

TCS OS-IRIS

Internet Routing in Space (IRIS) on Intelsat 14



OS-IRIS Key Benefits

- True IP end-to-end network
- Single hop architecture for reduced latency and improved application performance
- Four continents simultaneously through a single connection
- Single physical access network - all sites half a hop
- Allows creation of private shared services models – Common bandwidth pool across multiple virtual networks
- Single monthly fee for the entire network
- Allows independent scaling of terminals and bandwidth
- Add a terminal without the need to purchase additional bandwidth
- Purchase more bandwidth to share across the pool
- Customer chooses allocation of bandwidth across their sites
- All links are full-duplex, same as terrestrial networks

OS-IRIS – Converging Satellite and IP Networks

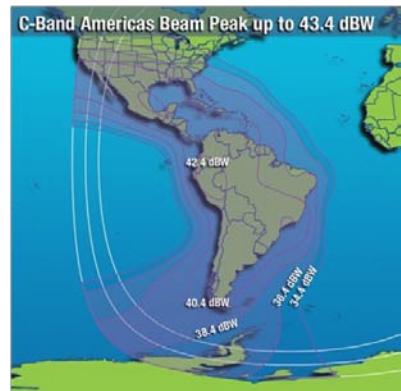
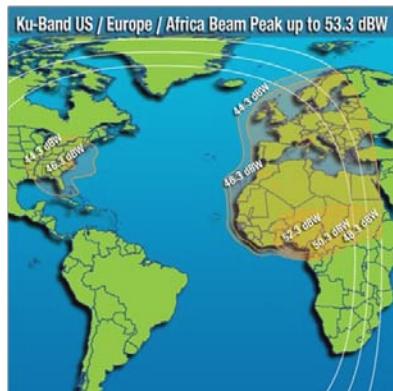
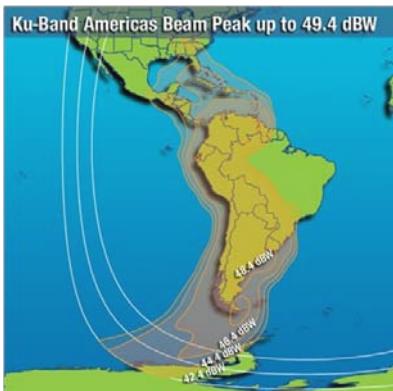
There is an exploding growth in connected devices, smart apps, video, and bandwidth. Operators are investing in network expansion and the satellite industry is no different. Government and commercial clients know networks will grow but have to do so across multiple satellites, transponders, and frequencies. How can they address this while maintaining and controlling costs, and ensure continuity and improving performance? TCS OS-IRIS.

TCS OS-IRIS is the world's first commercial service offering of a Cisco enabled Internet Routing In Space (IRIS) managed satellite service. The combination of Cisco IRIS satellite and terminal architecture, in addition to TCS global network implementation and support capabilities, bring a new era of true IP end-to-end communications to the satellite industry and our clients.

Now your satellite network can deliver the services you need anywhere, anytime, on demand.



OS-IRIS Coverage
on Intelsat 14



See TCS' complete line of products and services at www.telecomsys.com or contact us at geonet@telecomsys.com.

Your Established Partner

TCS brings proven, technology problem-solving expertise to its professional service offerings for the public sector. From continuity of operations and information assurance, to cyber security and integrated logistics support, TCS solves the toughest technical challenges, under conditions that demand the highest level of reliability, availability, and security. As an ISO 9000-certified provider with many consultants holding active security clearances, TCS has an established track record over the past decade as a trusted partner providing mission continuity for the Department of Defense, Special Operations and intelligence communities, the Department of Homeland Security, and the Department of State.

TeleCommunication Systems, Inc.
275 West Street
Annapolis, MD 21401 USA
Toll Free: 1.888.728.8797
Outside US: +1.410.263.7616
www.telecomsys.com

Enabling Convergent Technologies® is a registered trademark of TCS. All other trademarks are the property of their respective companies. Information subject to change without notice. | NasdaqGM: TSY | 120229

TCS TeleCommunication Systems
Enabling Convergent Technologies®

Proven Technology

TCS OS-IRIS allows any site in the network to communicate with any other site in the network through a single hop, direct connection regardless of the beam the site is in, or the frequency (C or Ku) the site is using. TCS OS-IRIS delivers an IP-VPN network, which means that all of a client's standard IP applications and expectations are finally met over satellite, reflecting the same service and architecture delivered by contemporary terrestrial networks – simplifying both procurement and operations.

OS-IRIS is deployed as a full-duplex pool of bandwidth to the client, which is allocated between sites according to the client's network demands. The bandwidth allocation can be changed by the client directly, providing flexibility as business needs dictate; for example - temporary allocation of higher bandwidth to sites with high usage requirements. During normal operations, each site receives user specified CIR allocation while also benefitting from bursting automatically into unused capacity in the pool on an 'as available' basis. All of this is directly controlled through standard IP routing by the client. That means no operator interference or delay required, no shared or contended link to each site. OS-IRIS is a dedicated pool of bandwidth that is designed to meet the needs of the client – just like IP-VPN architecture does on

ground! As opposed to ordering a new link for each site, the client now calls TCS and adds a site to their existing pool or adds bandwidth to their pool as their needs increase. It's simple, efficient, reliable, and affordable.

With a blend of C band and Ku band capacity, TCS OS-IRIS covers most of the U.S.; all of South America and the Caribbean; West and North Africa; and most of Europe. Finally multinationals and coalition partners can have true IP communications from any location in the network to any other network location with just a single hop: San Francisco to Stockholm; Lima to Libya; Nigeria to North Carolina; or just the Bahamas to Florida. OS-IRIS is one network and one connection.

