# SKALA GLOBAL PLATFORM

Solution Brief

SES Networks

# MANAGING THE DATA DELUGE

Broadband has become a critical part of everyday life. Consumers increasingly demand ubiquitous and seamless access to applications and services wherever they are—via their phones, tablets and e-readers.

At the same time, the number of those devices is proliferating rapidly. Analysts project there will be 3.5 networked devices per person by 2021, up from 2.3 in 2016.[1] Consumers are carrying more devices with them, and expecting them to remain connected and tied to the network, whether they're at the office, at sea, on a plane, or on a remote getaway.

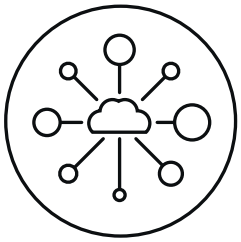
This is putting new pressures on the businesses that provide services to this increasingly mobile customer base. Mobile operators, under pressure to reduce churn and increase revenue per user, are looking to deliver a broadband communications experience to customers in remote areas that is on par with the experience in urban and suburban locations. Hospitality and travel companies, including airlines and cruise ships, need to deliver high-quality connectivity as part of a larger customer experience strategy. On the business side, enterprises need to ensure that branch offices and remote workers are able to communicate with central locations, and have access to cloud-based resources and services for business and personal use.

1 *"VNI Global Fixed and Mobile Internet Traffic Forecasts." Cisco Virtual Networking Index,* 2016–2021.

# ADDRESSING THE BANDWIDTH CHALLENGE

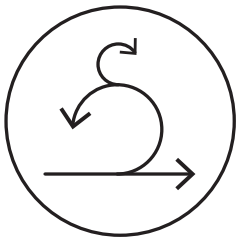
Bandwidth-hungry applications such as streaming video are challenging all communications networks.

Video accounted for 60% of total mobile data traffic in 2016, and is expected to rise to 78% by 2021. Meanwhile, rapid adoption of smart devices is driving exponential growth in network traffic, with the average smartphone expected to generate 6.8Gb of traffic per month by 2021.[2] While the demand for connectivity is weighing on businesses of all sizes and types, it imposes a unique set of requirements on industries under-served by terrestrial networks.



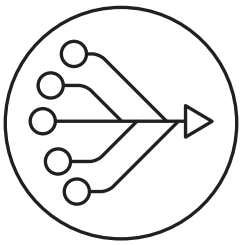
### The Proliferation of Connected Devices

Trends in the enterprise and industrial sector are also taking their toll on the network, particularly momentum around the Internet of Things (IoT). While the collection, exchange, and analysis of data generated by network devices has the potential to drive efficiency and profitability for sectors such as aeronautics, maritime, and energy, IoT applications depend on robust and reliable connectivity to the cloud—a challenge for segments that operate in remote or difficult-to-serve areas.



### The Need to Differentiate

Ubiquitous connectivity is rapidly becoming a must-have in many sectors. Analysts predict that more than 63% of commercial aircraft will offer inflight connectivity services by 2027.[3] This is driving the need to offer differentiated connectivity—customised services intended to further elevate the end-user experience, with offers based on parameters including service level requirements or customer type, the ability to support bandwidth-intensive services like videoconferencing, support for customer self-provisioning, and the delivery of application-specific packages. These capabilities have the potential to not only reduce customer churn and provide an ancillary source of revenue, but also enable companies to attract and retain a highly qualified workforce.



### Taming the Complexity

The benefits of enabling broadband services to consumers and employees who cannot be reached by terrestrial networks may be clear, but the process of procuring and managing satellite connectivity can be daunting—particularly when bandwidth requirements span multiple regions. Adding to the complexity is uncertainty around costs. Connected devices generating exponentially greater quantities of data create a corresponding demand for bandwidth that will likely be difficult to predict. This results in limited visibility into bandwidth requirements over the next few years, raising the risk of much higher connectivity costs over time.

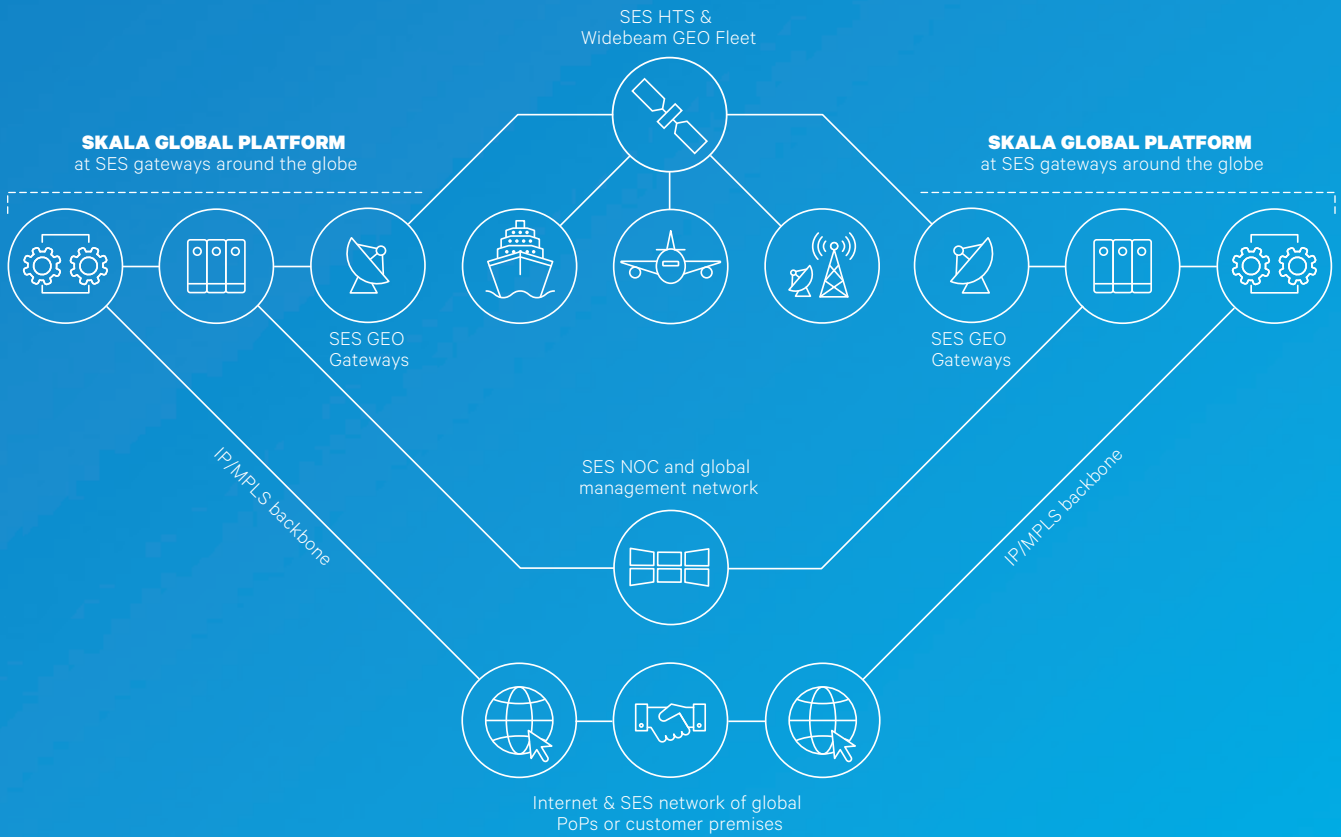
2 *"VNI Global Fixed and Mobile Internet Traffic Forecasts." Cisco Virtual Networking Index,* 2016–2021.

3 *"In-Flight Entertainment and Connectivity." Euroconsult,* 19 June 2018.

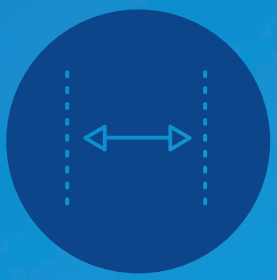
# SKALA GLOBAL PLATFORM FROM SES NETWORKS

SES Networks' Skala Global Platform is a next-generation ground system optimised for the delivery of high quality broadband services.

Its distributed architecture provides unprecedented scalability, enabling you to increase capacity as required on a global basis—without additional hardware costs. This eliminates a major bottleneck to growth as your bandwidth requirements increase. Our space assets include our low-latency O3b MEO constellation, and widebeam and high-throughput satellites in GEO—with the ability to transmit in C-, Ku-, and Ka-band. When combined with our multi-orbit, multi-band fleet and global terrestrial network, Skala Global Platform ensures that service providers, mobile network operators, enterprises, and vertical industry segments receive the best possible service to address their business requirements—wherever they are located.




**Skala infrastructure**



## ADVANCED BANDWIDTH MANAGEMENT CAPABILITIES

Skala lets you manage bandwidth over widebeams and spot beams across multiple satellites as a single service area that can then be partitioned into multiple service tiers. This enables you to create service plans for specific customers based on factors including Quality of Service (QoS) and geography, with the ability to automatically shift services between beams, and, if required, bands, to address variable demand and ensure a consistent experience across regions, and more efficient use of available bandwidth.

## FAST BEAM SWITCHING

Skala Global Platform's advanced automatic beam switching capabilities include fast reacquisition after blockage, make before break switching, and contention-based acquisition, resulting in seamless connectivity for the end user.

## A SOPHISTICATED NETWORK MANAGEMENT SYSTEM

Skala Global Platform features a next-generation network management system optimised for complex, large-scale networks to ensure reliable, efficient, and profitable network operations. Depending on the degree of visibility and control required, you can leverage network management tools to subdivide bandwidth, apply and monitor service level agreements (SLAs), and set parameters for sub-networks—opening the door for a wide range of new business models.

## OPTIMISED FOR SES NETWORKS' SATELLITE INVESTMENTS

New high-throughput satellites (HTS) transmit data throughput up to 20 times greater than widebeam satellites—at a reduced cost per bit. Skala Global Platform optimises the value of our significant investments in this area. The platform handles higher aggregation symbol rates, delivers more effective modulation and coding techniques, and features Adaptive Coding and Modulation and Adaptive Time Division Multiple Access (TDMA) to maximise data throughout, while enabling seamless switching among our HTS and widebeam assets. This ensures customers receive the best possible service to meet their requirements—at any given time.

## DELIVERED AS A MANAGED SERVICE

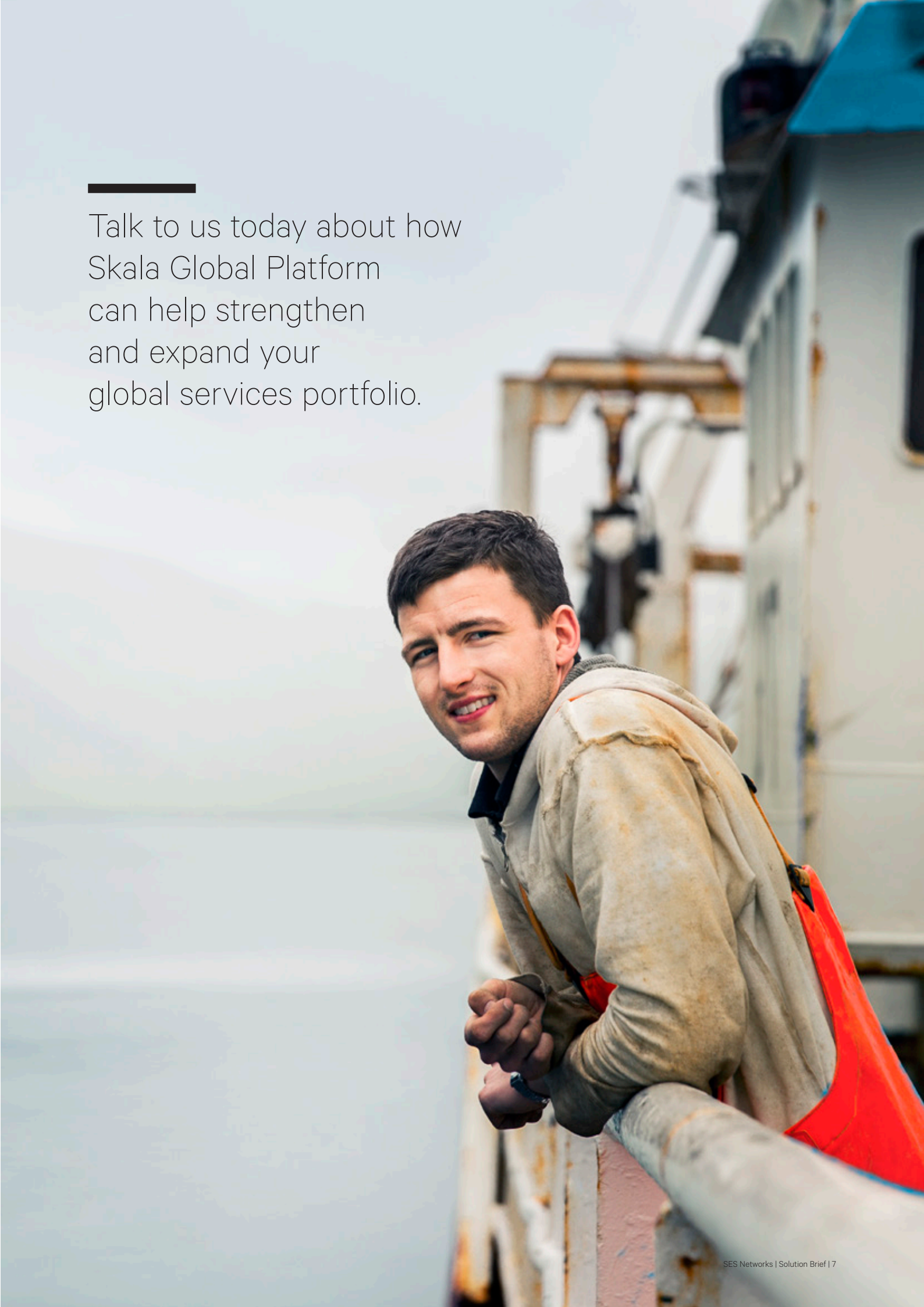
The combination of Skala Global Platform and our advanced satellite capabilities are offered as either a fully or a partially managed service delivered by SES Networks, or one of our service provider partners. This enables our customers to deliver high-quality broadband services to their end users that are backed by guaranteed service level agreements, and powered by a high-availability platform for superior reliability. The managed service model removes the cost and complexity associated with leveraging new technologies and delivering global services, and allows customers to scale and grow their broadband services in a cost-effective manner—ensuring you're not paying for capacity you don't need.

# MEETING GROWING DEMAND

The future is connected, and both businesses and consumers continue to capitalise on the benefits of digitalisation.

Their need for connectivity will only grow—regardless of where they are located. Combined with our next-generation global space assets and service lifecycle expertise, Skala Global Platform ensures your end users receive the right service, at the right time—without the complexity of stitching together regional connectivity, and the CapEx costs associated with procuring equipment. Multiple service delivery models, including platform services and end-to-end managed network services, reduce operational costs and risk, while enabling a faster time to service and revenue.

Talk to us today about how Skala Global Platform can help strengthen and expand your global services portfolio.



# Ready to manage the data deluge?

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Bucharest | Romania
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Florida | USA
The Hague | The Netherlands
Istanbul | Turkey
Kiev | Ukraine
Lagos | Nigeria
London | UK
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