



Polaris Networks NetEPC delivers improved situational awareness to Coast Guard command and control

San Jose, California, Dec 19, 2016 – The Department of Homeland Security (DHS) Office for Interoperability Compatibility (OIC) supported by the National Institute of Standards and Technology Public Safety Communications Research Division (PSCR, based in Boulder, Colorado) successfully used the Polaris Networks NetEPC to demonstrate a public safety-centric communication system which delivers improved situational awareness to the Coast Guard and enhances its ability to respond to and manage off-shore emergencies. Polaris Networks has been working as a PSCR partner under a Cooperative Research and Development Agreement (CRADA) since 2013.

The primary objective of the DHS Component Communications Experiment was to demonstrate the ability to provide a commercially available, fully interoperable, Joint Interoperability Test Command (JTIC)-compliant, communications system allowing voice, data and video interoperability between local, state and federal first responder elements to include at least three (3) different components of DHS in accordance with Public Law 114-120, United States Coast Guard (USCG) Authorization Act of 2015. The secondary objective was to demonstrate the integration of other developmental equipment utilizing the pilot communications network to show additional capability across the multimedia spectrum. The exercise highlighted how the effectiveness of a U.S. Coast Guard search-and-seizure operation could be augmented by live voice and video from the location of the incident (on the water) back to the command and control center in Washington, DC in real time.

In this experiment, an LTE Band Class 14 / Wi-Fi Router in a boat provided network connectivity to a number of terminals in surrounding boats. These terminals included air-borne drones, streaming video cameras and other commercial Wi-Fi and LTE devices. A Band Class 14 macro eNodeB and the NetEPC were co-located onshore on a system-on-wheels. The EPC was connected to the Internet via satellite backhaul.

This network was evaluated over multiple days with the exercise taking place on the final day. The applications tested included push-to-talk voice, video and some amount of messaging.

This experiment was beneficial to the DHS Component agencies and other participants by showing how the leverage of emerging public safety communications technology can improve overall communications and situational awareness, and how gaps in network coverage during offshore operations can be eliminated using deployable network equipment, like the Polaris NetEPC.

The Polaris Networks NetEPC combines the MME, SGW, PGW, HSS and PCRF into a single platform, thereby providing all of the core network elements required for LTE deployment. The NetEPC is available on portable hardware platforms, and can be scaled to meet subscriber loads of varying sizes. The NetEPC can also be deployed as a Virtual Network Function (VNF) in a cloud.

About Polaris Networks

Polaris Networks is a global solutions provider for LTE communication networks, offering a wide range of test tools for lab use as well as Evolved Packet Core (EPC) solutions for deployment in private and public LTE networks. The LTE solutions from Polaris Networks are actively used by Network Equipment Manufacturers, Telecom Service Providers, and Test Labs across several countries. The company is headquartered in San Jose, CA, USA and has two R&D centres in Kolkata, India. To learn more about Polaris Networks, visit www.polarisnetworks.net.