GTI

Industry Briefing

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The 2nd GTI Forum on Digital Intelligence · Hong Kong

The 2nd GTI Forum on Digital Intelligence · Hong Kong themed "Openness, Sharing, Cooperation: Advancing AI Development", brought together renowned experts and outstanding young talents to engage in academic exchanges and industry discussions on cutting-edge AI concepts, technologies, and innovative applications. By driving progress through both advanced technologies and application scenarios, the forum aims to accelerate AI research, innovation, and industrial digital transformation, and promote broader and more equitable global AI adoption, shaping a brighter future for all.

Key Takeaway

Sun Dong, Secretary for Innovation, Technology and Industry of the Government of the Hong Kong Special Administrative Region

Hong Kong is sparing no efforts to advance sci-tech innovation, actively integrating into the national development landscape. Through policy support, infrastructure provisions and international cooperation, it aims to build an international sci-tech innovation hub. Artificial intelligence (AI) is a key engine driving high-quality economic growth. Hong Kong stands ready to collaborate with global partners to advance inclusive AI development, positioning Hong Kong as a global frontier for AI R&D, outcome translation and talent aggregation, and contributing to China's national AI strategy and global AI advancement.

Gao Tongqing, Chairman, GTI

First, we should jointly advance tech innovation to solidify AI's foundation: mobilize global industry, academia, research and application forces, leverage East-West cooperation strengths, and rely on the GTI platform to address common key challenges for the global industry. Second, share open scenarios to empower industries with AI: jointly set up and use 5G-A×AI/6G open labs, continuously explore and open up high-value industry scenarios, and build quickly replicable and promotable AI demonstration benchmarks. Third, jointly build dialogue platforms to promote AI for good: jointly create a sound dialogue environment, utilize innovations like the MI3 Index, and explore the "greatest common ground" on AI standards, security and governance to boost mankind's common well-being.

Li Huidi, Deputy General Manager, China Mobile

To seize the "AI+" trend and advance AI's healthy, orderly, ethical growth: First, leverage collaborative innovation for an AI sci-tech hub: deepen joint R&D, strengthen AI's basic research (math mechanisms, autonomy, decision-making), layout cutting-edge tech (spatial/embodied intelligence, world models), explore 6G-AI integration, and build an original system for AGI/ASI. Second, Drive AI application with scenario needs: pool efforts in key links (scenario ideation, design, opening, demonstration), use forward-looking/pioneering practices, and accelerate large-scale AI in smart energy, construction, finance, cities. Third, promote AI for good via inclusive cooperation: uphold "people-centered" principles, respect diversity in data, algorithms, products, and make AI a key force for social equity and human well-being.

Prof Christopher Chao , Vice President (Research and Innovation), The Hong Kong Polytechnic Univer

Universities are key to AI innovation and talent training: integrate disciplinary strengths, pursue cutting-edge research to drive AI breakthroughs, and train forward-looking industry professionals. Meanwhile, industry-academia-research collaboration is critical to accelerating AI application and empowering industrial innovation—jointly tackle key challenges with enterprises in 6G-AI integration and satellite communications. He also stressed universities should build interdisciplinary platforms to advance AI R&D, help build an open, collaborative AI ecosystem, and contribute to bridging the AI divide and enabling an AI-powered future.

Mark Nitzberg, Executive Director Center for Human-Compatible AI at UC Berkeley AI Research Lab

AI's core goal is AGI (matching/exceeding human capabilities)—not yet achieved; GPT-like models are just part of it. Given AI's scale (global digital communications, business, all human activities), it needs corresponding caution. It faces socio-economic/ethical issues (income gaps, job displacement, privacy leaks) and security risks (loss of control, cyberattacks), with the core problem—"humans controlling superhuman AI long-term"—unsolved. China's 2021 rules require AI to be human-controlled, but safeguards are unclear. He stressed multi-dimensional efforts—tech (e.g., RLHF), regulation (setting "red lines"), organizations (200+ institutions)—to advance safe, beneficial AI. AI has great potential, but much work remains.

Yannis Ioannidis (Online) , President of ACM, Professor at the University of Athens, Greece

As a global computing sci-tech & education org, ACM advances computing's art, science and applications. Through open info exchange and high professional ethics, it serves professional/public interests and lays an AI governance foundation. He stressed AI—core driver of the 4th Industrial Revolution—not only reshapes academic publishing processes (registration, verification)—pushing publications to interconnected, explorable knowledge graphs and reducing text's dominance—but also transforms education teaching models. Yet it needs to tackle anxieties (robot job displacement, LLM impact on software teaching) and AI's ethical boundaries in homework.

Panagiotis (Takis) MATHIOPOULOS, Professor of National and Kapodistrian University of Athens

6G-AI integration is key to ITS (Intelligent Transportation Systems) for precise sensing, collaborative communication and efficient management. It needs AI to overcome limitations of traditional electromagnetic scattering modeling—dynamic target processing, cross-band consistency, and balance between accuracy and real-time performance. He emphasized AI's strengths in handling nonlinear data and adapting to dynamic scenarios, which can effectively optimize modeling accuracy and efficiency for typical ITS scatterers (pedestrians, vehicles, vegetation). He also proposed building an AI-enhanced scattering modeling method via multi-material characterization, flexible geometric modeling, and joint multi-scatterer modeling, and specified future focus on multi-material system characterization and intelligent balance of accuracy and complexity to advance 6G-ITS scattering modeling.

Feng Junlan, Chief Scientist of China Mobile Group, IEEE Fellow

AI+ industry development relies on intelligent computing infrastructure, multimodal foundation models and MoMA core technologies to build a multi-dimensional tech base. It has two implementation paradigms: "X+AI" for partial optimization and "AI+X" for core reconstruction, as large models drive a new AI+ paradigm in economy and society. She mentioned focusing on four application areas—operational services, new creation, new-quality production, strategic decision-making—to address scientific issues like multimodal fusion and human-machine collaboration. She added to leverage the "Innovation Community" to pool resources, advance co-creation of the AI+ industry open-source ecosystem, and help AI better serve industrial development.

Maria Tang, CVP AMD, General Manager of Cloud & Enterprise Sales Group, GC

AI innovation is accelerating, with trends like large-scale accelerated reasoning, explosive model growth, and agent technology rise—laying a solid foundation for the global AI industry. She emphasized that end-to-end AI computing systems are key to multi-scenario needs, supporting AI implementation across levels and driving industrial upgrading. She noted Greater China is a key AI market; AMD will collaborate with ecosystem partners, support local cloud needs, and build an AI PC ecosystem to help deploy AI across Chinese industries. She also mentioned the AI industry needs collaboration: linking edge intelligence with data center AI will expand application boundaries and support solving major global challenges.

The GTI Forum 2025

The GTI Forum 2025, with the theme of "**Mobile AI for Good**", was held on July 10. It was attended by over one hundred insightful leaders and experts from organizations, global operators, industry partners, universities and research institutions to share views on the integration of network and AI, the cutting-edge theories, technologies and innovative applications, explore the inclusive use of AI in various industries such as manufacturing, agriculture, healthcare and education, as well as discuss the development trends in the era of digital intelligence and their impactful role in achieving the UN SDGs.

Key Takeaway

Tomas Lamanauskas, Deputy Secretary-General, ITU

AI is profoundly reshaping the global economic and social landscape, penetrating healthcare, education, environmental protection, and urban governance. Yet the digital divide hinders its potential.The integration of networks and AI is crucial, as they jointly drive personalized services, efficient operations, and inclusive access.ITU aims to work with global stakeholders to promote inclusive AI-network integration, calling for continued dialogue to form global governance mechanisms and ensure inclusive AI outcomes. It also seeks to optimize network connectivity, leveraging mobile communication networks to bring AI benefits to every individual.

He Biao, CEO, China Mobile

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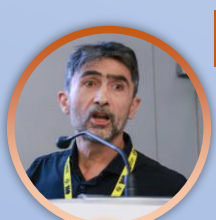

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Gao Tongqing, Chairman, GTI

At the core technology level, communications provide efficient channels for AI data transmission and model training, while AI facilitates intelligent network operation and maintenance as well as resource scheduling. At the application level, networks support AI applications such as intelligent security, and AI also drives innovation in network applications. In production, daily life, and governance, the combination of the two enables intelligent production and smart city management.

Alexander Ntoko, Chief, Operations and Planning Department, ITU

Developing countries face a digital divide due to weak infrastructure, funding shortages, and talent gaps. It is suggested to popularize open-source technologies to lower adoption barriers and promote technical standardization to adapt to special network environments (e.g., scenarios with only 2 hours of daily network coverage), ensuring technologies effectively serve the public.

Nilo Pasquali, Superintendent of Planning and Regulation of ANATEL, BraziL

The "light-touch regulation" strategy provides enterprises with room for innovation while adhering to the non-discrimination principle to ensure fair competition, and emphasizes diversity to encourage the participation of various types of enterprises. In response to uneven network coverage caused by vast territorial areas, it guides resources to tilt toward remote areas, and regulates AI in terms of algorithmic fairness and data privacy to prevent it from widening social divides.

Latif Ladid, Founder & President of IPv6 FORUM, Chair of AI & Blockchain, Global Forum Founder of EU Public Safety Forum, Member of 3GPP PCG Board

Global internet relies on IP as a core foundation, with address shortage a constraint. To fix this, IPv6 (next-gen standard, late 20th century R&D) launched globally in 2000. The internet took 30 years for 500M users; IPv6 hit 3B in 25 years. Unlike today's centralized, third-party-reliant internet, IPv6 is end-to-end (self-configurable, more secure/private). Its adoption is key for 6G—meeting massive IoT access, aiding low-latency industrial networks. Now 3.2B users use IPv6 unknowingly (mainly China/India, widespread in Africa); it's projected to drive ~$10T by the late 2020s.

Mirja Kuehlewind, Master Researcher, Ericsson

5G-AI deep integration reshapes industrial "intelligent network DNA". 5G acts as a high-speed, low-latency, reliable "neural network" for industrial equipment interconnection, while AI is the "intelligent core" for data processing. Together, they form a data collection-real-time analysis-dynamic decision closed loop, driving scenarios like machine vision/robot collaboration, optimizing resources via asset monitoring, and breaking manufacturing info silos. She stressed network-intelligence integration is key to industrial inclusivity: standardized tools let SMEs share tech dividends, accelerating intelligent transformation.

Alexander Hoffmann, Executive of IFM Group

Industrial AI popularization hinges on "intelligent networks". 5G, a transformative tech, empowers industrial OT's connectivity/upgrading (preserving existing investments), and with decentralized links + AI builds systems (e.g., anomaly detection) to redefine efficiency. This "network-intelligence integration" boosts data-to-decision speed, letting more enterprises access the ecosystem cheaply. 5G/6G will be core engines—integrating IT/OT and AI-edge computing to reshape production efficiency and management.

Robert Froehler, VP Europe Enterprise, Nokia

The ultimate goal of network-intelligence integration is unlocking "swarm intelligence"'s inclusive value. 5G-AI not only solves data transmission pain points, but also proves via drone swarm management: with networks as smart "blood vessels" and AI as collaborative "brains", single-device capabilities become system-level swarm efficiency (e.g., 1 pilot controlling 7 drones). Going forward, it will expand from specific scenarios to full-domain penetration, extending inclusive value (security, resource optimization) to more industries and people. He noted this transformation needs an open, compatible smart network ecosystem: balance standardization and innovation, and include government oversight to build trust.

Xu Jinchao, Professor of Applied Mathematics and Computational Sciences, KAUST

Take Mecca pilgrimage (managing 3M people) as an example: traditional tech struggles with its high density/dynamics. Yet cross-domain integration of math, AI and comms—especially multi-grid algorithms + intelligent networks—boosts computing efficiency by an order of magnitude. This network-intelligence integration is more than tech overlap—it's an efficient dynamic optimization model: math-based crowd flow models, 5G's high-speed low-latency connectivity and AI's big data capabilities enable real-time decisions for complex problems, offering a replicable intelligent network solution for inclusive scenarios (ultra-large crowd safety, resource allocation).

GTI Summit · Shanghai 2025

The GTI Summit·Shanghai 2025, with the theme of “Envisioning the Future, From 5G-A to 6G”, was held on June 18. It has attracted hundreds of insightful leaders, innovators and creators from operators, vendors and verticals to discuss more on the path from 5G-A to 6G, share thoughts on reshaping the landscape of digital economy in 6G era, explore 6G global ecosystem that will transform industries and daily life, as well as envisioning new scenarios and new applications that will bring a more connected, intelligent, and immersive digital future.

Key Takeaway

Craig Ehrlich, Chairman, GTI

During the Phase 3.0 of GTI, it has continued to promote the integrated innovation of 5G-A and AI. Last year, GTI made the global debut of the "5G-A × AI Development Program," which accelerates the maturation of 5G-A technology, deepens the integration of AI and communication technologies, and lays a solid foundation for the transition to 6G. Looking ahead, GTI will further explore innovative application scenarios and create new value for various industries and society.

He Biao, CEO, China Mobile

China Mobile firmly seizes the opportunities of the digital and intelligent revolution, anchors its positioning as a world-class information service technology innovation company, advances the integrated evolution of 5G-A/6G in a coordinated manner, accelerates the in-depth integration of technological innovation and industrial innovation, and empowers the digital and intelligent transformation of the economy and society; specifically, it first takes scenarios as the driver to jointly promote demand cultivation, second takes consensus as the foundation to jointly discuss standard development, third takes integration as the path to jointly advance technological R&D, and fourth takes cooperation as the link to jointly build a prosperous ecosystem.

Vivek Badrinath, Director General, GSMA

China has taken a leading position in 5G infrastructure, investment and innovation, with its 5G-A commercial deployment delivering remarkable results and driving multi-faceted transformation of the economy and society. Meanwhile, he urges the global community to secure the return on 5G investments and policy support while advancing 6G, emphasizing that technological evolution should align with market rhythms to ensure the sustainable development of the industry.

Gao Tongqing, Chairman, GTI

The "MI3 Index" (Mobile Intelligence Integration Index)—which reflects the level of mobile intelligence integration, innovation and development across global regions—was released. It outlines the outlook for typical applications in daily life, production, and social governance amid the evolution from 5G-A to 6G, and emphasizes that for 6G, new scenarios and new applications should be leveraged to drive technological innovation, standard-setting, and industrial development.

Edward George Tiedemann, SVP of Engineering, Qualcomm

AI is transforming the future, with its reach spanning all industries. It can create value at the edge side, and advanced wireless technologies enable AI and connected computing to fully unlock their economic potential. The continuous evolution of wireless technologies is essential, as it will drive sustained growth in mobile data traffic—meanwhile, AI is also bringing new data traffic to mobile networks. Furthermore, he stated that next-generation wireless technologies and intelligent computing are becoming the cornerstone of social development, which will drive economic growth, create new opportunities, and bridge the digital divide.

Wu Xihong, School of Intelligence Science and Technology, Peking University

First, the development of embodied intelligence is neither a goal nor a function, but rather a means and a mechanism. It requires leveraging an embodied cognitive framework to achieve the correlation between cross-modal signals. Second, it is necessary to establish a connection between concepts and language, and acquire language competence through social interaction.

GTI Talks

During the GTI Innovation Forum session, experts from partner organizations including Ericsson, Siemens, Honor Device, Leju Robotics, and EHang Intelligent conducted in-depth discussions on the evolution of technologies from 5G-A to 6G and their application prospects in the low-altitude economy, smart manufacturing, and automation sectors. With the rapid development of artificial intelligence technology, the integrated transition between 5G-A and 6G will provide strong technical support for multiple industries, particularly in application scenarios such as automated production, collaborative robots, and intelligent aircraft.

- Key applications in the low-altitude economy—such as high-density flight, real-time data transmission, and intelligent management—will heavily rely on the outstanding high-bandwidth and low-latency performance of 5G and 6G networks. Meanwhile, the integration of sensing technology and ubiquitous connectivity will drive the transformation of smart manufacturing and robotic collaboration platforms, enabling more adaptive production processes. In this process, the in-depth integration of AI technology, satellite communications, and environmental sensing technology will lay a solid foundation for the evolution of future communication systems, promote industrial innovation, and create new momentum to address upcoming challenges and opportunities.
- Christopher Price, Director of Cutting-Edge Technologies at Ericsson Group Asia Pacific, emphasized that during the transition from 5G-A to 6G, the reliability, connectivity, and programmability of communication networks are crucial. In the future, robots, drones, and industrial equipment will require programmable networks capable of autonomous decision-making and service delivery. Christopher pointed out that the key to 6G's success lies in the network's ease of use, controllable costs, and convenient deployment methods; providing a "zero-hassle" network experience will be a core element for the widespread application and popularization of 6G.
- Nicholas Hansen, Head of Factory Automation, Strategic Products, and Digital & Automation Systems at Siemens Digital Industries Group, stated that the manufacturing industry is transitioning from traditional automation to "adaptive automation" and "autonomous decision-making factories" to achieve production processes with less human involvement and higher

5G-A is A Necessity for Capitalising on the AI Boom

Total telecom: As AI grows ubiquitous, 5G-Advanced (5G-A) has become critical for telecom operators' success. Since 3GPP's Release 18 launched last year, over 30 global operators have rolled out 5G-A commercially, with China leading — China Mobile, China Unicom and China Telecom now serve 10 million+ subscribers across 300 cities in 30 provinces.

AI: Catalyst for 5G-A Evolution. AI usage has surged since late 2022, with workplace adoption up 233% in six months (Salesforce data). James Chen, Huawei's Carrier Business President, noted at MWC Shanghai that AI inference costs drop 90% annually, making AI as accessible as utilities. David Li, VP of Huawei's Wireless Network Product Line, outlined "new connectivity, new network planning, and new business models" as imperatives:

- New connectivity: Edge computing will bring AI inference closer to users, with Huawei investing in "cell-free" tech for uniform signal quality. 5G RedCap (Reduced Capability) supports large-scale intelligent IoT, with costs below 100 RMB (~$14) and set to match or undercut Cat-4 IoT soon. Enhanced RedCap (eRedCap) will later enable IoT video surveillance and livestreaming.
- New network planning: AI's rise shifts focus to uplink capacity—users now upload data frequently and expect real-time AI responses. Li advocates a "double 20" benchmark: 20 Mbps uploads and 20 ms air interface latency.
- New business models: Beyond traffic monetization, operators can offer tailored packages (e.g., for latency-sensitive gamers or livestreamers). AI integration will automate service provision and quality assurance.

As 5G-A and AI mature, industry collaboration is vital to build new value chains. Eric Fang, Huawei's 5G-A Domain President, said, "The AI agent era is here. Let's advance 5G-AxAI to drive growth." Without 5G-A, operators risk missing the AI revolution's full potential.

Redefining Global Benchmarks: China Mobile and Huawei on the Power of 5G-A and AI

Telecom Review: In an exclusive WinWin interview hosted by Telecom Review, Sun Shiwei, Deputy General Manager of China Mobile Department of Market Operation, and George Gao, President of Huawei's Cloud Core Network Product Line, shared their valuable insights into China Mobile's pursuit for value-driven operations and its efforts to set a global benchmark by leveraging the power of 5G-Advanced (5G-A) and artificial intelligence (AI).

Sun began by emphasizing the importance of network abilities as the foundation for operators. He elaborated on the launch of China Mobile's 5G-A network, noting that in March 2024, the world's first 5G-A network was rolled out in Zhejiang, Hangzhou. This marked the start of commercial 5G-A deployment across over 300 cities in China. "Currently, 64 types of terminals are supported by 5G-A networks," Sun shared, underscoring the scale of China Mobile's deployment. Elaborating on service innovation and development, Sun detailed how the company integrates AI into its products and services. With the broad deployment of 5G-A and the rapid adoption of AI, China Mobile has been actively pursuing its 'AI+' strategy. This product model combines AI with platforms, networks, and applications. "We've launched more than 20 'AI+' products," Sun revealed. These include services like New Calling, cloud phones, and glasses-free 3D devices.

Gao then spoke about Huawei's contributions to helping operators monetize value through AI- and experience-driven models. Gao then discussed Huawei's approach to core network transformation, particularly in the context of AI integration. He noted that integrating AI into the core network is inevitable in the mobile AI era. Gao explained that the ultimate goal is to develop a telco AI system capable of meeting the real-time, personalized requirements of services and accelerating the adoption of inclusive AI across industries.

T-Mobile Advances 6G Trials, Paving the Future of Ultra-Fast Connectivity

The Silicon Review: T-Mobile has initiated large-scale 6G trials across select U.S. cities, marking a critical step toward the next generation of wireless connectivity. The company's pilot programs in New York City, Los Angeles, and Chicago have demonstrated speeds exceeding 10 Gbps, signaling a shift toward ultra-fast, low-latency networks designed to support advanced industrial automation, AI-driven applications, and next-gen consumer experiences. As industries push for real-time data processing and seamless connectivity, T-Mobile's 6G rollout aims to redefine wireless infrastructure. The new technology leverages higher-frequency spectrum and AI-powered network optimization to deliver significantly improved bandwidth and efficiency. Businesses in sectors like autonomous transportation, telemedicine, and smart manufacturing are expected to benefit from near-instantaneous data transmission, enabling mission-critical operations with unprecedented reliability.

T-Mobile's move underscores the intensifying race among telecom giants to establish dominance in the 6G space. With global competitors accelerating their research efforts, early adoption of 6G technology could provide a competitive edge, particularly in enterprise solutions and IoT-driven automation. However, challenges remain, including spectrum allocation, infrastructure expansion, and regulatory approvals. There are also concerns regarding cybersecurity and data privacy, as higher-speed networks introduce new vulnerabilities that must be addressed.

With full commercial deployment anticipated by late 2025, T-Mobile is positioning itself as a leader in the telecom industry's next evolution. As the demand for hyper-connectivity grows, the success of these trials will determine how quickly businesses and consumers can transition into the 6G era. If successful, the technology could lay the groundwork for innovations that redefine communication, automation, and digital interaction on a global scale.

Rogers rolls out 5G Advanced for IoT applications

Telecoms: The Canadian operator announced in June, 2025 that it is working with Ericsson on the deployment of the technology. Specifically, it is using the Swedish vendor's 5G Advanced RedCap software to power more advanced Internet of Things (IoT) applications.

RedCap, or reduced capability, to give it its full title, is essentially a pared-down version of 5G – lower cost and lower power – for IoT devices, be they industrial sensors or wearables. And that's exactly why Rogers has opted to use it. RedCap means that IoT devices on the business side, such as sensors and monitoring equipment, use network resources more efficiently and connect seamlessly, the telco explains. Meanwhile, customers will also see the benefits, with smartwatches and other wearables experiencing longer battery life, it says.

"5G Advanced will help unlock the full potential of 5G for businesses and consumers," said Mark Kennedy, Chief Technology Officer at Rogers, in a statement. "We continue to invest in Canada's largest 5G network and are proud to be the first in Canada to bring 5G Advanced technology to our customers."

We are well used to telecoms operators making 'first to market' claims when it comes to new technologies. But in this case Kennedy's comment takes on greater significance, because to date 5G Advanced has not seen the traction that industry watchers were expecting… or indeed the vendor community was hoping for.

There has been a lot of noise around 5G Advanced as a stepping stone to 6G. Rogers' vendor partner Ericsson launched a raft of new 5G Advanced software products at the back end of last year, for example, and confidently declared that "after building out 5G networks, communications service providers (CSPs) are ready to further harness the benefits of this technology." But to date the operators themselves have had little to say on the matter and they haven't done a lot either.

Ericsson and Turkcell collaborate to advance Generative AI solutions

Ericsson and Turkcell have signed a Memorandum of Understanding (MoU) at Mobile World Congress 2025, Barcelona, Spain, to collaborate on the development, deployment, and adoption of Generative Artificial Intelligence (GenAI) solutions across Turkcell's networks and operations.

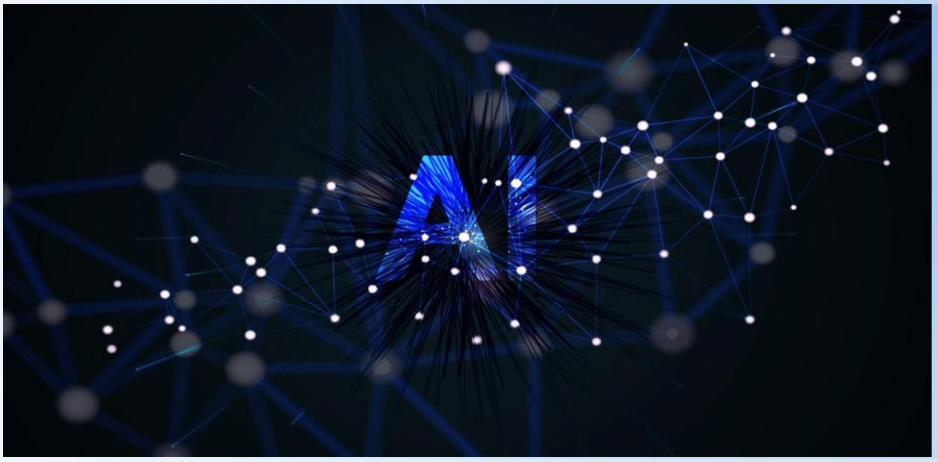
Marking a significant step in leveraging AI for the next generation of telecom technologies, the collaboration will explore AI-powered innovations that optimize network efficiency, enhance automation, and drive new capabilities for 5G, 6G, and future connectivity solutions. By integrating open and flexible AI models, the collaboration aims to address the complexities of multi-vendor and multi-technology networks, unlocking new opportunities for improved performance and business growth.

As next-generation networks evolve, automation and AI will be critical in delivering seamless, high-performance connectivity. Turkcell and Ericsson will focus on AI-driven solutions that improve network resilience, maximize network sustainability, and enhance user experiences. The collaboration will also explore new use cases for AI in network operations, including predictive analytics, intelligent fault detection, and automated network healing.

Prof. Dr. Vehbi Çağrı Güngör, Chief Technology Officer of Turkcell, says: “Turkcell is committed to staying at the forefront of innovation, and this collaboration with Ericsson represents a key milestone in our AI-driven transformation. By integrating Generative AI into our operations, we aim to deliver superior network performance, greater automation, and enhanced experiences for our customers.”

Kevin Murphy, Vice President and Head of Ericsson North Middle East and Africa, says: “As telecom networks grow more complex, AI-driven automation is essential for delivering efficient and scalable operations. Our collaboration with Turkcell will help accelerate the adoption of Generative AI, transforming network management and paving the way for 5G, 6G, and beyond.”

Intelligent Telecom Marketing in the AI Era: Indonesia's Telkomsel Partners with Huawei to Break Through Growth Bottlenecks



Against the backdrop of accelerated digital transformation and AI application, telecom operators worldwide are exploring ways to break through development bottlenecks using intelligent technologies. To address challenges such as data fragmentation, inefficient modeling, and cumbersome user operations arising from its massive user base, Telkomsel has joined hands with Huawei to build an intelligent platform featuring an operational closed loop of "data integration - analysis - execution." This collaboration has successfully optimized network performance and customer experience, increased 5G package conversion rates, and set a practical example for the telecom industry’s AI-driven transformation.

From a technical perspective, AI solves the telecom industry’s pain point of "difficulty in utilizing massive data." Leveraging generative AI (e.g., Large Language Models/LLMs), Telkomsel has cut user modeling time by 50%, tripled marketing response speed, and enabled real-time prediction of user churn risk. From an industry demand standpoint, the current telecom market faces dilemmas like "difficulty in raising tariffs and high 5G costs," while AI can transform raw data into precise marketing capabilities. For instance, in Greater Jakarta, Telkomsel has boosted conversion rates through customized 5G packages, helping the operator efficiently recoup 5G investments and unlock new growth trajectories.

Key leaders from both parties have shared clear insights on AI’s application in telecom. Julitra Anaada, Head of Network AI and Data Science at Telkomsel, emphasized: "Without AI, it would be impossible to build effective operational models for 160 million users. Going forward, we will expand the scope of AI applications—planning to extend intelligent marketing to omni-channels and explore AI-powered optimization of network resource allocation." Zhang Lei, Director of Network Performance and Converged Data Operations Marketing at Huawei, noted: "SmartCare helps operators drive transformation with AI and data. It not only resolves the core issue of network performance optimization but also accurately targets customers' real needs."

TUC Unveils "Worker-First" AI Strategy to Mitigate AI-Driven Job Risks

As AI poses growing employment risks, the UK's Trades Union Congress (TUC) has launched a "Worker-First" AI strategy, calling on governments and businesses to center workers in AI development and balance innovation with job stability.

The strategy has three key pillars: Public AI R&D funding will be tied to recipients' commitment to "support rather than replace workers," blocking funds for layoff-focused projects; firms are urged to involve workers in AI decisions, boost skills training, and set up safeguards against algorithmic bias or over-surveillance; and the TUC pushes for wider collective bargaining and a support system—free training and reemployment help—for AI-impacted workers.

Warnings of AI's job impact are mounting. In June 2025, Ford's CEO said AI may cut half U.S. white-collar jobs; Amazon plans workforce cuts as AI use deepens. A January 2025 WEF report forecasts 92 million global job losses by 2030. A TUC survey found 51% of UK adults (62% of 25-34s) fear AI harms their jobs.

TUC Assistant General Secretary Kate Bell stressed: "Properly developed AI benefits workers—but only if they're at innovation's core." Unregulated AI, she warned, could widen inequality. The strategy offers a practical way to align tech progress with fair employment.

European Space Agency partner with Nokia to develop 5G-enabled low-latency solutions

To meet growing connectivity needs, the European Space Agency's Space for 5G/6G and Sustainable Connectivity programme line, in collaboration with the UK Space Agency (UKSA), has awarded a development contract to telecommunications company Nokia to develop and deploy a satellite-adapted Nokia RXRM Real-time eXtended Reality Multimedia solution at ESA's UK-based 5G/6G Hub.

This commercial agreement follows an initial Memorandum of Intent to collaborate between ESA and Nokia signed in 2023, while the initial installation took place in March 2024.

The technology is already being utilised across situational awareness, teleoperation, remote monitoring, and training. Equipped with a 360° video and spatial 3D audio, it increases the accuracy of what users see, and the speed with which they see it, with near-instant, ultra-HD streaming. This immerses users whether this be for consumer experiences or professional working environments, increasing safety and wellbeing, improving productivity, and more widely contributing to a more sustainable working world. The 5G/6G Hub, located at the European Centre for Space Applications and Telecommunications (ECSAT), Harwell Science and Innovation Campus, UK, is using RXRM to solve real-world customer problems such as remote inspection of critical infrastructure, demonstrating how space-enabled applications are being used to meet real-world challenges.

As the adoption of 5G connectivity continues across Europe, technologies such as RXRM will enable a strong digital and green transformation, enabling a new level of increased employee safety and well-being, quicker and more informed decision making, resulting in cost savings, and productivity gains, benefiting society.

Antwork Drone Logs Over 2M KMs in Urban Drone Logistics Milestone

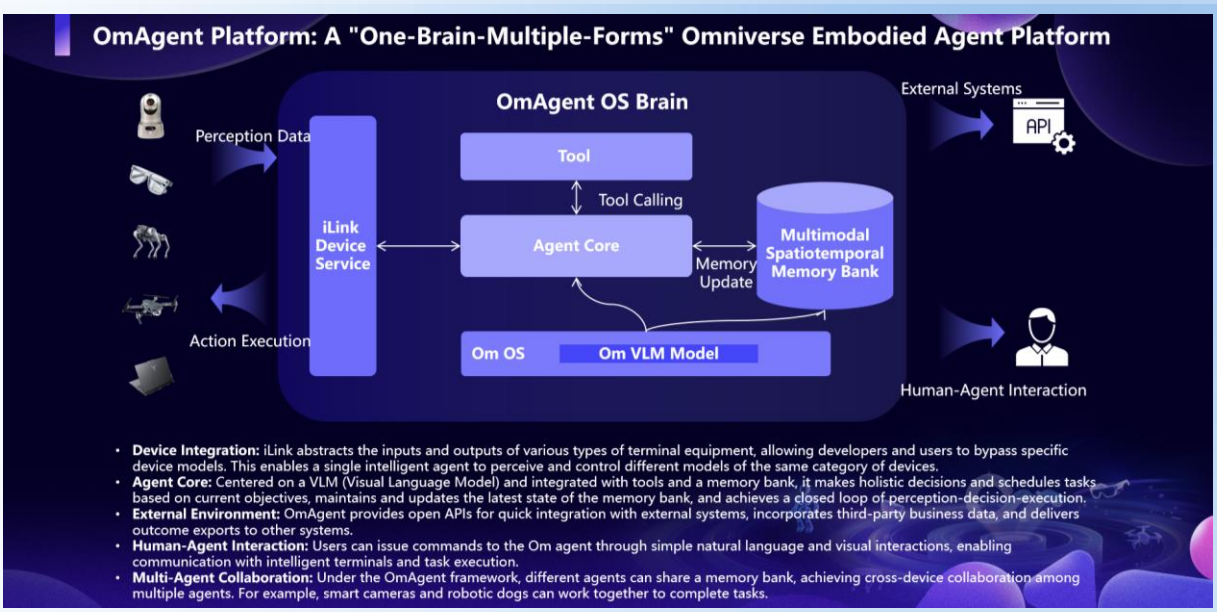
China's low-altitude logistics industry has reached a significant milestone as Antwork, a pioneering company in the field, has accumulated over 2 million flight kilometers through more than 31,000 flights—equivalent to circling the Earth 50 times. This remarkable achievement, realized through real-world commercial operations across over 50 Chinese cities, demonstrates the potential of autonomous drones to transform essential urban services.

Operating below 120 meters in densely populated urban areas, Antwork's drones have become crucial for medical emergencies and city logistics. The company provides services to over 300 hospitals nationwide, transporting blood, pathology samples, and surgical kits at speeds of up to 60 km/h. In a life-saving operation last year, drones airlifted 10,000 ml of blood across 11 km in Hefei to rescue a hemorrhaging mother. The drones' temperature-controlled pods maintain a precision of ±0.5°C to ensure the integrity of biological materials during flight.

Beyond healthcare, Antwork is also collaborating with industry leaders such as Ele.me to address urban congestion. Drones now deliver groceries over Hangzhou's skyscrapers, transport medicines to island communities around Chaohu Lake, and reduce delivery times by 70% on routes ranging from 5 to 20 km—areas where ground transport traditionally struggles.

This achievement is made by Antwork's distributed AL-4 autonomy system, which allows a single operator to manage up to 10 drones simultaneously. The cloud-based scheduling platform functions like an air traffic control center, processing hundreds of flight missions in real time. The drones fly through bustling commercial areas daily, equipped with a multi-sensor fusion system, redundant navigation, energy, and power systems, and a safety parachute system as the last line of defense, all of which ensure the safe and reliable operation of the drones.

Om AI Launches World's First Embodied Agent Platform, OmAgent



Om AI has officially launched the world's first Embodied Agent Platform, OmAgent, in Shanghai. As the industry's first embodied agent construction system supporting multi-modal perception fusion, it reshapes the application paradigm of intelligent terminals, enabling AI agents to step into the "physical world" and providing a solid platform foundation for leading the embodied AI industry.

The OmAgent platform is equipped with the industry's most advanced visual language model (VLM) for spatial intelligence, allowing robots to truly "understand" space and make autonomous decisions, breaking through the limitations of traditional machine perception. Based on the iLink embodied agent protocol, it eliminates device barriers and seamlessly connects diverse intelligent terminals such as mobile robots, AI glasses, drones, and cameras. The platform subverting traditional operation modes by adopting AI-native agent application interaction, significantly reducing the technical barrier to using agent technology while enhancing human-machine collaboration efficiency. This empowers users to accomplish highly efficient and high-value industry-level complex tasks.

The OmAgent platform not only enables intelligent terminals to possess human-like spatial cognition and autonomous decision-making capabilities but also fundamentally enhances their application efficiency and commercial potential. With higher application efficiency, lower comprehensive costs, and an entirely new technical service model, it is powerfully driving the commercialization and industrial upgrade of embodied intelligence.

The OmAgent Embodied Agent Platform has been deployed across various industries such as construction sites, public security, power utilities, and retail, empowering over 100,000 hardware terminals. It is widely used in core scenarios and tasks including safety inspections, low-altitude economy (drone applications), compliance checks, and perimeter security.

China Mobile & Ti5robot Drive Embodied Intelligence Innovation for Humanoid Robots

Intelligent empowerment from China Mobile Embodied Intelligence Industry Innovation Center: The center focuses on the R&D of the autonomous intelligent capabilities of the robot brain and holds technological leadership in areas such as AI understanding, multi-modal interaction, and scenario-based decision-making. By integrating autonomous intelligent algorithms with Ti5robot humanoid robot body, it can endow robots with advanced capabilities of "understanding needs, making independent judgments, and responding flexibly." For example, after recognizing voice commands from home users, the robot can independently plan routes to complete tasks such as item delivery and environmental cleaning.

Jointly Establishing the ‘Embodied Intelligence Co-Creation Center’: With this center, innovating the ‘Hardware+Network+Content’ business Model, breaking the traditional single model of ‘hardware sales’, this model combines robot hardware with China Mobile’s 5G/6G networks, cloud computing resources, and scenario-based content services. For instance, robots achieve real-time data transmission and remote control via 5G networks, complete complex AI tasks relying on cloud computing power, and access customized content services in education and medical care. This forms a sustainable business closed loop of ‘hardware as the carrier, network as the support, and content as the value-added component’, creating reproducible industry solutions.

Based on existing cooperative achievements, Ti5robot expects to further expand its cooperation scope with China mobile in the future, and develop more innovative humanoid robot together to serve more and more families in China and around the world.

5G-A Integrated with AI: China Mobile Zhejiang Drives Upgrades of 5G Smart Factories

With the integration of 5G-A and AI technologies, the digital and intelligent transformation of the manufacturing industry has ushered in new development opportunities. In Zhejiang Province, China Mobile Zhejiang Company is comprehensively accelerating the advancement of new productive forces, promoting the integrated innovation of 5G private networks on a broader scale, at a deeper level, and with higher standards. It has established a provincial-level industrial internet platform, empowering over 700 "5G + Industrial Internet" projects, 17 industrial brains, and 30 future factories. Focusing on 5G-A application scenarios, it has built industry benchmarks for multi-network integration, injecting intelligence into thousands of industries.

5G LAN Private Network Empowers Flexible Manufacturing

Zhejiang Yema Battery, a leading exporter of eco-friendly zinc-manganese batteries and a national smart manufacturing demo enterprise, partnered with China Mobile Zhejiang to build a commercial 5G LAN private network smart factory. Digital technologies cover the entire production chain from raw material storage to delivery, including automated production, AI visual inspection, and remote equipment maintenance, significantly enhancing flexible manufacturing capabilities.

5G-AI Integration Boosts Efficiency and Accuracy

Wenzhou Zhouyi Aluminum, a national high-tech enterprise, produces 0.016mm coated aluminum foil rolls (among the world's thinnest) sold globally. Its 5G + AI smart factory project covers data collection, MES-based production management, precision weighing, AI defect detection, and online monitoring. 5G deployment improved network stability/security by over 50%, enabling stable data transmission and real-time remote monitoring. Production management became digital and paperless, raising efficiency and cutting labor costs by 5%.

Avatr opens 5G-powered AI factory

On July 2025, Avatr Technology officially opened a new vehicle production plant. The facility is designed for flexible production, with connected systems throughout the manufacturing process.

Avatr Technology hosted a livestream walkthrough of its newly operational vehicle production plant, offering the public a guided look at its manufacturing systems. During the broadcast, factory staff led viewers through various sections of the plant, providing on-site explanations of automated body welding, real-time quality inspection, and final vehicle assembly.

Avatr says the plant integrates several digital systems, including automation, 5G network equipment, AI analytics, and data tracking infrastructure. Each component on the line is connected through a unified platform that enables real-time data transmission and full traceability from order to final vehicle output.

Avatr claims the production line operates with a high level of automation, capable of completing one vehicle every 60 seconds. The facility supports the production of multiple vehicle types on the same line, allowing for different powertrains and custom configurations. Avatr says it can accommodate over 1,200 individual order variations. The site uses 369 monitoring points, 26 quality checkpoints, and AI-assisted visual inspection systems across 73 workstations.

Avatr says that each workstation features real-time displays showing current tasks, components used, and digital instructions. Robotic systems handle key installations, including panoramic roofs, glass, and doors. Automated guided vehicles (AGVs) coordinate part delivery throughout the assembly floor. A modular battery line supports pack configurations ranging from 400V to 800V.

Global Technology Association of InfoComm (GTI)

Objectives and Positioning

Collaborate with stakeholders from industry, academia and research in global ICT field, promote interdisciplinary integrated innovation, technology-to-industry transformation and global unified standards, to provide an open high-level, and high-value platform for collaboration in the global ICT ecosystem.

Platform for Technological Cooperation

Gather global innovation resources inindustry, academia and research, focuson 5G/5G-A.6G,computing forcenetwork,AI and other key issues, andcarry out technology cooperation infrontier trends and key breakthroughs

Platform for Industrial Cooperation

Gather global partners in infocomm andvertical industries, jointly promotetechnology industrialization and digitaintelligence, and support globalcooperation in technology, standard,product and business.

Platform for Think-Tank Cooperation

Attract international organizations, consultinginstitutions,internationally renowned universitiestop experts and scholars,conduct think-tankresearch,enhance connection between academiaand industry, advance integration of technologyand application, as well as promote cooperationin global development and governance

Path to Growth

GTI 1.0

2011-2015

Objective:

- Construct a robust ecosystem ofTD-LTE
- Speed up the commercialization ofTD-LTE
- Promote the converged developmentof LTE TDD and FDD

In 4G era, promote TD-LTE as a globalmainstream technology, and achievelarge-scale commercialization

GTI 2.0

2016-2022

Objective

- Further promote 4G evolution andexpand global market
- Promote 5G development andcross-industry innovation

In 5G era, accelerate 5G end-to-endmaturity and global 5Glarge-scalecommercialization

GTI 3.0

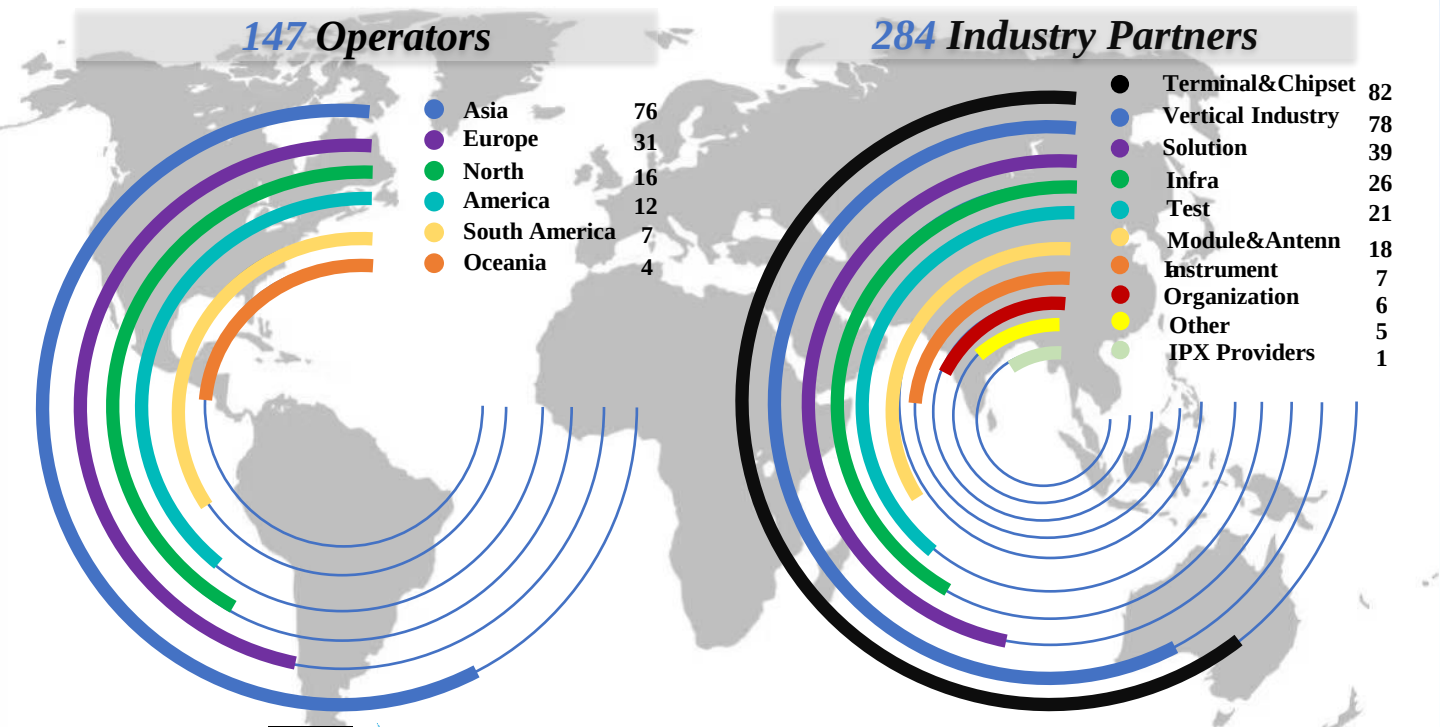
2023-Now

Objective

- Promote intelligent, efficient, andgreen 5G-A tech and products
- Foster intearated innovation between5G-A/6G, AI and other technologies
- Empower digital and intelligenttransformation ofindustries to createnew value

Members&Organizations

Gather Global Resources, Build **Global "Circle of Friends"**



International Cooperation

GSMA · ITU · 3GPP · NGMN · GCF · 5GAA · 5GACIA · KHRONOS GROUP

GTI Breakthroughs and Achievements

5G Technology and Product

Focus on advancing 5G/5G-A new technology evolution and cross-domain integration, innovating and promoting 5G products, and explore potential spectrum resources and application scenarios, to promote global 5G end-to-end network development, technological innovation, maturity of services and products, and accelerate large-scale commercialization of 5G/5G-A technologies.

Released 60+ White Papers

Scan to download

5G Enterprise Network Solutions (5G ENS)

Focusing on key domains such as ambient loT, 5G private networks, industrial intelligence, and industrial loT, we conduct work in demand exploration, technological innovation, product R&D, value assessment, and application promotion. This accelerates the deep integration of ICT and OT, fully unleashes the commercial value of 5G, and drives the digital transformation and development of global vertical industries

Released 80+ White Papers

Scan to download

5G-A×AI Development Program

GTI has released the 5G-A×AI Development Program, aiming to build industry consensus, gather industry taskforce, and promote integrated innovation of 5G and AI, support digital intelligence in economy and society, and create new revenue space for industrial development.

Task 1: Build Open Labs	Task 2: Build and Open Collaborative Innovation Community	Task 3: Explore Innovative Use Cases
Provide basic environment, equipment facilities andother resources for 5G-AxAl integration innovationand carry out joint research and technology test!	Establishing an open platform for knowledgesharing and supply & demand matching	Explore5G-AxAl integration use cases andbenchmark usecases, and condense them into replicablebusiness model tiemplates to provide commercial applications

Established 8 Open Labs

- GTI-China Mobile OpenLab (Beijing)
- GTI-Huawei OpenLab (Shanghai)
- GTI-ZTE OpenLab (Shanghai)
- GTI-Ericsson OpenLab (Stockholm)
- GTI-Intel OpenLab (Chandler (U.S.), New Mexico, Beijing, Taipei, Penang)
- GTI-Asix (Sinarmas) OpenLab (Jakarta)
- GTI-Universiti Malaya OpenLab (Kuala Lumpur)
- GTI-Qualcomm OpenLab (London)

Released 3 Challenges

GTI-GSMA New Calling x AI
- Opened in October 2024
- Winners to be announced: June 2025

GTl-GSMA Wireless Network Intelligence
- Opened in November 2024
- Winners to be announced: 2026

GTl Secure Federated Learning (Research Topic AreaSupported by GsMA)
- Opened in August 2025
- Winners to be announced: September 2025

Released 10+ White Papers and Industry Research Reports

5G-A x AI: New Era, New Opportunities, New Value

5G-AxAI New Technology, New Case, New Model

Mobile Intelligence Integration Index (MI^3) Report

To understand global mobile intelligence coordination and measure integration levels, GTI proposes the **Mobile Intelligence Integration Index**. With 15 core indicators across 3 dimensions (**mobile broadband, intelligence, integrated application maturity**), it seeks a quantitative, dynamic evaluation system. As a "universal benchmark," it guides regulators, operators, and players to spot opportunities and fill gaps.

Pioneer Markets Lead in Integration Foundation	Global Development Remains Uneven: AI Divide Intensifies	AI Inference Demand Fuels the Matthew Effect
East Asia, North America, Western Europe lead in mobile communications, AI computing & their integration — paving the way for large-scale mobile intelligence integration.	Following the digital divide, the challenge of the "AI divide" has quietly worsened, leading to unbalanced progress in global mobile intelligence integration.	Surging demand for AI inference further drives mobile intelligence integration, exacerbating the "stronger grow stronger" Matthew Effect in regional development.

Scan to download Full Report

GTI Key Moments
—Look Back to Our Historical Story

2011
Kick-off of GTI by China Mobile, SoftBank, Vodafone and other operators

2012
Release of world's first TDD/FDD Multimode chips

2013
Release of world's first MMMB smart phone

2014
World's first TD-LTE VoLTE phone call was made

2015
Release of 5-Mode Low Cost Device Solutions

2015
Release of Native RCS Devices

2016
Launch of **GTI 2.0** by China Mobile, Bharti Airtel, KT, SoftBank and Vodafone to promote 5G development and cross-industry innovation

2016
Release of HPUE on Band 41 to promote Massive MIMO commercialization and improve systematic performance

2018
Release of GTI 5G S-Module Industrial Cooperation Plan to promote wide application of 5G devices and expand the scale of application

2018
Joint release of ***5G in China-the Enterprise Story*** by China Mobile, GTI and GSMA

2019

Debut of 5G 2.6GHz End-to-end Products to accelerate maturity of 2.6GHz industry chain and promote 5G commercial process

2020

Release of ***Supportive Policies for a Sustainable Mobile Industry in the 5G Era*** with GSMA to promote sustainable mobile industry

Release of GTI 5G Global Device Initiative to promote maturity of multi-mode, multi-band and multi-form devices

2021

Unveil the joint "2.3GHz Band Industry Statement" to promote efficient use of TDD 2.3GHz spectrum and accelerate commercial launch by global operators

2023

GTI 3.0 was launched to promote continued global cooperation, accelerate 5G-A tech and products, foster integration of DICT, and empower 5G monetization to create greater value

2023

Release of ***Unleashing New Value with New 5G Technology***, to develop and strengthen 5G industry, and stimulate 5G-enabled economic and social transformation

2024

Release of ***GTI Report – 5G-A×AI: New Era, New Opportunities, New Value*** to promote full potential of 5G A^2, and create a much broader value space for the entire industry

Launch of GTI ***5G-A×AI Development Program*** to promote integration of 5G and AI in technology, business, ecology, and commerce, and two-way empowerment

2024

GTI and GSMA signed cooperation agreement on 5G-A×AI to jointly explore potential collaboration opportunities and drive innovative integration in 5G-A and AI.

2025

Launch of GTI ***5G-A×AI 100 Commercial Campaign***

Release of ***5G-AxAI New Technology, New Case, New Model White Paper***

2025

Release of ***Mobile Intelligence Integration Index Report***
Data Center in the Generative AI Era
5G-A IGNITES
THE THREE-TYPES OF NEW INTELLIGENT SERVICES

For more details refer to https://www.gtigroup.org

Welcome to Join GTI 3.0

DEEPEN GLOBAL COLLABORATION FOR A DIGITAL AND INTELLIGENT FUTURE

Join as GTI Operators

1. Click Here to download and fill out the Application Form (AF), then return it to GTI Secretariat: admin@gtigroup.org;

2. Sign the Declaration Form (DF) and mail the hard copy to GTI;

3. Once the participation process finishes, a GTI website account and associated password will be assigned to the new participant.

Join as GTI Partners

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3. Once the participation process finishes, a GTI website account and associated password will be assigned to the new participant.

Scan the QR code below to access more relevant social media channels

CONTACT GTI:

If you have any questions, comments, and suggestions regarding 5G/5G-A or general enquiries regarding GTI, please contact:
admin@gtigroup.org