



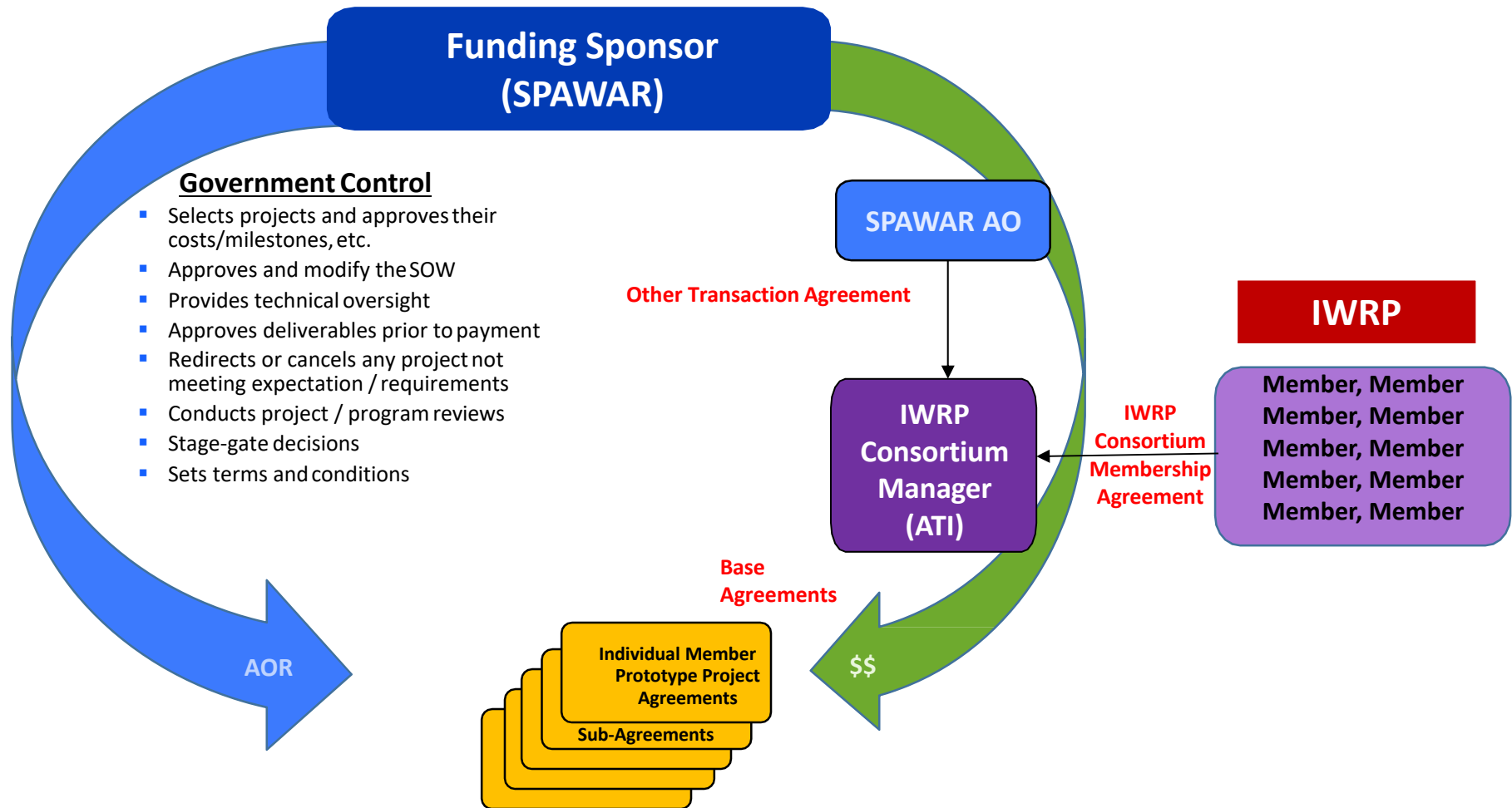
Project Solicitation & Proposal Submission Process



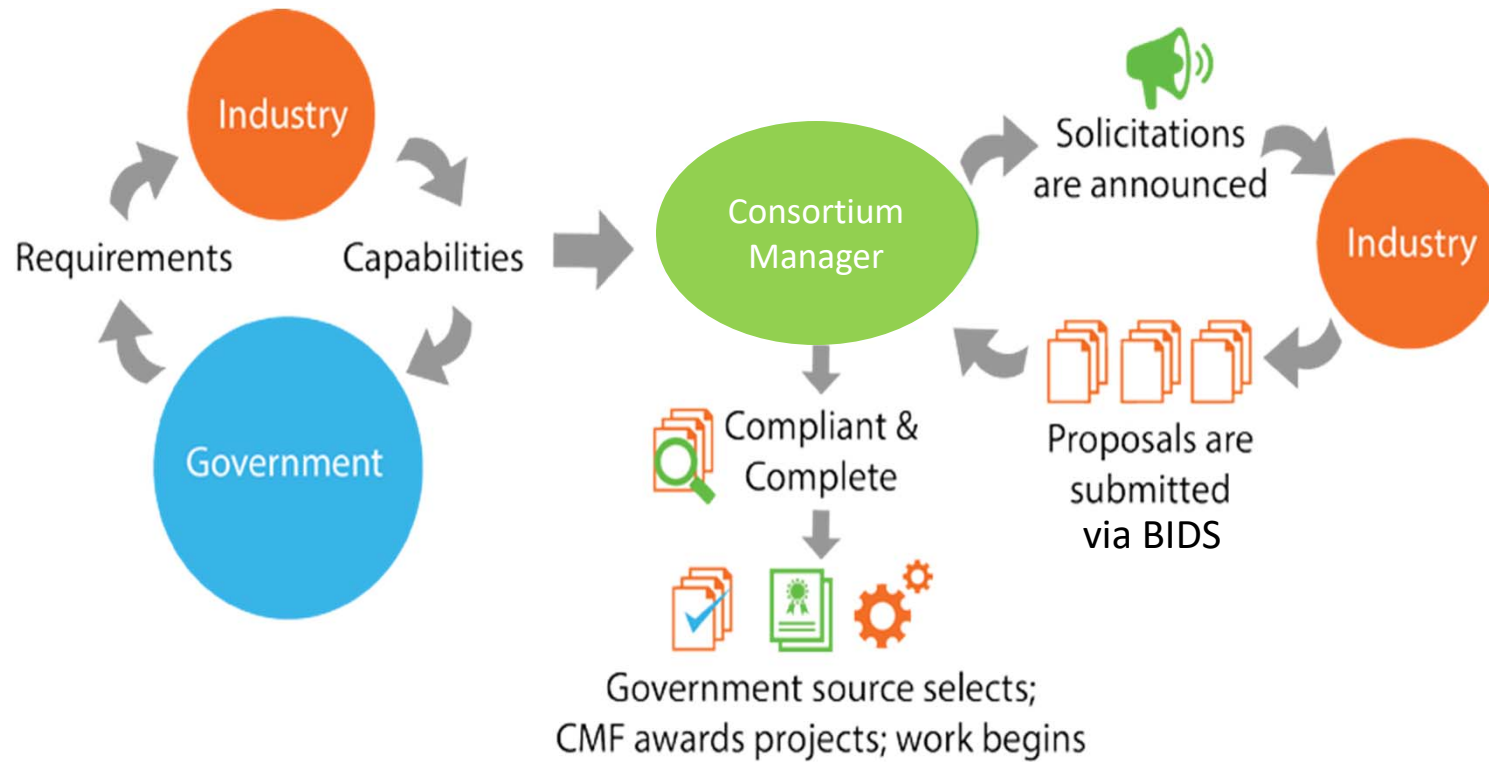
Terminology

- OTA – Other Transaction Agreement
- CM – Consortium Manager
- AO – Agreements Officer
- AOR – Agreement Officer Representative
- RPP – Request for Prototype Projects
- PPA – Prototype Project Agreement

Relationship of Parties



Process Overview



Solicitations and Proposal Process



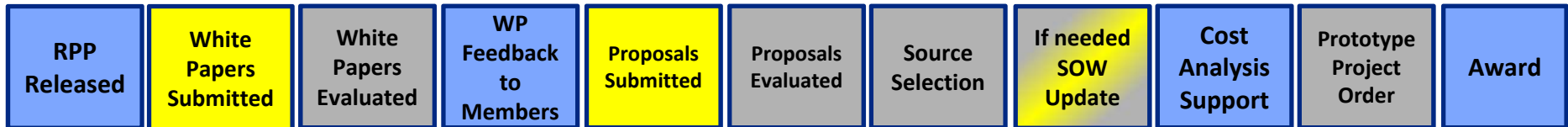
- Requests for Prototype Projects (RPPs)
 - Government defines requirements
 - RPPs contain 1 or more topics
 - Each topic details its technical requirements
 - Each topic will indicate submission of Proposals only or White Papers then Proposals (or other path)
 - The RPP contains proposal prep instructions
- Proposers Conference
 - ATI offers webinar to address proposal prep
- Submission
 - Submissions via secure upload to ATI for compliance screening
 - ATI distributes submissions to government for source selection

Selection, Negotiation, Award

- Selection
 - Gov't finalizes selection, notifies ATI
 - ATI notifies offerors
 - Basket Provision
- Negotiation
 - Awardee and Gov't finalize SOW and Milestones
 - ATI performs cost analysis
- Award
 - Base Agreement
 - Prototype Project Agreement

Process Options

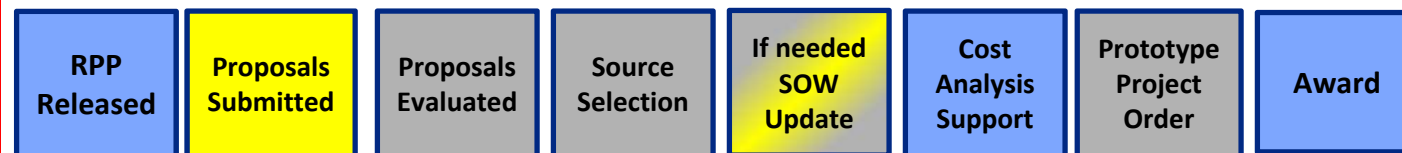
White Paper to Full Proposal



Enhanced White Paper



Full Proposal



CM



Member



Government

RPP Release

- The published Request for Prototype Projects, any amendments, and supplementary information can be found in the Solicitations tab of the Members Only section of IWRP website (<https://private-iwrp.ati.org/>).
- Official sources of information regarding the active solicitation. If you act on information from any source other than these official sources, it is at your risk.
- The IWRP Consortium Manager will revise official guidance (if required) and post any such revisions on the Members Only web site.
- One Stop Shopping, except for classified attachments

Organizational Conflict of Interest



- OCI clause requires Consortium to monitor all potential conflicts of interest
- Ensure prototype-level performance does not conflict with other agreements or contracts
- All white papers and proposals will address potential conflicts of interest and any proposed mitigation.
- Right of Government to limit Consortium Member Entity(ies)' involvement under this Agreement
- Mitigation plan may be acceptable on case-by-case basis.

Proposers' Conferences

- Webinars that detail the Request for Prototype Proposal (RPP)
 - Walk through the RPP
 - Review Preparation and Submission details
 - Review Cost Preparation
- Held after release of each RPP
- Slides made available on the Members Only website

Proposal Selection

- The Government may:
 - Select the proposal (or some portion of the proposal) for award;
 - Place the proposal in the Basket if funding currently is unavailable; or
 - Reject the proposal (it will not be placed in the Basket).

- Basket Provision
 - The Government reserves to the right to consider prototype project submissions (e.g. white papers and proposals) for each prototype requirement for up to 18 months after submission.
 - May be funded at any time during the 18-month period after the Government has reconfirmed validity of the submission.

Key Documents

- **IWRP Base Agreement**
 - Between ATI and IWRP member organization
 - Serves as baseline agreement for all future project agreements
 - Flows down T&Cs from OTA between Gov't and IWRP
 - Government does not intend to negotiate different terms with each IWRP member so negotiations limited and applicable to all members

- **IWRP Prototype Project Agreement**
 - Issued by ATI to member under Base Agreement
 - Result of Government selection and funding on OTA
 - Government retains technical oversight
 - Defines the particulars of the awarded project
 - Include IP, data right assertions, SOW, milestones, payment instructions, etc.

Proposal/Award Requirement



- There is at least one **nontraditional defense contractor or nonprofit research institution** participating to a **significant extent** in the prototype project
- At least one third of the total cost of the prototype project is to be paid out of funds provided by parties to the transaction other than the Federal Government (**cost share**)
- All significant participants in the transaction other than the Federal Government are small businesses or nontraditional defense contractors

Cost Share



- Awards are still permitted without significant participation of a nontraditional defense contractor or nonprofit research institution, under OTA if 1/3 of the project cost is provided as cost share
- Allowable Cost share - cash or in-kind resources expended during a prototype award by the Consortium Member or lower tier subcontractors that are necessary and reasonable for accomplishment of the project

Cost Share Requirements

- Cash: Outlays of funds to perform the SOW. Cash includes labor, materials, new equipment, and relevant subcontractor efforts. Sources include new IR&D funds, profit or fee from another contract, overhead or capital equipment expense pool. New IR&D funds offered to be spent on the Statement of Work and subject to the direction of the project's management may be utilized as cost share.
- In-Kind: Reasonable value of in-place equipment, materials or other property used in performance of the project. All cash or in-kind cost sharing availability must be clearly and convincingly demonstrated by the IWRP offeror.

Cost Share Requirements

- Additional Cost Share requirements
 - Must be verifiable from financial records
 - Must not be included as a cost sharing contribution for any other Federal Government contract vehicle.
- Cost Share cannot be:
 - paid by the Federal Government under another contract vehicle, except IR&D
 - sunk costs or costs incurred before the start of the proposed project, foregone fees or profits, bid and proposal costs, value claimed for intellectual property or prior research, parallel research or investment

Intellectual Property

- Data and Patent Rights covered in the Base Agreement
- Negotiable – Members assert rights in proposals
- Neither CM nor Consortium have any rights to Members intellectual property
- CM will assist Members with the reporting of subject inventions, the proper use of data rights assertions, and the proper use of data rights legends on deliverables

IWRP Contact Information

- General Assistance or Questions
 - iwrp.consortium@ati.org
- Contract or Proposal Related Questions
 - iwrp.contracts@ati.org
- ATI Program Management Support
 - Chad.Bryant@ati.org



Mr. Don Sallee

FY19 Outlook/White Paper Requests



Prototype Forecasting

- ▼ Data indicates approximately \$28M in potential FY19 for Project Prototype Agreements
- ▼ FY19 transaction forecast: 25-30 transactions (this is expected to grow in FY20 and 21)
- ▼ FY19 is expected to be a learning year with limited execution; the following two FY's have an opportunity to increase execution 100% over FY19 and FY20
- ▼ The 3rd Quarter of each FY is expected to have a higher volume of transactions while the 1st quarter of the FY is expected to be light in volume of transactions
- ▼ Requirements will be planned to quarterly events were possible
- ▼ Urgent requirements will be processed on an AD HOC basis.



Covert Direction Finding System

Ms. Carel Peacock

FY18 AWARD
PROJECTION

Requirements Owner: Expeditionary Intelligence Solutions (EIS) Division
Department: Expeditionary Warfare
Division: Expeditionary Intelligence Solutions

Sub-Agreement Example Description:

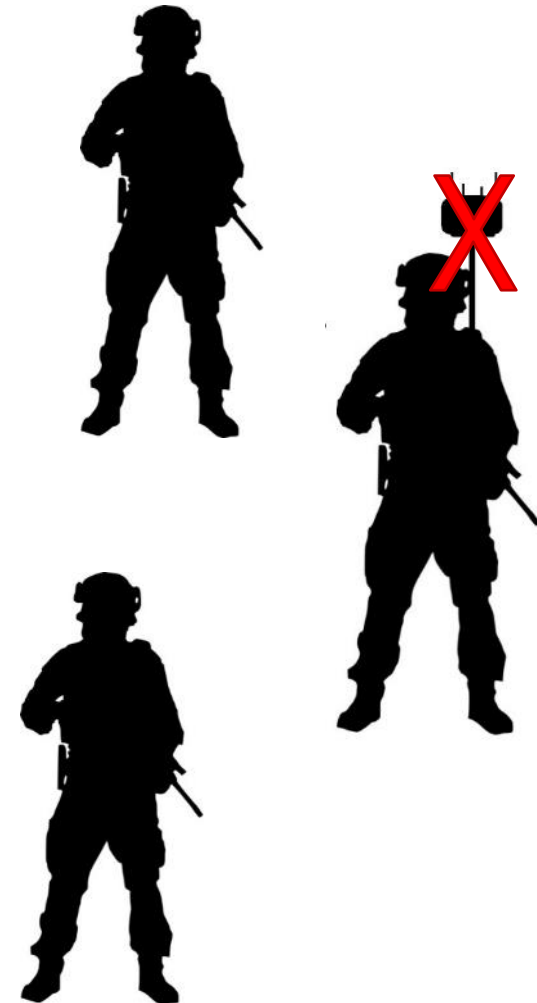
The RF spectrum can be used in multiple ways by tactical warfighters from Situational Awareness (providing alerts that enemy communications are in the area) to allowing for Find and Fix of target locations.

Current Man-wearable or Body Worn Direction Finding systems require external antennas that provide a large visible profile, forcing the wearer to become a potential high profile target as well as causing maneuverability issues. Vest-based body worn antennas have had limited success due to differences in operator body types interfering with the calibration of the antennas.

The requested prototype for this project is a Covert DF system that includes functional antenna, algorithm, and calibration technique. The system should:

- ▼ Perform direction finding capabilities in a stand-alone configuration to prevent operators from having to separate from their squad to find a proper geometry used in some techniques. This also prevents communication transmissions that could be used against the ground troops.
- ▼ Provide RF coverage from 30MHz-3GHz threshold.
- ▼ Provide RMS of less than 10 degrees when the received power at the antenna is greater than or equal to -100 dBm.
- ▼ Weigh less than 15 pounds, including batteries. As an objective, batteries included in weight estimates should last a minimum of 16 hours before needing replacement.
- ▼ Provide SDK or API to allow additional integrations or tipping of the DF subsystem from additional fielded equipment. SDK/API will have Government Use Rights.

Schedule: Expected prototype to be delivered within 10 months of award. Government testing to be supported by contractor within 30 days of prototype delivery.





Hardening & Miniaturization of All Clear Alert Device

Mr. Peyton Cavaroc, MS, PE

FY18 AWARD
PROJECTION

Requirements Owner: SPAWAR Systems Center Atlantic
Department: Expeditionary Warfare
Division: Expeditionary Intelligence Solutions

Desired Prototype Outcome

- Previously, the US Marine Corps left a man behind to ensure that previously cleared rooms in a building remained empty. With the new development of the All Clear Alert Device, the warfighter is able to deploy a passive infrared sensor of small size, weight, and power to remotely alert him to room breaches and serve as a digital chemstick.
- All Clear Alert Device must be refined and made more reliable in the following ways: indoor/outdoor day/night concept of operation, elimination of false triggers, miniaturization, and ruggedization

Proposed Project Schedule

- Award 1 Dec 18
- Engineering/Development 1 Dec 18 – 30 June 19
- Prototype Test 1 July 19 – 30 Sept 19



Proposed Data Rights

- SPAWAR Systems Center Atlantic has filed a provisional patent application as of 4/3/18 for the invention entitled, "ALL CLEAR: Room Breach and Digital Chemstick System".
- The contract winner must sign a non-disclosure agreement indicating that any information provided by the government in order to ruggedize and miniaturize the sensor system will not be disclosed to other parties.
- SSC LANT seeks to retain Government Purpose Rights to the requested development.

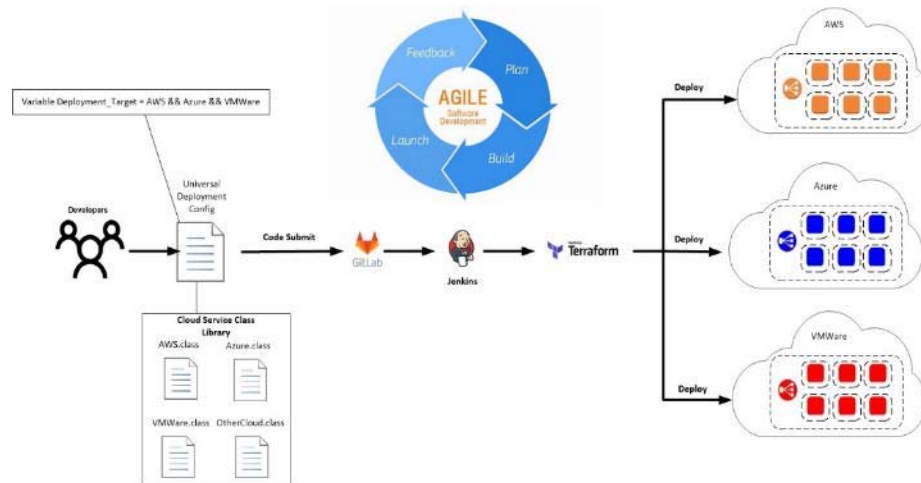


Universal Cloud Infrastructure Deployment Capability Mr. Jason Anderson

1st QTR FY19
AWARD
PROJECTION

Requirements Owner: USMC
Department: Expeditionary Warfare
Division: E2S2

In an Agile Software Development Framework, rapidly develop a Commercial Service Provider (CSP) agnostic write-once/deploy-many capability. Enable Developers to code description of virtual networks, hosts, load balancers, VPNs in one location and have CSP specific classes translate the environment and call upon CSP's specific Application Programming Interfaces to deploy environment to a single or multiple concurrent cloud providers.



Objectives:

- Develop Universal Configuration SDK
- Develop Universal.class -> CSP Specific API translators/classes
 - ✓ Translate "small vm" to "aws:m3.medium, azure:A3"
- Deploy basic Continuous Deployment (CD) pipeline to execute the deployments (ex: GitLab, Jenkins, Terraform)
- Enable Configuration/Change Management of deployed environments using the same process (i.e. Mod, Destroy, Redeploy, infrastructure pre/post deltas, monthly cost changes)
- Enable automated SW installation, config, STIG post deployment
- Develop solution to upload data for initial deployment
- Develop solution to synchronize data for systems/apps hosted in multiple clouds

Technical Approach:

- Multiple small DevOPS teams each owning specific solution:
 - ✓ Universal configuration
 - ✓ AWS.class
 - ✓ Azure.class
 - ✓ CD ToolChain
 - ✓ Config/Chg Mgmt
- External considerations like DNS, shared services, AD, Cloud Access Point (CAP) that will be required.

Government Retain 100% Data Rights



Enterprise Network & Internal Private Cloud

Mr. Richard Cunningham, PE, PMP

1st QTR FY19
AWARD
PROJECTION

Requirements Owner: Richard Cunningham, PE, PMP
Department: Fleet C4I & Readiness
Division: IA & Navy Cyber Security

Desired Prototype Outcome

- Creation of an enterprise network to link multiple, independent & geographically separate work centers together with a multi-site, multi-tenant internal private cloud that utilizes Software Defined Networking (SDN) technologies to automate network operations, minimizing required manpower to operate the network
- Provide seamless workload mobility between work centers and for the ability of a user at one work center to utilize computing resources at another work center and internet access at another work center
- Creation of a two-location global network operations center (NOC) that will operate & maintain the enterprise network/private cloud

Project Security

- US Citizens only, TS//SCI required; work required to be executed in Govt/CTR SCIF

Proposed Project Schedule

- Award 1 Dec 18
- Engineering/Development 1 Dec 18 – 30 June 19
- Prototype Test 1 July 19 – 30 Sept 19

Proposed Data Rights

- USG desires full data rights on all information developed for and through this project
- As solution requested is an integration of cutting edge COTS technologies, USG does not anticipate to receive proprietary information from vendor



Safeguarding CDI and CUI and Incident Reporting Ms. Katherine Kent

1st/2nd QTR FY19
AWARD
PROJECTION

Requirements Owner: US Navy
Command: SPAWARSYSCEN Atlantic
Competency: Mission Assurance

There is a significant need for industry to meet or exceed current federal requirements to safeguard Covered Defense Information (CDI) and Controlled Unclassified Information (CUI), report adverse security incidents and for government assurance of contractor and sub-contractor compliance without unnecessary increase in cost or oversight

Deliverables:

- Process Guide with minimum scope of:
 - Completion of NIST SP-800-171 CUI System Security Plan (SSP) Template
 - Completion of NIST SP-800-171 CUI Plan of Action and Milestones (POA&Ms) Template
 - Incident reporting procedures
 - Utilization of FedRAMP or equivalent Cloud Services
 - Auditing method to ensure government assurance of compliance at prime and sub-contractor levels
- List of Software Tools to enforce NIST SP-800-171 security requirements with least amount of cost and maximum compliance

Time for Delivery: 60 days from prototype award

Government to Retain 100% Data Rights

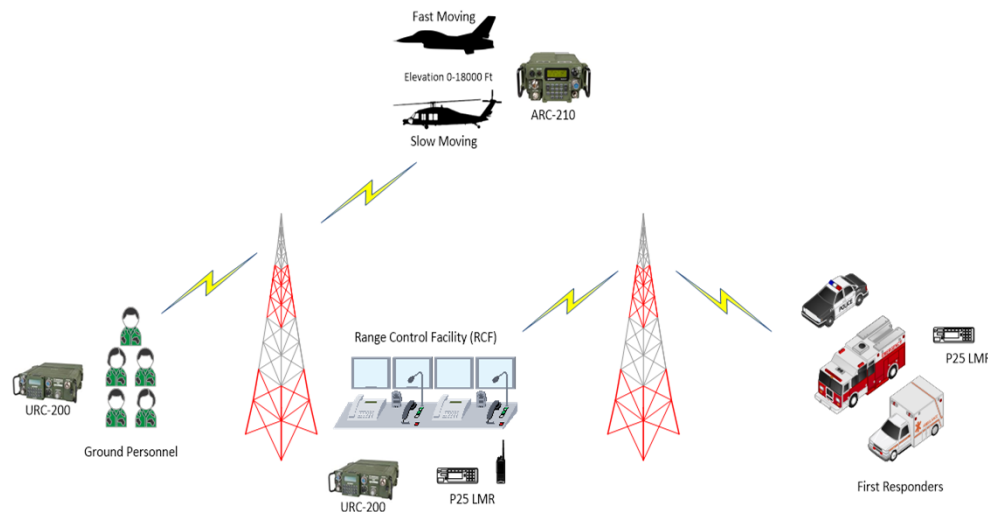


Low Altitude Range Communication System (LARCS) Mr. Scott Brinson

3rd QTR FY19
AWARD
PROJECTION

Requirements Owner: USMC
Department: Expeditionary Warfare
Division: E2S2

Rapid prototype development to standardize LARCS across the USMC enterprise. Recent upgrades provided certain locations with the ability to remotely select, communicate, and tune radios within their local radio network. Current system architecture varies widely across the enterprise and all systems utilize legacy transceivers which present interoperability and maintainability challenges.



Objectives:

- Develop LARCS prototype for system standardization
 - Requirements documentation
 - Operating procedures
 - Test reports
 - Training documentation
- Prototype installation and demonstration
- System evaluations by military personnel twelve months from award

Technical Approach / System Capabilities:

- Operating frequency range: 30-512 Mhz
- Operating distance: Geographic extents of the training area and up to the floor of Class A airspace (Military and Commercial)
- Channel expansion ability
- Remote control capability from a dispatch console
- Interface with Base Network infrastructure and first responders
- Ability to communicate across multiple radio networks
- Logging/Recording for all radio traffic

Government Retain 100% Data Rights



Mr. Vince Squitieri

FY19 Research Topics Initial Proposals



VLF Automation for LBUCS

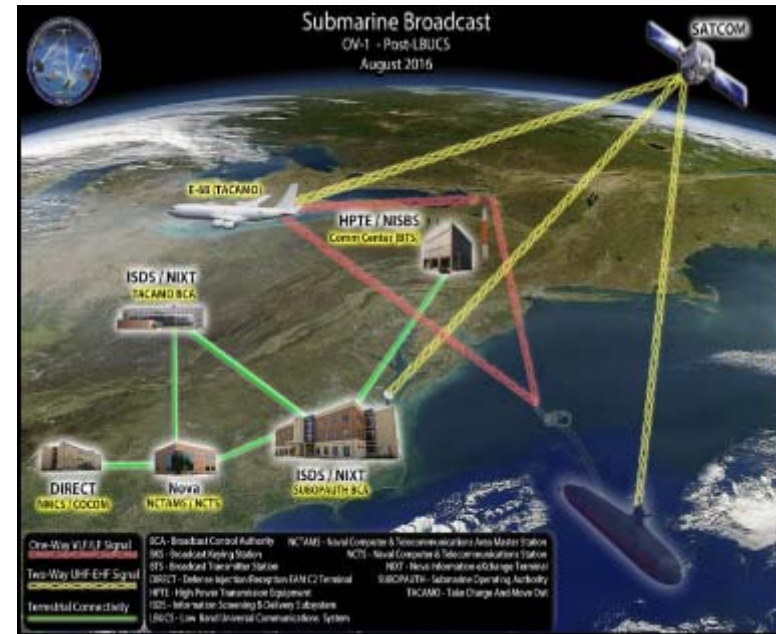
Receive V2 Mr. Brent Murray

FY19 AWARD
PROJECTION

Requirements Owner: Sean Fujimoto; PMW-770 LBUCS APM
Department: Communications & Networks; SSC PAC
Division: Enterprise Communications & Networks; SSC PAC

Project Description:

Design and deliver a digital front end processor, using state-of-the-art technology in RF processing in the VLF/LF spectrum. This effort will encompass exploring new processing technologies of symmetric multi-core processing, utilizing advanced CPU and/or GPU technologies to expand input and output capabilities, multiple scales of what it is today. The approach will utilize an open systems modular architecture approach to design, to ensure flexibility in component selections and future-proofing of system design. Current VLF/LF processing software will be modernized to a standard open-system, real-time compiler and operating system.





Digital Thread for Additive Manufacturing

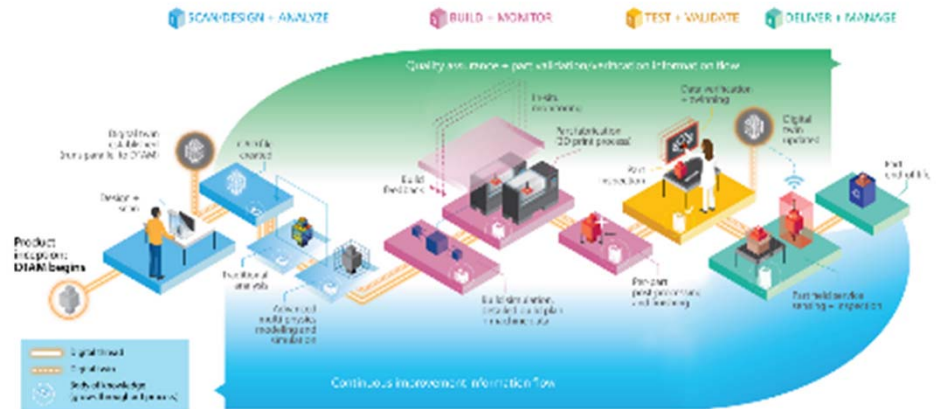
Mr. Aaron Peterson

FY19 AWARD
PROJECTION

Requirements Owner: IPT Lead: Aaron Peterson
Department: Communications and Networks
Division: Enterprise Communications and Networks

Project Description:

- Design and deliver a digital thread for additive manufacturing (DTAM) prototype providing the ability to Scan/Design & Analyze, Build & Monitor, Test & Validate, and Deliver & Manager for a material part/system that resides on an afloat Navy platform
- Prototype should consider a blockchain capability that protects the confidentiality and integrity of 3D files, and provides an audit trail for the lifecycle of the files
- Prototype also should consider machine learning capabilities to enhance the DTAM architecture, making it more predictive and autonomous





CANES Automation -

SecDevOps to build, test, and deploy Mr. Michael Brewer

FY19 AWARD
PROJECTION

Requirements Owner: PMW 160
Department: 55 – Networks & Communications
Division: 551 - Networks

Project Description:

Navy needs to consider a SecDevOps approach to automating CANES throughout the lifecycle from integration environment to installation site to greatly reduce manual processes, and time and effort.

Design and deliver a prototype that employs a SecDevOps approach to securely develop, update, and maintain a CANES software baseline using a set of representative CANES equipment in a test lab as a proof of concept.

The solution the Navy will pursue must satisfy three tenants:

1. Ease of use and interface – Our customer is the sailor with little training
2. Must work out of band and securely
3. Must work in a disconnected state from "cloud" - Navy ships have limited connectivity



Focus:

Leveraging IWRP OTA, we will be pursuing the best solution that will allow for the tasks identified in the current documentation for troubleshooting and management

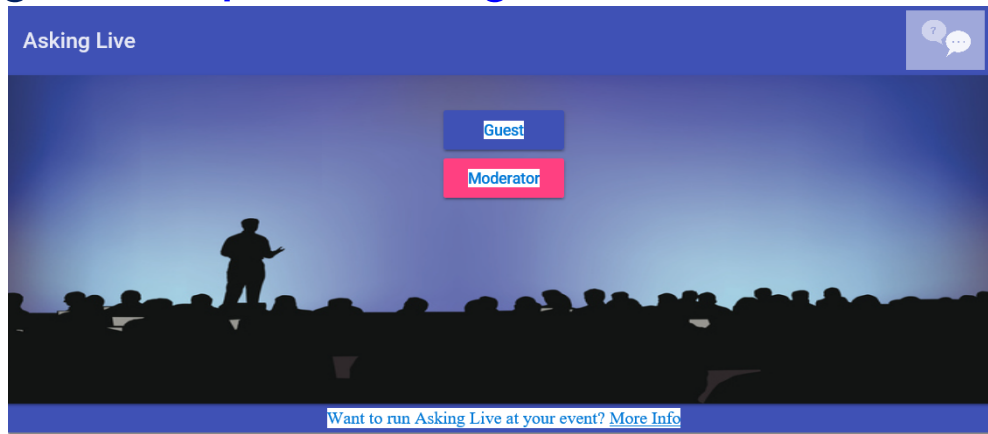


Questions?



Question and Answer Instructions

1. go to <https://asking.live>



2. Select Guest
3. enter IWRP as the Event Key (case sensitive)
4. select "Briefing of SPAWAR Opportunities" and post a question