

Monthly Report

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Policy and Regulation

National Data Bureau/ CAC: Three-Year Action Plan for "Data Elements X" (2024-2026)

On January 4th, the National Data Bureau, together with Cyberspace Administration of China (CAC) and other 15 Ministries and Departments, jointly released the Three-Year Action Plan for "Data Elements X" (2024-2026) (hereafter "Action Plan").

The Action Plan is a strategic initiative aimed at leveraging data elements and their multiplier effects to empower economic and social development. It focuses on activating the potential of data elements across various sectors and industries, encouraging collaboration and innovation, and promoting the secure and efficient flow of data to drive growth and efficiency, including:

- industrial manufacturing,
- modern agriculture,
- commerce and trade,
- transportation,
- financial services,
- technological innovation,
- cultural tourism,
- healthcare,
- emergency management,
- meteorological services,
- urban governance,
- and environmental sustainability

Besides, the Action Plan places significant emphasis on data integration, innovation, and safety across various sectors. It highlights the pivotal role of data-driven decision-making and strategy implementation while stressing the importance of enhancing data supply, optimizing data circulation environments, and implementing stringent robust data security measures.

Specifically, the “data elements X transportation” initiative primarily focuses on promoting new formats in the automotive industry. The Action Plan supports the commercial pilot operation of autonomous vehicles in specific areas and at designated times. It addresses the necessity to dismantle data barriers between automotive companies, third-party platforms, and transportation entities. Additionally, it emphasizes the integration of multiple sources of data, including road infrastructure data, traffic flow data, and driving behavior data, to enhance innovation in intelligent vehicle services and proactive safety controls.

Overall, the plan signifies a comprehensive effort to harness the power of data elements across multiple sectors, promoting innovation, efficiency, and growth, while ensuring the security and ethical use of data resources. It highlights the transformative potential of a well-executed data strategy in driving economic development and modernization in China.

NDRC: Implementation Opinions on Strengthening the Integration and Interaction between New Energy Vehicles and Power Grid

On January 4th, the National Development and Reform Commission (NDRC), the National Energy Administration (NEA), the Ministry of Industry and Information Technology (MIIT), and the State Administration for Market Regulation (SAMR) jointly published the document titled Implementation Opinions on Strengthening the Integration and Interaction between New Energy Vehicles and Power Grid (hereafter “Opinions”).

With the massive development of new energy vehicles (NEVs), their integration with charging and battery-swap infrastructure, along with the power supply network, has become increasingly dynamic. Establishing a two-way interactive system of information flow and energy exchange between NEVs and the power grid can effectively leverage the flexibility and adjustment capabilities of power batteries as mobile energy storage units. This system can offer crucial support for the efficient and cost-effective operation of the new power grid. This context and objective have led relevant Ministries to issue the Opinions.

The Opinions define a two-step strategic goal:

- By 2025, China aims to establish the technical standard system for vehicle-grid interaction, implement peak-valley electricity pricing for charging, and conduct pilot demonstrations to ensure that 60% of total charging volume in pilot cities occurs during off-peak periods, with over 80% of private charging taking place during off-peak hours.
- By 2030, China envisions the completion of a comprehensive technical standard system and the widespread implementation of vehicle-grid interaction. NEVs are expected to play a crucial role in the electrochemical energy storage system, aiming to offer bidirectional capabilities at a scale reaching tens of millions of kilowatts.

The Opinions also, in specific, outline the prioritized tasks from different perspectives:

- Jointly promote the core technical breakthroughs on vehicle-grid interaction.
- Accelerate the establishment of the standard system on vehicle-grid interaction.
- Optimize the electricity pricing and market mechanisms.
- Explore comprehensive demonstrations of bidirectional charging and discharging.
- Improve the interactivity of charging and swapping facilities.
- Enhance the support capabilities of the power grid enterprises.

To conclude, the Opinions aim to give full play to NEVs' vital role in electrochemical energy storage system, consolidate and expand NEVs development advantages, and support the construction of new energy system and new power system.

MIIT: Notice on the Pilot Application of "Vehicle-Road-Cloud Integration" for Intelligent and Connected Vehicles

On January 17th, the Ministry of Industry and Information Technology (MIIT), jointly with the Ministry of Public Security (MPS), the Ministry of Natural Resources (MNR), the Ministry of Housing and Urban-Rural Development (MOHURD), and the Ministry of Transport (MoT) released a notice on carrying out the pilot application of "Vehicle-Road-Cloud Integration" for intelligent and connected vehicles (ICVs), which outlines a comprehensive pilot program scheduled to run from 2024 to 2026, focusing on the integration of vehicle-road-cloud infrastructure to advance the country's autonomous driving industry.

The pilot is to, through city-level pilot projects, promote the development of intelligent roadside infrastructure and cloud-based foundational platforms, increase the installation rate of onboard terminals, formulate a unified technical standard and testing evaluation system for vehicle-road collaborative technology, enhance road traffic safety capabilities, explore new business models, and vigorously advance the industrialization of ICVs.

The pilot schemes the following targets and tasks:

- Construct intelligent roadside infrastructure.
- Increase the installation rate of onboard terminals.
- Promote large-scale demonstration applications.
- Explore secure applications of high-precision map.
- Improve the standards and testing evaluation system.
- Establish a cross-domain identity recognition system.
- Enhance road traffic safety and its assurance capabilities.
- Explore new business models and new industrial formats.

Specifically, the demonstration applications within designated areas include scenarios like smart public transportation, intelligent passenger vehicles, automated parking, urban logistics, and automated delivery. It proposes specific targets such as achieving networked recognition and autonomous driving on selected bus routes, deploying at least 200 smart passenger vehicles and some for unmanned driving demonstrations, upgrading at least 10 parking facilities for automated parking with no less than 30 parking spaces each, deploying city logistics vehicles for automated demonstration runs, and showcasing the collaborative autonomous driving capabilities of at least 200 low-speed unmanned vehicles.

The notice also lists the requirements for the city to voluntarily apply for "Vehicle-Road-Cloud Integration" pilot projects for ICVs. The deadline for the first batch of applications is scheduled as April 30th, 2024, after which the application and pilot conduction will still be accepted on a regular basis. However, the main body that is found to have security risks in the pilot or fails to implement the pilot work as required shall be suspended, even terminated.

This comprehensive pilot plan underscores China's commitment to shaping the future of intelligent transportation through innovative vehicle-road-cloud integration.

MIIT: Guidelines for Construction of a National Comprehensive Standardization System for Artificial Intelligence Industry _ Draft for Comment

On January 17th, the Ministry of Industry and Information Technology (MIIT) released Guidelines for Construction of a National Comprehensive Standardization System for Artificial Intelligence Industry (hereafter "Guidelines"), to solicit public comments until January 31st, which is regarded a move to develop and regulate the hot-discussed and fast-developing AI industry in real scenarios.

The Guidelines set the first target as:

- By 2026, the proportion of standards on key technologies and applications will have reached over 60%, via which the level of interaction and synergy between standardization and industrial technological innovation will largely improve.

Specifically, over 50 new national standards and industry standards will be established, accelerating the formation of the standard system for the high-quality development of the artificial intelligence industry. Over 1000 enterprises will be involved in standard formulation, implementation, and promotion. Additionally, participation in the formulation of over 20 international standards will promote the globalization of the artificial intelligence industry.

The framework of the AI standard system consists of six pillars:

- basic and general definitions,
- basic supporting systems and technologies,
- key technologies,
- intelligent products and services,
- industry applications,
- and safety and governance.

The key technology standards include machine learning, knowledge graphs, large-scale models, natural language processing, intelligent speech, computer vision, biometric recognition, human-machine hybrid

augmentation intelligence, intelligent agents, collective intelligence, cross-media intelligence, and embodied intelligence.

As the core driving force behind a new round of industrial transformation, AI is spawning modern technologies and new products. At the same time, AI is also playing a powerful empowering role for traditional industries, especially for automotive intelligence or digitization. Consequently, the country finds it an urgent need to take advantage of the opportunity at hand, accelerate research on AI technology and industry development, establish unified and complete systems of standards, and use standards to promote the booming development of AI technologies and industries in China.

MIIT: Implementation Opinions on Promoting Future Industrial Innovation and Development

On January 29th, the Ministry of Industry and Information Technology (MIIT), jointly with six other ministries and departments, released the Implementation Opinions on Promoting Future Industrial Innovation and Development (hereafter "Opinions"), to support the technological innovation, industrial cultivation and safety governance of "future industries".

"Future industries" is a term used in China to refer to modern and high-tech fields like artificial intelligence, 6G, metaverse, humanoid robots, brain-computer interface and quantum information. Compared with traditional productivity tools that are driven by elements like labor, land and capital, new productivity boosters are led by technological innovation and elements like data, industry experts explained.

The Opinions set the short-term goals for development:

- By 2025, a batch of incubators and pilot zones of future industries should be built, while breakthroughs should be achieved in about 100 core technologies in key fields.
- By 2027, China's general strength of future industries is expected to gain significant momentum, with major breakthroughs achieved in key technologies, and with China leading some areas.

The Opinions call for efforts to develop signature products, enrich application scenarios and optimize industrial supporting systems for future industries, with a particular focus on six key fields including manufacturing, information, materials, energy, space and health. Besides, a catalog for promoting cutting-edge technologies should be published to propel the application of advanced technological achievements.

From automotive perspective, the intelligent and connected vehicles (ICVs), Internet of vehicles (IoV), as well as the use of alternative energies - what are regarded as the trends of future vehicles – will for sure play key roles in the future industrial innovation and development.

Standardization

Standard Drafts for Public Comments

In January, CATARC released the following drafts of standard for public comments:

NO.	Title	Publicity date	Deadline for comments	Note
1	QC/T XXX-xxxx Test Method for Automotive Organic light emitting diode (OLED) Light Source	2024-01-03	2024-02-12	
2	QC/T 544-xxxx Specification for camshaft of automobile engine	2024-01-04	2024-02-13	To replace QC/T 544-2000
3	GB/T XXXX-xxxx Specification of Categories of Light Sources for Power-driven Vehicles	2024-01-08	2024-03-08	
4	GB/T 10485-xxxx Road Vehicles - Lighting and Light-signalling devices-Environmental endurance	2024-01-08	2024-03-08	To replace GB/T 10485-2007
5	QC/T 471-xxxx Automotive diesel engine	2024-01-12	2024-02-21	To replace QC/T 471- 2006

6	QC/T 273-xxxx Technical Specifications of Aluminum-Alloy Die Casting for Automobiles	2024-01-16	2024-02-25	To replace QC/T 273 -1999
7	QC/T 272-xxxx Technical Specifications of Aluminum Alloy Castings for Automobiles	2024-01-16	2024-02-25	To replace QC/T 272 -1999
8	GB/T XXXX-xxxx Road Vehicles - Performance Requirements and Test Methods for Hands-Free Communication and Voice Interaction	2024-01-16	2024-03-16	
9	GB/T XXXX-xxxx Road vehicles-Cybersecurity engineering	2024-01-17	2024-03-17	
10	GB/T 40855-2021 Technical requirements and test methods for cybersecurity of remote service and management system for electric vehicles	2024-01-17	2024-03-17	NO. 1 Amendment sheet
11	GB/T XXXX-xxxx Road vehicles Electrical electronic switching devices Relay	2024-01-18	2024-03-18	
12	QC/T XXX-xxxx Automobile heavy duty hose clamps of elastic compression type	2024-01-22	2024-03-02	
13	QC/T XXX-xxxx Automobile heavy-duty hose clamps type A	2024-01-22	2024-03-02	
14	QC/T XXX-xxxx 12-point head heat-resistant nuts	2024-01-22	2024-03-02	
15	QC/T XXX-xxxx Heat resistant double end stud	2024-01-22	2024-03-02	
16	GB/T XXXX-xxxx Automotive lidar performance requirements and test methods	2024-01-24	2024-03-24	
17	GB 20071-202x The protection of the occupants in the event of a lateral collision	2024-01-30	2024-03-30	To replace GB 20071-2006
18	GB20072-202x The requirements of safety in the event of rear-end collision for passenger car	2024-01-30	2024-03-30	To replace GB 20072-2006
19	QC/T 952-202x Disc wheels for passenger car - Dimensional of attachment on hub	2024-01-30	2024-03-10	To replace QC/T 952-2013

Standard Revision Plan for Public Comments

In January, MIIT released the revision plan of 4 mandatory national standards for public comments:

NO.	Title	Publicity date	Deadline for comments	Note
1	GB 27999-20xx Fuel consumption evaluation methods and targets for passenger cars	2024-01-31	2024-03-08	To replace GB 27999- 2019
2	GB 19578-20xx Fuel consumption limits for passenger cars	2024-01-31	2024-03-08	To replace GB 19578- 2021
3	GB 34660-20xx Road vehicles-Requirements and test methods of electromagnetic compatibility	2024-01-31	2024-03-08	To replace GB 34660- 2017
4	GB 24407- 20xx The safety technique specifications of special school	2024-01-31	2024-03-08	To replace GB 24407- 2012

MIIT: Guidelines on Construction of National Standard System for Automotive Chip

On January 8th, the Ministry of Industry and Information Technology (MIIT) issued the “Guidelines on Construction of National Standard System for Automotive Chip” (hereafter “Guidelines”), providing a phased target timeline and framework instructions for developing automotive chip standards.

The Guidelines provide a framework instruction for the industry by dividing the data security standard system into 3 sub-systems:

- **Standards on basic common terms and definitions**, which are used to define automobile chip terminology, provide a foundation for the development of various standards.
- **Standards on general requirements**, which standardize the common requirements and evaluation criteria for automotive chips, mainly including environmental and reliability, EMC, functional safety, and cyber security.
- **Standards on products and technical applications**, which specify the technical requirements and testing methods that various types of chips used in automobiles should refer to. These standards cover 10 categories of chips: control chips, computing chips, sensor chips, communication chips, storage chips, security chips, power chips, drive chips, power management chips, and other types of chips.

The Guidelines also define a phased development target:

- By 2025, develop more than 30 standards, complete the development of basic general standards. Meanwhile, develop the standards for key products and technologies including control, computing, power, storage, and communication chips.
- By 2030, develop more than 70 standards, provide standardization support for the development of cutting-edge and integrated technologies. Full coverage for typical application scenarios and testing methods for automotive chips.

High stability, reliability, and computational power in automotive chips serve as the cornerstone for the advancement of high-level autonomous driving technology. VDA China keeps close attention to the evolution of automotive chip standards in collaboration with members, ensuring that the industry stays abreast of standardization and regulation progress, as well as technological advancements and developments that are crucial to the successful implementation of autonomous driving systems.

RIOH: SAC/TC247 (Automobile Maintenance TC) the 3rd “Electric Vehicle Coolant” Standard Exchange Meeting in Beijing

On January 18th, the Research Institute of Highway Ministry of Transport (RIOH) convened the 3rd technical meeting focusing on the “GB 29743.2-20xx Motor electric vehicle part 2: Electric vehicle coolant” standard in Beijing. The gathering included representatives from coolant manufacturers and OEMs. The primary objective of the meeting was to engage in discussions based on feedback received during the Draft for Comments (DfC) phase, with the goal of refining and finalizing the standard related to electric vehicle coolant.

The GB serves as a compulsory national standard designed to regulate the coolant products for electric vehicles. Presently, the leading coolant manufacturers for China market have formulated their products to align with the specifications outlined in the latest version of the draft standard. Nevertheless, OEMs, as end-users of these products, may need to update their production processes, implement specific product adjustments, and undergo extensive testing to accommodate the new coolant requirements accordingly. This transition underscores the importance of adherence to evolving standards to ensure safety, performance, and compliance within the electric vehicle industry, where the concern at current stage from OEMs of both Chinese and German sides is from the standard’s application scope and implementation approach. The comments specifically can be summarized into 3 different aspects:

- The HEV and PHEV need more flexibility. Hybrid vehicles contain both combustion engines and power batteries which have more complex TMS (Thermal management system), making it difficult for the current standards to adequately accommodate all TMS on the market.
- A longer transitional period is needed for automobiles. OEMs need more time to do vehicle validation (e.g. durability test), technical modifications, and factory tank equipment upgrades for the new coolant products.

- The old vehicle models need to be exempted. The TMS for in-use vehicle models has undergone comprehensive safety validation. Switching to a new type of coolant without verification may lead to unforeseeable safety risks.

VDA China is committed to closely and actively involving into the progress of the "electric vehicle coolant" standard, based on discussions among VDA members, as well as the timely communication with the Chinese counterparts, e.g. CAAM, ensuring that the updating of coolant products is well aligned with its application in the whole vehicle manufacturing and its aftermarket services.

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