



A 3-Minute Read on Converged Satellite and Cellular Connectivity in Fleet Management

Advancements in converged cellular and satellite connectivity eliminate coverage gaps, ensuring higher availability and uptime for critical fleet management use cases.

This 3-minute summary distills **critical insights from the** white paper published in collaboration with Berg Insight, demonstrating how these technologies offer resilience, efficiency, and global connectivity for your operations.



Six key takeaways from the research

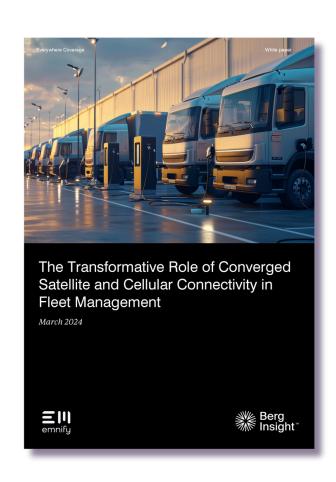
- 1 Converged cellular and satellite IoT connectivity simplifies operations, reduces administrative overhead, and ensures global coverage, critical for managing commercial fleets effectively.
- Advances in IoT, AI, and the transition to electric and mixed-fuel vehicles are reshaping fleet management strategies, requiring innovative approaches to operations and vehicle maintenance.
- The **fleet management sector is becoming more international**, with a need for solutions that cater to a global market, including the ability to manage diverse assets like trailers, containers, and other transportation-related assets.
- As electric vehicles gain traction in commercial fleets, **providers are developing functionalities to support fleet electrification**, indicating a shift towards sustainable transportation.
- New technologies, including advanced dash-cams and sensors for cargo monitoring, are emerging, offering **enhanced value for transportation and logistics**, particularly in tracking cargo conditions.
- 5G, advancements in SIM technology, and the development of new satellite constellations under the 5G specification are setting the stage for more efficient, resilient, and cost-effective global fleet management solutions.

What you need to know about converged cellular and satellite connectivity

Fleet management and logistics businesses confront the challenge of seamless operations over vast, remote landscapes. This necessitates not just connectivity but continuous, reliable communication channels capable of supporting the heavy demand of real-time data collection and analysis.

Among these challenges lies a significant opportunity: the convergence of satellite and cellular IoT connectivity. This solution can bridge the gaps in traditional fleet management systems by enhancing connectivity, reliability, and operational efficiency no matter where your devices may travel.

Download the original research now.





Tech innovations driving fleet efficiency and safety

Advancements in fleet management and logistics tracking now provide improved connectivity, enabled by wider satellite coverage in remote areas. Other innovations driving change, include:

- Convergence of terrestrial and satellite networks: The inclusion of non-terrestrial networks (NTN) in the 5G specification is a new era of cost-efficient, resilient global connectivity.
- Advancements in SIM technology: The adoption of eUICC solutions offers fleets the flexibility to switch between network providers easily, helping global scalability and adherence to international regulatory standards.
- → **Progress in cargo monitoring techniques:** Shifting to sensor-based cargo tracking allows for detailed logging and compliance with regulatory demands, moving beyond basic location tracking to deliver precise monitoring and reporting.
- Adoption of 5G and Al-enhanced features: Adopting 5G and features like Al-enabled dash cameras and fuel analytics marks a shift to data-intensive management solutions.



As the global economy increasingly depends on a seamless flow of data to manage supply chains, to adhere to emerging compliance standards, and enhance safety, a significant opportunity emerges for fleet management providers.

This opportunity is rooted in the foundation of ubiquitous connectivity which addresses the challenge of maintaining communication in remote areas, enabling real-time tracking and management of assets anywhere in the world.

It simplifies operational complexities by eliminating the need for multiple connectivity contracts and devices, reducing both administrative overhead and operational costs. Convergence also enables compliance with regulatory standards and improves safety through constant monitoring of driver behavior and vehicle performance.



Choosing a provider for converged cellular and satellite connectivity

emnify SuperNetwork SatPlus converges IoT-dedicated cellular access with Skylo's NTN satellite service, facilitated by a single eSIM, management platform, and radio module.

The advantages of SatPlus for your business

- Uninterrupted global coverage: SatPlus removes connectivity dead zones, providing continuous, reliable communication across land and sea. This global reach ensures that your fleet operations are never out of touch, enhancing logistical efficiency and operational reliability.
- → Cost optimization: By converging cellular and satellite connectivity, SatPlus significantly reduces the complexity and cost associated with managing multiple connectivity solutions. This delivers cost savings by streamlining operations and leveraging the most effective connectivity option available, based on location and network conditions.
- Operational simplicity: Converged cellular and satellite connectivity on a single eSIM for uninterrupted IoT connectivity. SatPlus is compatible with 3GPP 5G Release 17 compliant cellular and satellite hybrid radio modules to enable reduced hardware costs.
- → **Enhanced data security and compliance:** SatPlus ensures that your fleet's data transmission remains secure across borders and networks, meeting stringent regulatory requirements.

Available the USA and selected countries in Europe, emnify SuperNetwork SatPlus is designed for businesses seeking ubiquitous IoT coverage for their fleet operations.

Ready to explore converged cellular and satellite for your IoT business?