

A military helicopter is shown in the process of landing on a dusty, uneven terrain. The helicopter's main rotor blades are blurred, indicating motion. Several soldiers in full combat gear, including helmets and backpacks, are positioned around the helicopter, some appearing to be assisting with the landing or preparing for disembarkation. The overall atmosphere is hazy and dusty, suggesting a field or desert environment.

**AVANTI:
WE CONNECT
THOSE WHO PROTECT**



We are a trusted provider of high throughput satellite capacity in EMEA



Our Ka-band high-throughput satellite capacity guarantees secure and resilient coverage and provides information advantage for the full range of mission sets across EMEA. This makes us a trusted, high-performance partner to U.S. and global government agencies for providing COM-SATCOM to meet all their requirements.

Our business has a targeted, clear, focus on customer partnerships in support of the defense, satellite and carrier industries. Defense and military are central to our operations and, as the military accelerates their migration from Ku to Ka-band, Avanti is well placed to deliver the stringent demands of resilience, agility and throughput.

Our steerable beams overmatch the high standards required for large capacity ISR dissemination and meet the agility and flexibility levels demanded by the US Department of Defense and European MoDs. We also support non-military organizations who promote peace

and security through soft power activities, such as peacekeepers, first responders and emergency services.

This report contains key information and case-studies to illustrate how Avanti has evolved to be a strategic partner to global defense and military organizations, and a credible and effective contributor to forces engaging in peace-keeping and disaster relief efforts. We are proud of the work we do in this area and are pleased to share how we are striving for excellence in all areas of our defense and military support services.

We have a unique set of assets delivering secure communications for every mission type

Avanti operates a fleet of 5 satellites delivering over 50GHz of Ka-band capacity. Positioned and operating from our own prime orbital positions, we have the ability to connect users across EMEA with our fixed beams and have the reach to connect customers from the Americas to the Far East with our steerable beams.

We are proud of our reputation of driving innovation – we were the first commercial operator and provider of HTS Ka-band satellite connectivity; we are at the forefront of providing satellite-based educational connectivity across Africa and, in December 2019, Avanti's HYLAS 3 satellite capability became the world's first Ka-band steerable cluster of high throughput spot beams.

At the core of our capability are our very high-throughput satellites that provide exceptional capacity; but these are so much more than just providers of exceptional capacity. Our technological capabilities also include steerable

beams that can switch between Civilian or Military frequencies, military grade encryption, end user beam steering controls and the ability to provide obfuscated beam positioning - all features that are ideally suited to the needs of the military and Government customer.

Most users understand that the space segment (the satellites) delivers only 50% of the connectivity continuum. The rest of the service is made up of the ground segment. At Avanti we own our own ground segment, delivering a fully diverse and secure ground network of Gateway Earth Stations in the UK, Germany, Turkey, Cyprus, South Africa and Nigeria, all connected by a private fiber ring-main. This ensures we can control and safeguard our customers' data traffic up to the point of hand-over into their secure networks.



A resilient ground network

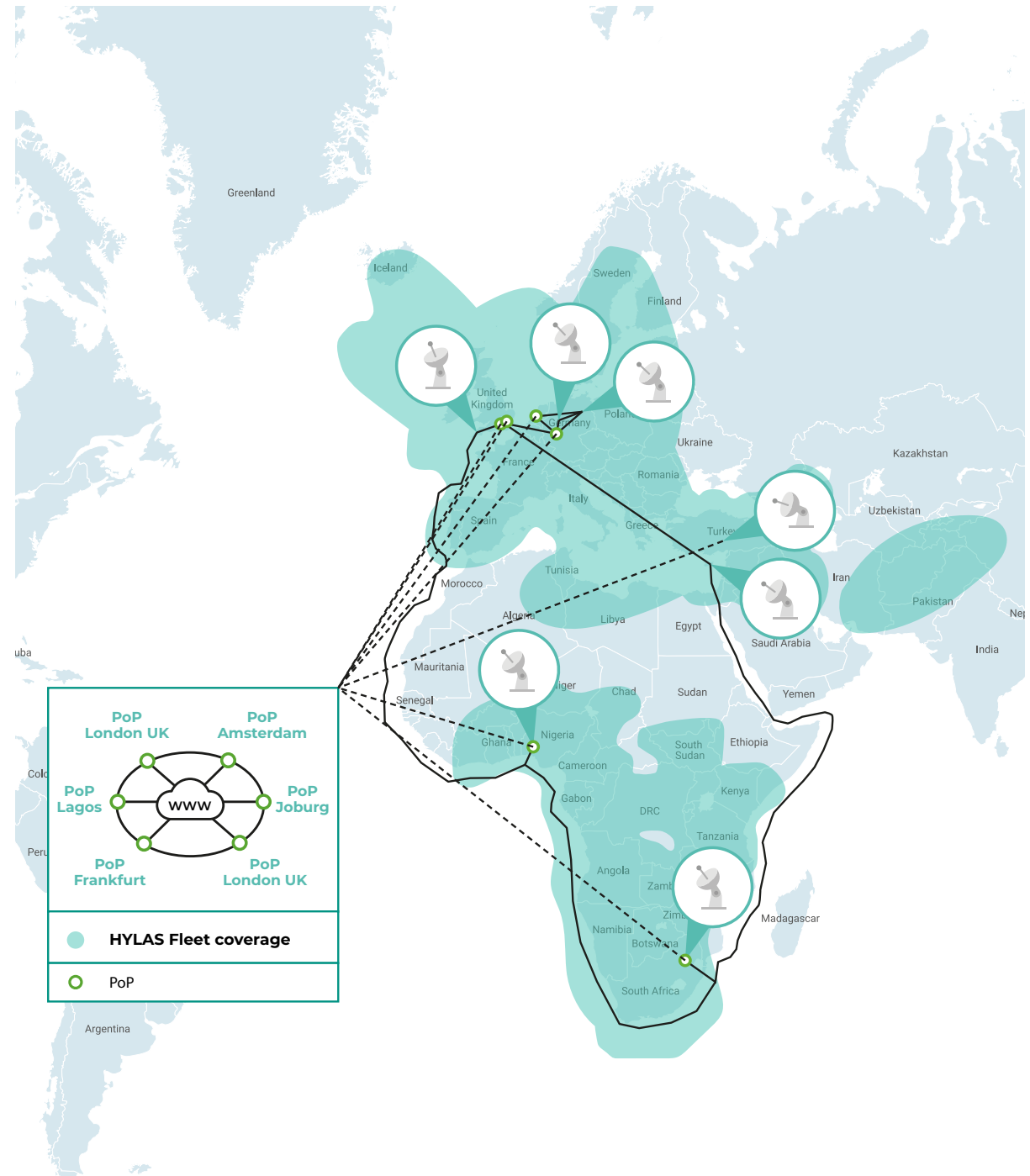
1 Fully operational and fully regulatory approved ground network

2 Interconnected via redundant fiber links

3 Fully authorized operations in Africa

4 Dual redundant antennas serving all satellites from geographically diverse ground stations

5 99.9% + SLA



A proven record of supporting Government operations

Avanti has delivered continuous, high capacity connectivity to Government operations since 2017. We have provided this to a wide range of military and government users, delivering a flexible portfolio of solutions tailored to the end users' specific requirements and ranging from pure space segment capacity to fully-managed end-to-end services.

Our high throughput Ka-band satellites are designed to deliver very large capacities. The power and focus of our beams also makes them particularly well suited to connect the very smallest satellite antennas. This makes Avanti's connectivity the perfect solution for early entry forces travelling quickly and lightly with very small man-portable terminals or for users seeking communications on the move.

Our connectivity supports genuine scalability, providing high capacity throughput to single users with a deployed back-pack terminal all the way to delivering Gbps backhaul on large fixed antennas for ISR backhaul. With Avanti, users can exploit the latest C4ISR tools and applications to gain information advantage.



Contingency or resilient connectivity for critical infrastructure and locations



Airborne ISR or en-route mission planning



Overt and covert communications on the move



Early entry units and expeditionary teams using low SWaP manpack terminals



Medium and large-scale headquarters operating at the Halt or Pause

Land and Maritime “satellite on the move” capability

In partnership with Airbus Defence and Space, GRC Ltd and Get SAT Ltd, we deliver high-speed, secure satcom-on-the-move connectivity to a UK MoD customer allowing users to access high-speed voice and data in some of the most challenging environments on the planet, using very small terminals that can be connected within minutes and easily moved between vehicles as required.

We help military forces enhance their operational capability by extending their information reach

Military forces trust us to provide fast, secure, satellite services that deliver reliable, affordable communications beyond the reach of traditional wired connections. In addition to delivering battle-proven solutions and capability today, we are also leading the way in helping Governments identify and deliver the solutions for tomorrow. Working closely with the leading providers of Satellite Communications on the Move terminals – for ground, maritime and air vehicles – we are pushing the boundaries on mobile connectivity. We are also leading or supporting R&D in: 5G from space, flexible modem interfaces, commercial SATCOM pooling and sharing, tactical RF communications over satellite and a host of other Government-focused applications.

Higher capacity

10 to 20 times more capacity than Ku satellites, and 5-10 times more capacity than other commercial operators on like-for-like terminals.

Interoperability

Widest range of in-use terminals accredited for use on Avanti network, and a rapid on-boarding process for new equipment certification.

Resilience

Overlapping matrix of fixed and steerable beams offering resilience and contingent capability through beam duplication.

Low SWaP dishes

High power, high efficiency beams generating the greatest capacity to the smallest terminals

Agility

Ability to stand up new operations in new beams in hours, not weeks

Sophisticated service offering

Flexible contracting geared to the tempo and nature of military operations (switch-on/switch-off; portability of airtime bundles between theatres; operational pauses, etc.)

Lower cost

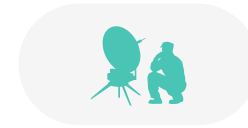
The most competitively priced military capability on the market due to efficiencies generated by use of tightly focused spot beams which concentrate power and spectrum re-use

We are transforming the way military forces use COMSATCOM and enhancing their C4ISR capabilities

Our fleet of high throughput satellites and state-of-the-art ground network provide fiber-like throughputs at a price point that is transforming the utilization of commercial SATCOM. Avanti's technology can provide military commanders with highly secure and resilient communication at a price that allows them to permanently stream data, without constraint or data caps, allowing users to exploit the latest C4ISR tools.



From manpack communications to maritime or land-based Comms-on-the-Move



From rapidly established communications on the pause to very high capacity fixed base backhaul requirements



From manned and unmanned airborne surveillance to covert vehicle mounted antennas



From strategic-level intelligence and data dissemination to morale, welfare & recreation



We help military and Government users win information advantage – in all theaters of operation

We have proven, enduring experience supporting special and early entry operators in some of the most arduous and critical operational theaters. Utilizing fixed beams with rapidly accessible coverage or steerable beams with secure, obfuscated steering control, Avanti's capacity and mode of operation has been designed around the military end users' specific needs.

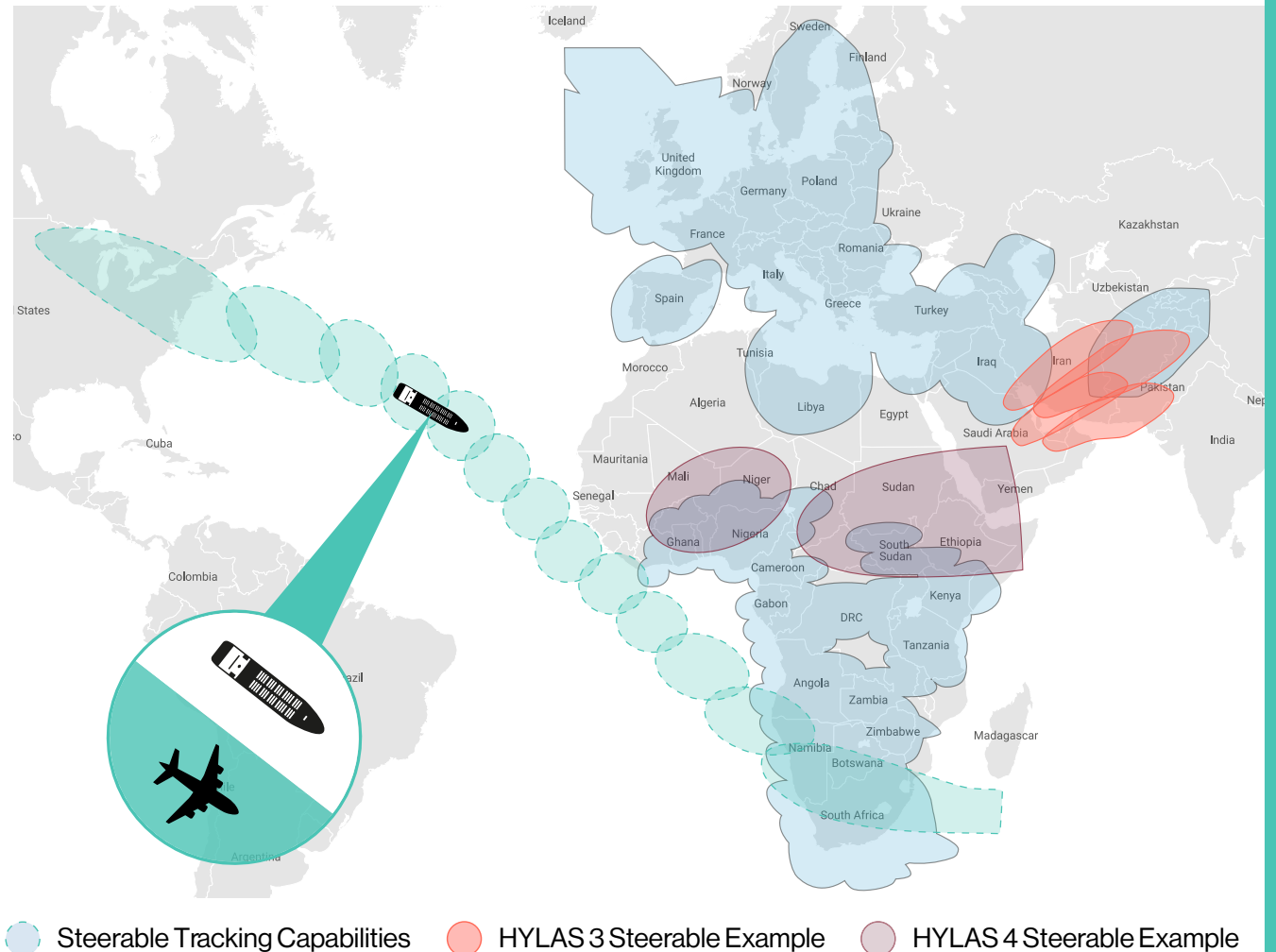
We provide high capacity, focused communication capabilities across Europe the Middle East and Africa. We are able to respond rapidly to emergent or contingent missions or provide resilience and enduring capability to more sustaining operations.

Our satellite capacity, capabilities and affordability is changing the way the military uses satellite communications. It gives warfighters and commanders the necessary bandwidth to access and share intelligence from anywhere, exploit the technology and tools at their fingertips and is helping them make better decisions faster.

By providing underpinning capacity and connectivity Avanti is helping to enable the realization of the US DoD's and NATO's digital transformation agendas, including Joint Domain Command and Control (JDAC2), Advanced Battlespace Management Systems (ABMS), Distributed Maritime Operations (DMO) and wider

programs for distributed, networked connectivity – on the move, on the pause and on the halt. With Avanti's connectivity military commanders

can enhance the processing and dissemination of intelligence and exploit the value of AI and Machine Learning to speed up decision making in the field.



We deliver resilience to critical infrastructure and connectivity in the wake of disasters

Drawing on the experience of supporting military forces, we have developed the skills and capabilities to assist non-military organizations who promote peace and security through soft power activities, such as peacekeepers, first responders and emergency services.

When disasters strike, lines of communication need to remain open. Satellite communication plays a crucial role in providing reliable and secure connectivity when and where it matters the most, for first responders, government bodies and health organizations.

Effective, well-organized and pre-prepared responses help mitigate the effects of disasters. Avanti's satellite systems provide secure, resilient and cost-effective connectivity in disaster situations, providing critical tools for emergency communications and situational awareness.

We can also support disaster recovery using our steerable beams. At very short notice we were able to move one of our beams over Mozambique to provide vital connectivity for rescuers when Cyclone Idai hit the country in March 2019.

How we've supported Niger's government response to COVID-19

Using HYLAS 4 capacity, Avanti has provided resilient and secure satellite connectivity and equipment to 10 government sites across Niger, keeping lines of communication open for key government bodies. We are collaborating with the National Agency of Information Society (ANSI), the technical arm of the government of Niger responsible for coordinating ICT solutions in the Covid-19 response in Niger.



We make it easy for Government users to get access to our satellite capacity

We have established partnerships with a wide range of integrators and operators who have direct contractual frameworks with Governments to provide capacity and capability across EMEA.

We have the fastest process of new terminal accreditation and on-boarding in the industry, ensuring customers and end-users can bring their own devices into the Avanti network quickly and effectively, whilst meeting all international regulatory obligations.



Our partnership with those who serve goes beyond the frontline

We understand that Government and national service are more than a job. We value the sacrifices that military and emergency service personnel make and we recognize the skills and contribution they can offer outside of Government service. We are a corporate partner of the military charity, Walking With the Wounded and are proud to support their aim of ensuring disadvantaged veterans who have served in the Armed Forces and their families are empowered, to regain their independence, thrive and contribute to our communities.

“As a company that works closely with governments and peacekeeping forces around the world, we are keen to show our thanks and respect for those who put themselves on the frontline to protect others. Walking With The Wounded is a fantastic charity that highlights the resilience and strength of the men and women who have been wounded at war.”

Kyle Whitehill, CEO, Avanti Communications





Be More.

www.avantiplc.com