# Mobile World Congress and Embedded World 2025 reveal shifts in AI, satellite tech and cybersecurity



The Mobile World Congress (MWC) 2025 and Embedded World (EW) 2025 recently showcased significant advancements in telecom and embedded systems, highlighting themes that are expected to shape the future of secure connectivity and computing. Gathered in Barcelona and Nuremberg respectively, the events drew thousands of participants keen to explore cutting-edge technologies and innovations.

MWC 2025, held from 3rd to 6th March in Barcelona, Spain, witnessed a robust turnout with 109,000 visitors, an 8% increase from the previous year. The event hosted a record 2,900 exhibitors, focusing on key topics such as 5G expansion, network automation, and satellite connectivity. During the congress, the GSMA reported that 326 of the 783 global operators have launched 5G networks, forecasting a potential $70 billion revenue opportunity by 2030. The role of artificial intelligence (AI) in meeting network demands was further emphasised, highlighting the ongoing shifts towards lower latency and more deterministic performance.

Conversely, EW 2025 took place from 11th to 13th March in Nuremberg, Germany, maintaining a steady visitor count of approximately 32,000 while witnessing an 18% increase in exhibitors compared to pre-pandemic levels. This event underscored the growing integration of AI and the Internet of Things (IoT) in embedded systems. Key focuses included edge AI, secure embedded software, and future vehicle architectures, underscoring the evolution towards Quantum-resistant security protocols.

The insights gathered at both events have been distilled into five key themes that illustrate the evolution of connectivity and computing technologies:

1. **Edge AI**: The landscape of edge AI is rapidly advancing beyond TinyML, evolving to incorporate multimodal large language and vision-language models (LLMs and VLMs). This shift is evidenced by real-world deployments, suggesting that edge AI now supports more complex models running directly on industrial-grade edge devices. For instance, at EW 2025, Advantech showcased chat interfaces and live video analysis executed entirely on-site, optimising latency, cost, and energy efficiency.

2. **AI Integration in RAN**: Telecom networks are increasingly embedding AI within radio access networks (RAN) to streamline performance and enable low-latency applications. Companies like Fujitsu demonstrated AI capabilities directly within the RAN to enhance services such as real-time robotics, while other firms like Deutsche Telekom displayed agentic AI systems for RAN optimisation, showcasing early deployments aimed at improving efficiency.

3. **Satellite Technology**: As satellite networks transition from backup solutions to essential components for connectivity, their role in emerging communications strategies is becoming evident. KDDI showcased live deployments with Starlink satellites, providing cellular backhaul for rural regions. Additionally, developments in quantum-safe satellite communications, highlighted by Telefónica and ThinkQuantum, suggest significant advancements in secure connectivity solutions.

4. **Automotive Innovations**: The automotive industry is undergoing a pivotal shift towards zonal computing architectures, critical for developing software-defined vehicles (SDVs). Vendors at both events presented zonal controllers and methodologies that favour virtual-first software development, facilitating simulations without requiring immediate physical prototypes.

5. **Cybersecurity Challenges and Compliance**: The interplay between regulatory frameworks such as the EU Cyber Resilience Act (CRA) and the rise of quantum computing significantly influences the cybersecurity landscape. At EW 2025, Arrow Electronics showcased CRA-compliant devices, emphasising that security must be integral to every stage of the product lifecycle. Concurrently, the emergence of quantum-safe solutions indicates a proactive approach towards countering future security threats.

With these developments, the landscape of secure connectivity and computing is shifting. Analysts from IoT Analytics observed that the boundaries between communication, computation, and security are increasingly blurred, paving the way for intelligent, secure, and resilient infrastructures ready to support the next digital transformation wave. The full analysis from MWC and EW 2025 is available in a detailed report from IoT Analytics, which also reflects on the implications of these technological advancements across various sectors.

Source: [Noah Wire Services](https://www.noahwire.com)

## Bibliography

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