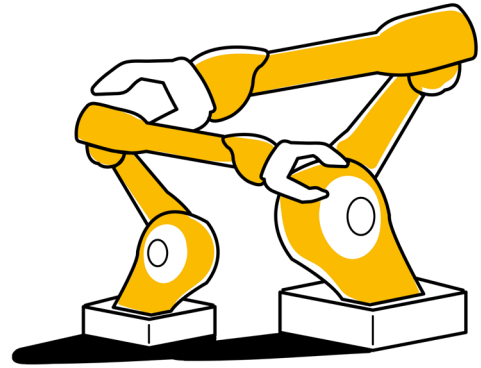


MARCH 6, 2024 (REPORTING PERIOD: JANUARY 31 - FEBRUARY 26)

MERICS

China Industries



CONTENTS

MERICS TOP 5.....	2
1. Large companies first in line for serving of data security pie.....	2
2. Labelling everything: China extends the scope of its Industrial Internet.....	3
3. China pursues new high-tech healthcare drive in rural areas	4
4. MOST establishes guardrails for brain-computer interface research	5
5. Filling the workforce gap: Cultivating five million workers and 15,000 leaders....	6
NOTEWORTHY.....	7
Policy news	7
Corporate news.....	7

MERICs TOP 5

1. Large companies first in line for serving of data security pie

At a glance: The Ministry of Industry and Information Technology (MIIT) released a plan to guide data security work in the industrial sector over the next three years. It aims to establish a basic data security system and promote data security practices among all major industrial enterprises. The document set targets for 2026, including:

- Increase the number of enterprises that have categorized the data they handle and implemented relevant security measures to 45,000, with at least the top 10 percent of enterprises by annual revenue covered in each province and city
- Launch at least 100 projects to develop national, industry, group and other standards and specifications for data security
- Select at least 200 typical cases of data security, covering ten or more industries
- Complete data security training for 30,000 people and cultivate over 5,000 industrial data security talents

MERICs comment: While China's leadership promotes data as a "new factor of production," it is also acutely aware of the risks associated with the expanding digital economy. According to the [MIIT](#), large-scale data leakage, ransom attacks and other risks are becoming increasingly severe. The data security awareness and capabilities of industrial enterprises are generally weak. The new plan charts a roadmap to implement existing laws and regulations, in particular the [Trial Measures for the Management of Data Security in the Industrial Sector](#), in order to address this situation.

Key to this process will be to ensure that firms review the kinds of data collected, handled and stored, as well as the processes in place to manage risks. Authorities will focus on larger firms first, including large foreign firms which are among the most important in certain provinces. The need to adhere to data security standards will put pressure on firms to localize their IT systems and data storage. This is particularly the case for firms which could be considered [critical information infrastructure operators](#). This covers not only network equipment and service providers, but could also extend to the energy, transport and other sectors. For firms which have maintained a globally connected data infrastructure, these regulations could require costly restructuring.

Article: Implementation Plan for Improving Data Security Capabilities in the Industrial Sector (2024-2026) (工业和信息化部关于印发《工业领域数据安全能力提升实施方案（2024-2026年）》的通知) ([Link](#))

Issuing body: MIIT

Date: February 26, 2024

2. Labelling everything: China extends the scope of its Industrial Internet

At a glance: 12 ministries led by Ministry of Industry and Information Technology (MIIT) issued an action plan to enhance the Industrial Internet labelling and resolution system, optimize the whole industrial chain and boost the digital economy. Key targets by 2026 are:

- Build up an autonomous and controllable identification system with a growing integration among and an initial application in key industries such as manufacturing, healthcare, consumer goods, safety management, green and low carbon
- Serve more than 500,000 enterprises in 60 industries
- Exceed 600 billion identity registrations, with average daily identity resolutions surpassing 300 million

MERICS comment: Globally, [the fragility of supply chains](#) is growing, amplified by the risks in supply interruption, the global division of labor, more personalized demands etc. Expanding the Industrial Internet labelling system to gain greater identification coverage of components and products has emerged as a part of China's ambition to digitalize and control the industrial chain.

Since its inception in 2018, China's Industrial Internet identification system has established seven national top-level nodes and deployed over 330 second-level nodes across 46 industries. Despite this notable progress, expanding the application of the system remains a major roadblock, particularly at the cross-business or cross-sectoral level. The lack of standardized practices for aspects such as ID coding and managing interfaces has [hindered widespread adoption](#) of the system. The latest document calls for deeper integration of the industrial identification system with AI, big data, blockchain etc. enabling smarter manufacturing processes to break the silos and speed up the digital transformation of industries and enterprises.

Foreign companies operating in China can liaise with the local Industrial Internet testing and assessment center to learn what the latest developments in their sector are. While there may be some advantages to connecting to the Industrial Internet system, firms ought to also consider the risk that competitive advantages reflected in their data might be exposed once further integrated into the identification system.

Article: Action Plan for the “Penetration” of the Industrial Internet Identification Analysis System (2024-2026) (工业和信息化部等十二部门关于印发《工业互联网标识解析体系“贯通”行动计划（2024-2026年）》的通知) ([Link](#))

Issuing bodies: MIIT, MOE, MOST, MOHRSS, MEE, MOHURD, NHC, MEM, PBC, SASAC, SAMR, CSRC

Date: January 31, 2024

3. China pursues new high-tech healthcare drive in rural areas

At a glance: The Ministry of Industry and Information Technology and the National Health Commission jointly released a list of 117 pilot projects for the “Broadband Network + Healthy Countryside” initiative. The initiative aims to promote the fusion of innovative technology available over broadband connections and the advancement of healthcare services in rural areas. The candidates, which include local health bureaus, hospitals, as well as telecommunications and tech companies, have until the end of the year to implement their projects before a final round of reviews. Focus areas of the projects include:

- Develop remote healthcare services, such as telemedicine for common diseases
- Build digital platforms to integrate medical data among regional hospitals
- Provide digital and AI tools to aid local clinics to provide better services
- Bring mobile medical services to remote areas

MERICs comment: This initiative combines goals of modernizing the countryside, improving healthcare coverage in remote regions, and nurturing innovation in digital healthcare and medical technology. It utilizes the broadband infrastructure that the government has been building in rural areas.

The focus on big data and AI for these projects is in line with AI being a [key strategic area](#) for the country’s technological development. Applications include the digitization of health data, and predictive and analytic systems based on said data; computer vision and robotics solutions for medical services; wearable monitoring systems; and other digital tools for hospital administration.

By fostering close ties between local health bureaus, hospitals, and the private sector, China boosts its companies by providing them with state contracts as well as ample patient data, key to developing big data solutions. Foreign companies without the same access risk falling behind. In this way China hopes to cultivate its MedTech sector to have a competitive edge not only domestically, but also be able to offer more advanced products and services for export.

More on the topic: [Investigating state support for China’s medical technology companies](#). Report by Alexander Brown, François Chimits, Jeroen Groenewegen-Lau, Jacob Gunter and Gregor Sebastian.

Article: Announcement of the first batch of shortlisted pilot projects of “Broadband Network + Healthy Countryside” (两部门关于公布“宽带网络+健康乡村”入围应用试点项目（第一批）的通知) ([Link](#))

Issuing bodies: MIIT, NHC

Date: February 1, 2024

4. MOST establishes guardrails for brain-computer interface research

At a glance: The Ministry of Science and Technology (MOST) released an ethical guideline on brain-computer interface (BCI) research drafted by the Artificial Intelligence subcommittee of the National Science and Technology Ethics Commission. The guidelines:

- Identify five BCI research areas and their corresponding requirements, with a focused call for development in reparative BCI technologies
- Protect patients' personal data, privacy, and the right to be informed
- Ensure patients get fair access to BCI technologies for the betterment of human well-being
- Monitor risks, refrain from hasty applications, misinformation, illegal activities, and infringing legal rights

MERICS comment: China has established the China Brain Project in 2016 and launched the "brain science and brain-like research" megaproject shortly thereafter. The latest guideline document underscores it as a key national strategy and that the research is making headway. Concrete progress has been achieved, exemplified by quadriplegic patients gaining the ability to [drink water using brain interfaces](#). This shows the ambition to catch up with global research institutes and competitors such as Neuralink, and is in line with China's broader ambition to achieve self-reliance in the areas of critical technologies.

The strategy also expands to setting global standards. In 2022, China proposed the [ISO/IEC JTC 1/SC 43 standard](#) for brain-computer interfaces, which was accepted by the International Standardization Organization and International Electrotechnical Commission.

While practical applications of BCI are currently limited, the [transformative potential](#) is huge, with an estimated annual impact of up to USD 200 billion in the next 10 to 20 years. The release of ethical guidelines further signals a forthcoming increase in trials and prototype development in China. Institutions and companies abroad should expect more competition from Chinese firms. At the same time, foreign entities operating in China in this field should anticipate the increased scrutiny it carries, conduct risk audits for the ethical reviews and legal compliance if necessary.

Article: Ethical Guidelines for Brain Computer Interface Research (脑机接口研究伦理指引) ([Link](#))

Issuing body: MOST

Date: February 2, 2024

5. Filling the workforce gap: Cultivating five million workers and 15,000 leaders

At a glance: The Ministry of Human Resources and Social Security (MOHURD) and seven other government bodies issued a plan to cultivate high-skilled talents. The program aims to enhance skilled workforce to meet the needs of China's major national strategies and key industries, focusing on areas like advanced manufacturing and modern services. Targets include:

- Train 15,000 leading talents and five million new high-skilled workers by 2027
- Develop talent that can lead China's industrial upgrading, strategic emerging industries, and digital transformation
- Establish special training plans, focusing on young talents with exceptional skills and achievements in vocational skills competitions
- Encourage enterprises to reward leading talents with bonuses, equity, and special remuneration for special posts

MERICS comment: Back in 2016, the Ministry of Education, MOHURD and MIIT issued the [Manufacturing Talent Development Planning Guide](#), which estimated that the shortfall in skilled workers in the key industries outlined in the Made in China 2025 plan would reach 30 million workers by 2025. This figure is still used in [state media](#) reports today, as the government continues to struggle with a significant [mismatch](#) between the career aspirations of its youth and the actual job market needs, leading to a growing worker shortage.

Beijing has been trying to bridge this gap for years through various methods, including through measures to attract foreign talents. Among recent initiatives, Beijing has introduced attractive living allowances for foreign talents. However, without substantial changes to China's immigration laws, the effectiveness of these efforts remains uncertain. China's efforts to attract foreign top talent are further complicated by international scrutiny of these talent programs. The [US government](#) criticizes China's talent attraction programs as an attempt "to steal foreign technologies needed to advance China's national, military, and economic goals."

This plan seeks to address the issue by training more domestic talent, following reforms last year of the education system to promote university programs that train "urgently needed talent", particularly in STEM areas. However adverse demographic shifts, coupled with the undesirability of manufacturing jobs for many Chinese workers, mean that combatting the skilled labor shortage will likely remain an uphill battle for China.

Article: Notice on the Implementation of the High-skilled Leading Talent Cultivation Plan (人力资源社会保障部等七部门关于实施高技能领军人才培养计划的通知) ([Link](#))

Issuing bodies: MOHURD, NDRC, MOE, MOST, MOF, SASAC, ACFTU

Date: February 7, 2024

NOTEWORTHY

Policy news

- *February 4:* The State Council issued new regulations on carbon emissions trading, which seek to clarify institutional mechanisms, standardize trading activities, ensure data quality and punish illegal activities; the regulations will enter into force on May 1, 2024 ([State Council notice](#), [Xinhua article](#))
- *February 4:* Eight government agencies, led by the China National Intellectual Property Administration and the Ministry of Education released a work plan to enhance the industrial use of patents developed by universities and scientific research institutions ([CNIPA notice](#))
- *February 9:* The State Council published instructions to enhance the recycling of industrial, agricultural and municipal waste; the plan promotes the fine management of waste and resource recycling ([State Council notice](#))

February 18: Six government agencies led by the Ministry of Ecology and Environment issued a plan to promote low-carbon technologies, which will be organized through the on-going batches of the “National Promotion Catalog for Low-Carbon Technologies” ([MEE notice](#), [MEE article](#))

- *February 19:* During the fourth meeting of the Central Commission for Comprehensively Deepening Reform, Xi Jinping called on officials to offer more financial support for the green and low-carbon transformation ([State Council article](#), [State Council article](#))
- *February 21:* The MIIT released guidelines for the construction of a carbon peak and carbon neutral standard system in the industrial sector; the plan aims to formulate more than 200 standards related to carbon peaking by 2025 ([MIIT notice](#))
- *February 23:* During the fourth meeting of the Central Commission for Financial and Economic Affairs, Xi Jinping stressed the need to speed up product upgrading and called for policy measures to stimulate a new round of large-scale equipment renewal and trade-in of consumer goods ([Xinhua article](#))

Corporate news

- *February 2:* SenseTime, a prominent Chinese AI firm, unveiled the SenseNova 4.0 large language model, showcasing advancements in logical reasoning, numerical reasoning, and code generation; SenseTime's focus is now on industry-specific AI solutions, including medical care and autonomous driving ([S&T Daily article](#), [Scout](#))
- *February 5:* China's State Administration for Market Regulation approved a joint venture between the Mercedes-Benz Group China and BMW Brilliance Automotive, which aims to establish an expansive EV charging network in China, including

1,000 fast-charging stations and 7,000 supercharging piles by 2026 ([Yicai article](#), [The Paper article](#))

- *February 6:* The Financial Times reported that China's largest semiconductor manufacturer, SMIC, has built new production lines in Shanghai using US- and Dutch-made equipment, and plans to produce 5-nanometre chips as early as this year ([Financial Times article](#))
- *February 6:* China's car imports declined to a decade-low in 2023, with a nine percent drop to 799,000 vehicles. Contributing factors include global chip shortages, increased local production by foreign automakers, a lack of new products, and a shift towards new energy vehicles (NEVs); luxury models continue to dominate imports ([Yicai article](#))
- *February 7:* Nasdaq-listed biotech firm I-Mab announced that it will sell its China unit, I-Mab Shanghai, to affiliate Hangzhou Co for up to USD 80 million, as it aims to streamline operations and prioritize US market activities ([Reuters article](#), [Yicai article](#))
- *February 9:* Amid public concerns over alleged human rights violations by its partner company in Xinjiang, BASF initiated the divestiture of its shares in two joint ventures in the region ([BASF press release](#), [The Guardian article](#))
- *February 14:* Following reports suggesting that forced labor may have been used in the construction of its test track in Xinjiang, Volkswagen announced that it is in discussions with its Chinese joint venture partner on future business directions in the region ([Handelsblatt article](#), [Financial Times article](#))

AUTHORS

Alexander Brown
Analyst, MERICS

Wendy Chang
Analyst, MERICS

EDITORS

Claudia Wessling
Director Communications
and Publications, MERICS

Alexander Davey
Editor and Analyst, MERICS

For more information, please contact:
publications@merics.de

PUBLISHER

MERICS | Mercator Institute for China Studies

Alte Jakobstrasse 85-86

10179 Berlin

Tel.: +49 30 3440 999 0

Mail: info@merics.de

www.merics.org