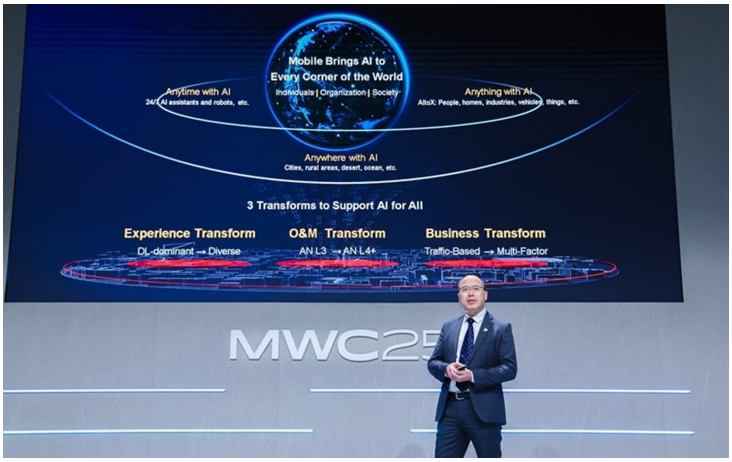
Rahbar International

Monday, June 22nd 2026

Huawei Advances AI-Powered Network Transformation at MWC 2025



Published on March 5, 2025

Document Date: Mon, Jun 22 2026 08:51:56 am

Category: ,English,International -

Show on website : Click Here

March 5, 2025, At MWC Barcelona 2025, Huawei unveiled a comprehensive suite of AI-enabled network solutions that collectively represent a strategic push to transform telecommunications infrastructure for the mobile AI era. The company's announcements spanning wireless, core network, and IP domains demonstrate a unified vision of how AI and networks will evolve together to enable new experiences, business models, and operational efficiencies.

Reimagining Network Intelligence Across All Domains

The central theme across Huawei's MWC announcements is the fundamental shift from traditional connectivity to intelligent networks that can adapt, self-optimize, and enable new AI-driven experiences. This transformation spans multiple technology layers:

"Mobile AI is booming, bringing three major transformations to mobile networks in terms of user experience, O&M, and business models," explained Cao Ming, Vice President of Huawei and President of Huawei Wireless Solution, when introducing the company's intent-driven AI-centric 5.5G solutions.

These transformations reflect how connectivity is evolving beyond human-to-human communication to increasingly include human-to-AI and AI-to-AI interactions, creating new demands for networks with higher uplink capacity, lower latency, and ubiquitous coverage. Simultaneously, network complexity is driving the need for greater automation, advancing operations from Autonomous Network Level 3 to Level 4 and beyond.

Building Blocks for the AI-Powered Network Infrastructure

Huawei's announcements reveal a unified strategy across multiple network domains:

In wireless networks, Huawei's AI-centric 5.5G solutions feature three key components working in concert: GigaGear for intent-driven resource collaboration, GreenPulse for intent-driven energy efficiency optimization, and GainLeap for intent-driven experience monetization.

In core networks, George Gao, President of Huawei Cloud Core Network Product Line, announced the industry's first AI Core Network, which marks a shift from AI-powered to AI-native infrastructure. "The AI core network will become critical telecom infrastructure in the mobile AI era," stated Gao, outlining a two-phase rollout from the initial 5G-A Intelligent Core to the future Agentic Core.

In IP networks, Leon Wang, President of Huawei's Data Communication Product Line, unveiled the AI WAN Solution with its three-layer architecture of AI routers, AI new connections, and AI new brain. He noted that carriers are accelerating the convergence of networks and AI. AI WAN comprehensively empowers IP networks in the Net5.5G era using AI. The solution enables carriers to build networks with optimal TCO, expand service boundaries, improve operations efficiency, and stimulate new service growth.

This solution leverages millisecond-level flow reporting, flow-level scheduling, and AI agents powered by Network Digital Map and Network Foundation Model to enhance network intelligence.

Real-World Impact and Industry Momentum

The practical impact of these technologies is already visible through Huawei's partnerships with global operators:

MTN South Africa has employed AI WAN's traffic prediction capabilities across its 7,000+ base stations, resulting in a 25% increase in dataflow of usage in KwaZulu-Natal and 15.4% traffic growth. Macau SAR carrier CTM partnered with Huawei to optimize network services using an AI computing engine, dramatically reducing game latency and improving customer experience.

These implementations align with broader industry initiatives that Huawei is actively advancing. At the Broadband Development Congress hosted by the World Broadband Association at MWC, industry leaders recognized Net5.5G as an industry-wide consensus, with Huawei participating in a next-generation network cooperation mechanism alongside organizations like the WBBA, IPv6 Forum, ITU-T, and IETF.

In his keynote speech at the congress, Ryan Qiu, Vice President of Huawei's Data Communication Product Line, noted that the integration of AI into carriers' strategies is gaining momentum, with Net5.5G serving as a catalyst for the in-depth convergence of networks and AI.

Meanwhile, Huawei's partnership with China Unicom on their "AI Unites All" strategy demonstrates how these technologies enable integrated innovation across computing infrastructure, network connectivity, data resources, model development, and application scenarios. Yang Chaobin, Huawei Board Member and CEO of the ICT Business Group, emphasized that this collaboration will "create new AI service portals with a global impact and make intelligence more inclusive for all."

Toward an Intelligent Future

Collectively, these announcements illustrate how AI is not merely an addition to networks but a transformative force reshaping their fundamental architecture and capabilities. By integrating AI across wireless, core, and IP domains, Huawei is enabling operators to unlock new revenue streams through differentiated experiences, improved efficiency, and enhanced service offerings.

As commercial 5G-Advanced deployment accelerates in 2025, these AI-enabled solutions position Huawei and its partners to lead the transition toward an intelligent world where networks don't just connect devices but actively enable and enhance AI capabilities across society.

MWC Barcelona 2025 runs from March 3 to March 6 in Barcelona, Spain, with Huawei showcasing these solutions at stand 1H50 in Fira Gran Via Hall 1.For more information, please visit:

https://carrier.huawei.com/en/events/mwc2025