

MOBILE BACKHAUL (VIA SES-17)

—
Maximise network expansion in the Americas
via managed mobile backhaul

57M

subscribers will use mobile
Internet for the first time over
the next four years

INDUSTRY PERSPECTIVE

Over the next four years, both rural and urban populations in the Americas—including an estimated 18 million in North America and 57 million in Latin America—will start using mobile Internet for the first time. This will lead to a five-fold increase in data consumption via mobile networks. At the same time, 5G adoption in the Americas is also expected to accelerate. By 2025, 5G market penetration will grow to 51% in North America and 9% in Latin America, contributing to a rapid increase in demand for total bandwidth in the mobile industry.

Selecting a future-ready service that can support the transition from 3G to 4G, and even 5G, is critical to ensuring your financial and operational performance in the long term. SES's Mobile Backhaul service via SES-17, a very high-throughput satellite (VHTS), can help you tap into multiple backhaul opportunities across the Americas.



SERVICE DESCRIPTION

Mobile Backhaul via SES-17 is a satellite-enabled managed solution that can help you extend the reach of your mobile network throughout the Americas. Allocated bandwidth with a committed information rate (CIR) can be used across multiple sites via dynamic sharing of resources, and delivered to individual locations at an excess information rate (EIR) above the contracted CIR. Mobile Backhaul via SES-17 includes pre-defined remote terminal hardware bundles, and can be easily configured with any throughput within the ranges supported by the bundle, as per the specific location of the service.

As a part of the managed service, we enable reporting on key metrics such as network usage and service performance. This gives you control over your network's security and overall bandwidth utilisation, allowing you to de-risk network investment and empower flexible business growth.

We deliver a transparent service experience focused on ease of business, with unrivalled support at every step—from ensuring your service is deployed on time to maintaining its health and delivering optimal network performance throughout the service duration.

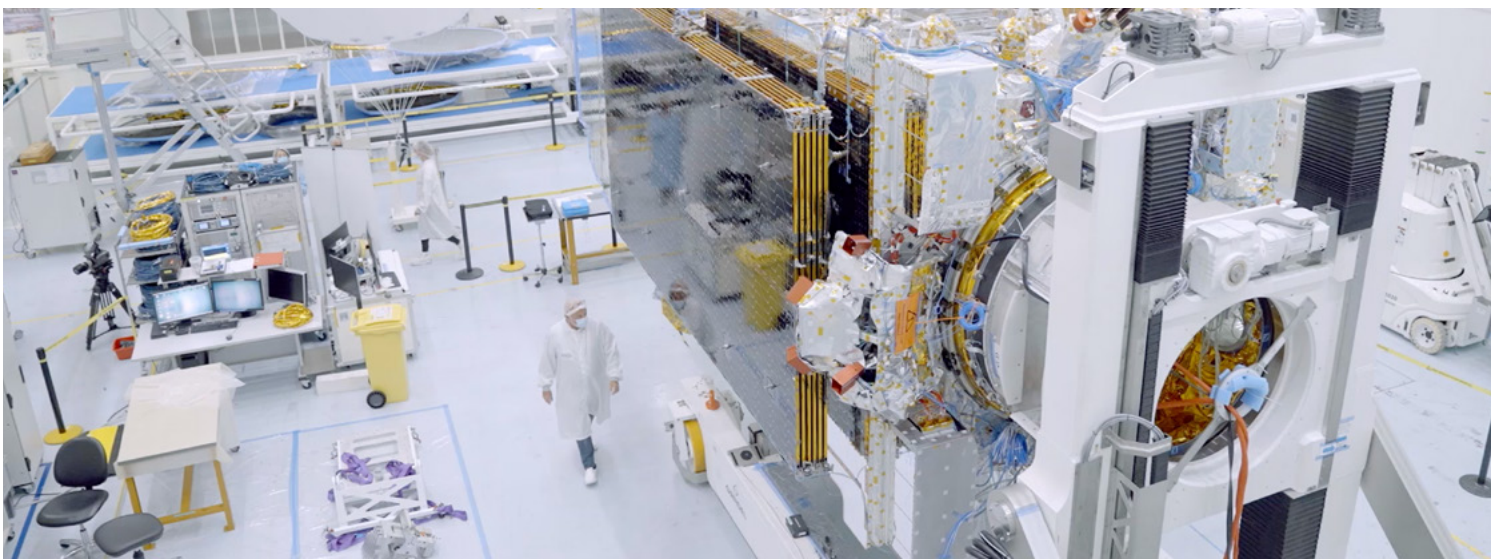
SES-17 is designed to interoperate with O3b mPOWER, our next-generation Ka-band MEO communications system.

ABOUT SES-17

Our next-generation Ka-band geostationary Earth orbit (GEO) satellite, SES-17, enables you to embrace a new era of high-throughput services with unrivalled coverage across the Americas. With the industry's most flexible payload, SES-17 allows you to match your customers' precise bandwidth needs—even as demand evolves.

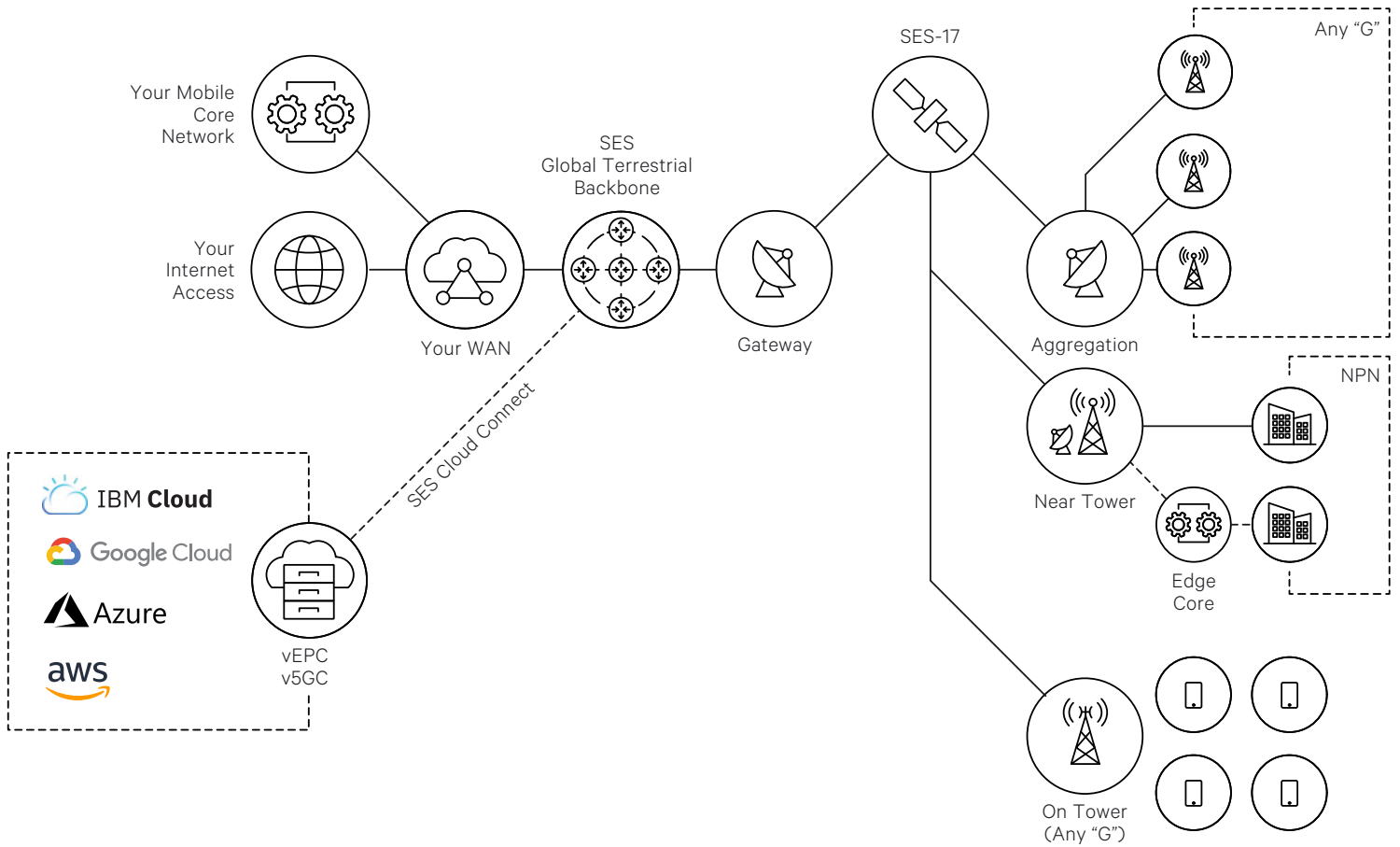
SES-17 is a future-proof satellite designed to interoperate with O3b mPOWER, our next-generation Ka-band medium Earth orbit (MEO) communications system. Leveraging the full capability of both systems, which use SES's Adaptive Resource Control (ARC) software to optimise capacity and ground system resources, you can offer mobile services with unrivalled scale, performance, and resiliency.

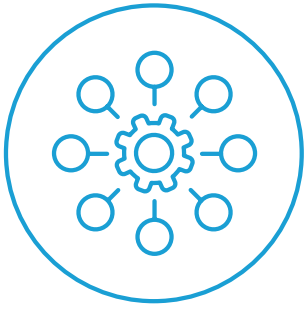
Equipped with groundbreaking Digital Transparent Processors (DTP) across all spot beams, SES can optimise bandwidth and power allocation to meet your throughput requirements across the Americas.



EXTENDING YOUR MNO CORE NETWORK WITH MOBILE BACKHAUL VIA SES-17

For the Mobile Backhaul service on SES-17, we offer two management levels—Managed Hub or Managed Hub to VSAT, with a single guaranteed SLA (network uptime) shared by a group of remote terminals.





TECHNICAL SPECIFICATIONS

Mobile Backhaul via SES-17 is available in two hardware bundles, pre-engineered to achieve the necessary throughputs and network uptime—Option 1 (1.2m/4W

antenna) and Option 2 (0.98m/4W antenna)—allowing for flexible and scalable throughput configurations.

Mobile Backhaul via SES-17 has a unique set of features that maximise performance:

HARDWARE BUNDLES

Option 1 (1.2m/4W antenna)				Option 2 (0.98m/4W antenna)			
CIR		MIR		CIR		MIR	
FWD	RTN	FWD	RTN	FWD	RTN	FWD	RTN
15-45 Mbps	5-15 Mbps	Up to 130 Mbps	Up to 48 Mbps	1-32 Mbps	1-8 Mbps	Up to 100 Mbps	Up to 25 Mbps

THE FOLLOWING SPECIFICATIONS APPLY TO OPTION 1 AND OPTION 2

Platform	Gilat-Quattro
Modem	Capricorn-4/Aquarius-e
Connectivity transport service	L2 Ethernet service
Interface	4 x Gigabit Ethernet
KPIs monitor	Latency, jitter, and packet loss
Customer portal	Available



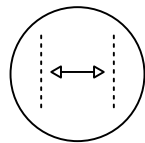
KEY FEATURES

Mobile Backhaul via SES-17 is available in two service packages—Pro and Premium, either with Option 1 or Option 2 HARDWARE bundles, with a variety of value-added features.



PERFORMANCE MONITORING

Ability to monitor the service performance metrics included in the service level specification. In the Pro service tier, you can monitor Network Availability (%) and CIR Availability (%). In the Premium service tier, you can monitor Network Availability (%) and CIR Availability (%), as well as jitter (ms), latency (ms), and frame loss (%).



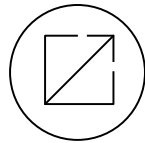
BANDWIDTH OPTIMISATION

Ability to optimise utilisation of space segment resources in cases where the amount of traffic transported over the satellite is substantially reduced using compression and other techniques.



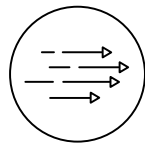
QOS AWARE

Uncontended bandwidth with four classes of service, allowing our customers to differentiate between various traffic types like control plane traffic, real-time traffic, and non-real-time traffic.



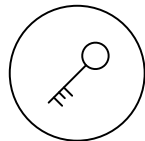
VOLUME

Mobile Backhaul on SES-17 offers unlimited volume services.



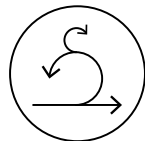
TCP ACCELERATION

Capability to dramatically improve the effective throughput of TCP sessions, even when they are encapsulated in mobile backhaul protocols like GTP. In the Basic service tier, TCP acceleration is done in non-encrypted links. In the Advanced service tier, TCP acceleration is performed even when the traffic is encrypted at S1 or luh interfaces. This requires integration with the MNO's PKI via CMPv2.



ENCRYPTION

Ability to enable over-the-air encryption for a highly secured link. AES-256 is used to encrypt traffic between the remote terminal modem and the gateway.



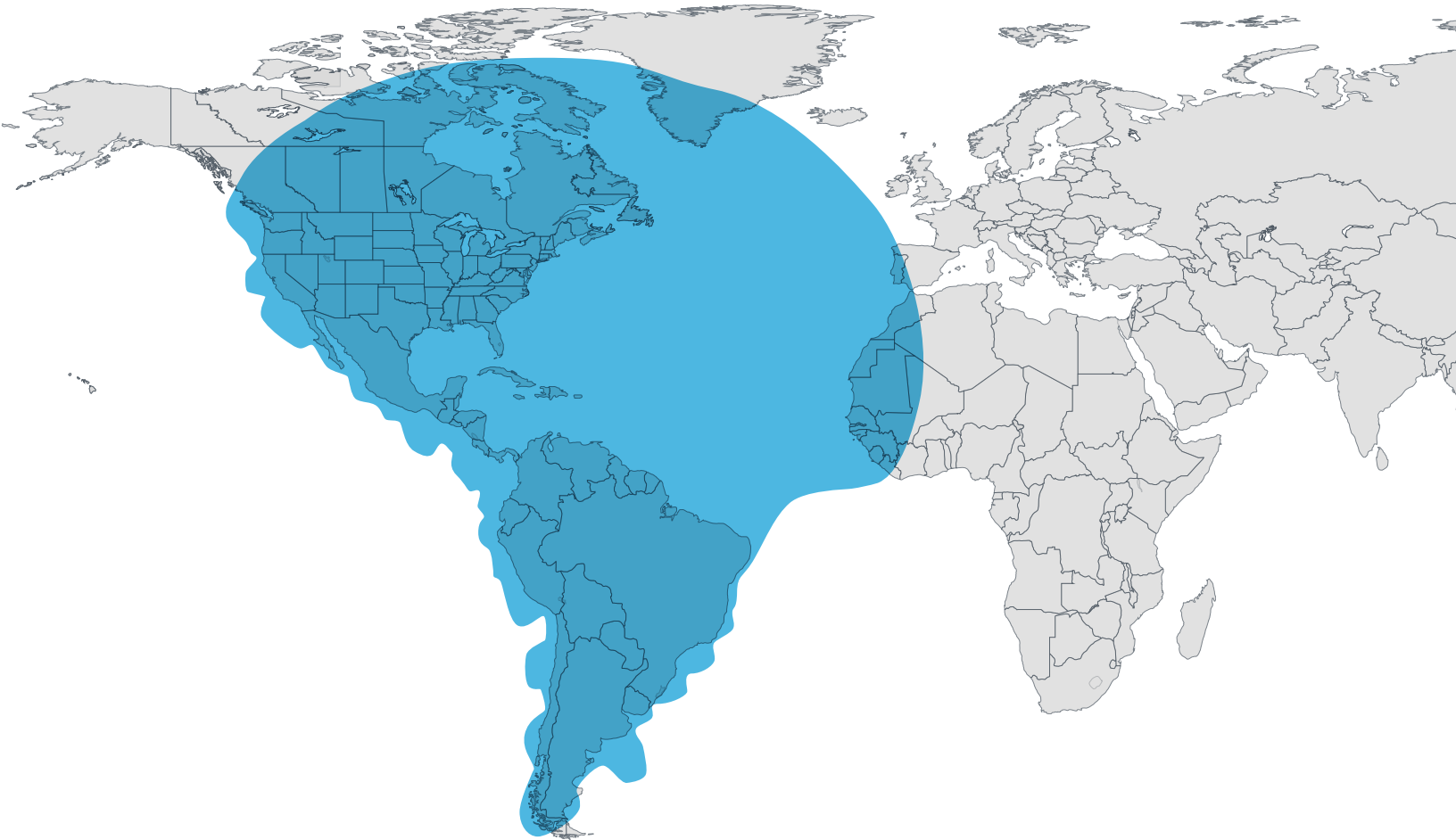
FLEX HANDOFF

Extended flexibility for service handoff. The handoff for the Basic service is done at SES's default On-Net PoP for the region. The Advanced service allows for a more flexible choice of service handoff locations. This includes any global SES On-Net PoP, Off-Net PoP directly on-premises, or directly to the cloud using SES's Cloud Direct, which effectively creates an end-to-end, dedicated connection from a cell-site to any of the growing number of top-tier cloud service providers.

*Network uptime of 98% for Pro, and 99% for Premium.

GLOBAL COVERAGE MAP

SES-17 provides full Ka-band coverage over the Americas, minus Alaska and parts of Canada.



EXPAND YOUR NETWORK'S REACH WITH MOBILE BACKHAUL ON SES-17

Mobile Backhaul via SES-17 is a managed service that allows you to rapidly deploy new cell towers anywhere in the Americas, and increase bandwidth as you grow. It provides clear visibility of your network's

performance, security, and behaviour, and offloads the financial and operational risk of extending your mobile network using traditional terrestrial technologies, enabling you to tap into new revenue sources.

Learn how [Mobile Backhaul via SES-17](#) can help you enhance your network's reach and growth.



Learn more about our full portfolio of services and solutions at ses.com

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