DOE-ID NEPA CX DETERMINATION
Idaho National Laboratory

CX Posting No.: DOE-ID-INL-20-038

SECTION A. Project Title: INL Wireless Test Bed, Test and Engineering Support to China Lake

SECTION B. Project Description and Purpose:

KBR Wyle Services, LLC (KBR) is a prime contributor on the Defense Technical Information Center (DTIC) contract task order supporting the Quick Reaction Capability Office (QRCO). As such, KBR is directly funded by and supports current and projected tasking from QRCO to arrange for the delivery of recurring engineering support for the Wireless Test Bed (WTB) Network capability located at the Idaho National Laboratory to the China Lake CA Test Range. KBR is not the sole supporter of this service, but collaborates with other sponsors like the Defense Threat Reduction Agency (DTRA) and the Department of State (DoS). This SPP is intended to satisfy all the policy and procedural requirements in order to allow KBR to provide incremental support as deemed necessary by the Government sponsors in support of their requirements.

INL will provide network engineering support in order to facilitate and fulfill the recurring network engineering support required to operate and maintain a viable, reliable Wireless Test Bed Cellular Network capability with multiple technologies and multiple frequencies. Support will include engineering, operations, maintenance and procurement support in order to operate and maintain this Advanced Communications Network.

Task No.	Tasks	INL Role/Responsibilities	KBR Role/Responsibilities	Duration
1	Requirements Analysis	Review analyses of range system requirements to assess the viability of the Wireless Test Bed (WTB) Network capabilities in order to support developmental and operational testing.	Review and approve requirements established by INL.	As agreed on per requested analysis
2	Improvement and Modernization Recommendation	Assess advanced communication upgrades of current systems in the context of life cycle support including associated costs. Recommendations shall include potential for improved processes and procedures, automated test, data acquisition. Findings will contribute to TP procurement strategies and implementation of improved range infrastructure supportability, maintenance and sustainment.	Review and approve recommendations by INL.	As agreed on per requested assessment
3	Review Planned Wireless Test Bed Network Strategy	Review planned and scheduled Wireless Test Bed Network activity in support of test requirements and analysis.	Generate planned and scheduled Advanced Communications Network activities for review.	As agreed on per requested review
4	Engineering Support	Conduct analysis and provide systems engineering support in order to provide Wireless Test Bed Network signals as required.	Identify support required.	As agreed on per requested support effort
6	Procedure Documentation	Document significant issues and concerns regarding task execution to not impact tests, solutions, and lessons learned. Document procedural anomalies for further research and solution development.	Review and approve documentation.	As agreed on per event
7	Procurement	Procure requested Wireless Test Bed Network hardware, software or services to maintain, address current issues with or lacking capability of Wireless Test Bed Network capabilities	Review and approve procurement	As agreed on per procurement
8	Test Analysis	Analyze and evaluate Wireless Test Bed test equipment and infrastructure capabilities in order to develop data that will support reliable accurate, repeatable test data.	Review and approve test analysis.	As agreed on per test
9	Signal Monitoring	Perform signal monitoring and analysis in support of QRCO Wireless Test Bed Network Test requirements.	Identify signal monitoring requirements.	As agreed on per test
10	Operational Log Analysis	Analyze Wireless Test Bed operational logs for reliability improvements and make recommendations utilizing identified engineering processes, to support logistics management and quality improvement.	Review and approve operational logs.	As agreed on per test
11	Meetings	Participate in weekly planning meetings hosted by the QRCO, as required. Cancellations or additional meetings will be coordinated through the QRCO Operations or Advanced Communications Network personnel.	Plan and conduct meetings.	Weekly
5	Travel	Engage in travel, only to the extent necessary to assess and provide information to facilitate successful execution of QRCO tasking.	Identify and direct travel requirements.	As agreed on

Anticipated software upgrade for the Home Location Register (HLR) cellular network element and for the LTE (RAN) eNodeBs cellular network elements.

Backhaul hardware and software upgrade. All the hardware to be replaced is currently resident at INL (CFA 609 Room 200, Gate 1 Shelter 1, WTB EBR-1 (B21-724), CFA 1609, CFA 699, and CFA 668 and the project would dispose of the old hardware.

SECTION C. Environmental Aspects or Potential Sources of Impact:

Air Emissions

N/A

Discharging to Surface-, Storm-, or Ground Water

N/A

Disturbing Cultural or Biological Resources

CF-668 and CF-699 are both over 50 years old. All work will be done inside of the buildings.

Generating and Managing Waste

This work is expected to generate small amounts of common trash and construction-related waste such as scrap metal. All scrap metal will be recycled to the extent practicable.

Releasing Contaminants

N/A

Using, Reusing, and Conserving Natural Resources

Packaging Material from shipment (Cardboard, Plastic wrap). Surplus hardware will be managed through the Excess Program.

SECTION D. Determine Recommended Level of Environmental Review, Identify Reference(s), and State Justification: Identify the applicable categorical exclusion from 10 Code of Federal Regulation (CFR) 1021, Appendix B, give the appropriate justification, and the approval date.

For Categorical Exclusions (CXs), the proposed action must not: (1) threaten a violation of applicable statutory, regulatory, or permit requirements for environmental, safety, and health, or similar requirements of Department of Energy (DOE) or Executive Orders; (2) require siting and construction or major expansion of waste storage, disposal, recovery, or treatment or facilities; (3) disturb hazardous substances, pollutants, contaminants, or Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)-excluded petroleum and natural gas products that pre-exist in the environment such that there would be uncontrolled or unpermitted releases; (4) have the potential to cause significant impacts on environmentally sensitive resources (see 10 CFR 1021). In addition, no extraordinary circumstances related to the proposal exist that would affect the significance of the action. In addition, the action is not "connected" to other action actions (40 CFR 1508.25(a)(1) and is not related to other actions with individually insignificant but cumulatively significant impacts (40 CFR 1608.27(b)(7)).

References: 10 CFR 1021, Appendix B to Subpart D, B1.7 "Electronic equipment" and B1.31 "Installation or relocation of machinery and equipment."
Justification: Project activities are consistent with 10 CFR 1021, Appendix B to Subpart D, B1.7 "Acquisition, installation, operation, modification, and removal of electricity transmission control and monitoring devices for grid demand and response, communication systems, data processing equipment, and similar electronic equipment" and

B1.31 "Installation or relocation and operation of machinery and equipment (including, but not limited to, laboratory equipment, electronic hardware, manufacturing machinery, maintenance equipment, and health and safety equipment), provided that uses of the installed or relocated items are consistent with the general missions of the receiving structure. Covered actions include modifications to an existing building, within or contiguous to a previously disturbed or developed area, that are necessary for equipment installation and relocation. Such modifications would not appreciably increase the footprint or height of the existing building or have the potential to cause significant changes to the type and magnitude of environmental impacts."

Is the project funded by the American Recovery and Reinvestment Act of 2009 (Recovery Act) ☐ Yes ☒ No

Approved by Jason Sturm, DOE-ID NEPA Compliance Officer on: 6/11/2020