



Call for Proposals: 2020 Workshop on 5G Technologies for Tactical and First Responder Networks

Workshop proposals are being accepted for the 3rd Annual Workshop on 5G Technologies for Tactical and First Responder Networks,” hosted by IEEE, in collaboration with the Johns Hopkins University Applied Physics Laboratory (APL) and the Department of Homeland Security’s Science and Technology Directorate (DHS S&T).

The event will take place Oct. 23. The deadline for workshop proposals is Aug. 1; and acceptance notifications will be distributed no later than Aug. 25.

5G is not just the next evolution of 4G technology; it’s a paradigm shift. It is expected to enable fundamentally new applications — with much more stringent requirements in latency and bandwidth — and provide resiliency and flexibility to the underlying network. Several standards organizations and forums, namely IEEE, the 3rd Generation Partnership Project, and the International Telecommunication Union, are working on defining the architecture and standardizing aspects of 5G technologies. However, few organizations are focusing on how such technologies can be useful to tactical and first responder networks.

This workshop will explore the applicability of 5G technologies for tactical and first responder networks, offer solutions, share use cases, and investigate research opportunities and challenges. The event will also provide an opportunity for 5G experts from industry, academia, standards, regulatory, homeland security, public safety and department of defense communities to collaborate.

Each proposal should be no more than two pages, and must include:

- A title and abstract
- A Specific track: Technology, First Responder Network, Tactical Networks, or Research (see descriptions on next page)
- A biography of no more than 200 words of each speaker
- An explanation of the motivation, background, objective, description of the challenges to be covered, relevance, and timeliness

The proposal will be reviewed based on its relevance, the topic’s importance to the workshop, and the diversity it offers in terms of the problem, proposed solution, and evaluation approach.



Track Descriptions:

Technology: Covering 5G and beyond technologies currently available to solve challenges associated with first responder and tactical networks. The technologies could cover a wide variety, but are not limited to 5G hardware, millimeter wave (mmW) communication, 5G network security, massive multiple input multiple output (MIMO) antenna technology, non-terrestrial architectures and supporting hardware/software, optics, new radio (NR), edge cloud computing, core network architecture and management, network slicing, and 5G applications and services.

First Responder Networks: Covering use cases and solutions applicable to First Responder community, including case studies that illustrate the gaps in current technologies and how 5G can augment operational capabilities. Solutions could also include various integrated systems, platforms, frameworks, and testbeds that can provide the desired features, functionalities, and service level agreements (SLAs) to meet the needs of the first responders including fire rescue services, law enforcement, emergency management, emergency medical service and other public safety entities.

Tactical Networks: Covering use cases and solutions applicable to Tactical Networks, including case studies of real life scenarios that illustrate the gaps in current technologies and how 5G can augment the capabilities. Solutions could include various integrated systems, platforms, frameworks, and testbeds that can provide the desired features, functionalities, and service level agreements (SLAs) to meet the needs of the tactical networks such as Army, Air Force or Navy type networks. Proposals could also include results from initial deployments and trials.

Research: Covering new development in technologies, novel solutions, ongoing research, and prototypes that look well beyond three-, five- and 10-year horizons. Talks could cover fundamental research on technologies beyond 5G, results from initial experimentation, proof-of-concept, field tests, and systems optimization.

Proposals should be submitted via [EDAS](#). Login to your account, or create one at [edas.info](#).

Additional information about the 5G workshop is available [here](#).