Policy

Policy Boosting Private Economy

The employees work at a workshop of a private company in Taizhou, Zhejiang province. (PHOTO: XINHUA)

By LI Linxu

In its latest moves to further stimulate the growth of private economy, China has rolled out a package of measures in a top-level guideline.

Jointly released by the CPC Central Committee and the State Council, the guideline vows to improve the business environment and treat private enterprises the same as their state-owned counterparts.

It puts forward a total of 31 concrete measures, such as cutting market access barriers for private firms, enhancing the protection of intellectual property rights, easing private companies' efforts to raise capital and supporting their overseas expansion.

The private economy has long played a positive role in stabilizing growth, promoting innovation, increasing employment and improving people's livelihoods, said Li Chunlin, vice chairman of the National Development and Reform Commission (NDRC), adding that NDRC will thoroughly implement the guideline, so as to create a better environment for the development of private economy. Li indicates that NDRC, together with relevant departments, will unveil corresponding support measures very soon.

The private sector, which produces more than 60 percent of China's GDP, is responsible for 70 percent of the country's technological innovation, and accounts for more than 80 percent of its urban jobs, according to a recent press conference held by the State Council Information Office.

The guideline sends a clear policy signal for private enterprises to carry forward with high- quality development, said Lei Jun, founder of Xiaomi Corporation, vowing to focus on its main businesses and make a contribution to the country's sci-tech modernization.

Efforts will be made to improve private enterprises' sci-tech innovation capabilities, according to the guideline, encouraging private firms to continuously increase spending on R&D.

The guideline proposes a series of targeted measures to facilitate the development of private economy, demonstrating the country's resolve to support the private sector, said Liu Yonghao, chairman of New Hope Group.

As a leading agricultural company, the group is encouraged to steadfastly pursue high- quality development by leveraging bio- technologies and digital technologies, added Liu.

Digital and technological transformation is also among the measures announced in the guideline, signaling more support for private companies' digital upgrading efforts.

Meanwhile, the guideline pledges to protect the legal rights and interests of private enterprises and entrepreneurs.

It responds to the call of private enterprises, said An Lijia, vice chairman of the All- China Federation of Industry and Commerce, pledging efforts to create a nurturing social environment for the private economy.

Online platform companies are encouraged to play an important role in job creation and international competition, said the guideline.

Noting the policy's pledges for fair competition and equal protection under the law, Tencent Chairman Ma Huateng said the measures reinforced everyone's confidence to build better and stronger companies.

As a private technology group, Tencent bears the important responsibility of promoting technological innovation and advancing industrial development, added Ma, vowing to invest more in basic research and frontier technologies.

First of Its Kind Regulation for Generative AI

By LI Linxu

Soon after soliciting public opinion, China finalized a regulation on the governance of generative AI.

The regulation will come into effect on August 15, 2023, according to a decree jointly released by seven government bodies, including the Cyberspace Administration of China (CAC) and the Ministry of Science and Technology (MOST).

As the first of its kind in the world, the regulation has garnered attention from people across society, and is being closely watched across the globe.

The rapid development of generative AI has brought new opportunities for economic and social growth, while also triggering concerns about disinformation, personal privacy and data security.

The regulation specifies the basic norms for generative AI services, said an official from CAC, noting that it meets the urgent needs to promote the healthy development of generative AI.

Encouraging innovative development

Compared with the draft version, the final version has further clarified the regulation's scope of application.

According to the regulation, the measures apply to those providing generative AI services to the general public.

For those conducting R&D and application of generative AI technologies that are not available to the general public, the measures are not applicable.

Innovative applications of generative AI technologies in various sectors are encouraged, as per the regulation, urging industry associations, enterprises, and education and research institutes to coordinate in technological innovation, data resource construction, application and risk prevention.

Indigenous innovation in basic technologies, such as generative AI algorithms, frameworks and support software platforms, are also encouraged, said the regulation.

It advocates international exchanges and cooperation, and calls for participating in the formulation of relevant international rules.

Efforts will be made to advance the construction of generative AI infrastructure and public training data resource platforms.

The measures signal the government's positive attitude toward innovation in generative AI, and will inject strong confidence into tech companies, said Zhou Hongyi, founder of 360 Digital Security Group, adding that the clearly drawn boundary will facilitate the R&D of relevant institutes.

Ensuring healthy development

While promoting innovation, the regulation also attaches great importance to the healthy development of generative AI.

Taking an inclusive and prudential approach, the regulation exercises classified and grading supervision on generative AI services, said the official.

It puts forward a series of measures for the healthy development of the sector, such as setting up service norms, stipulating the obligations of service providers, and clarifying the responsibilities of relevant government bodies.

The measures require service providers to fulfill the obligations of online information security, including protecting personal information, taking precautions to prevent underage users from becoming addicted to such services, and establishing a mechanism to handle user complaints.

If a service provider finds illegal content, it should take measures to remove such content, improve the algorithms, and report it to concerned authorities.

The pre- training and optimized training data used for generative AI shall not infringe on intellectual property rights, as per the regulation.

The philosophy behind these measures is in line with relevant laws and regulations, and is conducive to cultivating an environment of science for good, Tian Jingqiao, a lawyer specialized in cybersecurity law, told *S&T Daily*.

Smart Green Electronic Products Consumption Encouraged

By ZHONG Jianli

China's R&D institutes and market players are being encouraged to actively apply AI technology to improve the intelligence level of electronic products, in a clear message to accelerate technological upgrades.

A new policy, issued by the National Development and Reform Commission, the Ministry of Industry and Information Technology and other government bodies, seeks to promote technological innovation of electronic products and boost consumption of those that are smart and low-carbon.

Relying on the new generation of information technologies such as virtual reality and ultra- high- definition video, more innovative electronic products are expected to attract more consumers.

Efforts will also be made to remove barriers from rural and elderly residents to use electronic products. More investment will be put into the development of speech recognition technology for dialects and specific accents. Software installed with those popular products should be designed to tailor to the need of the elderly at the same time.

Exhibition and marketing activities for green smart electronic products should be organized across the country, while e-commerce platforms are encouraged to set up a special page to promote low- carbon smart electronic products, according to the policy.

It calls for the improvement of the quality standard system for smart electronic products, so as to realize the interconnection of electronic products such as smart home appliances and wearable devices of different types and brands.

In addition, the policy made it clear that consumer information protection policies for mobile phones, smart home appliances, wearable devices and other products should be strictly implemented. The formulation of policies and industry standards for data masking and compliance should be speeded up, and improper use of personal data by concerned enterprises should be cracked down on.

In terms of recycling electronic products, the policy proposed to regulate the recycling system, while increasing the crackdown on illegal dismantling of electronic products and promoting the "Internet + recycling" model.

5G Promotes Maritime Industry in East China

Case Study

By CHEN Chunyou

In recent years, China's coastal provinces have implemented various measures to support the maritime economy, with a focus on accelerating the construction of information infrastructure. The application of 5G technology has given a significant boost to the marine industry.

One example is Yangguang Island, a three- square- kilometer artificial island in Nantong city, east China's Jiangsu province. Situated about 13 km from the shore, the island is home to numerous energy enterprises, including the Petro-China Jiangsu liquefied natural gas (LNG) terminal, the largest of its kind in Jiangsu, which handles natural gas shipments from 25 countries.

Meeting development requirements

Stability of network signals on the island and surrounding sea areas is crucial for port digitalization, the security of the LNG reservoir and daily communication among businesses.


A row of wind turbines at an offshore wind farm in Rudong county, east China's Jiangsu province. (PHOTO: VCG)

As the island became increasingly important as an operation area for many enterprises, the old 4G network was insufficient for the higher requirements, making 5G coverage essential.

In 2019, a local telecommunication service provider set up the first 5G base station on the island serving local industries such as wind power and offshore aquaculture. The construction of 5G base stations accelerated subsequently and now there are more than 120 such stations in coastal and offshore waters, ensuring steady 5G signals within about 100 kilometers of Nantong's coastline.

Better marine connectivity

In the past, the usual modes of communication — wireless video conferencing systems and mobile terminal video calls — were affected by atmospheric ducting interference near the sea, resulting in unstable signals.

To mitigate the impact of weather conditions at sea, customer premises equipment — connected devices used to access the internet — were used to convert 5G signals into high-speed and stable WiFi. Enterprises on the island can now use portable cloud video terminals to hold online video meetings, without experiencing freezing and blurred visuals.

5G coverage has also improved the efficiency of offshore wind power maintenance. In the past, repairers had to climb up the wind turbines and then use a satellite phone to tell the reason for the breakdown to the technicians based in an underground command center. But the signals were so unstable and intermittent that they would often not receive clear instructions. They would then have to climb down to report the problem to the command center, which was both time-consuming and unsafe.

Now, after climbing up the turbine, the repairers can send videos and photos via their phone to the workgroup and receive repair instructions on the spot. This reduces their commute frequency and makes their work more intelligent and efficient.

Safety for fishermen

Fishing operations at sea are often uncertain, including vessel problems.

But now, thanks to extensive 5G signals, there is high-speed communication between the vessels and the shore. When emergencies occur, fishermen can reach the helpline for help.

In addition, 5G technology has promoted the development of the local fishing industry. Fishermen can live- stream their fishing so that viewers can see what's happening and assess if the seafood products are safe and fresh. This has attracted more customers and improved fishermen's incomes.

Innovative Tech Builds New Harbor in Stormy Water

From page 1

"The development and utilization of this platform significantly expanded the construction window, improving efficiency and safety, leading to the early completion of the project and saving millions in costs," said Liu Dongbing, general manager of PMEC, adding that this achievement was recognized with one national invention patent and seven papers in China's core journals, along with many awards from their parent company.

Transforming offshore construction into onshore construction

The long- period wave effect also posed challenges to other offshore construction tasks, such as building wharf steel pipe piles. To address this, the project team introduced the concept of "transforming offshore construction into onshore construction." They utilized an innovative piling technique. The method involved placing a hydraulic pushing pile platform directly on the already installed steel pipe piles, unaffected by wind and waves, essentially converting the sea construction into a land-based process.

Inspired by bridge construction principles, this method significantly increased piling efficiency compared to traditional processes, reducing the construction period by eight months and saving millions of dollars. Given its success, this technology has been implemented in other projects by PMEC, according to Liu.

Advancing green development through technological innovation

PMEC is committed to scientific and technological innovation for green and sustainable development. Throughout the Ashdod port project, they optimized the design, employed advanced environmental protection facilities, and implemented measures to minimize the environmental impact on the nearby sea and the surrounding city.

For instance, in the "change the bottom" project of the sea wall, PMEC's approach of using seabed gravel pile construction was more environmentally friendly than traditional excavation and backfill methods, significantly reducing sea pollution. Furthermore, protective measures were implemented during dredging to prevent impacting surrounding waters, and the project team continuously monitored environmental indicators such as turbidity to ensure adherence to high standards of environmental protection.

The project stands as a testament to overcoming complex challenges with innovative solutions. This remarkable achievement not only strengthens Israel's maritime infrastructure but also exemplifies the importance of technological innovation in achieving sustainable development and preserving the environment. China's instrumental role in building Ashdod's new harbor reflects the power of technical capabilities and creativity in shaping a more connected and advanced world.