INSIGHTS

FCC Ban on Chinese Labs Shocks Global Supply Chains



By HU Dingkun & SUN Jin

The Federal Communications Commission (FCC) in the U.S. announced it has launched proceedings to revoke U.S. recognition for seven Chinese testing laboratories on September 8. The FCC also confirmed that recognition for four other Chinese labs has expired and will not be renewed.

New FCC rules in May prevent any Chinese lab linked to firms listed on the FCC's Entity List from certifying devices for the U.S. market.

FCC chair Brendan Carr said, "Foreign adversary governments should not own and control the labs that test the devices the FCC certifies as safe for the U.S. market."

Under U.S. regulations, all electronic devices that emit radio frequencies must undergo certification by the FCC-accredited laboratory before entering the American market. Currently, 175 Chinese labs hold FCC accreditation, which is greater than the number of testing laboratories in the United States. About 75 percent of FCC-recognized tests currently occurs in China.

Though seven out of 175 seems to be a small number, the FCC is soliciting public feedback on whether to broaden the ban to include all labs in China and other nations classified as foreign adversaries. An immediate concern is the FCC's potential revocation of all Chinese laboratories' accreditation.

From 5G to TikTok to testing labs, branding Chinese tech a "national security threat" is the U.S. government's goto tactic. Yet security concerns alone cannot explain the FCC's crackdown



on Chinese labs, behind which lie oth-

Last month, the Foundation for Defense of Democracies (FDD), an American think tank, stated in a written public comment to the FCC, "China's role within telecommunications certification bodies and other laboratory testing reinforces its manufacturing dominance. Proximity of manufacturing plants to these testing facilities allows companies to move prototypes directly from factory floor to a test lab within hours, shortening lead times and lowering costs. This clustering effect cements China's position as the global center for electronics production and certification while allowing major firms to influence each aspect of the supply chain, from design to

certification."

Prior to this, in January, Michael
Schafer, CEO of Compliance Testing,
an accredited American testing service,

petitioned the FCC chair and U.S. President Donald Trump that the 28 billion USD certification services market should relocate from Chinese facilities to U.S. laboratories. "This would be the first step in getting U.S. manufacturing out of China and back to

the U.S.," he wrote.

Clearly, security concern is just a pretext. The FCC aims to dismantle China's telecommunications manufacturing clusters and erode its competitive advantages in order to accelerate the reshoring of critical industries to America.

While the ultimate outcomes remain uncertain, immediate disruptions are inevitable. Electronic certification has a critical role in global supply chains, directly impacting efficiency, cost, and globalization. The FCC's revocation will severely destabilize the global electronic supply chains. Numerous enterprises that manufacture or

certify products in China for U.S. export will now have to transfer their testing labs, causing logistical obstacles and triggering a rise in costs.

In May, prior to the FCC's new regulations, CTOL Digital Solutions, an IT consultancy based in Switzerland, published an analysis indicating that the impending rules would trigger price escalation among non- Chinese testing firms. Certification laboratories outside China were reportedly raising quotes by 15-30 percent.

For U.S. consumers, changes in regulations may bring significant impacts, as the higher certification costs will be passed on to retail prices. Concurrently, non-Chinese laboratories may struggle to accommodate the relocated certification workload from China, resulting in backlogs, delay in some product launches, and shortage of certain devices.

The FDD also admitted that it will drive up testing cost and cause temporary inventory bottlenecks, and businesses may shift these costs onto consumers. Small-scale producers particularly will find this difficult to resolve as their certification fees constitute a larger share of unit costs.

China's laboratories have achieved a strategic position in testing accreditation due to decades of manufacturing efforts and market evolution. For most electronic manufacturers, conducting testing near the production base has significant logistics advantages and cost-effectiveness.

By disregarding these economic fundamentals, the FCC is compelling manufacturers to violate market principles. Ultimately, the additional costs, whether through price hikes or supply chain delays, will inevitably fall on American consumers.

Voice of the World

China's Automakers Transcend Boundaries in EV Tech

By LIANG Yilian & LI Shan

IAA Mobility 2025, the international motor show in Munich, Germany, held from September 9 to 14, brought together around 750 companies from over 30 countries and regions to showcase innovation and explore partnerships.

More than 100 Chinese exhibitors joined the event — their number second only to the host country's — underscoring China's growing role in the global automotive industry.

"China is not only back, but more present than ever," Jan Heckman, divisional head at German auto lobby VDA, told Reuters, adding that this year's edition had 40 percent more Chinese exhibitors compared to 2023.

Chinese electric vehicles (EVs), with their strength in battery technology, smart cockpits, and competitive pricing, are increasingly shaping global design trends. When Geely unveiled its Zeekr 001 with a long-range battery option in 2021, the model "shocked quite everyone," Stefan Poetzl, president of SAIC Audi Sales and Marketing, told Reuters. The car's European styling prompted Audi to accelerate its EV strategy, leading to new models like the AUDI E5 Sportback, developed with Chinese partner

Toyota and Volkswagen are also codeveloping China-focused EVs with local partners GAC and Xpeng respectively.

"Unquestionably, the Chinese are ahead in manufacturing technology," Bob Galyen, a retired executive whose long career in automotive batteries spanned both GM and the Chinese battery giant CATL, told NPR.

The results are evident in global sales: EVs, including plug- in hybrids, now represent 19 percent of all cars sold worldwide, up from just four percent five years ago. Chinese models account

for 17 of the 20 best-selling plug- ins globally, according to CleanTechnica, the American cleantech news site.

"Now you have European companies that cut a deal saying, 'If you give us your EV technology, we can help you come into the European market,'" Stephen Ezell, vice president at the Washington- based Information Technology and Innovation Foundation think tank, told *The Washington Post*.

Rico Luman, senior sector economist for transport and logistics at ING, noted in an email to CNBC: "We know that Chinese players are valued for their digital features among European consumers. It's clearly a signal that they are ramping up competition with EV-only competitors by introducing a next level technology for their models."

Innovation at IAA Mobility extended beyond EVs. Christian Kleinert from Cellcentric — a joint venture of Daimler Truck and the Volvo Group — introduced a heavy-duty hydrogen fuel cell system for long-haul trucks. The system delivers 375 kW of continuous power with hydrogen consumption below six kilograms per 100 kilometers.

Kleinert told *Science and Technology Daily* that fuel cells complement batteries. With 80 kilograms of liquid hydrogen, trucks can exceed a range of 1,000 kilometers. While Germany leads in fuel cell development, China is ahead of Europe in overall infrastructure and framework conditions.

Through exhibitions like the Munich event, European consumers are gaining a renewed appreciation for China's advanced EVs. With affordable, high-tech models entering the market, Chinese automakers are poised to expand their presence across Europe, raising the competitive stakes in the years to come.



BYD introduces the Yangwang U9 track edition, which has been awarded the title of "world's fastest EV." (PHOTO: LI Shan / Science and Technology Daily)

Stage Set for 'AI Plus' Infrastructure Boom

By LIANG Yilian

Opinion

In a significant move to accelerate technological integration, China's State Council recently released the "AI Plus" initiative, outlining a comprehensive roadmap for embedding artificial intelligence across economic and social domains.

This policy lays out overarching principles, key objectives, and priority fields — from manufacturing and agriculture to finance and healthcare — providing a strategic pathway toward an intelligent economy and society.

The introduction of the "AI Plus" initiative signals a shift from fragmented AI applications to systematic, ecosystem-

driven integration. Much like the "Internet Plus" initiative that revolutionized digital connectivity, "AI Plus" aims to transform industries through deep restructuring — optimizing supply chains, enabling personalized education, enhancing precision medicine, and boosting agricultural productivity. However, rather than just adding AI tools to existing systems, the plan emphasizes fundamental upgrades in production models and service delivery.

Key to this transformation is AI infrastructure. Without robust underlying support, widespread AI adoption remains an abstract concept. The demand is multi-layered: intelligent computing centers and high- performance chips scale AI models and open-source platforms provide the software core; and data sharing mechanisms, security standards, and governance frameworks constitute the operational safeguards. A combination of these elements create the essential environment for scalable AI implementation.

This policy is expected to trigger massive investment in AI infrastructure. Cross- regional computing networks, public data resource platforms, and industry-specific cloud services are expected to see accelerated development. Companies involved in semiconductors, cloud computing, data services, and AI solution provisioning are poised

driven integration. Much like the "Internet Plus" initiative that revolutionized scale AI models and open-source platand expanded demand.

The policy extends beyond China's borders. Recognizing that the future of AI depends on collaboration, the "AI Plus" initiative advocates global cooperation — promoting inclusive access, mutual trust, and shared benefits. It also backs building an open, equitable AI ecosystem and jointly shaping a global governance framework with broad international participation.

In essence, "AI Plus" represents a decisive step in China's digital transformation. By prioritizing infrastructure, security, and global cooperation, it lays the groundwork for sustainable, AI-powered growth.

Chinese Games Shine in Gamescom 2025

Edited by SUN Jin

The recent Gamescom 25 held in Cologne, Germany witnessed a significant leap in the presence of Chinese games.

More Chinese game developers participated and basked in attention at the exhibition, the world's largest games event. Gamescom 2025 attracted over 1,500 exhibitors from more than 70 countries and regions, including a record 50 Chinese exhibitors.

The popularity of Chinese games abroad hinges on their successful transformation of Chinese cultural elements into artistic experiences with cross-cultural appeal. Beyond scale, Chinese games showcased polished original content with globally competitive visuals, storytelling, and gameplay mechanics,

winning acclaim from overseas media and players, said Grace Pan, senior project manager at the Cologne Exhibition Center (Koelnmesse), co- organizer of Gamescom.

Chinese action- role playing game (RPG) Phantom Blade Zero drew one of the longest queues at Gamescom 2025. After the hour-long demo, a young gamer from Germany's Harz said the art style was cool, and the fighting with swords and knives looked great.

On the opening night, Chinese video game developer Game Science unveiled the first computer graphics generated teaser trailer of Black Myth: Zhong Kui, another action-RPG based on Zhong Kui, a figure from Chinese folklore. The two-minute video brought the house down, and the host called it the last big surprise before

saying goodnight.

Shanghai-based Papergames participated in Gamescom for the second time, with its game Love and Deepspace winning the best mobile game award.

In recent years, Chinese game developers have emerged as "true content creators" and "peers of leading European, U.S., and Japanese studios," Pan remarked, adding that their focus on quality and long-term operations has earned global respect.

Chinese games' growth extends beyond exhibitions to market impact. According to a report by the German Game Industry Association (GGIA), four mobile games by Chinese developers ranked among Germany's top-10 mobile game downloads in 2024.

The game market is fiercely competitive in Europe, said Felix Falk, managing

director of GGIA. For overseas developers, deep localization — including language adaptation and community building — is essential. For instance, Genshin Impact by Chinese video game developer miHoYo integrates European cultural elements into its content design and operation, from using regional instruments in the music to launching cafes in Berlin and Paris, effectively engaging local players.

The growing footprint of Chinese

The growing footprint of Chinese developers, coupled with the rise of China's gaming ecosystem, is accelerating partnerships with Europe. Falk said collaborations between Chinese studios and their counterparts in Germany and wider Europe are becoming more frequent, enabling both sides to better understand and access each other's markets.

AI Model to Boost City Governance in Chongqing

Hi-Tech

By Staff Reporters

At the World Smart Industry Expo 2025 in Chongqing, southwest China, on September 6, Chongqing Architectural Design Institute Co. launched the Nexucity large-scale model, a next-generation AI system designed to accelerate urban digital transformation.

Positioned as a vertical AI model for city infrastructure, Nexucity bridges the gap between architectural engineering language and intelligent information

According to general manager and chief architect Chu Dongzhu, the model integrates three core functions: precise interpretation of engineering drawings, intelligent data modeling, and smart application of data elements. Together, they enable more efficient construction of urban information systems and improve city asset management, laying a stronger foundation for high-quality urban development.

The model is the result of eight years of independent research. Nexucity can decode engineering drawings, extract detailed structural data, and automatically generate layered 3D building models.

Compared with manual modeling, efficiency is boosted more than 1,000 times, while costs are slashed by over 80 percent — addressing long-standing challenges in building large-scale digital twins, according to Ran.

Gao Mindong, deputy director of the application center at the big data development bureau of Chongqing's Yuzhong district, said the district is using the Nexucity model to build a high-rise firefighting system characterized by "intelligent generation, smart alarms, self-rescue, and intelligent rescue," achieving real-time, full-domain fire safety perception.

Addressing the challenge of extinguishing fires in super high-rise buildings, the model also integrates management and service platforms to enable one-click airspace applications, define operation perimeters, and dispatch drones for reconnaissance, firefighting, and supply delivery — ensuring timely emergency response.