

Rapid Reaction Technology Office Needs Statement

Updated Response Date: September 4, 2014

The Department of Defense, Rapid Reaction Technology Office (RRTO) will conduct a Solutions Meeting in the Washington, DC area in the October/November 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 RRTO needs.

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

Sensors

- Acoustics/seismic
- On-chip processing
- Sensor processing and fusion algorithms
- Human behavior characterization
- Novel sensor modalities
- Unattended ground
- Change detection
- Commercial satellite imagery

Communications

- Ad-hoc mesh networking, self-organizing
- Hybrid networks
- Low power/low latency communications
- Novel communication methodologies
- Dynamic RF spectrum management

Information Technology

- Edge computing
- Distributed processing technologies
- Adaptive video analytics/querying
- Data contextualization and visualization
- Multi-level security
- Device management

Miniaturization

- Accelerometers, actuators
- Micro-robotics
- Sensors
- Computing technologies

Anti-tamper

- Anti-jam capabilities
- Secure packaging
- Low power/no-power electronics
- Self-destructing chips
- Physical and cyber intrusion detection

Batteries

- Novel battery chemistry (primary and rechargeable)
- High density primary and rechargeable batteries
- Thin film capacitors and batteries

Energy and Power

- High efficiency motors
- Intelligent power management
- Small size, small scale energy harvesting
- Micro scale power conversion and management
- Advanced single chip power supplies

Autonomy

- Artificial intelligence
- Cognitive behavior
- Collaborative behavior
- Navigation in GPS denied areas

Urban Characterization

- Social media analytics
- Real time 3D mapping
- Void/tunnel detection and characterization
- Population, political and social trends
- Semantic processing and ontologies

Remote Analysis and Case Management

- Collaboration tools
- Centralized data base with global access
- Data fusion
- Forensic case management
- Efficient data exfiltration
- Data analytics and forensics
- Multi-format, structured and unstructured data processing

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

The following information is required in the application (Note: Only 1 application is permitted per company):

1. Email subject line "RRTO Solutions Meeting Application"
2. Company name
3. Website address
4. POC, email, phone number and an alternate POC if desired
5. A succinct description (less than 100 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, September 4, 2014.

Selected companies are responsible for their travel and all other expenses associated with participation in the RRTO Solutions Meeting.