

Defense Prisoner of War / Missing Persons Office (DPMO) Needs Statement

The Department of Defense, Rapid Reaction Technology Office (RRTO) Innovation Outreach Program will conduct a Solutions Meeting in the Washington, DC area in the December timeframe. The Meeting provides selected innovative companies with an opportunity to make short technical presentations to government representatives about their technologies and products. There is a potential for companies to be selected for pilot projects or experimentation if their technology appears to match DPMO needs.

RRTO is supporting the DPMO in their quest for innovative technologies and capabilities to address Personnel Recovery (PR) and Personnel Accounting (PA) mission needs. The PR mission focuses on preparing organizations and personnel, including service members, government civilians and contractors, for possible isolation or capture and enabling their recovery and reintegration. Current PA efforts seek to account for over 83,000 missing persons from previous armed conflicts including World War II; the Korean, Cold, Vietnam, and Persian Gulf Wars; and the Iraq Campaign.

The DPMO is looking for innovative technologies and capabilities in the following areas:

- **Burial or Incident Site Identification and Location**
 - Remote sensing to detect surface and subsurface artifacts, on land or underwater, for potential sites of interest
 - Exploitation and analysis tools for archival imagery, narratives and historical records
 - Multi-source capture, correlation and collaboration tools for managing digital information
 - Crowd-sourced support for retrospective personnel search, identification and location determination
- **Site Survey and Localization**
 - Robotics and autonomous systems for land and underwater survey
 - High resolution surface, subsurface and underwater mapping
 - Portable high resolution 3D imaging and LIDAR
 - Mobile GIS mapping technologies
 - Mobile data gathering and capture
 - Bone and other material evidence detection using chemical and non-chemical methods
 - Site rendering by 3D printing/visualization to improve site excavation planning and execution
 - Multi-source data capture of site investigations and excavations
 - Mobile power and lighting sources
- **Personnel Recovery**
 - Sensors to detect and report personnel separation or absence from unit or location at or very near the moment of loss
 - Advanced materials suitable for beacons, tags, or other tracking methods
 - Enhanced personnel training and education prior to incident
 - Identify and produce latent metadata from digital and multimedia devices including computers, electronic devices, audio, images and video.
 - Video and audio forensics
 - Crowd-sourced support for enhanced personnel search, detection and tracking
 - Predictive analysis and improved mission simulations that improve probability of success
 - Communications, and tagging and tracking capabilities for uncertain or hostiles areas where conventional personnel recovery is problematic
 - Non-traditional recovery (anything not “conventional”) capabilities for uncertain or hostiles areas where conventional personnel recovery is especially challenging

- **Biometrics and Forensics**

- Standoff identification of persons using iris or facial recognition or other modalities
- Field detection and identification of previous occupants of a vehicle or location
- Advanced assembly/annotation software for interpreting Next Generation DNA Sequencing data
- Manage whole human genome sequencing and human identification applications large data sets
- Nanoparticle forensics to track personnel or identify prior vehicle/facility occupants

- **Communications and Information Technology**

- Collaborative tools for search, case management and long term mission continuity
- Secure applications for monitoring and tracking personnel
- Improved communication systems interoperability
- Portable analytic tools for computers, electronic devices, audio, images and video
- Data analysis and visualization
- Structured and unstructured data correlation, fusion and decluttering
- Digitally capture indigenous population's perspective and insights
- Enhanced genealogy research tools to find living next of kin or discover familial relationships

Companies interested in participating in the Solutions Meeting should submit an application to RRTO Innovation via e-mail at osd.pentagon.ousd-atl.mbx.rrto-innovation@mail.mil.

The following information is required in the application:

1. Email subject line "DPMO Workshop Application"
2. Company name
3. Website address
4. POC, email, phone number and an alternate POC if desired
5. A succinct description (less than 200 words in length) of the company's technologies, products and capabilities including a mapping to the topic areas and needs addressed

All applications must be received on or before 5:00 PM EDT, Tuesday, September 24, 2013.

Selected companies will be responsible for their travel and all other expenses associated with participation in the Solutions Meeting to be held in the Washington, DC area.