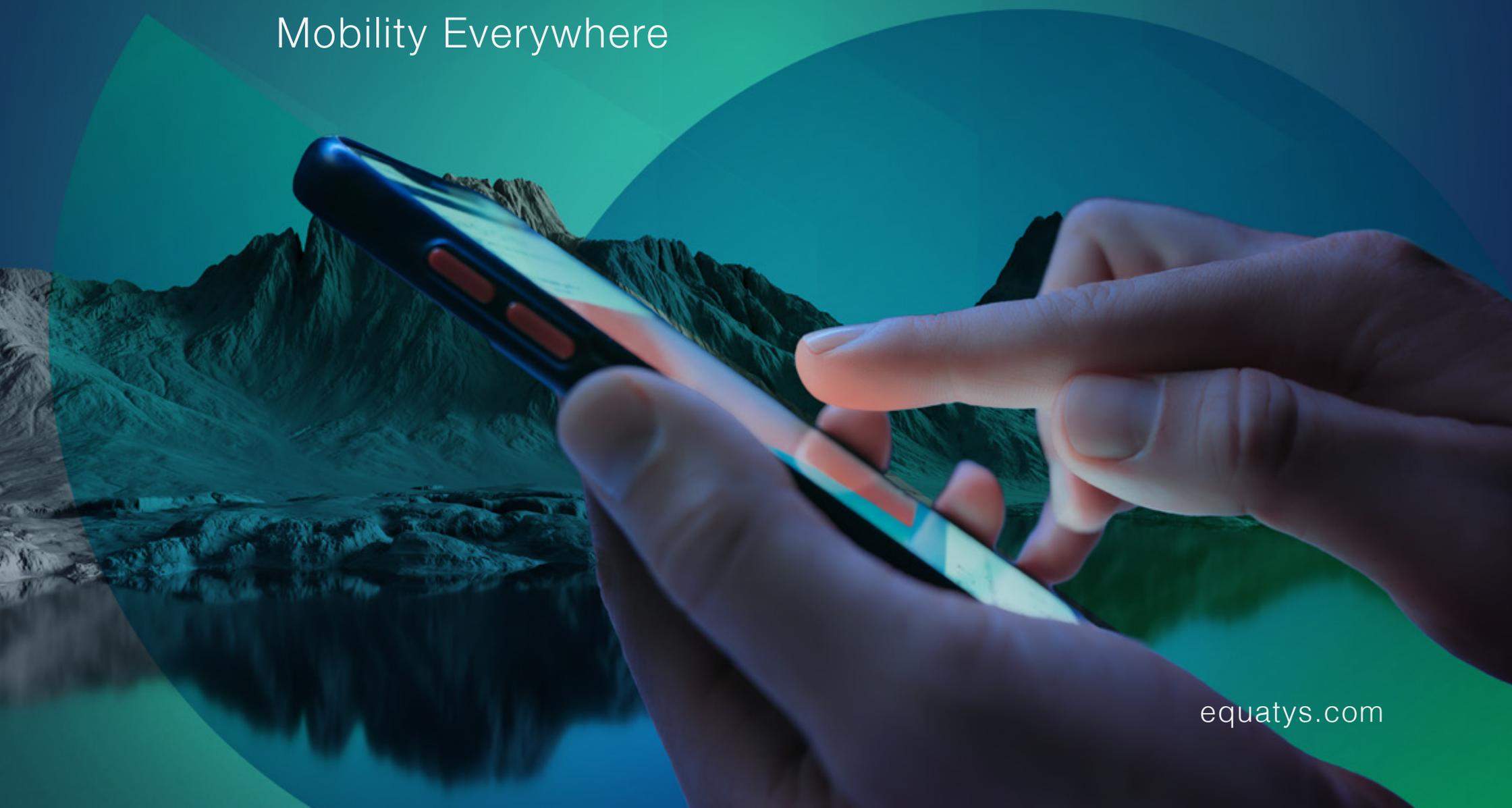




# EQUATYS

Mobility Everywhere



[equatys.com](https://equatys.com)

## ABOUT EQUATYS

# Infrastructure for global Direct-to-Device and other advanced Mobile Satellite Services

Space42 and Viasat are the co-founders of Equatys, bringing together over 60 years of combined mobile satellite services experience

Equatys is designed as an independent, neutral shared infrastructure platform to extend 3GPP-based connectivity to the billions underserved by terrestrial networks

Operating on a Tower Co. model, Equatys will deliver the lowest unit cost of satellite capacity while preserving each partner's spectrum rights and sovereign interests

The Equatys model is designed to welcome additional co-founders, satellite operators, and spectrum holders as the ecosystem takes shape

# THE EQUATYS VISION:

## Mobility Everywhere

# THE VALUE PROPOSITION

- 1 Ubiquitous mobility:** Global service delivery through harmonized Mobile Satellite Services (MSS) spectrum across 160+ nations, enabling true worldwide coverage rather than terrestrial spectrum dependency. A choice and independence enabling multi-participant approach encourages price competition, accelerated technological evolution and innovation, and reduces the risk of significant market power that distorts level playing fields. Space-enabled mobility is a foundational layer for global connectivity
- 2 Sovereign mobility:** Infrastructure deployment options that allow nations to maintain economic security, national autonomy and data sovereignty compliance while participating in global connectivity, creating for the first time a model for integrating international infrastructure with national infrastructure. Space-enabled mobility is critical infrastructure, not just a technological add-on
- 3 Affordable mobility:** Cost-efficient capacity through shared multi-tenant infrastructure, delivering the lowest-cost space and ground infrastructure to ecosystem participants. The Tower Co model reduces redundant investments and lowers airtime pricing across the ecosystem. By reducing reliance on proprietary interfaces, 3GPP-aligned NTN architectures lower barriers to entry, expand supplier diversity and economies of scale, and strengthen competitive dynamics across the value chain. Space-enabled mobility is affordable when designed deliberately/collaboratively

Global coverage: 160+ countries, billions addressable population



## THE VALUE PROPOSITION

- 4 Scalable mobility:** System designed to densify through additional space and ground infrastructure. Architecture requires no reengineering or rewiring to expand, creating the full effect of an ecosystem where new contributors strengthen the whole and prevent market concentration through proprietary technology stacks. When used to supplement existing operations in L-band and S-band spectrum, the shared infrastructure not only drives capital efficiency but also scales at a market responsive pace with the ability to reach billions of subscribers globally.
- 5 Frictionless mobility:** Standards-based architecture seamlessly integrates non-terrestrial and terrestrial networks, delivering a frictionless experience allowing the end-user to automatically and seamlessly transition to and from satellite only when terrestrial service becomes unavailable, while also enabling choice of NTN service providers. Space-enabled mobility delivers seamless connectivity
- 6 Transformational mobility:** An infrastructure platform that redefines “legacy” MSS for satellite-centric user terminals for the 3GPP era. Equatys leverages the scale of the terrestrial mobile eco-system to reduce costs for traditional MSS applications, while also enabling next-generation capabilities that augment terrestrial networks and unlock new services.



Space-enabled mobility supports choice, innovation, and scale

# SYSTEM PROPOSITION

By aligning policy, standards, and industry practice early, space-enabled mobility builds long-term shared value and sustainability for citizens, markets, and nations

# SYSTEM ARCHITECTURE

## Long-term evolution

- 
 Next-generation constellation of up to 2,800 satellites over 60 orbital planes, with scalable multi-shell architecture and dense multi-plane configuration to enhance redundancy, availability, and seamless coverage
- 
 Design flexibility with three altitude layers (500 km, 640 km, 1,023 km) enabling performance optimization across latency, coverage, and capacity, with progressive densification and application-driven adaptation over time
- 
 Multi-frequency architecture starting with globally harmonized L-and S-band, designed to accommodate future spectrum expansion as capacity and service requirements evolve. Built for phased deployment while maintaining long-term expansion capability
- 
 The system capabilities are enabled by very efficient payload and ground-based systems technology that minimizes mass-to-orbit requirements & maximizes flexibility to respond to end user demand

# SPECTRUM ACCESS MODEL

## Bring your own spectrum

Each partner retains its spectrum rights and employs its spectrum with Equatys system resources to generate satellite capacity at substantial cost savings, much like MNOs use leased resources on shared terrestrial towers to substantially reduce costs. Model allows partners to access and combine capacity generated across different frequency bands, while ensuring that spectrum rights holders retain requisite licensee control and comply with international and national regulations

With the technical capability to operate across over 100 MHz of globally allocated and coordinated MSS spectrum and also support MNO-managed satellite services in terrestrial spectrum bands, the platform enables ecosystem participants to extend coverage, introduce innovative services, reduce capital requirements, drive ubiquitous digitization for nations, and while still respecting sovereign interests in the integrity of national telecommunications infrastructure

Allows retained and significant licensed spectrum resources to be used even more cost effectively, while continuing to serve vital public interest missions like maritime & aeronautical safety, and enabling new and innovative mobility services that augment terrestrial 5G & 6G connectivity to phones, wearables, IoT, autos, and autonomous land, sea, & air vehicles



## BUILT AS A PLATFORM:

Equatys designed as a long-term shared infrastructure layer capable of supporting future participants, additional capacity batches, evolving 3GPP standards, and iterative technology insertion

*High power satellites tailored to substantially enhance & evolve existing L-band and S-band services and deliver high speeds at low air-time costs*

*Positioned to work with other L & S band operators to support competitively priced, state-of-the-art current & forthcoming 3GPP standard-based, interoperable NTN services*

*In a timeframe consistent with the introduction of device chip sets that support MSS frequencies*

**Space42** brings more than two decades of operational satellite experience and deep integration across the global telecom ecosystem, foundational to Equatys. Space42 will contribute globally harmonized L-band spectrum, proven spectrum optimization expertise, and established relationships with mobile network operators.

Through its heritage GEO infrastructure and operational track record, Space42's operating experience within complex regulatory environments ensures Equatys is designed to uphold a foundation of standards compliance, sovereign alignment, and long-term sustainability. Beyond infrastructure, Space42 brings a system-level perspective shaped by operating at the intersection of space, connectivity, data and AI.

**Viasat** is a global communications company with a long heritage in satellite innovation and GEO operations, committed to connecting everyone and everything worldwide.

Through its Advanced Non-Terrestrial Solutions (ANTs) business unit, spanning Operations & Safety, and Advanced Air Mobility, Viasat will bring deep NTN integration expertise, mobility platforms, and safety-critical service know-how.

Following the acquisition of Inmarsat in May 2023, Viasat unites complementary teams, technologies and spectrum assets to strengthen Equatys with global MSS capabilities, resilient mobility networks and the operational scale required for standards-based D2D at population level.



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