

# BUSINESSCOM<sup>®</sup>

## NETWORKS

**Our core mission is to supply broadband Internet access, managed business networks and customized space connectivity services to our customers.**

Having access to an extensive fleet of satellites, BusinessCom Networks is one of the world's most experienced providers of satellite data, voice and video connectivity. BusinessCom's success is founded on offering our customers the most advanced VSAT platforms available, on developing customer-focused relationships and maintaining the highest standards of technical excellence and responsibility.

Innovation lies at the heart of the BusinessCom growth story. Our commitment to market research and our leadership in implementing new technologies opens the satellite market up to an even broader range of users and applications. A key component of our value lies in the skills of the men and women who work at BusinessCom. This technical expertise brings a clear understanding of international and local markets.

Our success is associated with a commitment to technologies and standards that lower the barrier to entry for users and drive down equipment costs. BusinessCom was one of the first satellite Internet Service Providers to deliver the Deterministic TDMA technology which is now a globally accepted reference for reliable business connectivity technology

### **BusinessCom Value Proposition**

- Global service availability via combined fiber, teleport and satellite networks
- End-to-end managed services
- Centralized operations
- Track record of quality service—over 400 networks deployed worldwide
- Strong understanding of customer requirements



**Geographic expansion is a really important focus for our growth in order to serve users who have requirements for intercontinental or regional communications.**

With technical excellence and customer needs at the centre of our development and growth strategy, we are committed to providing capacity and building partnerships for new applications and services, particularly in the market for IP services. By drawing on our skills in interactive networks engineering we have introduced new IP services together with a network of partners. These services include fully satellite-based connectivity solutions for companies and local communities based on SCPC, DVB-S2/ACM and TDMA platforms that deliver voice data and video at a variety of bandwidth rates suitable to your requirements.

### **Adaptive TDMA Satellite Connectivity: iDirect Broadband Services**

BusinessCom iDirect Broadband services are satellite IP connectivity solutions for small businesses and commercial enterprises with a wide choice of service levels for networks of any sizes. BusinessCom iDirect Broadband services, powered by Sentinel Bandwidth Management & Optimization and PEP solutions is the perfect combination for organizations that want a reliable, well managed and efficient broadband satellite service that empowers their business. Featuring dedicated CIR bandwidth, QoS and a strong SLA, BusinessCom iDirect Broadband services perform far better than legacy VSAT systems.

### **Dedicated Satellite Connectivity: High-Throughput Satellite (HTS) DVB-S2X and SCPC Services**

By utilizing the world's latest technological innovations, BusinessCom dedicated circuits are able to reach one of the best spectral efficiency benchmarks running at 64APSK (with future potential of up to 256APSK) and thus the best price per bit for the customer, whether voice, video and data carriers, regional Internet Service Providers or corporate backbones.

### **Backbone Connectivity Solutions**

For global service providers and established voice, video and data carriers with extensive demands for increased reliability, BusinessCom offers complete turn-key connectivity solutions on an end-to-end basis. Our turn-key proposals cover the whole spectrum: from customer's equipment to civil works, freight, transport to site, customs clearance, to EF&I, installation and maintenance.

## Private Network Solutions

Enterprise organizations, satellite service providers and Value Added Resellers can easily start their own private networks with BusinessCom. Private networks are available in several configurations and enable organizations to link their remote offices securely to corporate datacenters with or without Internet access. Service providers can build private services leveraging the in-place facilities and investments in the teleport. BusinessCom offers the complete range of VNO, GQoS and Hub based solutions on a number of strategically placed teleports in Europe and America and these offer outstanding terrestrial fiber optic backbone connectivity, collocation opportunities, a wide VSAT platform choice and broad satellite coverage.

## Telephony Solutions

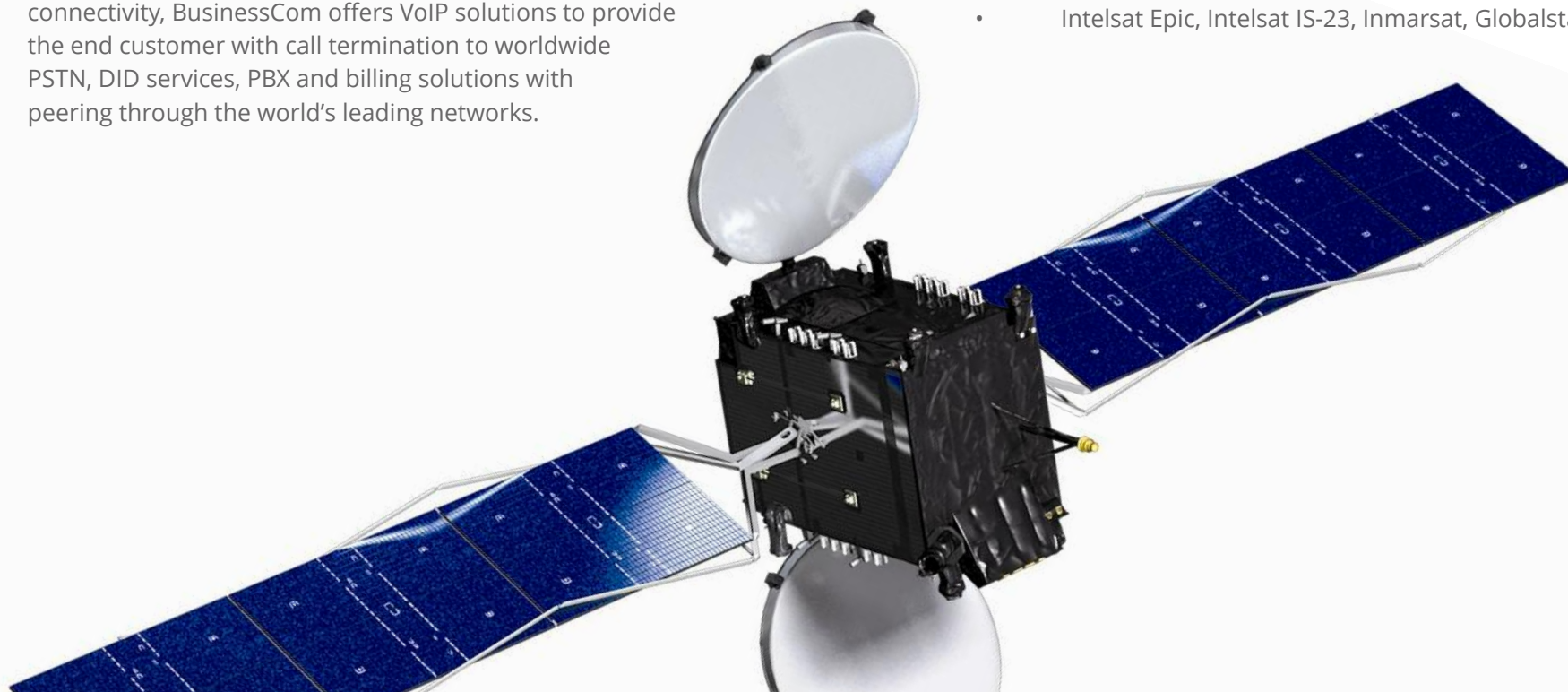
As one of the value-adds to our main services – the satellite connectivity, BusinessCom offers VoIP solutions to provide the end customer with call termination to worldwide PSTN, DID services, PBX and billing solutions with peering through the world's leading networks.

## BusinessCom Satellite Fleet

**With capacity commercialized on an extensive spacecraft fleet in an orbital arc from West to East, BusinessCom's market presence now stretches from United States right through to the Pacific.**

In addition to high-power Ku-band capacity, we offer C-Band capacity throughout all the Africa, Asia, CIS and Middle East countries. BusinessCom offers the full range of Internet access services on the following Ku and C-Band satellites:

- Measat Africasat 1a, ABS-2
- Telesat Telstar-11N
- SES-6, NSS-10, NSS-12
- Eutelsat 70B, 21B, 172A, 115WB
- Asiasat 4
- Anik F1
- Intelsat Epic, Intelsat IS-23, Inmarsat, Globalstar

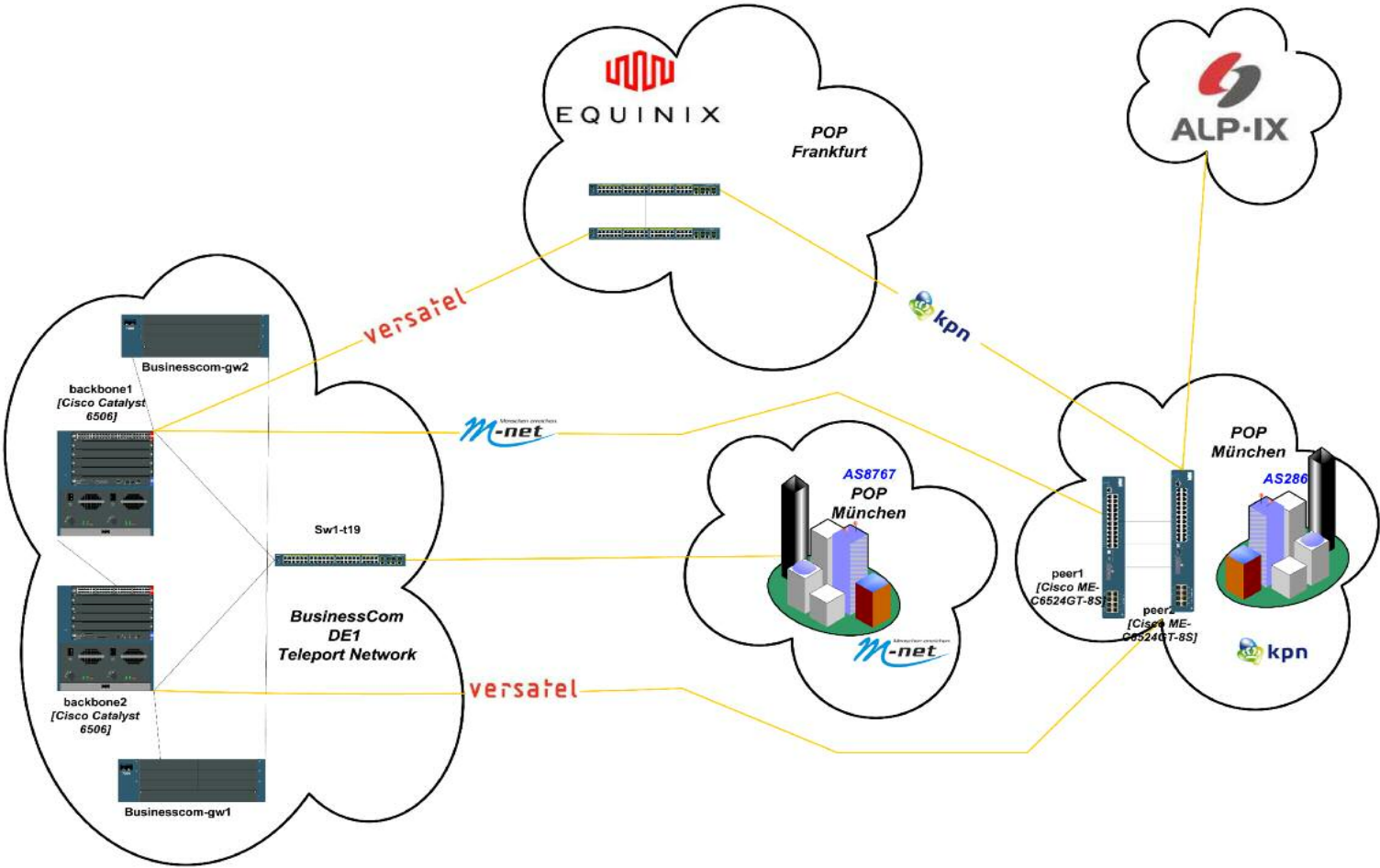




BusinessCom DE1 Network (AS197206)

At the core of our capabilities is the fully redundant BusinessCom DE1 teleport network, located in Germany. It provides connectivity to Tier 1 European Internet backbones, as well as Equinix and ALP-IX (DE-CIX) Regional Internet Exchange. This allows DE1 to reach more than 700 networks via a single connection.

The DE1 teleport facility is secured with our own site security service and 24/7 guarded perimeter. All public utility and UPS power and fiber optic Internet connections are redundant. The standard BusinessCom service SLA is > 99.5% availability per annum, and satellite connections can be engineered to exceed this number for specialized applications, such as mission-critical telemetry and multimedia streaming and other applications.



Teleport Services @ DE1

Based on DE1, BusinessCom provides a wide array of teleport services. This includes satellite space segment provision, RF uplink and downlink, antenna hosting, IP addresses, routing, terrestrial MPLS and Ethernet services, TV playout, TT&C and custom tailored services.

The DE1 facility implements monitoring and control for all antennae, RF/IF devices, uplink and downlink carriers, fiber connections, and all electrical and HVAC systems.

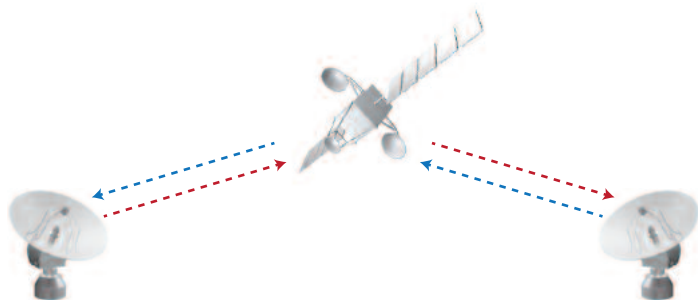
BusinessCom provides operational weekly and monthly reports for all DE1 landing services.

## BusinessCom Satellite Connectivity Capabilities

BusinessCom capabilities includes all network topologies available to satisfy any connectivity requirement—from a point-to-point link to private multi-level tree VSAT networks whereby bandwidth is allocated on-demand.

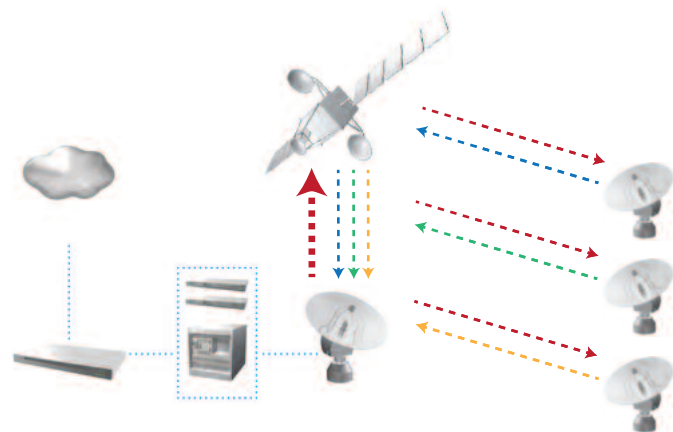
### Point-to-Point

Point-to-point Single Channel Per Carrier (SCPC) satellite links connect two locations via single satellite hop. Multiple SCPC links can be used to built private networks.



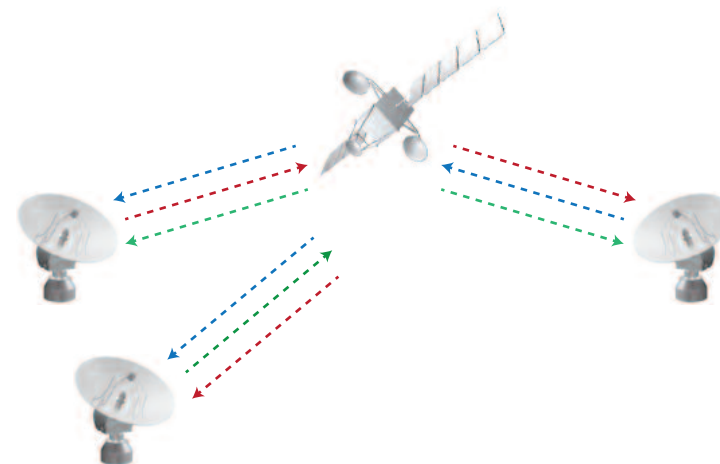
### Hub-and-Spoke (Star)

Star topology TDMA Hub networks provide point-to-multipoint connectivity. The Hub site can be co-located either at the customer premises or BusinessCom teleport facility to provide Internet access to multiple remote locations.



### Mesh Networks

Mesh networks provide single-hop satellite connectivity between multiple remotes. Mesh networks can be both Hub-based and Hubless TDMA.

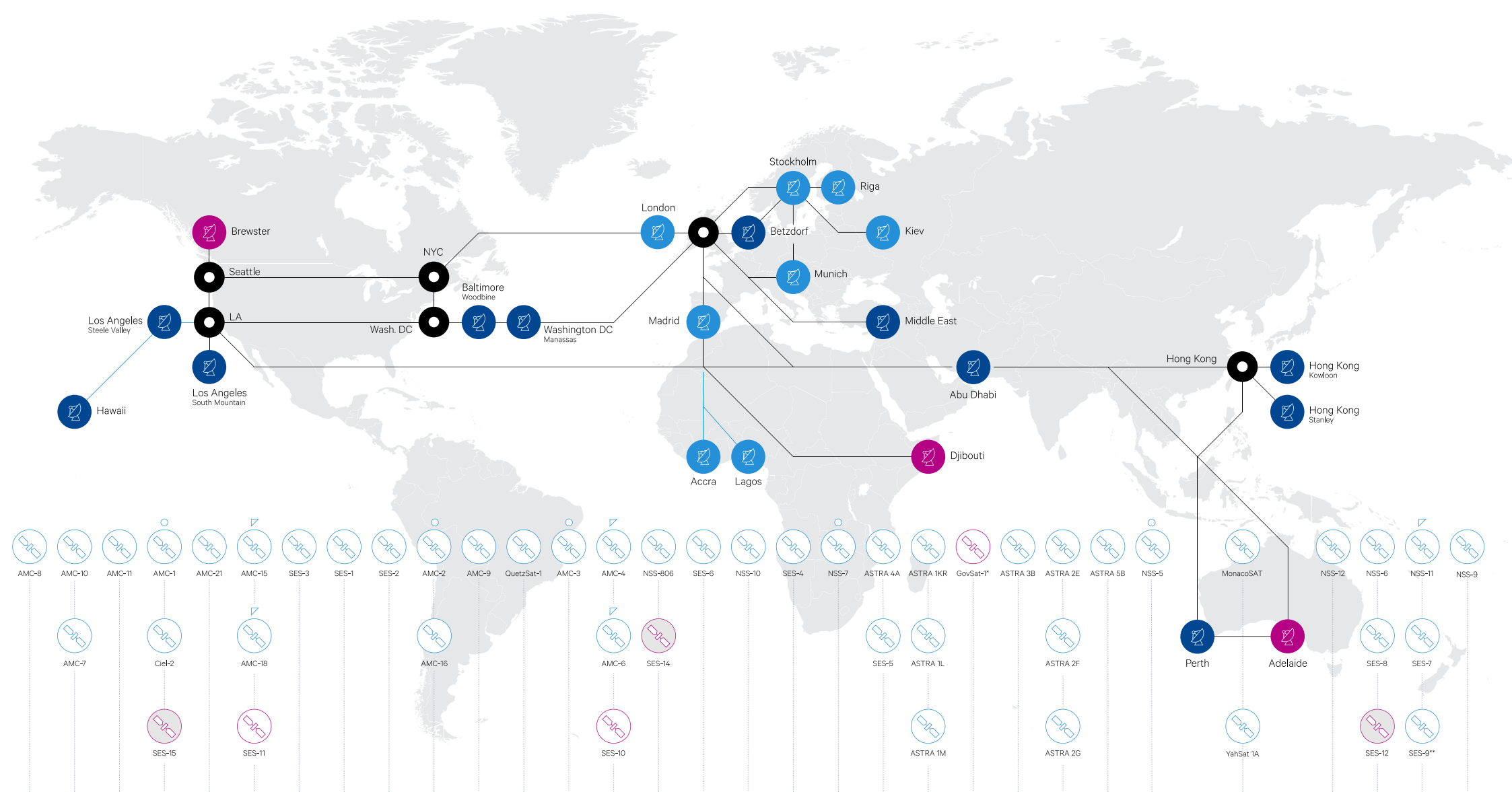


A wide variety of intermediary and hybrid topologies exist, along with 1:N geographical redundancy. Hub-and-spoke networks can be organized in multilevel tree hierarchy with some of the sites acting as relays towards the Hub. Stacks of point-to-point SCPC links can be deployed with an MCPC outbound for private networks requiring outbound bandwidth sharing and dedicated inbounds.

**BusinessCom provides full consultation, engineering and deployment services to deliver custom tailored and managed satellite connectivity solutions to clients with the desired QoS.**

BusinessCom Global Availability Services

For customers who require worldwide services, BusinessCom provides a range of ID GLOBAL service on land and on sea, provisioned via extensive Earth Station network interconnected via redundant fiber optic Public IP and MPLS connections. Among the networks are Woodbine – Maryland, providing fiber connectivity to Baltimore, MD and Level-3 in McLean, VA. South Mountain – California provides Fiber and microwave connectivity to One Wilshire in Los Angeles, CA and serves as a gateway to the Pacific Rim, Hawaii and Alaska. Sunset Beach – Hawaii acts as a pacific rim interconnect and provides international turnarounds between U.S. and Asian networks.





## **Private Networks**

### **Your Business Interconnection**

Satellite Wide Area Networking has emerged as the clear leader in broadband technologies where organizations have offices that are widely dispersed around the globe and often in locations where there is no traditional communications infrastructure. They choose satellite WAN technology because with a single satellite service provider there are fewer points of failure than a terrestrial alternative—if there is one—and uniform service levels in place. Also, such networks can be deployed quickly should a rapid response be required.

BusinessCom Networks will guide organizations through the choices available for interconnecting their remote VSAT-based sites. This can range from VLANs on standard commercial services, to Private Networks leveraging iDirect GQoS, or Virtual Network Operators, operating securely and independently.

**Enterprise**  
**Embassy Networks**  
**Military and Government**  
**End-to-End Communications**  
**IoT and M2M Connectivity**

## **Enterprise**

### **Voice, Video and Data with SLA**

Today, modern businesses operate in a technology centric world and IP connectivity is the key to driving businesses forward. In order to maintain a competitive advantage, bringing remote locations into the corporate network is the key to fluid communication and decision making. Enterprise organizations utilize many different applications to ensure that their business operates in the most efficient manner. Business applications can be easily implemented into a BusinessCom Networks communication topology, as can media rich web applications such as videoconferencing or telemedicine, for example. Our networks support organizations who wish to roll out enhanced CRM applications or maybe introduce new and innovative ERP initiatives to their remote offices so that everybody has access to the same corporate tools.

**Oil & Gas**  
**Mining, Construction, Engineering**  
**Healthcare**  
**Financial Organizations**  
**Maritime**

## **IP Carriers, MNOs**

### **Backbones and Backhauls**

Service Providers recognize that there is a huge, untapped market of prospective subscribers who remain without access to the Internet, mobile services or, more importantly, to the rest of the global economy. BusinessCom offers satellite solutions to deliver local and regional networks to any point in the world, with very high spectral efficiency resulting in optimized TCO. BusinessCom supports emerging markets around the world with our custom solutions:

**Cellular Backhaul**  
**Internet Service Providers**  
**Wireless Hot Spots**  
**Disaster Recovery Networks**  
**DTH**



Among Our Customers...



Sao Tome, Enterprise Customer  
SCPC Dedicated Bandwidth Services



Mediterranean Cruise Liner  
Maritime SCPC Dedicated Service



Morocco, Austrian Space Forum  
MARS Simulation Mission



Congo, Government Agency  
Enterprise iDirect Services



Nigeria, Oil & Gas Customer  
6.2 m Earth Station and SCPC Services



Angola, Enterprise Customer  
SCPC Dedicated Bandwidth Services



Iraq, Military Customer  
DVB-RCs Broadband Services



United Kingdom, Media & Entertainment  
Communications-on-the-Pause



Afghanistan, Military Customer  
Managed Satellite Access

- Airforce Deputy Defence of United Kingdom
- African Minerals Limited
- American Systems Corporation
- Austrian Space Forum (OEWf)
- Bell Helicopters
- Bosch Group
- Burgess
- CACI Technologies, Inc
- Central European Commission
- DRS Technologies
- Focus Energy
- GAC Saudi Arabia
- Geokinetics
- Henry Jackson Foundation
- IAP Worldwide Services
- JV Cummins/Louis Berger Group
- KBR
- KNNS
- Lockheed Martin
- Maersk
- Ministry of Defence of Ukraine
- Ministry of Defence of United Kingdom
- Ministry of Foreign Affairs of Ukraine
- Ministry of Foreign Affairs of Nicaragua
- MNG Gold
- Nestle S.A.
- OSFAC
- Parsons Corporation
- Ponticelli Frères
- Raytheon Corporation
- Red Bull
- Relyant
- South Dakota State University
- Synopsys Corporation
- Swe-Dish Satellite Systems
- United Nations
- USAID
- U.S. Air Force, Army Forces, Navy and Marine Corps
- U.S. Department of State
- U.S. Naval Special Warfare Development Group
- U.S. Naval Research Laboratory
- U.S. Special Operations Command



**Around the world, our core business is to provide your organization with satellite broadband Internet access and connectivity to international IP backbones**

BusinessCom has global experience, with over 400 networks deployed worldwide. We are a member of WTA (World Teleport Association) and are registered as a RIPE NCC LIR.

**More information is available at our website: <http://www.bcsatellite.net/>**

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