

## ENHANCED SHORT BURST DATA (ESBD) SERVICE

Improved, secure messaging solution using the United States Space Force (USSF) Enhanced Mobile Satellite Service (EMSS)

There are few situations with more on the line than warfighters needing secure communication on the battlefield. L3Harris' brings end-to-end security and increased performance to address this need with ESBD service, providing efficient, low latency, on-demand, secure two-way messaging. The expanded capabilities include the benefits of the Short Burst Data (SBD) service.



Developed to provide improved communications agility to our government customers, ESBD offers increased security, twice the speed, double the capacity and improved reliability compared to the legacy SBD service.

This global service delivers secure oneway or two-way messaging in near realtime while providing improved payload size, reliability and resiliency with even greater capacity and operational capability than traditional SBD. Payload and device metadata are Advanced Encryption Standard 256-bit (AES-256) encrypted using short-life ephemeral session keys that provide high-level data protection, an extremely low attack surface and attack prevention. Device identifiers are obfuscated to provide device anonymity.

In addition, transfer rates are increased, resulting in lower time on air for any mission with payload greater than 70 bytes, reducing the likelihood of interception.





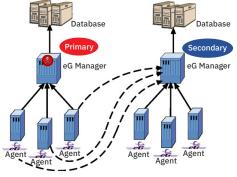
## **KEY BENEFITS**

- > Provides secure two-way messaging for high-level data protection
- Delivers end-to-end security for critical communications
- > Offers increased speeds of up to 2,000 bits per second, which means less airtime, power, and reduced RF footprint
- Built-in recovery for continuation of data transfer and higher success rates over traditional SBD



L3Harris has a long, successful history partnering with Defence Information Systems Agency (DISA) and EMSS to support the warfighter and larger DoD communities. Having introduced the legacy SBD service in 2003, L3Harris continues to improve upon this service leading to the development and deployment of the ESBD service in 2019.

Provides global, on-demand, two-way messaging with near real-time delivery





High Availability

**Capacity Expansion** 

COMPARISONS		
Short Burst Data (SBD)	Enhanced Short Burst Data (ESBD)	Benefits
All information in the clear	Critical information/obfuscated or encrypted	End-to-end security of information transfer
1,000 bps/half duplex	2,000 bps/full duplex	Less time on air, less power, reduced RF footprint
2 KB payload size	Up to 65 KB	Supports more applications
No partial transmissions	Built-in recovery and continuation of data transfer	Higher success rate, reduced RF footprint, less time on-air, less power



## Enhanced Short Burst Data (ESBD) Service

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## Nonexport-controlled Information

L3Harris Technologies is the Trusted Disruptor in the defense industry. With customers' mission-critical needs always in mind, our 50,000 employees deliver end-to-end technology solutions connecting the space, air, land, sea and cyber domains in the interest of national security.



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