Hughes and Boost Mobile Demonstrate Automated, Multi-Transport Network Management for Resiliency at the Tactical Edge

From Hughes Network Systems, Aug. 27, 2024

Standalone 5G Network with enterprise management and control ensure Primary Alternate Contingency Emergency (PACE) planning for warfighter communications

GERMANTOWN, Md., Aug, 27, 2024 –Hughes Network Systems and Boost Mobile, EchoStar (Nasdaq: SATS) companies, successfully demonstrated optimized, multi-transport network management for the U.S. Navy. The demonstration, which took place earlier this year, tested remote network orchestration, wide area network (WAN) resiliency, and secure Radio Access Network (RAN) sharing between standalone Private 5G networks operating at the U.S. Navy Air Station, Whidbey Island, Washington, and a base in Hawaii.

Hughes collaborated with Boost Mobile, both of which are part of the EchoStar family of companies. Boost Mobile's innovative Open-RAN-based 5G networking technologies for US-wide public network deployment experience provided a rich heritage for the standalone, secure 5G networks on each base. In addition, Hughes implemented its intelligent network orchestration capabilities, Smart Network Edge (SNE) mission-planning technology, and Network Management System (NMS). Together, these technologies maintained communications in contested and congested environments.

"The combined team successfully demonstrated a flexible and

resilient mission network that dynamically switched communications paths to ensure uninterrupted situational awareness," said Dr. Rajeev Gopal, vice president of Advanced Programs for the Defense Division at Hughes. "We are ready to implement smart network orchestration and secure Private 5G networks, for the U.S. Department of Defense to ensure that users have critical command and control information when they need it most, even in disrupted, occasionally disconnected, and low-bandwidth conditions."

The network supported Automated PACE planning, leveraging the powerful Hughes NMS and SNE technologies that dynamically utilize multiple transport paths to deliver situational awareness. These advanced automation techniques optimize capacity, QoS, and various time/space-based resource commitments to speed up changes and access to SATCOM resources. With command-in-the-loop, the Hughes technology can process new service requests in less than 5 seconds to accommodate new threats in the theatre and automatically distribute information across paths orchestrated by Hughes SNE. The NMS and SNE are critical enablers for state-of-the-art resilient communications utilizing multiple diverse transports, including GEO, MEO, LEO, and 5G systems.

The demonstration confirmed that the EchoStar Private 5G ORAN network can maintain secure connectivity for devices and applications when users travel outside the naval base. This capability supports a concept of operations where a device running on the Whidbey Island NAS 5G network can travel to another location and still securely access applications that reside at Whidbey Island. The Navy can use this secure internet access for missions requiring a user to relocate from one base to another.