“Currently, near-term capability gaps are mostly mitigated through incremental improvements to existing platforms and systems, while we make prudent investments in emerging and breakthrough technologies to address future gaps.” –LTG Michael Williamson
PEO CS&CSS Robotics Portfolio

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

M160 Light Flail

Semi-Autonomous Control
Route Clearance & Interrogation System

Leader/Follower

Robotic Enhancement Program

Man-Transportable Robotics System Increment II

Common Robotic System Individual

Squad Multipurpose Equipment Transport

Automated Convoy Operations

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

Non-Standard Equipment

Common Robotic System Heavy *

EOD Robotics Payload *

Husky Mounted Detections System

* Images are conceptual representations, not endorsements.
• CRS(I) will provide a man-packable (<25lbs), small, highly mobile, unmanned robotic system with advanced sensors and mission modules for dismounted forces.

• The system is designed to be quickly re-configured for various missions by adding or removing modules and/or payloads. The controller for the CRS(I) will also function as the Army’s Universal Controller.

• Contracting
  - EMD phase for competitive prototyping - up to two contractors; downselect for LRIP and Production
  - RFP release anticipated in 3QFY17
  - Contract award anticipated in 2QFY18
Route Clearance & Interrogation System (RCIS) Type I
Semi-Autonomous Control (SAC) System

• Optionally manned or unmanned High Mobility Engineering Excavator (HMEE) capable of enabling Soldiers to semi-autonomously interrogate, excavate, and classify deep buried explosive hazards, IEDs, and caches

• Contracting:
  - EMD phase contract with Low-Rate Initial Production (LRIP) and Full-Rate Production (FRP) options
  - Integration onto Delta High Mobility Engineer Excavator (D-HMEE)
  - RFP release anticipated in 2QFY17
  - EMD contract award anticipated in 1QFY18
Non Standard Robots

• Spare Parts for Talon variants
  - Five Year IDIQ
  - RFP release anticipated in 3QFY17
  - Contract award anticipated in 4QFY17

• Spare Parts for PackBot variants, Kobra and First Look
  - Five Year IDIQ
  - RFP release anticipated in 3QFY17
  - Contract award anticipated in 4QFY17

• Spare Parts for F6A, A+, AFMSR, RONS, FX
  - Five Year IDIQ
  - RFP release anticipated 3QFY17
  - Contract award anticipated 4QFY17
Leader Follower (LF)

• **System Description:** The Leader Follower capability is an applique suite of automation (sensors and host vehicle “digitization” upgrades) providing serial march units of a manned to unmanned ratio of 1:3 to the tactical Wheeled Vehicle (TWV) Fleet of vehicles during line haul convoy operations.

• **Leader Follower Capabilities:**
  - Force protection and logistics throughput for line haul convoy missions TWVs.
  - Wirelessly link unmanned follower to a soldier operator Leader vehicle.
  - Reduces number of soldiers required to operate convoy, resulting in reduced number exposed to risk of injury from attack.

**PROGRAM PROJECTIONS**

- Palletized Loading System (PLS) first TWV fleet to receive LF
- Competing for POM 19-23 Funding
- Reliance on M&S to reduce testing of automated vehicle system
- LF (B) kit design to be vehicle agnostic while host vehicle (A) kit will be vehicle unique

**Status:** Army determining if Leader Follower will stay in S&T, transition to POR, or hybrid solution set
System Description: The SMET will lighten the Warfighter’s load and sustain the force during operations. The SMET will maneuver with the dismounted force and enable Warfighters to conduct operations carrying equipment required to conduct dismounted operations.

Potential Capabilities:
- Load Lightening
- One Size Platform
- Resupply
- Tele-operate and Automation
- Adaptable to Squad Missions
- Reconnaissance
- Multiple Payload integration
- 3KW Squad Power Source
- Resupply
- Reconnaissance

CDD Writers Workshop
25-29 Aug 2016
1-3 June 2016

MAR 2017 AROC CDD Approval

2017 P-Spec Development

NIE16.1 OCT15
SMET Surrogates demonstrated reduced Soldier load, commo network extension, non-standard casualty evacuation, and battery charging capability.
Robotic Enhancement Program (REP)

• “Buy, try and inform” - evaluate state-of-the-art robotic systems and/or payloads that are Government-Off-The-Shelf (GOTS), Commercial-Off-The-Shelf (COTS) and Non-Developmental Items (NDI) to inform the requirement and acquisition process

• Status:
  - Experiment 16.1 – 17.1
    • Proposals submitted 109
    • Proposals Selected: 25
  - Experiment 17.2
    Proposals submitted 146 (62 New/ 84 Previous)
    Council of Colonels convenes: 2 MAR 17

• REP Submission Site:
OTHER

COMPETITIVE PROCUREMENTS
Portable Asphalt Patcher

• Portable, self-contained, fully functional spray injection asphalt patcher used by engineer construction teams to perform route remediation task in support of assured mobility.

• All in-one machine reduces refilling and mission completion times.

• Contracting Status:
  - Production contract
  - RFP release anticipated in 3QFY17
  - Contract award anticipated in 4QFY17
Maintenance Support Device (MSD) Version 4
Ruggedized & Semi-ruggedized; Light

• The Army's standard general purpose rugged compact, lightweight, man-portable at platform tester.
• Performs quick diagnoses and fault isolation on the Army’s fleet of Electronic, Tactical Wheeled, Armored Fighting, Aviation & Missile weapon systems.
• Hosts Interactive Electronic Technical Manuals, Intrusively tests and diagnoses Weapon Systems to the Line Replaceable Unit level.
• Contracting Information:
  - 2 Contracts (Rugged/Semi Rugged; Light)
  - RFPs release anticipated in 3QFY17
  - Contract awards anticipated in 1QFY18
  - Contracting through ACC-Redstone
Industry Interaction

- Industry feedback on RFIs and other matters are critical to PM FP for optimizing program strategy & managing risk
- Recent RFPs improved based on RFI feedback:
  - MTRS Inc II
  - CRS(I)
  - RCIS
- Question to Industry: How can we make Industry Days more effective for you?
SMET P-Spec Initiative

• Collaborative, front-end effort between NAMC & Government to inform development of the performance specification for the SMET program of record

• Stage 1 (RFI Process (JAN-APR 17)):
  - Solicit written input from NAMC members on initial draft p-spec
    • Technological feasibility, ROM cost, proposed evaluation criteria, etc.
  - Use input to determine key, residual issues requiring further consideration

• Stage 2 (Task Request Process (JUN17)):
  • Organize and conduct roundtable sessions* to address key, residual issues in four anticipated focus areas:
    - Mobility/Automotive, Autonomy, Survivability, Cyber/Radio
  • Consolidate feedback into a final report to Government

• Stage 3: (JUL 17)
  - Government prepares & publishes final draft p-spec for final public comment
  - Government considers final public input and finalizes the p-spec

* Three or more participating companies per session has been deemed sufficient to mitigate potential COI
OTA SMET P-Spec Development

**JAN**
- Contractors: DUE: Written feedback on initial draft P-Spec
- NAMC: Publish initial draft P-Spec to NAMC members
- Government: Complete singularization of CDD & SME review for draft P-Spec

**FEB**
- Contractors: NAMC provides questions to contractors
- NAMC: NAMC consolidates feedback

**MAR**
- Contractors: DUE: Submit proposals to serve as SME leads
- NAMC: VRA/Gov't review proposals & select SMEs
- Government: VRA/Gov't review consolidated P-Spec input. Identify key questions for contractors

**APR**
- Contractors: Respond to VRA/Gov't issues & questions
- NAMC: Release solicitation to NAMC for SME leads
- Government: VRA/Gov't review

**MAY**
- Contractors: SMEs conduct technological investigations & prepare for roundtable sessions
- NAMC: Roundtable Sessions with Contractors, NAMC and Government
- Government: SMEs prepare final report & document all findings

**JUN**
- Contractors: DUE: Submit proposals to serve as SME leads
- NAMC: DUE: Submit proposals to serve as SME leads
- Government: Final P-Spec

**JUL**
- Contractors: Roundtable Sessions with Contractors, NAMC and Government
- NAMC: SMEs prepare final report & document all findings
- Government: Final P-Spec