Fiber Performance. Satellite Reach...Delivered!
Over three billion people in the world are denied the benefits of globalisation because they are denied access to the 21st century communications network. Historically, they have not been able to access the internet, meaning they have not been able to connect with the rest of the world and benefit from the economic growth that can come with that connection.

O3b has developed a unique solution to address the challenges experienced by operators today. O3b’s Medium Earth Orbit (MEO) satellite constellation provides ISPs, telco’s, enterprises, and government customers with a low latency, high bandwidth, affordable middle-mile alternative to connect to the rest of the world.

We believe in a world where affordable, high speed connectivity is always in reach.
O3b is the first and only global satellite service provider capable of transporting network traffic with lower latency than long haul fiber to virtually any location in the world.

O3b transforms satellite communications with a groundbreaking, next-generation satellite constellation - delivering the highest combination of throughput, low latency, coverage and availability - with a commitment to quality that customers can rely on and at an affordable price.

This global satellite constellation has the flexibility to meet the capacity and network demands of ISPs, telco’s, enterprises and government customers in the emerging markets of the world. O3b’s next-generation satellite constellation reaches consumers, businesses and other organisations in over 180 countries across Latin America, Africa, the Middle East, Asia and The Pacific.

Who we are

O3b’s satellites are placed in orbit 8,062km from the earth, reaching around 70% of the world’s population with fiber quality connectivity.
O3b’s unique network of Medium Earth Orbit (MEO) satellites offer low latency, with round trip data transmission of less than 150msec.

Using the O3b network, customers are offering a variety of applications to a wide range of businesses, consumers, government and public organisations.

### What we do

**IP Trunking**
O3bTrunk connects carrier networks to remote and emerging geographies at unparalleled speed, quality and low cost. Using O3b’s global network of international POPs, regional gateways and local satellite access, O3b delivers high-speed, carrier-grade access between the core network and the global internet backbone. Optimised with a variety of network solutions, O3b has scalable bandwidth offerings to provide flexible solutions tailored to keep costs in line with revenue.

**Mobile Backhaul**
Reach more subscribers for less with O3bCell, the smarter solution for mobile backhaul. O3bCell allows mobile operators to reach more subscribers economically, significantly improving voice quality while supporting data rates unreachable using conventional satellite solutions. Cost-effectively extending high-performance 3G and 4G to rural areas, O3bCell is the response to today’s challenges for emerging market network operators.

**Offshore Communications**
O3bEnergy offers the performance of fiber with the flexibility of satellite delivered cost-effectively and reliably. O3bEnergy is the first satellite solution that matches your IT investments with a transport technology designed to meet the performance needs of your network now and in the future. We offer unlimited scalable bandwidth while reducing network latency to one quarter of that for existing geostationary satellites. O3bEnergy directly addresses crew productivity with cloud and big data systems, centralisation for multiple platforms, and even crew welfare and retention.

**Maritime**
Onshore, the days of voice communications as the primary means of staying connected are long gone and the same is now true at sea. For the first time, O3bMaritime delivers truly immersive broadband experience at sea providing unparalleled guest satisfaction, increased revenue generation, enhanced crew welfare and the potential for greater IT operational efficiency for cargo and cruise operators.

**Government**
Governments, inter-governmental agencies and non-governmental organisations (NGOs) promoting the public interest face unique communications and contracting requirements. O3bGovernment works with international technology partners and solutions integrators to deliver the flexible, secure and cost-effective broadband solutions necessary for national defense, humanitarian response, border security, diplomacy and rural development. With high throughput (up to 1.6Gbps) and low latency (roundtrip time <150ms) connectivity, O3b provides the reliable, scalable bandwidth needed to connect headquarters and field units using the latest technologies and applications — from remote cloud-computing information assurance, to ultra-high definition video for command and control — on land and at sea, globally.
O3b's next-generation network combines the reach of satellite with the speed of fiber, providing customers with affordable, low latency, high throughput connectivity.

**The technology**

**Constellation**
- Designed, integrated and tested by Thales Alenia Space
- Initial constellation of 8 satellites
- Orbital height: 8062km
- Orbital inclination: <0.1°
- Ground period: 360min / 4 contacts per day

**Gateways**
- Global network of gateways
- Strategically located on the internet backbone
- Enabling flexible, reliable, and secure connectivity options

**Beams**
- Ka-Band
- Optimal coverage between 45° north/south latitudes
- 10 beams per region (7 regions) totaling 70 remote beams per 8 satellite constellation
- Up to 1.6Gbps per beam (800Mbps x2)
- 84Gbps available per 8 satellite constellation
- Beam coverage: 700km diameter
- Transponder bandwidth: 216MHz; 2 x 216MHz per beam

**Terminals**
O3b has worked with industry partners to develop a range of terminals that support a variety of customer applications. We use advanced technologies to optimise bandwidth efficiency and are:
- Easily deployed
- Reliable
- Easily maintained
- Affordable

**Global Service Areas**
Customers can connect to fiber infrastructure through Regional Gateways.
Connecting people
The O3b advantage

Fiber Speed. Satellite Reach.

High Speed
O3b’s satellites provide fiber-like throughput with an average of three to four times higher throughput than geostationary satellites. More throughput means more people can be connected to the internet at fiber speeds. Unlike alternative satellite solutions, bandwidth demand will not outstrip O3b’s ability to supply capacity. O3b provides complete assurance that as a supplier it will match the growth of its customers.

Low Latency
O3b’s unique network of Medium Earth Orbit (MEO) satellites eliminates the delay associated with traditional GEO satellites. Roundtrip data transmission takes less than 150 milliseconds. This creates a web experience like terrestrial systems such as DSL or Optical Fiber. For the end customer, this means…

• Fast web access
• Clear, natural voice communications
• Real-time, lag-free video conferencing
• Full-speed IP over VPN
• Seamless access to web-based software and services

Low Cost
The O3b solution eliminates the need to construct extensive and expensive terrestrial backhaul networks, offering lower cost per megabit than current geostationary satellites. This enables operators to connect more customers, and provides the ability to focus more time on the front end of their business, increasing profitable reach and subscribers.

Global Coverage
O3b’s next-generation satellite constellation will reach consumers, businesses and other organisations in 180 countries across Asia, Africa, Latin America, the Middle East and The Pacific. Over three billion people will enjoy access to broadband for the first time.
Connecting businesses
to realise its goals.

With good infrastructure in some of the most experience that you have in the developed world so people can have the same kind of broadband markets. It brings good low latency connectivity, “O3b not only brings connectivity to emerging technical understanding, and diverse experience necessary to enable O3b financial and operational support O3b Networks enjoys world-class Our Investors Google

Business Operations Director, Larry Alder, of the growth.”

stimulating more bandwidth to come in, because of that growth by bringing not only bandwidth, but countries to grow and we think that O3b can be part great equalizers. It allows people to grow, it allows remote places. Connectivity and information are

Gilat is building state of the art networking hubs and ViaSat is building substantial terrestrial infrastructure including

At O3b, our people are our biggest asset. We have the highest caliber of space and ground engineers, technical and commercial experts and a world-class sales team with a passion, dedication and raw determination, which makes O3b a success, and provides access to millions of people around the world.

Our Investors

O3b Networks enjoys world-class financial and operational support from an investment team that has the technical understanding, and diverse experience necessary to enable O3b to realise its goals.

Larry Alder, Business Operations Director, Google

Our Partners

O3b has partnered with some of the best satellite industry experts in the world to spur the development of this innovative satellite system.

O3b customer modems. Gilat is building state of the art networking hubs and ViaSat is building substantial terrestrial infrastructure including Gateways, customer terminals and high speed modems.

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O3b VSAT antennas.

Thales is building O3b’s first 12 satellites and providing launch support services. Comtech is the leading provider of baseband equipment and provides modems that are tailored to support mobile backhaul. ArianeSpace will launch O3b’s satellites aboard the world’s most flown launch vehicle – Soyuz. VaSat is building substantial terrestrial infrastructure including Gateways, customer terminals and high speed modems.

Marsh is providing world class insurance protection and risk mitigation strategy. Gilat is building state of the art networking hubs and O3b customer modems.
O3b was founded on the belief that access to high speed connectivity is a right not a privilege. It is our mission to connect the unconnected and to offer digital parity to everyone on earth. With digital parity, all children can be educated, all people can participate in global conversations and global commerce and the world benefits by inclusion of those who were silent because of the lack of a simple right, the right to high speed connectivity.
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