

Statement Of Applicant Eligibility per Part 5 subpart E of Commission Rules

Perspecta Labs (<https://www.perspectalabs.com/>) is a division of Perspecta Engineering, Inc. Perspecta Labs is a leading provider of transformative applied research and engineering services across federal, defense and commercial sectors worldwide. Supported by independent research, academic and industry partnerships, and more than 60 government-funded research and technology programs, Perspecta Labs provides advanced cyber, mobility, quantum and information analytics capabilities that revolutionize solutions to our clients' most challenging problems. Perspecta Labs has:

- Long-standing collaborations with leading researchers at elite universities such as Princeton, Massachusetts Institute of Technology, George Washington University, Yale, Rutgers, Purdue, Texas A&M and the University of Pennsylvania
- Extensive industry partnerships serving clients within civilian agencies such as the Department of Energy, Department of Homeland Security, Security and Exchange Commission, Federal Communications Commission; and a broad spectrum of commercial clients in utilities, energy, financial and electronics sectors

Perspecta Labs is comprised of a distinguished technical staff where:

- 50 percent hold PhD's and 39 percent hold other advanced degrees
- More than 48 percent are patent inventors being named as sole or co-inventors on more than 460 patents across software, security, data analytics, network management, operations, optical and wireless technologies
- 74 percent have government clearances

(a) All radiofrequency experimentation will be conducted in the Perspecta Labs facility in Red Bank, New Jersey and in the adjacent parking area.

(b,c) The driving force behind Perspecta Labs' wireless research and development activities is efficiency—maximizing use of physical and link layer network resources, particularly the electromagnetic spectrum. Current wireless research and development activities at Perspecta Labs include:

- The development of innovative, distributed and line-of-sight multiple-input and multiple-output (MIMO) techniques, with applications to airborne tactical links in the millimeter-wave spectrum, high-bandwidth squad-to-squad communications and high-capacity backhaul solutions for commercial networks.
- Support for the deployment of commercial wireless networking technologies (4G/LTE) in the tactical battlefield environment and enhancing those technologies to support unique military requirements in the areas of security, multicast, seamless handoff and infrastructure-less capabilities.
- Support for the Multi-Access Cellular Extension (MACE) program under the direction of CERDEC, the Army's Communications-Electronics Research, Development and Engineering Center. MACE is a primary component in the U.S. Army's drive to harness

commercial 4G/WiFi and smartphone technologies to the rapidly evolving needs of dispersed and mobile war fighters.

- The development of low power tactical communications (LPTC) technology which reduces battery power consumption of handheld and soldier man-pack radios. Specifically, Perspecta Labs has developed solutions for reducing power consumption in the widely-used Soldier Radio Waveform (SRW). This solution includes the ability to create and maintain a low-power topology based on mission objectives and constraints using Perspecta Labs distributed Power-aware Topology Control (PTC) algorithms, to reduce ‘chattiness’ of the SRW and to selectively power down components when no over-the-air communications is active.
- The development of new technology for true air gap monitoring and detection of malicious behavior of embedded Internet of Things (IoT) devices. Using machine learning and binary program analysis on radio frequency, acoustic, and power signatures, this technology can determine if a system is operating normally or under attack

Perspecta Labs supports its U.S. government customers to obtain National Security Agency (NSA) approval for safely using wireless networks to handle classified communication on commodity hardware and for protecting its data at rest. Perspecta Labs has successfully integrated and registered multiple Trusted integrator for Commercial Solutions for Classified (CSfC) solutions compliant with the mobility access capability package and the campus WLAN capability. Perspecta Labs is an NSA-designated and proven CSfC trusted integrator since 2015.

Perspecta Labs is bringing the following next-generation products to market:

- The SecureSense product provides affordable, near-real-time intelligence to monitor spectrum usage, rapidly identify unexpected emitters and efficiently support mission needs. SecureSense delivers unparalleled insight and protection of the radio frequency (RF) spectrum at the place, time and frequencies of interest. SecureSense leverages Perspecta Labs’ leading-edge sensor technology, high-reliability management system, novel signal processing techniques and innovative data analytics capabilities to achieve more accurate spectrum situational awareness at lower cost and in the most demanding environments.
- Perspecta Labs’ spectrum usage and management system (SUMS) provides rigorous, validated metrics and in-depth analytics to quantify and visualize radio frequency (RF) spectrum usage. SUMS harnesses Perspecta Labs’ SecureSense RF spectrum sensing solution and its state-of-the-art big data analytics platform. Featuring multiple data and system interfaces, a flexible and virtualized server design, and customizable analyses and reports, SUMS can be deployed to accurately characterize spectrum usage in any environment, including Department of Defense (DoD) training centers and test and evaluation facilities.
- Perspecta Labs’ Velocite product is a ground-breaking solution which enables use of commercial 4G long-term evolution (LTE) cellular technology at well beyond Mach 1 speeds to meet the challenging operational requirements of Aeronautical Mobile Telemetry (AMT). AMT provides data communications for performance evaluation and safety assurance during testing of manned and unmanned aircraft. Velocite is a vendor-agnostic and high-bandwidth solution that enables multiple simultaneous test missions to be conducted over commercial equipment at considerable savings in both cost and time.