

The Sky's the Limit: Transforming Satellite Commercial Models

Mobile satellite communications standards are rapidly evolving, driven by the increasing demand for global connectivity and the integration of satellite networks with terrestrial mobile systems. Key developments include the 3GPP's Non-Terrestrial Network (NTN) initiatives that lay the foundation for incorporating satellite access into 5G systems and beyond to advance Narrow Band Internet of Things for low-bandwidth applications and 5G New Radio over NTN for high-bandwidth communication, enabling direct-to-device services.

Both mobile operators and satellite providers face significant opportunities as these technologies are deployed. Mobile operators can integrate satellite services to enhance their coverage and service offerings. At the same time, satellite providers can broaden their direct-to-consumer or direct-to-business market to deliver innovative communications and IoT services.

This ebook explores the dynamic changes that both mobile operators and satellite providers face and describes how new commercial models can help them seize new opportunities, deliver superior customer experiences and expand revenue streams.

MOBILE OPERATORS

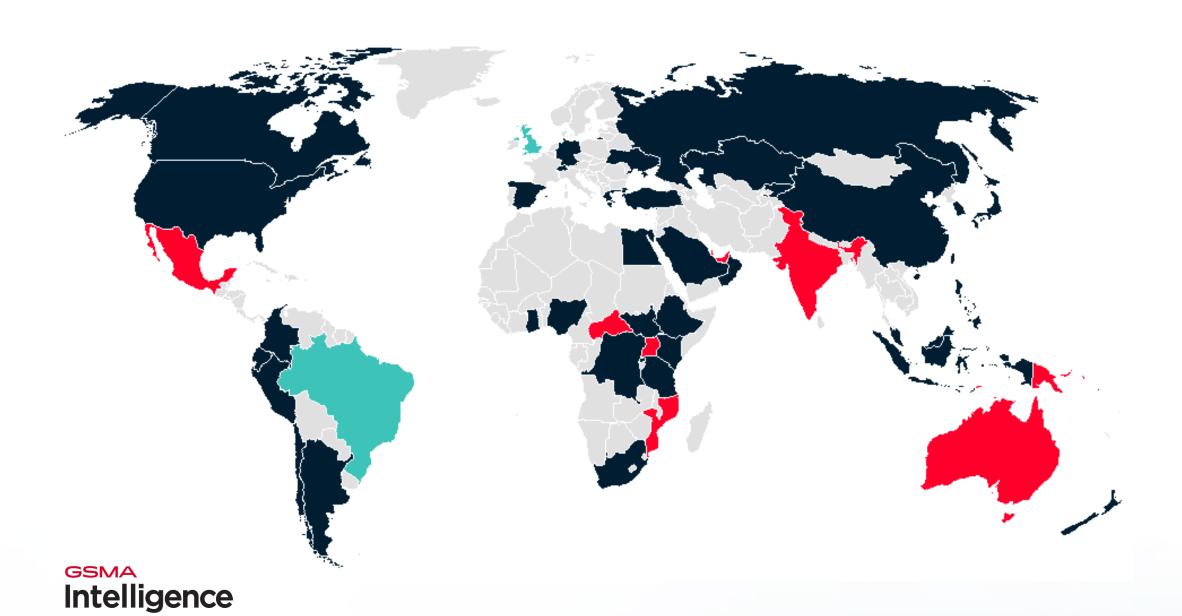


SATELLITE PROVIDERS





Mobile Operators: Expand Your Horizons With Satellite Services



- Satellite connectivity not yet launched but either planned or in testing phase
- Satellite connectivity launched by one operator
- Satellite connectivity launched by two or more operators

GSMA Intelligence. Satellite and NTN Tracker, Q1 2025: To Charge or Not to Charge? March 2025, p. 6.

Driven by advancing industry standards and a continued launch of new communications satellites — over 8,000 currently in Low Earth Orbit (LEO) as of mid-2025, with that figure expected to rise — this segment of the communications industry is set for significant transformation.

To date, nearly 100 mobile operators across Asia, Europe and North America have formed partnerships with companies like Starlink and AST SpaceMobile to provide direct-to-cell services for their customers. These collaborations allow mobile operators to extend their service coverage beyond the limits of their ground-based cell sites.

The competition is now intensifying to roll out 3GPP Release 17's direct-to-cell capabilities that facilitate satellite connections to any 5G mobile device.



Satellite Providers: Drive Growth in Your Direct-to-Consumer Market

Satellite providers are set to benefit from the expanding opportunities created by their partnerships with mobile operators for direct-to-cell services, yet they will not forsake their established direct-to-consumer market. Instead, they will persist in expanding and catering to the following segments:



Fixed Internet (Consumer and Enterprise)

- 40% YoY growth in broadband and IoT
- High-speed internet access
- Rural and remote areas
- Emergency services



Premium and Government Services

- Secure and resilient communications
- Government agencies
- Enterprises
- ♦ NGOs



Maritime and Aviation Mobility

- Connectivity on the move
- Onboard Wi-Fi
- Remote fleet management
- IoT sensor backhaul

2024 Revenue Distribution: \$85.2 billion in consumer subscriptions, \$19.7 billion in enterprise agreements and \$3.5 billion in connecting remote sensors.

Market Growth: Anticipating 9.7% CAGR with broadband connectivity forming a large part of this growth.



Mobile Operator Commercial Limitations

An examination of the numerous agreements announced and commercial offerings launched through mid-2025 reveals that the primary value proposition from mobile operators for direct-to-cell satellite services is focused solely on enhancing coverage in areas that are underserved or entirely unserved. The parameters of common commercial offers suggest that communication service providers (CSPs) are waiting to assess the value their customers will attribute to this new service.

Typical offer characteristics include:

Initial pricing structures are relatively simple and fixed:

- Complimentary trials for a specified period, such as six months
- Free add-ons for current subscribers at no extra cost
- Offered as an additional service for an extra fee, ranging from \$10 to \$20 per month

Initial phases support only text messaging

Voice and data will be available in the future



Satellite Provider Commercial Limitations

Satellite direct-to-consumer broadband services address connectivity issues in underserved areas. However, this sector faces ongoing regulatory, technical and operational challenges that contribute to higher prices. Additionally, commercial offerings are limited by outdated data management and monetization practices.

Volume of Usage Event Records

Subscriber usage generates a large volume of records. Without effective end-to-end automation, reconciling, rating, aggregating and billing processes are labor-intensive and error-prone, increasing audit and reconciliation needs.

Customer Confusion and Complexity

Enterprises and government bodies frequently utilize services from various satellite providers, each issuing different invoices on separate billing cycles, complicating their accounting processes.

Data Caps and Throttling

Many satellite internet plans impose data caps, leading to throttled speeds once limits are reached. However, usage is often not monitored in real-time, resulting in unexpected overage charges and variable monthly bills for customers.

Complex Bill Generation

The intricate pricing structures based on monthly data consumption, speed tiers and service types delay invoice generation.

Mobile Operators: Unlock the Potential of Dynamic Monetization

Move into the future with composable, cloud native revenue management processes from charging to monetization to billing.



Adjust pricing in real-time

MOBILE

OPERATORS

based on user activity and the context of the service.





Respond to market trends and customer needs with agility. Don't get weighed down by outdated, rigid pricing structures.



Manage both retail and wholesale monetization on a single platform to support auditing and reconciliation while gaining an up-to-date perspective on profitability.

Utilize dynamic monetization strategies to create innovative customer-focused

innovative, customer-focused direct-to-satellite offerings, such as pay-as-you-go options, premium connectivity services and enterprise packages.



Satellite Providers: You CAN Have Innovative Monetization Models

amount (e.g., \$5 for the next tier)

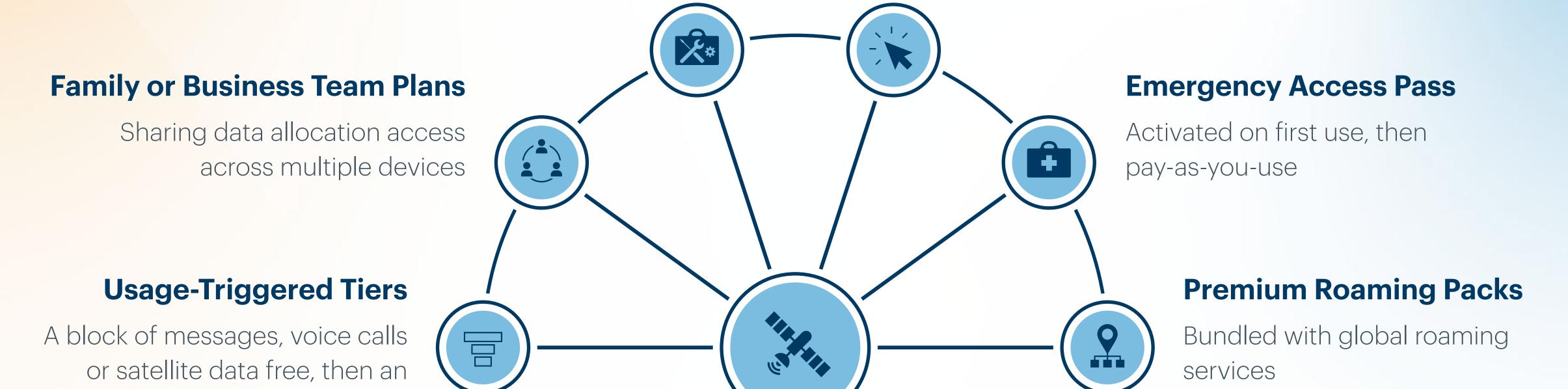
Don't let rigid, manual and error-prone processes get in the way of creating and monetizing innovative offers for individual or bundled services. Imagine an ecosystem that processes subscriber usage records in real-time and that enables you to transparently show consumers, B2B users, agencies and wholesale partners a current, accurate view of usage, charges, data and financial balances.

Field Ops Pricing

Customized pricing for remote enterprise teams

Pay-As-You-Use

Charge per message, call or MB over satellite







MATRIXX Dynamic Billing enables mobile operators to deliver transparent value to their customers, wherever they are and whatever device or service they use, including direct-to-cell satellite.

- Configure and launch any satellite service charging model instantly
- Deliver consistent, accurate billing across satellite-terrestrial boundaries
- Monetize satellite and terrestrial services through a unified platform
- Provide billing and customer management transparency into usage, charging and bills
- Create differentiated customer experiences and unlock new revenue streams



Skyrocket Your Revenue With MATRIXX



Bridge Coverage Gaps

Leverage satellite services to ensure seamless connectivity in remote and underserved areas. Launch into orbit with MATRIXX to cover every corner of the globe.



Innovate With Agility

Embrace real-time billing and customer management and stay ahead in a competitive landscape. Navigate the stars with MATRIXX Dynamic Billing.



Unleash Monetization Potential

Break free from traditional limitations and develop new revenue streams with MATRIXX dynamic monetization. Escape the gravitational pull of legacy systems and soar to new heights.



Deliver Enhanced Customer Experiences

Beam seamless, personalized services to every user, whether on land, at sea or in the air. With MATRIXX, elevate customer engagement to stratospheric levels.



About MATRIXX Software

MATRIXX Software delivers a dynamic billing, monetization and charging solution proven at scale. Global service providers like Telefónica, IoT providers like Tata Communications and network-as-a-service providers like DISH rely on MATRIXX to overcome the limitations of existing billing applications. MATRIXX provides a unified platform that transforms and simplifies billing operations across consumer, enterprise and wholesale businesses. With MATRIXX, operators can rapidly configure, deploy and monetize personalized offerings, enabling commercial innovation and real-time customer experiences that drive revenue and growth.

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