CONNECTIVITY -THE NEW FRONTIER





FUTUREBIG DATA,OF DATABIG IMPACT

FUTURE-PROOF CONNECTIVITY WHY SATELLITE MOBILE OPPORTUNITY VSAT LEAP WHY

SES

FUTURE OF CONNECTIVITY NOW

Consumers today are better connected than before.

Whether it's watching a movie on their commute or catching up on their social media feeds, the lines between the physical and digital worlds are increasingly blurred.



This demand for always-on connectivity has driven data traffic up to unprecedented levels.

At the same time, diverse industries such as telecommunications, energy, utilities, and banking are becoming increasingly digitised. This results in a growing demand for VSAT networks to connect numerous corporate sites and branch offices, even those located in remote areas.

Added to the mix is the promise of mobility communications. Airlines and maritime operators are looking to meet the increased "BYOD" (bring your own device) usage of passengers and crew members alike. Providing better mobility services is an important strategy for service providers to boost their business and drive additional revenue.



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BIG DATA, BIG IMPACT

To keep up with growing data needs, mobile operators and service providers have to look beyond just providing connectivity.

It's all about delivering the right combination of bandwidth, quality of service, and competitive pricing to deliver the ultimate quality of experience for consumers.

More and more service providers are turning to satellite to make the most out of new data growth possibilities.

Satellite is the most cost-effective and flexible solution to overcome connectivity challenges, where difficult geographical terrains often render terrestrial infrastructure inadequate and unreliable. Crucially, satellite technology also provides near-universal reach to support both domestic and international networks, as well as reaching remote areas.

The next wave of High Throughput Satellite (HTS) technology will further reshape the connectivity landscape—delivering massive throughput at a lower cost per bit that's comparable to terrestrial networks, in terms of pricing and bandwidth.

"North America has the world's highest 4G coverage at 97%, as well as the largest proportion of 4G connections (over 40% against a global average of just over 7%)."

21%

CAGR growth of IP traffic across the Americas by 2019¹ of mobile subscribers will have 3G/4G connections by 2018²

94%

6.6%

annual growth in VSAT deployments in Latin America by 2024³

Cisco, Cisco Visual Networking Index¹⁴⁴; Forecast and Methodology (2014-2019 White Paper), 2015 2 Dataxis, LTE Outlook: Latin America, 2015 2 Euroconsult. Satellite Communications and Broadcasting Markets Survey. Forecasts to 2024, 2015



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SATELLITE

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DELIVERING FUTURE-PROOF CONNECTIVITY

Anytime, anywhere connectivity has opened up massive possibilities for service providers telcos, and mobile operators. But the way forward is not without its challenges.



Satellites provide increased network coverage for consumer broadband applications, and enables new bandwidth-intensive data services at optimal cost.

In many countries across the Americas, inadequate terrestrial coverage is driving the adoption of satellite backhaul for both primary as well as backup connections, now and into the future.

WHAT'S DRIVING DATA GROWTH?

- Growing popularity of video streaming
- Mobile apps on the rise
- Proliferation of connected devices
- Push for governments to implement a digital inclusion strategy



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WHY SATELLITE

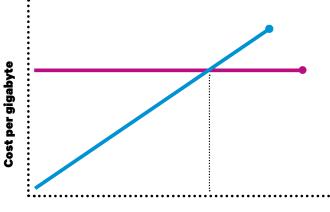
MOBILE **OPPORTUNITY**

VSAT WHY LEAP SES



WHY SATELLITES?

SATELLITE AND TERRESTRIAL DISTRIBUTION COST COMPARISON



Number of reception points (homes, towers, PoPs, etc)

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per additional user.

Satellite is less capital-intensive

than terrestrial networks for countries

with widely dispersed rural populations.

As user numbers grow, satellite holds

a distinct advantage over terrestrial networks in terms of its marginal cost

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Satellite provides the **flexibility and** greater ease of deployment for

new services. To connect untapped rural markets, for instance, satellite networks can be easily rolled out to broaden geographical coverage, anywhere in the world.



Satellite offers the **ability to scale** easily and capitalise on new opportunities to grow your business -from meeting connectivity demands on oil rigs across the Gulf of Mexico to providing much better digital experiences for passengers on a cruise ship in the Caribbean.

Terrestrial Satellite



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ENABLING MOBILE CONNECTIVITY

Cisco forecasts that mobile data usage will grow at a 35% CAGR in North America through to 2021, reaching more than 12 GB per user per month. Mobile growth in Latin America is estimated to increase at a CAGR of 45%⁴.

FUTURE

With more users moving towards mobile and consuming more data, telco operators are presented with the tremendous opportunity to drive subscriber growth. The ability to rapidly add revenue services—in multiple markets across different geographies—is the key to success.

Satellite plays a crucial role in enabling a telco's growth beyond the urban area and into suburban and rural regions. Besides benefitting the telco operators; it also goes a long way to help bridge the digital divide for the under-served communities in Latin America.

4 Cisco VNI Mobile Forecast, 2016-2021

06 MOBILE OPPORTUNITY



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COLLABORATING WITH US

SES's global scale, deep industry knowledge, and vast expertise make us an ideal partner in delivering mission-critical communications across America. An example is our collaboration with Tecnor.

The Chief Technology Officer of Tecnor, Alejandro Pilato, said, "SES has been of great support to us, particularly in addressing the requirements and needs of our clients in the context of the availability, quality, and the expansion of our service. Centric View is an application we have designed together with SES. It offers us the possibility to provide our clients with a tool to monitor the weather, service quality, availability, and even the exact geographical location of their vessels in real time, a tool that demonstrates an understanding of high service quality by both SES and Tecnor."

ALEJANDRO PILATO

CTO AT TECNOR

"SES not only proved its understanding of Mexican culture but also of Tecnor's corporate culture."



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MAKING THE VSAT LEAP



VSAT applications continue to gain ground across the Americas, providing reliable connections for demanding data and mobility applications.



BRINGING E-GOV SERVICES TO RURAL AREAS

VSAT has helped governments drive e-government initiatives and digital inclusion programs in countries across Latin America. Governments today are realising the massive potential of VSAT connectivity for better governance and to improve the lives of its people—by connecting schools, providing agricultural and weather updates, and facilitating e-registration.



ALWAYS-ON OFFSHORE OPERATIONS

Despite the slowdown in the oil and gas industry, operations and crew welfare needs remain. As energy sites are often located in far-flung locations, VSAT presents a quick and cost-effective means to keep them connected. Always-on connectivity also enables oil and gas companies, from the Arctic to Argentina, to run critical applications and streamline operations.



BIG POTENTIAL IN SMALL BUSINESSES

Small and medium enterprises (SMEs) are critical to economic and social development in most emerging markets in Latin America. An overwhelming majority (about 80-90%) of the companies making significant contributions to the countries' GDP growth are micro enterprises⁵. For SMEs located in rural areas, VSAT is deployed for reliable, flexible, and secure broadband connectivity to keep the businesses running.

5 World Bank, SME Statistics



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MOBILE OPPORTUNITY VSAT WHY LEAP SES

beyond frontiers

PUSHING THE BOUNDARIES OF CONNECTIVITY

At SES, we believe that satellite holds the key to realising the full potential of an increasingly connected and data-centric world.

From broadband connectivity to mission-critical communications, we are committed to enabling our customers to extend their reach across the Americas and beyond.



WE PROVIDE

• Strong regional expertise with an established global network to help our customers expand beyond the Americas

- Next-generation solutions, complemented by a robust teleport network and satellite infrastructure, to meet next-generation connectivity needs
- Enhanced connectivity solutions tailored to meet the demanding requirements of a wide range of vertical-specific applications



NEW POSSIBILITIES AWAIT





Visit our **SES-10** site to find out more.

Contact us to arrange for a one-to-one consultation with SES, and learn how we can help you unlock your growth aspirations in Latin America and beyond.

SES IN THE AMERICAS

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EXPLORE NEW FRONTIERS WITH US

SES is the world-leading satellite operator. By providing reliable and secure satellite communications solutions, we connect and enable broadcast, telecom, corporate, and government customers—enriching the lives of billions of people worldwide.

We own and operate a fleet of over 50 geostationary satellites, complemented by a network of teleports and offices around the globe. This far-reaching infrastructure enables us to reach 99% of the world's population.

Our business is built on four market verticals: video, enterprise, mobility, and government. As the leader in direct-to-home (DTH) and High Definition (HD) television, SES transmits over 7,300 TV channels around the world; of which 2,300 of them are in HD. Our satellites reach 317 million TV homes worldwide and over 1.1 billion people around the world. Beyond video, we enable businesses and communities with eliable data connectivity services. Broadband connectivity lelivered via our satellites is enriching the data experience on ships and airplanes, and caters to the diverse connectivity needs of governments and institutions.

Through our ownership of O3b Networks, we are the first satellite provider in the world to deliver a differentiated GEO-MEO offering with powerful capabilities across numerous market segments and geographies.

Our fleet of 21 satellites in the Americas are positioned at prime orbital positions to offer comprehensive coverage and unparalleled reliability. New satellites scheduled for launch include SES-10, SES-14, and SES-15, covering strategic locations in North and Latin America.

NEW SES-10 TO UNLOCK NEW POSSIBILITIES

Located at 67°W, SES-10 is at the heart of our strategy to help broadcasters, enterprises, and service providers to tap into the enormous potential across Latin America and the Caribbean. The new satellite will feature a payload of 60 Ku-band transponders tailored for DTH broadcasting and data connectivity services.



To learn more about SES-10, please visit our website.