td>2022-2071T-AH</td>
<td>Electric earth-moving machinery — Traction battery enclosure compartment</td>
<td>Newly-developed</td>
<td>N/A</td>
<td></td>
<td>Set up an interim period of minimum 6 months after publication date</td>
</tr>
<tr>
<td>4</td>
<td>2022-2075T-AH</td>
<td>Earth-moving machinery— Power converters installed on non-road electrical drive mining dumpers— Technical specification</td>
<td>Newly-developed</td>
<td>N/A</td>
<td></td>
<td>Set up an interim period of minimum 6 months after publication date</td>
</tr>
<tr>
<td>5</td>
<td>2022-2074T-AH</td>
<td>Earth-moving machinery— Energy consumption of traction system for non-road electrical drive mining dumpers— Test methods</td>
<td>Newly-developed</td>
<td>N/A</td>
<td></td>
<td>Set up an interim period of minimum 6 months after publication date</td>
</tr>
<tr>
<td>6</td>
<td>2022-0487T-AH</td>
<td>Earth-moving machinery— Unmanned Roller</td>
<td>Newly-developed</td>
<td>N/A</td>
<td></td>
<td>Set up an interim period of minimum 6 months after publication date</td>
</tr>
<tr>
<td>7</td>
<td>2022-1832T-JB</td>
<td>Earth-moving machinery — Autonomous non-road dumpers</td>
<td>Newly-developed</td>
<td>N/A</td>
<td></td>
<td>Set up an interim period of minimum 6 months after publication date</td>
</tr>
<tr>
<td>8</td>
<td>2022-2072T-AH</td>
<td>Earth-moving machinery — Battery electric non-road mining dumpers — Technical specifications</td>
<td>Newly-developed</td>
<td>N/A</td>
<td></td>
<td>Set up an interim period of minimum 6 months after publication date</td>
</tr>
<tr>
<td>9</td>
<td>2022-2073T-AH</td>
<td>Earth-moving machinery — Battery electric non-road mining dumpers — Test methods</td>
<td>Newly-developed</td>
<td>N/A</td>
<td></td>
<td>Set up an interim period of minimum 6 months after publication date</td>
</tr>
</tbody>
</table>

All nine standards are stated to have none similar international or foreign standards so far. What especially stands out is the newly-drafted sector standards for electrical non-road machinery. AEM or AEM members are advised to check the standard contents for further information if any one out of these nine standards may have impact to their product/business.
10. Official announcements made on China VI emission for vehicles

On May 8, 2023, the Ministry of Ecology and Environment, the State Administration for Market Regulation and other three ministries issued the Announcement of Matters Concerning the Implementation of the China VI Emission Standards for Vehicles (hereinafter referred to as “the Announcement”).

Based on the Announcement, the planned introduction of a stricter national emission standard, known as China VI stage 6b, for all new vehicles will proceed as scheduled from July 1, and will prohibit the production, import and sales of vehicles that do not meet the two standards:

• GB 18352.6—2016 Limits and measurement methods for emissions from light-duty vehicles (CHINA 6)
• GB 17691—2018 Limits and measurement methods for emissions from diesel fueled heavy-duty vehicles (China VI)

Revealed in 2018, the China VI standard is largely equivalent to Euro VI, and China VI-b introduces slightly more stringent testing requirements and a remote emission monitoring system. Specifically, the China VI stage 6b standard features reductions in nitrogen oxides and particulate matter emission limits by around 70 percent from the previous China V standard.

For the definition of importation or sales date (to conform with the China VI stage 6b deadline as July 1), the date of import shall be the arrival date of the goods endorsed in the import certificate; the sales date is subject to the date of motor vehicle sales invoice.
China RoHS

11. China RoHS system will expand with more details

On May 19 and 26, SAC/TC297/SC3 (Test Methods of Hazardous Substances) successively held two working meetings on standards revision of China RoHS 2.0.

The meeting on May 19 has approved the Amendment No. 1 for standard GB/T 26572-2011 Requirements of concentration limits for certain restricted substances in electrical and electronic products, which means four substances will be added into China RoHS: bis(2-ethylhexyl) phthalate (DEHP), benzyl butyl phthalate (BBP), dibutyl phthalate (DBP), diisobutyl phthalate (DIBP). The next step for the Amendment No. 1 will be submitted to Standardization Administration of China (SAC) for final approval and then implementation announcement.

The meeting on May 26 announced the projects to formulate/revise seven RoHS standards, and have formed the working groups accordingly. These standards are expected to focus on align with international RoHS testing systems to support China’s management system.

Full list of the seven standards is:

<table>
<thead>
<tr>
<th>No.</th>
<th>Standard/Project No.</th>
<th>Standard Name</th>
<th>Status</th>
<th>Relation with International Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>GB/T 39560.2-2020</td>
<td>Determination of certain substances in electrotechnical products—Part 2: Disassembly, disjointment and mechanical sample preparation</td>
<td>Revise</td>
<td>Identical with IEC 62321-2:2021</td>
</tr>
<tr>
<td>2</td>
<td>20221780-T-469</td>
<td>Determination of certain substances in electrical and electronic products—Part 3-2: Screening fluorine, bromine and chlorine in polymer and electronics by combustion-ion chromatography (C-IC)</td>
<td>newly-developed</td>
<td>Identical with IEC 62321-3-2:2020</td>
</tr>
<tr>
<td>3</td>
<td>20221784-T-469</td>
<td>Determination of certain substances in electrical and electronic products—Part 3-3: Screening polybrominated biphenyls, polybrominated diphenyl ethers and phthalates in polymers by gas chromatography-mass spectrometry using a pyrolyser/thermal desorption accessory (Py/TD-GC-MS)</td>
<td>newly-developed</td>
<td>Identical with IEC 62321-3-3:2021</td>
</tr>
<tr>
<td>No.</td>
<td>Standard/Project No.</td>
<td>Standard Name</td>
<td>Status</td>
<td>Relation with International Standards</td>
</tr>
<tr>
<td>-----</td>
<td>----------------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>-------------------------</td>
<td>----------------------------------------</td>
</tr>
<tr>
<td>5</td>
<td>20221779-T-469</td>
<td>Determination of certain substances in electrical and electronic products—Part 10: Polycyclic aromatic hydrocarbons (PAHs) in polymers and electronics by gas chromatography-mass spectrometry (GC-MS)</td>
<td>newly-developed</td>
<td>Identical with IEC 62321-10:2020</td>
</tr>
<tr>
<td>6</td>
<td>20221254-T-469</td>
<td>Determination of bisphenol A in electrical and electronic products—High performance liquid chromatography</td>
<td>newly-developed</td>
<td>None</td>
</tr>
</tbody>
</table>
12. Drafts of two automobile mandatory standards out for public comments

On May 5, 2023, the Ministry of Industry and Information Technology published 4 national mandatory standard drafts for public comments. Two out of the four standards are related to automobile information security, and these standards are formulated by SAC/TC 114/SC34 (Technical requirements for vehicle cybersecurity). The key contents that may connect with or can be used as a reference for possible machinery requirements to AEM and AEM members are:

**Project No, 20214422-Q-339: Technical requirements for vehicle cybersecurity**

It stipulates cybersecurity management system requirements, general requirements for vehicle information security, and technical requirements for information security, along with inspection evaluation and testing/verification methods for Class M, Class N, and Class O vehicles equipped with at least one electronic control unit.

No international standard is adopted, but it greatly uses **UN Regulation No. 155 - Cyber security and cyber security management system** issued by UN/WP29 as the reference, and **ISO 21434 Road vehicles — Cybersecurity engineering** is stated as a reference to evaluate the standard requirements.

What’s worth noting for AEM and AEM members is that the standard draft specifies that no direct cross-border data transfer is allowed from the vehicle. But vehicles indirectly transfer data overseas through the domestic cloud platform, and cross-border data transmission of users' behavior is not subject to this requirement.

**Project No, 20214420-Q-339 Intelligent and connected vehicle-Data storage system for automated driving**

The “data storage system for automated driving” is defined by this standard as “a system installed in a vehicle with autonomous driving capabilities that monitors, collects, records and stores data during the activation of the autonomous driving system and supports data reading”. Even more, for such a system, this standard only refers to the function and performance requirements and does not limit the specific product form of the enterprise to achieve the function and meet the performance requirements.

The standard also elaborates on the technical requirements and test methods for the data storage system for automated driving of intelligent connected vehicles of Class M and Class N. Other types of vehicles can be referenced.

Other than partly referencing the concepts and logic of Chapter 8 of the **UN Regulation No. 157 - Automated Lane Keeping Systems (ALKS)**, the contents of this standard are made by the working group based on China’s situation. No international standards or regulations of other countries are cited or referenced.

In regard to implementation, drafters currently suggest giving a minimum of a 12-month interim period after the publication date for manufacturers to make necessary modifications and adjustments.
13. China’s Standard System for Industrial Data Security

On 22 May 2023, the Ministry of Industry and Information Technology issued the Guidelines for Establishing Industrial Data Security Standard System (Draft for Comment) (hereinafter referred to as the Guidelines). The Guidelines, which are aimed at supporting the implementation of the data security and protection requirements outlined in the Data Security Law and Cybersecurity Law, are open for comment until 22 June. Stakeholders are free to submit comments via email or the contact number.

Similar to standard systems in other fields, the Guidelines mainly consist of three parts: basic principles, goals, and structure of the standard system (see below); implementation measures; as well as two annexes listing relevant standards already published, standards currently under development, as well as the standards or priorities for future development.
In the Guidelines, there are three major points worthy attention of AEM and relevant foreign stakeholders.

- **Outbound transfer of industrial data.** It is indicated in the document that the two standards might be developed in the future: (i) security requirement for industrial data outbound transfer; (ii) security assessment guidelines for industrial data outbound transfer. It means in the future that, a dedicated standard for industrial data outbound transfer will be developed. We shall await to see how it differs from the general one that are published.

- **Data security standards in equipment manufacturing industry.** What is clear is that equipment manufacturing industry is included. Specifically, the key standards to be developed include automobile data security, civil aircraft, and civil ship. At the moment, machinery manufacturing does not stand as independent vertical industry. Yet it can not rule out the case that machinery will be included in the standard system in the final draft as it is a indispensable part of equipment manufacturing outlined in Action Plan for National Standardization Development Outline.

- **Data security standards in energy conservation and resource usage.** Relevant data grading and classification, determination of key data and data security protection are also on the agenda. It might be of particular importance as China officially implement Non-Road Stage IV Off-Road Emissions Regulations in China this year, which generates a large amount of data that require certain protection. Yet from what perspective and with what considerations that those standards will be developed is still vague according to the Guidelines.

The lists included in the annexes are comprehensive and detailed; however, further clarification and details are needed to understand which standards are to be developed in all the vertical sectors that it listed.
14. Briefing of subsidies for cotton harvesters in China

Statistics of agricultural machinery purchase subsidies disclosed recently show that in 2022 China subsidized 1845 cotton harvesting machines and in 2023 China has subsidized 411 such machines as of May 10. These subsidies mainly come from three regions, namely Xijiang, Gansu, and Hebei, among which Xinjiang provides the most subsidies, accounting for 99% of all subsidies granted in China for cotton harvesters.

These subsidies are granted to nine enterprises/brands, as below.

<table>
<thead>
<tr>
<th>No.</th>
<th>Enterprise/Brand</th>
<th>Domestic/Overseas</th>
<th>Number of subsidized machines</th>
<th>Amount of Subsidy per machine (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>2022</td>
<td>2023</td>
</tr>
<tr>
<td>1</td>
<td>Xinjiang BoSHIRAN</td>
<td>Domestic</td>
<td>865</td>
<td>77</td>
</tr>
<tr>
<td>2</td>
<td>Jiangsu World</td>
<td>Domestic</td>
<td>373</td>
<td>159</td>
</tr>
<tr>
<td>3</td>
<td>Shandon Swan</td>
<td>Domestic</td>
<td>333</td>
<td>75</td>
</tr>
<tr>
<td>4</td>
<td>Modern Agricultural Equipment</td>
<td>Domestic</td>
<td>84</td>
<td>42</td>
</tr>
<tr>
<td>5</td>
<td>Thinker</td>
<td>Domestic</td>
<td>71</td>
<td>30</td>
</tr>
<tr>
<td>6</td>
<td>CRCHI</td>
<td>Domestic</td>
<td>68</td>
<td>15</td>
</tr>
<tr>
<td>7</td>
<td>Changzhou Dongfeng</td>
<td>Domestic</td>
<td>33</td>
<td>10</td>
</tr>
<tr>
<td>8</td>
<td>Xinjiang Juwangweiye</td>
<td>Domestic</td>
<td>13</td>
<td>3</td>
</tr>
<tr>
<td>9</td>
<td>John Deer</td>
<td>Overseas</td>
<td>5</td>
<td>/</td>
</tr>
</tbody>
</table>

As seen from the table, foreign cotton harvesters can be subsidized, but the number of machines they get subsidized is relatively small compared to domestic products.
BESTAO policy review to this Issue:

- FAQ on Key Points Regarding Security Assessment for Cross-border Data Transfer
- National Standardization of Cybersecurity and Data Protections in China

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. MARA issued leading and significant technologies of 2023
2. National standard update on industrial internet platform
3. China’s policy documents on the new energy development of non-road machinery
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.

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- 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:

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