FLEXIBLE GEO FROM AVANTI



"Delivering GEO capacity, where you need it, when you need it."

Avanti's Flexible GEO service delivers Ka-band capacity precisely where and when it is required. With 15 years of expertise in dynamic spacecraft operations and over 20 successful relocations completed, Avanti has the expertise to reposition satellites and reorient beams to bring assured connectivity to new regions on demand.

Our unique combination of scale, agility, and technical capability, together with the advanced design of our satellite fleet, allows us to move beyond the limitations of static geostationary operations. Instead, we flexibly deliver the full advantages of Geostationary orbit (GEO) - high-capacity, spectrum control, sovereign assurance - directly to the location our customers require.

Proven Experience Avanti was the first commercial satellite operator to provide Ka-band services from GEO. As the number one provider of capacity across sub-Saharan Africa, Avanti understands all aspects of GEO operations, including: Launch and operation of spacecraft Building and running of ground infrastructure Obtaining market access and regulatory clearances Delivering capability to government, military, enterprise, telco and consumer markets, wherever demand arises. **Assured Capability** High-throughput Ka-band Geostationary Highly Adaptable Satellites (HYLAS) provide assured capacity for customers. Geostationary assets provide optimal service for coverage over areas of high user density or areas with critical connectivity requirements. It provides guaranteed, alwayson, always available capacity, optimised for that region. This allows service to be tailored and structured to best meet the needs of a particular user group. With proven technology, in-orbit assets and complete control of the spectrum, Avanti's GEO satellites provide customer-centric services designed to match the individual needs of the users.

MORE INFORMATION?

To know more about what Avanti can offer, please contact:

Defence TeamDefence@avanti.space





Existing proven technology from Avanti:

Repositioning of Satellites

With unparalleled experience in spacecraft moves across the Geostationary orbital belt, Avanti repositions satellites to provide optimum capacity and beam coverage within any operating area. This is a turnkey service incorporating:

- Dynamic control of the satellites anywhere around the globe
- Management and coordination of spacecraft operations and deconfliction with other satellites
- Full international visibility of movements in accordance with Space Situational Awareness best practice
- Regulatory clearances and filings, licenses and market access and landing rights in final destination
- Gateways and ground infrastructure and network connectivity in the final destination

Reorientating satellites

Satellites can be dynamically realigned within a fixed orbital position to focus coverage on an operating area and/or facilitate the landing of data in customers' sovereign sites.

Steerable Beams

Our steerable beams and steerable clusters of beams provide immediate Ka-band capacity wherever you may need it around the world. Our beams operate in civilian and government frequencies and can be steered manually by our users or can automatically track aircraft, vessels or follow pre-set waypoints.

Customer choice to use a gateway or not

Sometimes, speed of reaction is a customer's most important requirement and establishing connectivity in a region for local connectivity is more critical than operating through a well-established Gateway.

Steerable beams that allow users to switch between 'direct-to-gateway' mode of operation and loopback, means users have the flexibility to establish their own local, mobile Gateways and/ or operate mesh services to dispersed users within the beam's coverage. This allows users to build and operate their own secure, agile, sovereign-controlled and closed communication network across a region without needing to establish complex fixed infrastructure.

Independently steerable gateway beams

In addition to being able to point steerable user beams to wherever a requirement exists, owning the landing of that data and assuring it is held within sovereign locations can be vitally important, especially if that data relates to national security or military operations. Independently steerable gateway beams allow users to nominate a country and a specific gateway of their choice to allow their traffic to land exactly where they require it.

Dispersed and diverse gateway locations

Land data directly into a government or commercial gateway of choice or take advantage of a growing global network of Kaband satellite teleports.

Flexible technology

We are equipment agnostic, integrating immediately and seamlessly with existing gateways, remote terminals, modem manufacturers and waveforms.

Speed and agility

We have a wealth of experience in space manoeuvres with proven technology that is readily available and mission-tested. We are agile, adaptable, and uniquely positioned to accelerate deployment, ensuring seamless execution even in the most time-sensitive and challenging environments.

Flexible capacity and tailored solutions

In-house control of our spectrum means services can be individually tailored to the customer. Whether it's dedicated capacity and Committed Information Rates, bespoke and novel waveforms, customer-controlled and managed contention, overt and covert signal management, Avanti provides flexible capacity using our spectrum management team and solution architects to build bespoke customer services.

We can generate and articulate meaningful solutions hand-in-hand with the customer, providing satellite simulations and link budget performances and plans delivering satellites and capability to where they are needed, when they are needed, ensuring access to capacity on demand.

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