



## Press release

# **Isotropic Systems and SES GS Complete Milestone Trials to Unlock Next-Gen Connectivity for U.S. Military**

*Successful multi-beam, over-the-air tests in the UK and US advance multi-beam antenna development*

London / Reston, VA, 3 June 2021 – SES Government Solutions (SES GS), a wholly-owned subsidiary of SES, and Isotropic Systems, a leading developer of transformational broadband terminal technologies, announce the successful completion of the first of two milestone next-generation antenna trials with the U.S. Military aimed at unleashing unprecedented information distribution to warfighters across the battlefield.

The U.S. Air Force and U.S. Army, through the innovative Defense Experimentation Using Commercial Space Internet (DEUCSI) program, are evaluating the ability of Isotropic Systems' optical beamforming antenna to enable frontline armed forces to access high-speed, real-time data simultaneously over multiple commercial and military satellites.

First phase dual-beam tests conducted at the Harwell Science, Technology and Innovation Campus near Oxford, UK, have successfully demonstrated transformational optics at the core of Isotropic Systems' multi-beam terminal that are fully capable of linking with multiple satellites at the same time.

Over-the-air (OTA) trials conducted at an SES teleport in Port St. Lucie, Florida, also part of phase one, have verified the Isotropic Systems' high-performance multi-beam platform meets military requirements to acquire and track SES' O3b MEO satellites.

Phase two trials will test Isotropic Systems' latest antenna prototype over links with SES satellites in geostationary orbit (GEO) and medium earth orbit (MEO), demonstrating seamless satellite-to-satellite transitions and a redundant, resilient leap in wartime communications.

The DEUCSI trials will wrap up in 2021, ahead of the commercial launch of Isotropic Systems' optical multi-beam antenna production scheduled for 2022, and in time to support SES' new high-throughput MEO constellation satellites coming online, the groundbreaking O3b mPOWER system.

"The armed forces and defense agencies are incredibly good at acquiring actionable information, but they run into bottlenecks when they try to distribute that mission-critical data over single beam parabolic antennas and other outdated infrastructure," said Scott Sprague, Isotropic Systems CCO. "These milestone trials with the U.S. Army and Air Force are successfully demonstrating the multi-beam, multi-orbit connectivity and capabilities our high-performance terminals will put in



the hands of frontline warfighters and decision makers across the government sector and battlespace.”

“Next-gen satellites and constellations need equally robust and resilient terminals and ground infrastructure to meet the government’s ‘Fighting SATCOM’ vision,” said Pete Hoene, President and CEO of SES Government Solutions, Brigadier General, USAF (Ret.). “Interoperability and multi-orbit capabilities are essential to achieving this vision, and these collaborative trials with the armed forces demonstrate how Isotropic Systems’ multi-beam antenna can successfully deliver robust connectivity across our vast MEO and GEO fleet. Each successful phase is a prime example of how the government and commercial partners can develop capabilities in parallel, which is especially important to us as we ready to launch our O3b mPOWER constellation and SES-17 satellite this year.

“Without affecting the main communications link, the Isotropic Systems multi-beam terminal can use a second or third link to evaluate the environment to preemptively decide the best routing option at any given time to maximize performance,” explained Brian Billman, Vice President of Product Management for Isotropic Systems. “That’s the level of differentiating capabilities our terminal roadmap leads to as a result of these important trials with the U.S. military.”

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**About SES Government Solutions**

SES Government Solutions (SES GS) is a wholly-owned subsidiary of SES, the leader in global content connectivity solutions. SES GS operates under a proxy board allowing them to provide services through contracts with the U.S. Government, including classified work. SES GS is exclusively focused on meeting the satellite communications needs of the U.S. Government. Leveraging more than four decades of experience in the government SATCOM market, SES GS offers robust and secure end-to-end satellite communications solutions. Further information can be found at [www.ses-gs.com](http://www.ses-gs.com).



## **About SES**

SES has a bold vision to deliver amazing experiences everywhere on earth by distributing the highest quality video content and providing seamless connectivity around the world. As the leader in global content connectivity solutions, SES operates the world's only multi-orbit constellation of satellites with the unique combination of global coverage and high performance, including the commercially-proven, low-latency Medium Earth Orbit O3b system. By leveraging a vast and intelligent, cloud-enabled network, SES is able to deliver high-quality connectivity solutions anywhere on land, at sea or in the air, and is a trusted partner to the world's leading telecommunications companies, mobile network operators, governments, connectivity and cloud service providers, broadcasters, video platform operators and content owners. SES's video network carries over 8,200 channels and has an unparalleled reach of 361 million households, delivering managed media services for both linear and non-linear content. The company is listed on Paris and Luxembourg stock exchanges (Ticker: SESG). Further information is available at: [www.ses.com](http://www.ses.com).

## **About Isotropic Systems**

Isotropic Systems is developing the world's first multi-service, high-bandwidth, low power, fully integrated high throughput terminals designed to support the satellite industry to 'reach beyond' traditional markets and acquire new customers with a full suite of high throughput services. The company's team of industry experts and scientists has pioneered several firsts in satellite terminal design resulting in a line of terminals that are customizable to meet the performance, cost and power requirements of countless applications – from the most complex government defense systems and mobile backhaul solutions capable of extending 5G, to next-gen connected experiences aboard commercial airliners, cruise ships, offshore rigs, and even small fishing boats at sea. Isotropic Systems' Series A funding was led by Boeing to advance space-based connectivity. Further information is available at [www.isotropicsystems.com](http://www.isotropicsystems.com).