



CRS(I) Program Update

NDIA GRCC

June 2016

Louis Anulare
PM Force Projection

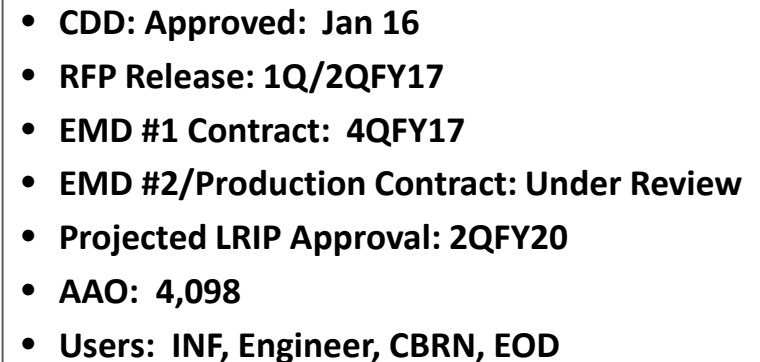


Agenda

- Common Robotic System (Individual) Overview
- Path to RFP
- Pre-Solicitation Industry Day
- Request For Information (RFI) Updates
- CRS(I) Acquisition Approach
- Universal Controller Overview
- Universal Controller Approach Update

Common Robotic Platform Enabling Payloads to Address the Operational Capabilities Gaps:

- 



****CRS(I) weight requirement does not include payloads or manipulator (included in standard payload)**



CRS(I): Path to RFP

Key Upcoming Events

- RFI release February 2016 (Posted FBO)
- CRS(I) Pre-RFP Industry Day: 19-20 July 2016
- DRAFT RFP: Nov 16
- RFP Release: 1Q/2Q FY17

Planning Dates

- Phase I EMD Contract Award: 4QFY17
- PDR: 1QFY18
- CDR: 4QFY18
- Phase II EMD / Production Contract Award: 1QFY19



Pre-Solicitation Industry Day

- Provided in-advance through FedBusOps
 - Acquisition Approach
 - Updated Performance Specification
 - Updated Interoperability Profile CRS(I) Instantiation
- Event Format:
 - Similar to MTRS Inc II
 - Two-Day Event
 - Day #1: Review of acquisition approach with focus area discussion
 - Day #2: One-on-One with Industry Partners to gain feedback relative to proposed acquisition approach



RFI Clarification to Industry

- Weight – CRS(I) 25lb includes Non-Line of Sight technology (i.e. tether, repeater, etc)
- Water Resistance – Stands as originally written
- Expect larger MOLLE pack vs Assault MOLLE
- Manipulation clarified as follows:
 - 5" sphere @ 5lbs with 24" reach full 360 degree sphere
 - Scrape 2" below grade with 24" reach
- OCU: Active/Passive Control – Expected to be defined by STANAG 4586 Levels of Interoperability



CRS(I) Acquisition Approach Update

Competitive EMD (up to 2 contractors)

- Select one contractor following CDR or during testing
- Operator Control Unit (OCU) Priced Options:
 - Option #1: Utilize Government owned hardware and software (i.e. TOGA) and interoperable with existing control software
 - Option #2: Contractor selected OCU (can also be TOGA, but open to contractor to choose) and interoperable with TOGA software and radio

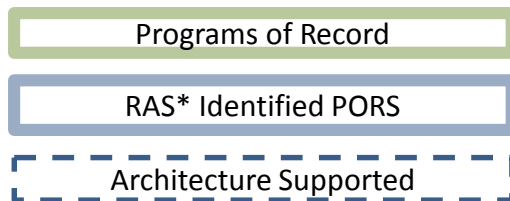
Award single contract for production



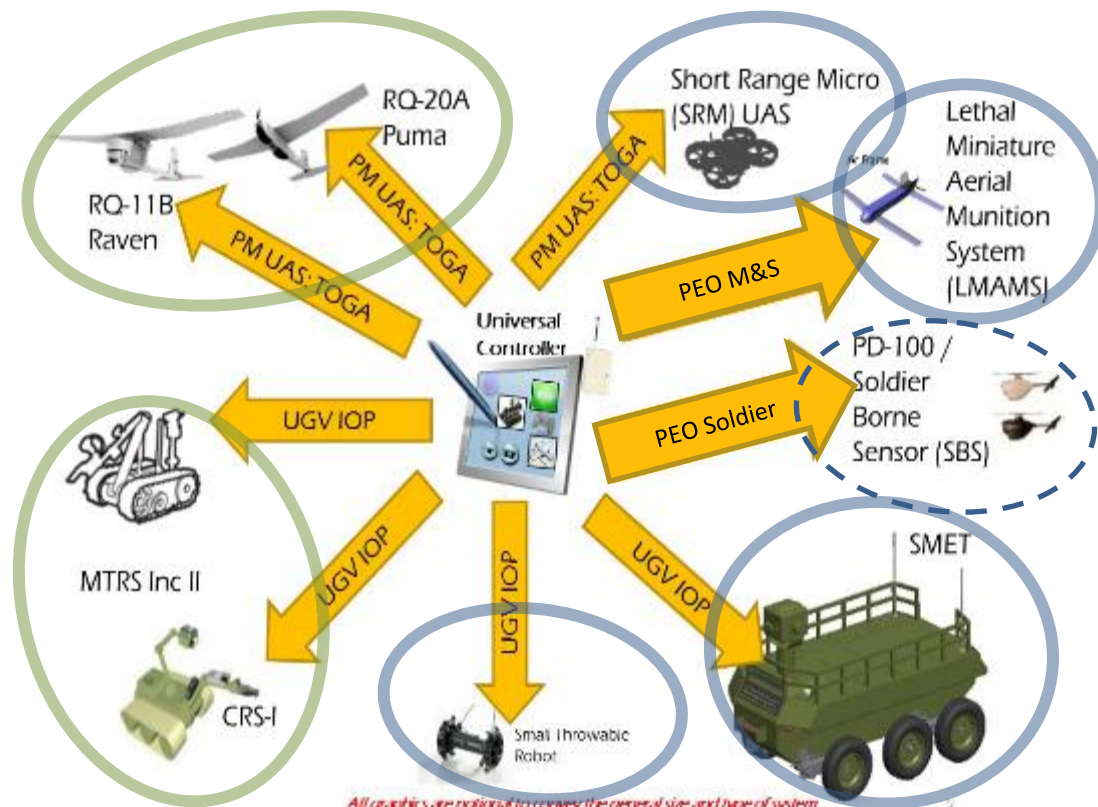
Universal Controller Strategy

Vision: controller(s) which meets or exceeds CRS(I) threshold while leveraging Better Buying Power emphasis areas:

- Provide draft technical requirements to industry early and involve industry in funded concept definition
- Modular Open Systems Architecture
- Interoperability
- Organic engineering capabilities
- Extensibility & Commonality
- Cybersecurity
- Commercial technology
- Supportability & Maintainability



*RAS – Robotic and Autonomous Systems



Universal Controller provides ability to control current and planned UxS and Sensors



CRS(I) Controller Update

Platform Interoperability

- Currently: CRS(I), MTRS, Raven, Puma (STANAG 4586 – Level of Interoperability)
- Anticipated: CRS(H), SMET, CRS(V)

PMO Investments

- Unmanned System Control Segment (UCS) with NAMC
- MOCU4 with SPAWAR
- Open Radio Design with AFRL
- JCUAS Common Communication Link Architecture with JHAPL
- Intra-Soldier Wireless/Intra-Robot Wireless
- Validated Modeling and Simulation



POCs

PM Force Projection (FP)

Mr. Bryan McVeigh

bryan.j.mcveigh.civ@mail.mil

Director, Robotics Logistics Support
Center (RLSC)

Ms. Michelle Link

michelle.a.link2.civ@mail.mil

PdM Unmanned Ground Vehicles (UGV)

Mr. Lou Anulare

louis.a.anulare.civ@mail.mil

PdM Applique & Large Unmanned
Ground Systems (ALUGS)

LTC Cory Berg

cory.n.berg.mil@mail.mil

Common Robotic System (Individual) {CRS(I)}

Mr. Jim Muldoon

James.p.muldoon3.civ@mail.mil

Robotic Enhancement Program (REP)

Mr. Jeff Morrell

Jeffrey.L.morrell.civ@mail.mil

UGV IOP

Mr. Mark Mazzara

mark.a.mazzara.civ@mail.mil



Discussion



PEO Robotics Portfolio - PdM UGV Programs



Man-Transportable Robotics System Mark I & II (EOD)



M160 Light Flail



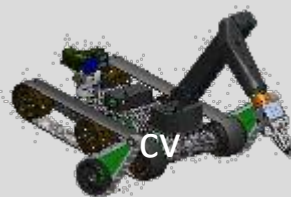
**Semi-Autonomous Control
Route Clearance & Interrogation System**



Robotic Enhancement Program



Man-Transportable Robotics System Increment II








Common Robotic System (Individual)



Leader/Follower



Husky Mounted Detections System

Talon IV	Packbot 510 FASTAC	SUGV 310 Mini-EOD	Dragon Runner	First Look
				

Non-Standard Equipment



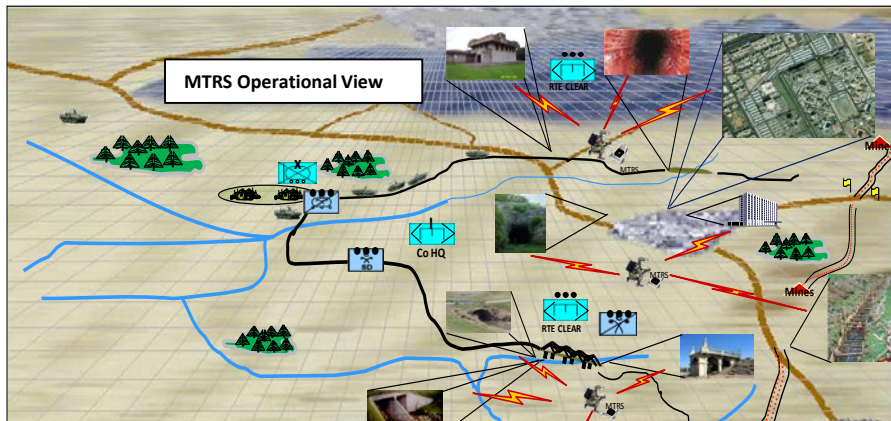
Squad Multipurpose Equipment Transport



Automated Convoy Operations

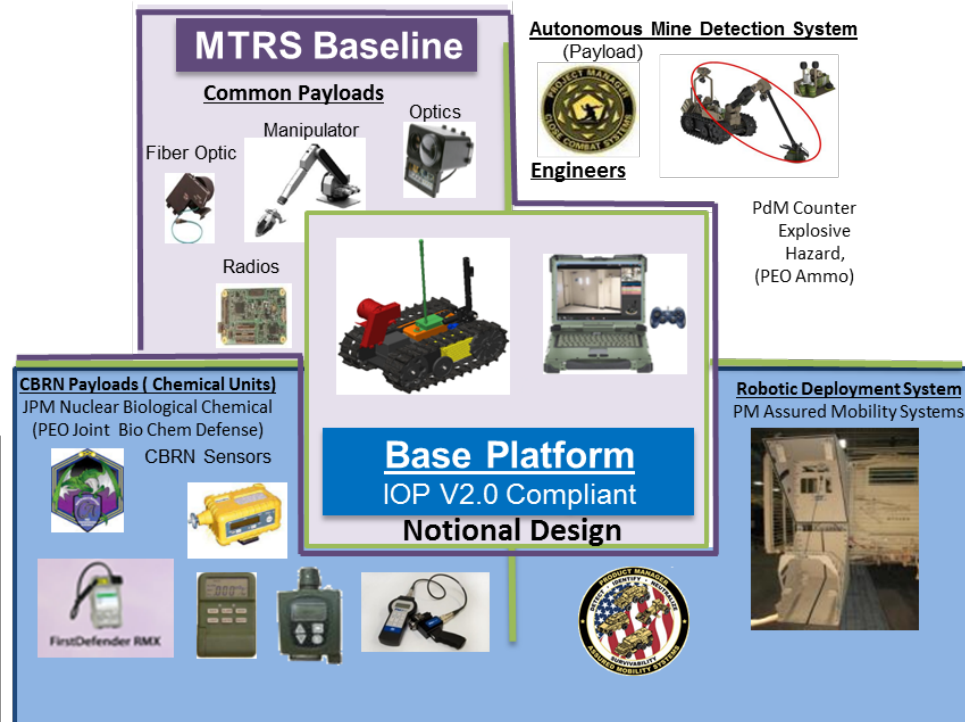


MTRS Inc II Program Overview



- (MTRS) Inc II is a remotely operated, man-transportable, robotic system.
- Provides a standoff capability to interrogate, detect, confirm and neutralize presence across War-fighting functions
- Identify and disposition
- Counter hazards by providing a base capability of carrying various platform payloads in support of current and future missions.

* AAO includes EOD requirement of 587



- CPD: Approved, 15 MAY 2013
- RFP Release: 4QFY16
- Contract Award: 2QFY17
- AAO: 1,210
- Users: Engineer, CBRN and EOD



Robotic Enhancement Program (REP)

Problem: Robotic technology is rapidly evolving. The standard requirements/acquisition timeline of 3 to 7 years increases the risk that robotic systems will be obsolete before it is fielded or more likely, before it even reaches Initial Operational Capability (IOC).

Mitigation: Evaluate small quantities of state-of-the-art robotic systems and/or payloads to inform the requirement and acquisition process.

Concept:

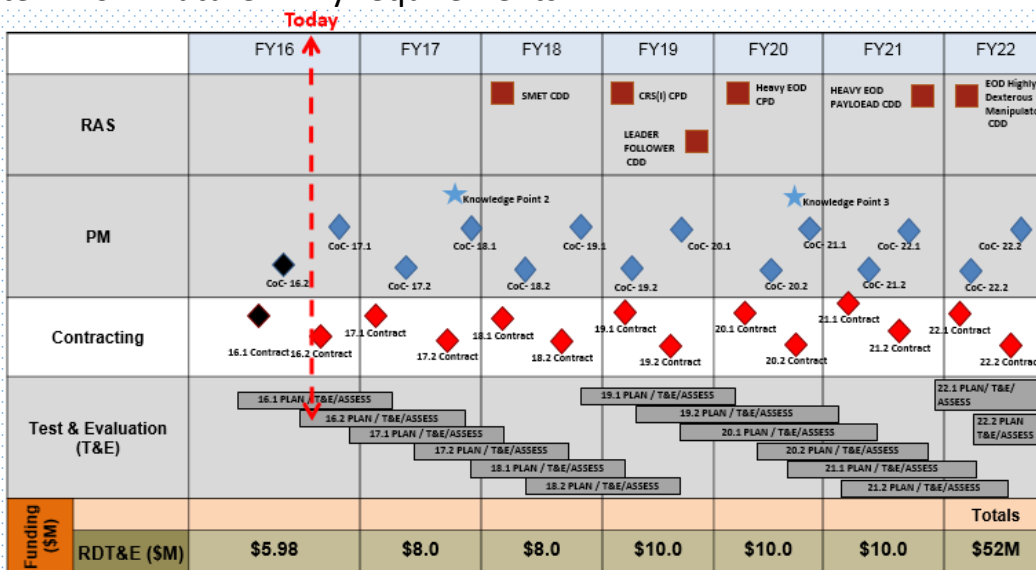
- Concept based off of Solidier Enhancement Program
- REP is a special project (not a full life cycle acquisition program)
- Uses a “buy-try-inform” methodology to better inform future Army requirements



Experiment Focus:

- Protect the Force
- Reduce Warfighters’ Workload
- Enable Situational Awareness
- Sustain the Force
- Enable Lethal/Non-lethal Engagements
- Reduce Cost

<http://www.peocscss.army.mil/rep.html>



Note: REP Council of Colonels (CoC) 17.1 Submission Deadline: 22 June 2016