AI summary

Integrated Connectivity: Building Seamless Hybrid Networks

ATX ENTERPRISE

VOXO

Integrated Connectivity: Building Seamless Hybrid Networks
Wednesday, 20 May 2026

Participants

Rachel Kong
Industry Analyst, ABI Research

Sujit Panda
COO, BDx Data Centers

Neha Idnani
RVP APAC, Eutelsat

Gunay Feyziyeva
Head of Solutions Engineering Unit, Azercosmos, Space Agency of Azerbaijan

Alec Climer
Director of Business Development, K2 Space

Integrated Connectivity: Building Seamless Hybrid Networks
Wednesday, 20 May 2026

Summary

The session explored advancements in hybrid connectivity, emphasising the integration of satellite, terrestrial, and mobile networks to create seamless, resilient, and scalable systems. Gunay Feyziyeva highlighted that hybrid networks, once considered supplementary, are now essential for operational continuity in remote and disaster-stricken areas. She explained that satellite connectivity has evolved to become a core layer of telecommunications, enabling dynamic network orchestration and seamless switching across technologies. Alec Climer discussed how K2 Space's innovations in high-power satellite platforms are facilitating greater capabilities, countering the traditional focus on smaller, proliferated constellations. Neha Idnani emphasised that low-Earth orbit (LEO) technology, once theoretical, now supports real-time applications and resilient infrastructure, transforming connectivity.

The panel identified interoperability as a major challenge, with hybrid networks requiring open standards and intelligent orchestration for efficiency. Gunay stressed the need for platforms that dynamically select the most reliable transport layer without service interruptions. Alec noted the bottleneck in satellite launches, suggesting that novel launch systems or medium-Earth orbit (MEO) constellations could address scalability issues. Neha highlighted the need for partnerships between satellite operators, telcos, and regulators to ensure data sovereignty, localisation, and encryption. She cited examples of rapid deployment during natural disasters as evidence of the effectiveness of well-integrated hybrid networks in ensuring uninterrupted connectivity.

The discussion addressed the role of policy, investment, and collaboration in building resilient digital infrastructure. Gunay advocated for hybrid networks to be treated as critical infrastructure, supported by flexible standards to facilitate international deployment and interoperability. Neha elaborated on how operators like Eutelsat are addressing national sovereignty concerns through localisation of infrastructure and regulatory compliance. She described building physical Points of Presence (PoPs) and deploying secure, encrypted systems to meet the needs of defence and enterprise customers. The panellists agreed that cooperation across industries and governments is vital for advancing hybrid connectivity.

Security and governance were central themes, as the panellists discussed the vulnerabilities introduced by integrating satellite, terrestrial, and cloud ecosystems. Alec described how virtualising command and control systems and leveraging existing security standards, such as those from AWS, could mitigate cyber risks. Neha detailed regulatory measures like lawful intercepts and anti-jamming solutions, along with creating secure private networks for data handling. Gunay called for open standards and international coordination to counter state-sponsored cyber threats and ensure early detection of risks. The panellists underscored the importance of shared frameworks for advancing secure, integrated connectivity.

The conversation also delved into the future of hybrid networks, focusing on scalability and resilience. Alec argued that satellite infrastructure should embrace distributed, fault-tolerant systems rather than monolithic designs, advocating for MEO constellations as a cost-effective alternative to LEO or geo-satellites. Neha emphasised the importance of building ecosystems that support smart bundling and orchestration of hybrid systems, enabling seamless integration of satellite and terrestrial technologies. Both stressed that future networks must prioritise customer needs for uninterrupted, secure connectivity without requiring users to differentiate between underlying technologies.

To conclude, the panellists highlighted cooperation, collaboration, and power as the primary catalysts for accelerating hybrid connectivity. They agreed that hybrid networks are no longer a conceptual ideal but a practical necessity for modern enterprises, governments, and critical infrastructure. By addressing challenges related to interoperability, security, and scalability, and fostering partnerships across sectors, the industry can build integrated systems that meet the increasing demand for resilient, always-on connectivity. The session underscored that hybrid connectivity is poised to play a transformative role in shaping the future of global telecommunications.

Takeaways

Hybrid Connectivity Is Transforming Network Architecture

The session highlighted the shift from standalone network technologies to hybrid connectivity systems that integrate satellite, terrestrial, and mobile networks. This approach is essential for ensuring seamless, resilient, and mission-critical communication across diverse environments, including remote areas and disaster zones.

Interoperability and Open Standards Are Critical

Interoperability emerged as a significant challenge for hybrid networks, necessitating open standards and collaborative efforts among operators, regulators, and industries. Unified frameworks such as 3GPP standards and intelligent network orchestration are pivotal for enabling seamless integration across diverse technologies.

Resilience and Data Sovereignty Drive Investment and Policy

The panel underscored the importance of building resilient infrastructure and ensuring data sovereignty to meet enterprise and government demands. Investments in localisation, partnerships with licensed operators, and compliance with regulatory frameworks are vital for achieving secure and reliable hybrid networks.

AI summary powered by

voxoevent.ai