PERFORMANCE WORK STATEMENT

PWS Designation:	**DMR**
Contract:	**TBD**
Task Order:	**TBD**
Date:	04 Jun 2019
Task Title:	**Digital Modular Radio Test Execution and Engineering Support**

1. SCOPE

This task order is to perform radio waveform testing and provide test execution management support to the Digital Modular Radio (DMR) Engineering and Test Integrated Product team (IPT) managed by the Software Defined Radios Branch (Code 55260). The scope of this task order includes testing of implemented radio waveform software in a lab environment as well as a deployed environment, test execution management, Risk Management Framework (RMF) compliance support, and engineering support to develop test and operating procedures that could be used as part of a radio operator's training curriculum.

This is a severable, level-of-effort type, task order.

1.1 Background

DMR is a software re-programmable radio system capable of providing the required functionality and interfaces with existing legacy and future systems for military communications equipment in the (b)3 [redacted] DMR provides the operational force with an improved communications capability for more effective battle group management and interoperability among Command, Control, Communications, Computers and Intelligence (C4I) systems. The mission of DMR is to ensure operational readiness and success by providing military commanders with the ability to command, control, and communicate with their forces using voice and data communications during all aspects of military operations (b)3 [redacted] DMR permits the tactical commander to reconfigure radio frequency assets in accordance with changing mission needs.

(b)3 [redacted]

(b)3 [redacted]

2. APPLICABLE DOCUMENTS

N/A

3. TECHNICAL REQUIREMENTS

Task 1: PROGRAM TEST (PT) SUPPORT (Development)

3.1 DMR Program Testing

For the development and/or recently fielded baselines, the contractor shall:

3.1.1 Test Dry Run and Test Event Preparations

3.1.1.1 Chair a PT Planning Meetings with membership from all PT stakeholders to identify, coordinate, and schedule resources and facilities. Solicit agenda items from stakeholders prior to each meeting. Take minutes that summarize key points and actions and distribute to all members. Provide inputs to the Integrated Master Schedule (IMS) for PT related items.

3.1.1.2 Conduct dry-run testing and evaluation of existing test procedures to assess the software implementation (b)3 [redacted] on the DMR platforms in Lab environment

3.1.1.3 Coordinate with the Joint-communications Engineering, Development and Integration (JEDI) Lab Manager for Communications Security (COMSEC) Material System (CMS) (key material and Simple Key Loaders

3.1.1.4 Coordinate with the DMR Hardware Team Leads and Test Team leads to coordinate lab use and lab hardware requirements

3.1.2 Verify and Update Test Procedures

3.1.2.1 Review and update available test plans, test procedures, and test execution schedules for completeness, feasibility, and adequacy for assessment of (b)3 [redacted]

3.1.2.2 Conduct Red-line, update, baseline and maintain the set of formal test procedures that will be exercised during dry-run and the formal test event

3.1.2.3 Work closely with User community and program stakeholders during test planning activities

3.1.3 Program Test Conduct

PT is composed of two parts. A lab-only test and a shipboard test, which performs the same test procedures conducted during the lab PT.

3.1.3.1 Conduct a formal Test Readiness Review (TRR) prior to the start of test execution.

3.1.3.2 Provide a draft and final TRR report

3.1.3.3 For the Shipboard PT event, travel off-site (per Travel Section 5.0) and conduct the PT on one US Navy Platform or any site designated by the DMR Program Office. The US Navy Platform will be out to sea during shipboard test conduct

3.1.3.4 Provide End of Day Status Reports to stakeholders

3.1.3.5 Conduct a formal Test Exit Brief (TEB) at the end of test execution

3.1.4 Program Test Report

3.1.4.1 Provide draft and a quick look report with high level results of each, Lab PT and Shipboard PT

3.1.4.2 Provide draft and final Test Report detailing results obtained during the Lab Program Test.

3.1.4.3 Provide draft and final Test Report detailing results obtained during the Shipboard Program Test.

3.1.4.4 Provide support by using the test results will be used in the Full Fielding Decision of newly implemented (b)(3) [redacted]

PROGRAM MANAGEMENT SUPPORT (Maintenance)

Task 2: Test Execution Sustainment and Management

For the fielded and maintained baselines, the contractor shall:

3.1.5 Test Management Infrastructure Maintenance

3.1.5.1 Acquire accounts on the DMR Test Management Infrastructure applications and enable Software Versioning Control, Risk Management, Configuration Management, Task Management, and Software Defects Management

3.1.5.2 Configure Test Management Infrastructure applications to track and maintain situational awareness of Software Versions under test, program risks, configuration management, staff task, and software defects

3.1.6 Software Testing Maintenance

3.1.6.1 Participate and support team meetings, including:

- Risk Management
- Test Team Tasking
- Test Configuration
- Configuration Control

3.1.6.2 Coordinate with team members and collect input to contribute to the data maintenance of test management infrastructure applications

PROGRAM CYBERSECURITY SUPPORT (Procurement)

Task 3: Program Acquisition Support and Cybersecurity Engineering

In support of the fielded products and platforms, the contractor shall:

3.1.7 TRANSEC Modernization Engineering Support

3.1.7.1 Support Cybersecurity Engineering efforts for production modifications necessary for TRANSEC crypto modernization, meeting support, travel to General Dynamics – Mission Systems (GD-MS) in Phoenix, AZ as described in Travel Section 5.0, (b)3 [redacted]

(b)3 [redacted]

3.1.8 Cybersecurity Impacts by Modernization Efforts

3.1.8.1 Provide Risk Management Framework (RMF) support ensuring security controls are implemented and documented as they apply to DMR Software Versions and Waveforms

3.1.8.2 Develop and maintain a Plan of Action and Milestones (POA&M) for DMR, providing monthly updates/reports

3.1.8.3 Support the DMR Information Systems Security Engineer (ISSE) to acquire and/or renew the Authority to Operate (ATO), and/or Interim Approval to Test (IATT) for all relevant DMR versions

3.1.8.4 Support DMR ISSE with Information Assurance compliance

3.1.8.5 Support the ISEE in ensuring any DMR-related equipment installed or integrated into Navy platform meets the cybersecurity requirements as specified under DoDI 8500.01.

3.1.8.6 Support the ISEE in ensuring security controls are implemented and documented, per draft NIST 800-53 RMF family policies

3.1.8.7 Support the ISEE by ensuring that any design change, integration change, configuration change, and/or installation of hardware and software is in accordance with established DoD cyber directives and does not violate the terms and conditions of the accreditation/authorization issued by the appropriate Accreditation/Authorization official

4. Reports

The contractor shall:

4.1.1 Submit monthly reports on findings and lessons learned in compliance with a Status Report (Monthly Status Reports) CDRL A001 on a monthly basis. (CDRL A001)
The monthly report shall be accurate with regard to data and calculations in order to provide complete and accurate information by which appropriate decisions can be made involving potential follow-on phases of the project.
These reports shall include, performance indicators, past-due deliverables, and any planned corrective actions, relevant issues and concerns, as well as cumulative labor, travel, and ODC costs. Each monthly report shall also include critical engineering and programmatic highlights from meetings or working groups. Ensure each monthly report also includes critical engineering and programmatic highlights from meetings or working groups. (CDRL A001)

4.1.2 Submit Technical Report(s) Study/Services, Trip Report in compliance with CDRL A010. (CDRL A010)
The technical report shall include trip reports detailing contractor travel, findings, and lessons learned. When multiple people take concurrent trips to the same location, only one trip report is required. (CDRL A010)

4.1.3 Submit Program Test Report (CDRL B001) required per conducted test
The test report shall include reports detailing contractor test conducted during DMR Program Test, findings, and lessons learned. (CDRL B001)

5. TRAVEL

The following round-trip travel is anticipated during the performance of this task order:

Origin	Number of Trips	Destination	Number of People	Number of Days
San Diego, CA	1	Norfolk, VA	2	21
San Diego, CA	2	Phoenix, AZ	1	3

Should the actual destination or the number of days change prior to travel, there will be no need to modify the task order as long as the travel cost does not exceed the original authorized amount for travel.

5.1 Travel in support of Shipboard PT

- The performer will be notified 6 weeks prior to the event if the location changes
- It is anticipated that the shipboard PT will require the staff to perform extended work work-days or approximately 12 hours each day
- The specified number of days includes travel to/from destination
- The date for the shipboard PT depends on the availability of a vessel and is subject to change
- Travel is expected to take place during the base period of performance. No additional travel for testing is expected. The current target timeframe is June 2020
- The on-boarding location of the shipboard PT is subject to change and the location may be outside of CONUS, including US Naval bases in foreign countries
- Shipboard PT will be conducted at sea and on port. It is anticipated that a twelve-day at sea duration will support the mobility portion of the test event

5.2 Foreign Travel in support of Shipboard PT

- Foreign travel is unlikely but possible
- It is possible that the shipboard test will be in Japan, but unlikely

6. GOVERNMENT PROPERTY

6.1 Government Furnished Property (GFP): Government Furnished Equipment (GFE) and Government Furnished Material (GFM)

- The Government does not anticipate any GFP, GFE, or GFM at this time.

6.2 Other Government Property: Government Furnished Information (GFI), Government Furnished Facilities and Government Furnished Property Incidental to the Work Place

- The Government will provide access to data, documents and facilities for any testing required. The government will provide the contractor access to information and

documentation relative to maintenance, integration, testing, and evaluation within 10 days of contractor's request. This will include systems integration plans, system performance specifications, system test plans, work statements, technical performance documentation, and manufacturer's data delivered with prototype and/or production hardware.

6.3 GFP/CPMS Contract Data Requirements List (CDRL)

Not Applicable.

6.4 Electronic Transfer of GFP

Not Applicable.

6.5 Requirement to reporting lost Government Property to the COR

No Applicable.

6.6 Requirement to Conduct Physical Inventory

Not Applicable.

6.7 Return of GFP Instructions

Not Applicable

7. SECURITY

Security for this task is at the UNCLASSIFIED level; however, personnel assigned to this task shall be cleared to the SECRET level to have access to classified information and spaces on a need-to-know basis in performance of their duties. Contractor personnel need to be eligible with no prior Naval Information Warfare Center (NIWC) Pacific Communication Security (COMSEC) Material System (CMS) violations to become CMS users at NIWC Pacific.

Per the National Industrial Security Program Operating Manual (NISPOM), Chapter 1, Section 3, contractors are required to report certain events that have an impact on the status of the facility clearance (FCL), the status of an employee's personnel clearance (PCL), the proper safeguarding of classified information, or an indication that classified information has been lost or compromised. Contractors working under NIWC Pacific contracts will ensure information pertaining to assigned contractor personnel are reported to the Contracting Officer's Representative/Technical Point of Contact (COR/TPOC), Contracting Specialist, and the Security COR along with notifying the appropriate agencies such as Cognizant Security Agency (CSA), Cognizant Security Office (CSO), or Department of Defense (DoD) Consolidated Adjudication Facility (DODCAF) when related to the denial, suspension, or revocation of a security clearance of any assigned personnel, any adverse information on an assigned employee's continued suitability for continued access to classified access; any instance of loss or compromise, or suspected loss or compromise, of classified information; actual, probable or possible espionage,

sabotage, or subversive information; or any other circumstances of a security nature that would affect the contractor's operation while working under NIWC Pacific contracts.

7.1 Operations Security

All work is to be performed in accordance with DoD and Navy Operations Security (OPSEC) requirements and in accordance with OPSEC attachment to the DD254.

8. PLACE OF PERFORMANCE

Work shall be performed at the DMR facilities at NIWC Pacific in San Diego, Naval Base Point Loma, and in locations specified in Travel Section 5.0.

9. OTHER

9.1 Enterprise Contractor Manpower Reporting Application (ECMRA)

The contractor shall report ALL contractor labor hours (including subcontractor labor hours) required for performance of services provided under this contract for the Space and Naval Warfare Systems Command (SPAWAR) via a secure data collection site. The contractor is required to completely fill in all required data fields using the following web address: https://doncmra.nmci.navy.mil.

Reporting inputs (from contractors) will be for the labor executed during the period of performance during each Government fiscal year (FY), which runs October 1 through September 30. While inputs may be reported any time during the FY, all data shall be reported no later than October 31 of each calendar year. Contractors may direct questions to the help desk, linked at https://doncmra.nmci.navy.mil.

For purposes of ECMRA reporting, the Federal Supply Code/Product Service Code applicable to this contract/order is AD24.

Details about ECMRA can be found at NMCARS 5237.102(90) https://acquisition.navy.mil/rda/home/policy and_guidance/nmcars.

9.2 Contractor Employee Identification

Contractor employees shall identify themselves as contractor personnel by introducing themselves or requesting they be introduced as contractor personnel and display distinguishing badges or other visible identification for meetings with Government personnel. In addition, contractor personnel shall appropriately identify themselves as contractor employees in telephone conversations and in formal and informal written correspondence.

9.3 Government Furnished Material/Information

The Government will provide access to data, documents and facilities for any testing required. The government will provide the contractor access to information and documentation relative to integration, testing, and evaluation within 10 days of contractor's request. This will include systems integration plans, system performance specifications, system test plans, work statements, technical performance documentation, and manufacturer's data delivered with prototype and/or production hardware.

9.4 Foreign Travel Requirements

If foreign travel is required, all outgoing Country/Theater clearance message requests shall be submitted to the NIWC Pacific foreign travel team, Topside, Building 27, 2nd Floor – Room 206 for action. A Request for Foreign Travel form shall be submitted for each traveler, in advance of the travel, to initiate the release of a clearance message at least 40 days in advance of departure. Each Traveler must also submit a Personal Protection Plan and have a Level 1 Antiterrorism/Force Protection briefing within one year of departure and a country specific briefing within 90 days of departure. AntiTerrorism/Force Protection (AT/FP) briefings are required for all personnel (Military, DoD Civilian, and contractor) per OPNAVINST F3300.53C. Contractor employees must receive the AT/FP briefing annually. The briefing is available https://atlevel1.dtic.mil/at/, if experiencing problems accessing this website contact NIWC_fortrav@navy.mil. Forward a copy of the training certificate to the previous email address or fax to (619) 553-6863; SERE 100.1 Level A Code of Conduct training is also required prior to OCONUS travel for all personnel. SERE 100.1 Level A training can be accessed at https://wwwa.nko.navy.mil. Other specialized training for specific locations may also be required; contact the NIWC Pacific foreign travel team.

PERFORMANCE REQUIREMENT SUMMARY

Performance Requirement Summary		
Performance Objective	**Performance Standard**	**Acceptable Quality Level**
Complete and deliver status reports	Reports shall be accurate, timely, up to date for the reporting period, and free of spelling and grammatical errors.	No more than one status report may be delivered later than the 15th of each month. Reported total of costs and expenses for the reporting period must be 100% accurate.
Complete and deliver trip reports	Reports shall be accurate, timely, and up to date and free of spelling and grammatical errors.	Trip reports shall be submitted within 10 working days from the end of the trip.
Manage Costs	Accurate Invoices with no errors; costs stay within estimates for the period of performance.	No more than one error per four invoices. Final total of costs do not exceed proposed amount.
Business Relations	Tasks are performed in professional manner and any problems are identified and communicated to the	No more than one customer complaint to COR per quarter on the same issue or topic.

	Government in a timely manner.	

10. INSPECTION AND ACCEPTANCE

The Contracting Officer Representative (COR) is Siamak Tabrizi, NIWC Pacific, Code 55220, (619) 553-4194, siamak.tabrizi@navy.mil. All deliverables shall be delivered NIWC Pacific, for review and inspection by the government COR.