

S²MARTS “Coming Soon” Opportunity (22-02)

Task Area 3-Dynamic Spectrum Management @ BG5 Tactical Edge

The Department of the Navy (DoN) is seeking prototype support in the area of Innovate Beyond 5G (IB5G) programing.

Fifth-generation wireless networking technologies (5G) are of fundamental strategic importance to United States (US) economic well-being and consequently, global leadership. 5G promises an order of magnitude in improvements for traditional network metrics (peak and average data rates/throughput) relative to its predecessor via Enhanced Mobile Broadband (eMBB) services that constitute the present driver of commercial 5G offerings. The DoN programming seeks to support ideation, design, prototyping, and integration of novel Beyond 5G network concepts and components, leading to demonstration of new capabilities that will allow U.S. Department of Defense (DoD) operations to integrate with the future 5G networked operations.

This effort seeks to focus on design, evaluation, and prototyping of Dynamic Spectrum Management (DSM) systems that address DoD Tactical Network (TacNeT) operations in the presence of 5G network infrastructure.

With federally allocated spectrum in the mid-band (3 GHz) being explored for potential sharing with commercial 5G systems, effective new solutions for DSM are a priority for the DoD. Future approaches to dynamic access will exploit the flexibility offered by 5G systems to explore how sharing approaches between co-primary (Federal/non-Federal) systems may be liberated from its major constraint - need for significant pre-planning and general lack of desired agility to deal with dynamically changing scenarios and Electronic Warfare (EW), so as to demonstrate success at operational tempo.

The IB5G Other Transaction Authority (OTA) prototype project is anticipated to be released and to be executed in three (3) phases, each of 12-month periods of performance.