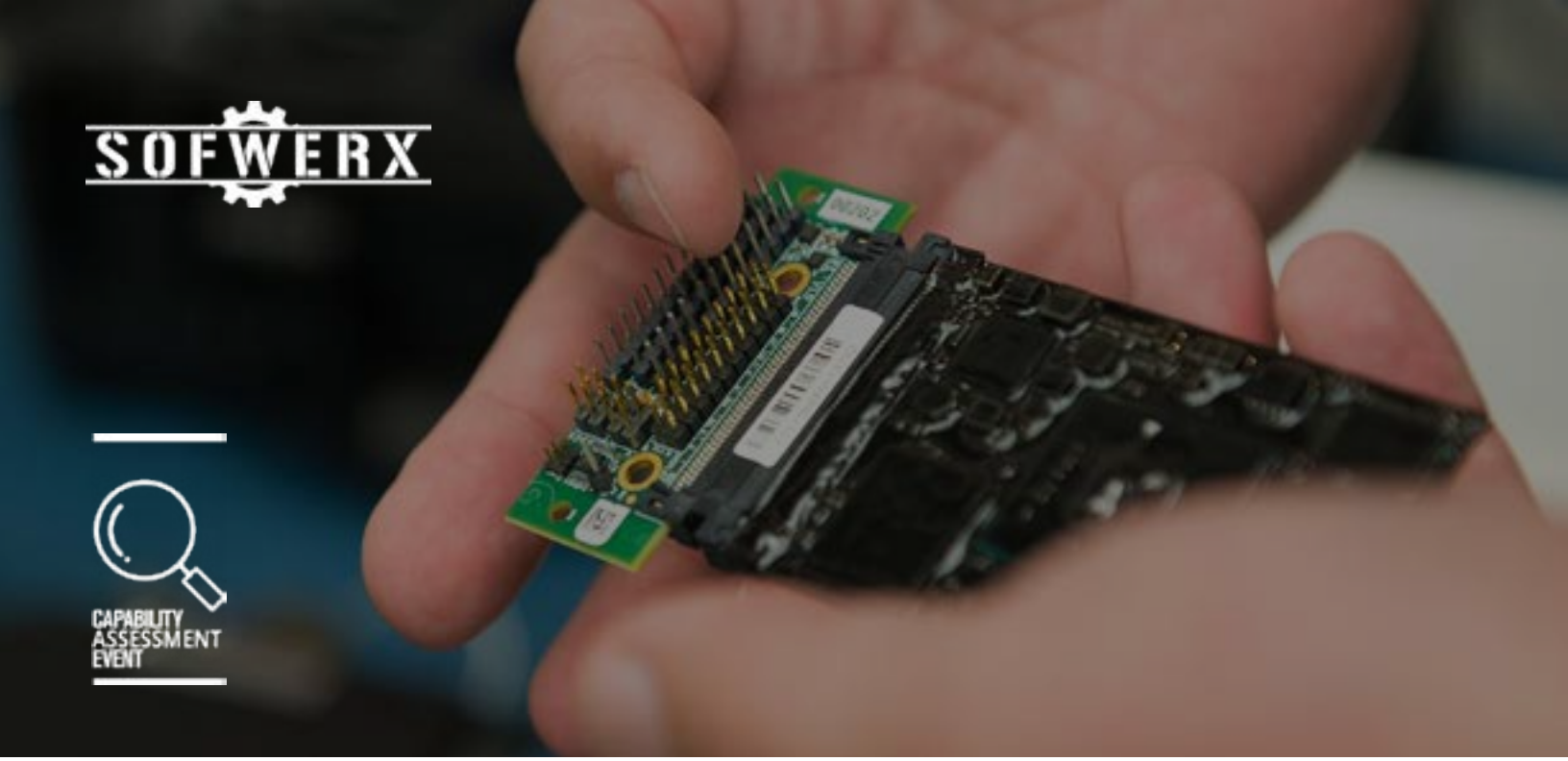

5G Capabilities Assessment Event (CAE)

3-4 April 2018

SOFWERX hosted a CAE, in collaboration with SOF AT&L PEO-C4, to learn, discuss, and collaborate the topic of 5th Generation (5G) wireless technology. The focus of the topics included:

- Advanced Heterogeneous Networks (HETNET) architecture and systems 3G, 4G, 5G, Wi-Fi combined, and Tactical Radio (SHF/VHF/UHF/HF/MANET)
- Millimeter Wave Technology
- Citizen Broadband Radio Service (CBRS) architectures/systems
- Advanced Antenna Solutions for efficient connectivity at high wireless bandwidth (>800Mbps) with benefits in RF congested or contested environments
- Military Internet of Things/Secure Machine to Machine
- Next Generation end-user devices planned, developed, or available
- Multi-Access Edge Computing (MEC) and application development
- Network, baseband, and radio access virtualization focused in network densification
- Network slicing architectures and systems focused on 5G bandwidths and scale
- Vehicle-to-Infrastructure (V2I) architectures and systems

Event Outcomes

There were a total of 45 proposals, 18 of which were presented to 44 government stakeholders from Federal Government organizations and the Department of Defense.

The discussions and collaborations involved market leaders in communication systems from infrastructure, wireless and satellite systems to enterprise-wide service providers. 5G is introducing a new spectrum environment in the millimeter wave range technology which could have tremendous advantages to Special Operations Forces Command, Control, Communications, and Computers (C4).

The advantages from increased bandwidth and very low latency combined with mobile edge computing could transfer the information and situational awareness to the warfighter exponentially. The SOF team has initially assessed 3 opportunities for future technology roadmaps and will use the information gathered during the event to shape the next generation communications capability for the future.