CPO 86 Botts – Rapid Defense Experimentation Reserve (RDER)

Project Summary

SOFWERX, in partnership with United States Special Operations Command (USSOCOM) Program Executive Office – SOF Digital Applications (PEO-SDA), awarded an agreement to Botts Innovative Research, LLC. to utilize an open source, open standards framework to provide USSOCOM and partner nations with interoperability by integrating all identified sensors, things, robots, control systems, devices and platforms into a 4D framework using the Open Geospatial Consortium's (www.OGC.org) OGC API - Connected Systems Standard (OGC CSAPI).

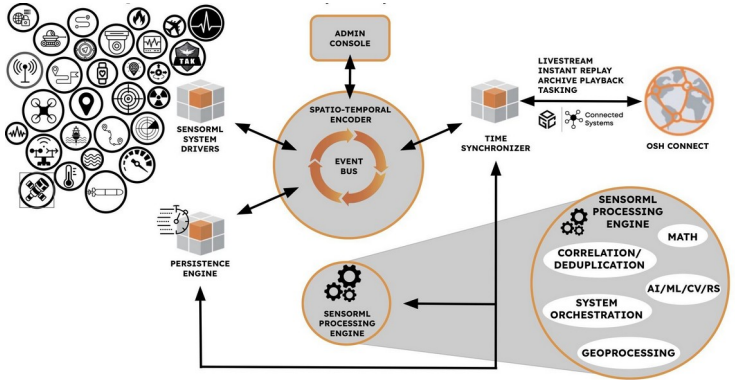
Project Timeline

Project Kickoff: 16 January 2025
Delivery of Final Report: 30 September 2026
Project Closeout and Final Invoicing:
30 October 2026



Resources Consumed

Total Cost: $9,600,000



Project Results

Botts Innovative Research successfully demonstrated architectural features to include: 10+ sensor systems from multiple vendors, interoperating in a MOSA based on OGC API - Connected Systems Standard (OGC CSAPI), a Rapid Deployability Kit (RDK) of OSH/OGC CSAPI enabled sensors with complex collaborative autonomy workflows, 3+ federated OSH Nodes (bi-directional Data Streams and Control Streams), integration of multiple nation-wide sensor networks via OSH/OGC CSAPI, spatio-temporal archiving of the exercise/operation for instant replay and after-action Reporting, across all federated OSH nodes. The estimated TRL maturation went from a TRL6 to a TRL9.