Terms of Reference
Introduction of the Electronic Integrated Disease Surveillance System (EIDSS) and the Pathogen Asset Control System (PACS) in Ukraine

Introduction

1.1 Background

On 29 August 2005, the U.S. Department of Defense and the Ukrainian Ministry of Health signed the Biological Threat Reduction Implementing Agreement (BTRIA) under the terms of the Cooperative Threat Reduction Umbrella Agreement. The overall purpose of the Biological Threat Reduction Program (BTRP) in Ukraine is to prevent the proliferation of technology, pathogens, and expertise that could be used in the development of biological weapons by providing technical assistance to:

- Establish a nationwide disease surveillance and reporting system
- Enhance the nationwide network of diagnostic laboratories that deal with especially dangerous pathogens (EDPs)
- Secure EDPs at designated facilities until an interim and/or permanent solution can be provided
- Develop BTRP-approved research projects to promote the goals and objectives of the BTRP

Phase I activities from 2005 to 2008 included site assessments and laboratory upgrades of several Ministry of Health labs; equipment, supplies, and expendables in response to avian influenza outbreaks; laboratory training activities; the approved detailed engineering design for the interim human health Central Reference Laboratory (CRL) at the Ukrainian Research and Anti-Plague Institute (URAPI) in Odesa.

The only anticipated disease surveillance activity is the introduction of the Electronic Integrated Disease Surveillance System (EIDSS) and the Pathogen Asset Control System (PACS) in Ukraine.

1.2 Objectives

EIDSS version 2.0 strengthens and supports monitoring and prevention of human and animal diseases, including especially dangerous infections, by integrating human and veterinary case, case plus disease specific investigation, aggregate disease data collection for non-cased based diseases, sample and laboratory data into an integrated data set enhancing decision making, and information analysis capabilities. The development of EIDSS is based on cutting edge expertise from institutes such as the Centers for Disease Control and Prevention (CDC), Walter Reed Army Institute of Research (WRAIR), and others.

EIDSS is a distributed database system with a hierarchical architecture consisting of four primary levels including from the top down the Central Data Repository which serves as the final data hosting place at a national level, Zonal or Regional Level Epidemiological Offices and Diagnostic Laboratories, District Level public health offices, and other mobile installations. The cohesive information set is continuously synchronized amongst all EIDSS sites within a country providing near-real time information flow that can be disseminated to the appropriate organizations in a timely manner.

EIDSS assists countries with the IHR 2005 compliance requirements by providing national level authorities with near-real time information on disease cases, and allowing to send data

electronically on select diseases from EIDSS via a data transfer module to the Computerized Information System on Infectious Diseases (CISID) operated by the WHO Regional Office for Europe.

Human case based disease data includes demographic data, disease specific clinical data based on standard case definitions, epidemiological investigation data, sample tracking linked to a specific case, and laboratory tests including results linked to a specific sample. Ad-hoc, case specific clinical signs and symptoms can also easily be added by the user.

Veterinary case based disease data include demographics, clinical signs, epidemiological investigation data, penside tests, and samples.

The Pathogen Asset Control System (PACS) is an electronic system for accounting, management and control of biological agent stocks. The application is designed to monitor agents receiving, transfer, movement, destruction and other actions performed with biological materials. PACS tracks samples and strains of any kind. Each item in a repository is marked with a unique barcode label. The barcode technology used with a barcode scanner allows fast and error-free data input and provides an extra level of pathogen asset tracking security.

PACS is a highly customizable tool, which can be configured to meet local needs and regulations, simplify data entry process and organize data in appropriate order. Features such as Repository management, Customizable Fields Editor, Barcode Label Designer and Reference Editor allow system owners to adapt the tool to meet all local requirements.

The objective of the TADR network is to enhance Ukraine's current capabilities to identify and respond to disease outbreaks involving EDPs or bioterrorism emergencies at the national, oblast, and rayon levels. TADR implementation in Ukraine will require laboratory construction/upgrades, the inclusion of molecular diagnostic technologies at designated laboratories, the integration of Electronic Integrated Disease Surveillance System (EIDSS) information system technologies, the integration of Pathogen Asset Control System (PACS) information systems, the integration of training provided by multiple sources—both U.S. Government and non–U.S. Government—and enhancements to existing mobile disease response units.

The objectives of BS&S enhancements are to assist Ukraine with achieving both Ukrainian and Euro-Atlantic standards for biological safety and both Ukrainian and U.S. Government (specifically DoD) standards for biological security.

2.0 Applicable Documents

Note, documents indicated below will routinely be updated and such revisions will become guiding documents upon their acceptance or entry into force.

- Agreement between the United States of America and Ukraine Concerning Assistance to Ukraine in the Elimination of Strategic Nuclear Arms, and the Prevention of Proliferation of Weapons of Mass Destruction, dated October 25, 1993, as amended and extended to December 31, 2013
- Agreement between the Department of Defense of the United States of America and the Ministry of Health of Ukraine Concerning Cooperation in the Area of Prevention

of Proliferation of Technology, Pathogens and Expertise that could be Used during the Development of Biological Weapons, dated August 29, 2005

3.0 Scope

This task order applies only to laboratories and institutes that have been approved by DTRA in consultation with the BTRIA executive agent(s) as beneficiaries of technical assistance. DTRA retains sole responsibility for negotiating with the Government of Ukraine to expand the list of beneficiaries.

Per Contract Data Requirements List item (CDRL) HDTRA1-07-D-007, the Contractor is responsible for constructing an Operations Support Plan, specifying integration and synchronization of planning, management, subcontracting/procurement, permitting (in accordance with CDRL A008, Licensing and Permitting Plan), construction, logistics, maintenance, technical expertise, and sustainment/transition support to accomplish the goals and objectives of this task order.

While the Contractor is performing work on behalf of DTRA under the CTR Program, the Contractor is not a representative of the U.S. Government. Therefore, the Contractor shall pay special attention to the nature and level of correspondence to specific Government of Ukraine organizations in order to implement this task order.

In addition, the U.S. Government will provide various assets (Government-furnished equipment (GFE) and Government-furnished information (GFI)) to the Contractor to integrate into the overall system. Some of this material may be the resources of DoD and other agencies of the U.S. Government focused on specific program areas, to include such items as EIDSS, PACS, training materials and trainers, and operations protocols. In such cases, the Contractor shall work closely with DTRA to ensure alignment of these resources with overall schedule and performance requirements.

4.0 Tasks

The following tasks shall be performed in accordance with direction from the Contracting Officer (CO) and/or the Contracting Officer's Representative (COR).

4.1 General Task Order Administration in Ukraine

4.1.1 In compliance with Ukrainian laws and regulations, the Contractor shall establish a legal presence in Ukraine to manage and integrate the efforts of this task order and to be eligible for exemptions from value-added taxes (VAT) and other taxes.

4.1.2 The Contractor shall maintain an online document control system to provide real-time access to correspondence and reports in both English and Ukrainian by both U.S. Government and Government of Ukraine stakeholders.
4.1.3 Procurement: The Contractor shall devise its procurement strategy to maximize its ability to receive VAT exemptions for this technical assistance in accordance with Ukrainian regulations and procedures.

Procurement shall also focus on long-term sustainment and transition planning. In-country/regional procurement is preferred wherever cost-effective and quality/performance specifications are met.

4.1.4 Contractor vehicles: The Contractor shall not import vehicles specifically for company use. In addition, the Contractor shall keep the use of leased vehicles to an absolute minimum.

4.2 Training

Computer and IT training program specifically developed for the health and veterinary end users and IT specialists provides trainings from the basics of Introduction into Computers, XP, Word and Excel for the end users to comprehensive Microsoft Workstation/Server OS, SQL Server and HP Hardware training. Adaptive character and continuous improvement of the program allows us to fully meet the needs of the training.