5G Smart Warehouse Naval Base San Diego (NBSD)

19 February 2020
Project Overview

Objective: Develop a 5G (NR)-enabled Smart Warehouse to

- Increase the efficiency and fidelity of NAVSUP FLCSD logistic operations, including the identification, recording, organization, storage, retrieval, and transportation of materiel and supplies.
- Create a proving ground for testing, refining, and validating emerging 5G (NR)-enabled technologies.

Approach: Government Assessment and Engineering Team shall

- Support implementation of the technology and execution of the experiments for the 5G smart warehouse.
- Perform Test & Evaluation of the proposed technologies for the 5G smart warehouse.
- Ensure the deployed 5G technology and smart warehouse features meet Navy and OUSD expectations.

Measure of Success:

- Integration of a 5G network testbed, 5G network architecture enhancements, and 5G-enabled technologies that improve the efficiency, accuracy, security, and safety of materiel and supply handling, management, storage, and distribution.
Project Activities – Rapid Prototypes

▼ 5G Network Test Beds (RAN, Connectivity, Core)
   ▪ Design an end-to-end 5G mobile cellular network

▼ 5G Network Enhancements – Utilization of 5G network attributes (e.g. network slicing, security, Open 5G implementations, etc.)
   ▪ Employ & test advanced 5G features to directly enable or enhance sharing or coexistence

▼ 5G Technologies
   ▪ Design (initial and iterative), test and implement desired application technologies and systems utilizing the basic 5G environment
   ▪ There are priority applications and use cases listed in the RPP to create a Smart Warehouse Solution