U.S. ARMY COMBAT CAPABILITIES DEVELOPMENT COMMAND – GROUND VEHICLE SYSTEMS CENTER

Acquisition Innovation

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MISSION:
Provide best in class, actionable, innovative acquisition and assistance agreement solutions to US Army CCDC Ground Vehicle Systems Center and its external customer organizations.

VISION:
The Recognized Leaders in Acquisition Innovation
### WHAT THIS BRIEFING COVERS

#### Federal Acquisition Regulations & Associated Supplements

**Standard Approach**

1. Requirements Development (Solution)
2. Market Research
3. Synopsis
4. RFP
5. Source Selection

**Acquisition Innovation Approach**

1. Define the Problem
2. Market Research
3. Publication
4. RWP / Panel Pitch
5. Negotiation
6. Award

**Section 804 Rapid Prototyping & Rapid Fielding**

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DEFINING THE PROBLEM AND PERFORMING MARKET RESEARCH

15 USC 3724 - Crowdsourcing and Citizen Science
15 USC 3715 - Use of Partnership Intermediaries
CROWDSOURCING AND CITIZEN SCIENCE

Crowdsourcing - method to obtain needed services, ideas, or content by soliciting voluntary contributions from a group of individuals or organizations, especially from an online community.

Citizen Science – A form of open collaboration in which individuals or organizations participate voluntarily in the scientific process in various ways, including—

(A) enabling the formulation of research questions;
(B) creating and refining project design;
(C) conducting scientific experiments;
(D) collecting and analyzing data;
(E) interpreting the results of data;
(F) developing technologies and applications;
(G) making discoveries; and
(H) solving problems.

This searchable database provides a government-wide listing of citizen science and crowdsourcing projects designed to improve cross-agency collaboration, reveal opportunities for new high-impact projects, and make it easier for volunteers to find out about projects they can join.

15 USC 3710a
PARTNERSHIP INTERMEDIARY AGREEMENT (PIA)

Partnership Intermediary Agreement (PIA): An agreement between the government and an intermediary organization to perform intermediary services.

Partnership Intermediary: An agency of a State or local government, or a nonprofit entity that assists, counsels, advises, evaluates, or otherwise cooperates with small business firms or institutions of higher education, to provide services for a Federal laboratory.

PIA Services

- *Innovation Hubs* – Leverage tools & resources in an "open door" environment under one roof
- *Prize Challenges* – Invite the public's help to solve perplexing mission-centric problems
- *STEM* – Host challenges & events
- *Shark Tanks* – Compete & pitch ideas
- *Technology Sprints* – 3 to 14 days event attacking a problem, speeding up decision making process
- *Technology Accelerator* – “Boot camp” consisting of workshops & mentorship
- *Technology Incubator* – Business, government & academic resources providing counsel

15 USC 3710a
Partnership Intermediary Examples (DoD)

**TechLink**
- Sources and pre-screens technology from DoD labs for marketing by PIA Network
- Serves as focal point to labs for licensing
- Helps other PIAs and their clients to develop high-quality license applications and commercialization plans

**MILTECH™**
- Assist DOD Labs, with manufacturing expertise, DOD Labs, DOD R&D efforts, to include DOD procurement organizations, with technology scouting
- Act as a Lab’s, PM’s, PEO’s, or a command’s “Honest Broker” with industry and vendors

**NAVSEA CRANE**
- Technology transition
- Technology transfer Innovation & Collaboration
- Workforce development (current & future, STEM)
- Concept prototyping

**SOFWERX**
- Technology Transfer/Commercialization and Collaboration:
  - STEM: Collaborative camps, curriculum writing for state educational requirements
  - Educational Partnership Agreements
Defense Innovation Hubs

Common Characteristics
- Robust Tech Community / Start-Up Culture
- State-of-the-art Lab and University Infrastructure
- Active Venture Community
REFINING PROBLEM SETS AND SOLICITING SOLUTIONS

- Defining and Refining Problem Sets
- 10 USC 2374a - Prizes for advanced technology achievements
- Solicitation Methods
Resources for Defining and Refining Problem Sets

Hacking 4 Defense
- University-sponsored class that allows students to research Department of Defense problem sets
- Government problem sponsors partner with the nation’s top students, solving national security issues with lean business practices.
- Sponsors guide their students while they rapidly create and deploy solutions.

National Security Technology Accelerator
- Frame problems and provide innovation tools (Education).
- Collaborate with non-traditional partners and venture community to identify solutions (Collaboration).
- Adapt solutions through public funding or dual-use venture (Acceleration).

Defense Innovation Unit
- Embedded engagement with Silicon Valley
- Translating DOD problem sets into actionable problems, easily translated to commercial solution providers
- Pioneered use of Commercial Solutions Opening as Solicitation method

Acquisition Innovation Road Show
- Coaching, mentoring, training, and direct acquisition support to Department of Defense activities.
- “Transaction Intensive Management Events (TIME)” to assist acquisition teams in defining problem sets and match acquisition approaches.
- Training to Govt and Industry on alternative authorities for Federal Procurement
Soliciting for Solutions

**Commercial Solutions Opening**

- Competitive solicitation process pioneered by Defense Innovation Unit (DIU) and Army Contracting Command New Jersey (ACC-NJ). The CSO is a three-phase process. Phase 1 is an evaluation of company solution briefs. In Phase 2 companies pitch to the government and provide additional detail. Companies invited to Phase 3 submit proposals to be negotiated with the government.

**Annual Plan Call for WPs**

- Competitive solicitation process in which the Government identifies broad topic areas for investment, along with current Government capability gaps to a consortium of companies. In response industry submits white paper solutions for further development, negotiation, collaboration and award.

**Broad Agency Announcement**

- Agency announcement with Peer or Scientific Review for the acquisition of basic and applied research and that part of development not related to the development of a specific system or hardware procurement. Issued annually to solicit meaningful proposals with varying technical/scientific approaches.

**Prize Challenge**

- Competitions among individuals, private industry, academia, and Government stakeholders, requiring them to submit solutions in response to a defined problem set. Challengers are incentivized through the use of monetary or non-monetary rewards.
PRIZE CHALLENGES

Prize challenges are: Competitions among individuals, private industry, academia, and Government stakeholders, requiring them to submit solutions in response to a defined problem set

- Challengers are incentivized through the use of monetary or non-monetary rewards

Purpose: To increase the attention on the problem set and help to diversify the vendor pool for proposed solutions beyond the traditional Government industry partners

Previous Challenges:
- Longitude and ship navigation
- Lindbergh’s transatlantic flight
- Designs for the U.S. Capitol and White House
- Cost-effective clean water systems
- Gunshot detectors
- Robots that can set up life support on Mars

Launched in 2010, Challenge.gov allows federal agencies to crowdsource ideas from the public and solve problems with thinkers and doers from any neighborhood and field of expertise. Since 2010, the U.S. government has run nearly 1,000 challenges and offered well over $250 million in cash prizes for the best ideas.
Recent DOD Prize Challenges

DARPA Launch Challenge
Anywhere, Anytime. The DARPA Launch Challenge aims to revolutionize flexible and responsive launch capabilities in major peer and near-peer defense scenarios.

DARPA Subterranean Challenge
Defense Advanced Research Projects Agency
Don't Blow It! Safely Eliminating Chemical... Access Disable Destroy

TechSearch
Army xTechSearch
The Army is seeking innovative, paradigm-breaking technologies from the nontraditional defense community to support modernization priorities.

Open Until: 11/19/2018

$2,180,000 IN PRIZES

Open Until: 01/01/2019
RESEARCH, EXPERIMENTATION, AND PROTOTYPING – GETTING ON CONTRACT

10 USC 2371 - Research projects: transactions other than contracts or grants
10 USC 2373 - Procurement for experimental purposes
10 USC 2371b – Prototyping: transactions other than contracts or grants
Federal Research Authorities
(Other than Contract, Grant, or Cooperative Agreement)

10 USC 2371: Research OT
- For basic, applied, and advanced research projects
- 50/50% Cost Share (to the Extent Practicable
- Used where contract, grant, or cooperative agreement are not “feasible or appropriate”
- Custom IP negotiated at arms length
- No FAR/DFARS or DODGARS

10 USC 2371: Technology Investment Agreement (TIA)
- For basic, applied, and advanced research projects
- 50/50% Cost Share (to the Extent Practicable
- Used where contract, grant, or cooperative agreement are not “feasible or appropriate”
- Standard IP provisions
- No FAR/DFARS but DODGARS does apply

10 USC 2373: Purchase for Experimentation
- For purchase of ordnance, signal, chemical activity, transportation, energy, medical, space-flight, and aeronautical supplies, for experimental or test purposes
- Purchase quantities are limited to the amount necessary for experimentation.

10 USC 2371b: Prototyping OT
- For prototyping directly relevant to DOD mission
- 1/3 Cost Share or significant NDC participation
- Custom IP negotiated at arms length
- No FAR/DFARS or DODGARS
PROTOTYPING, PRODUCTION, AND FIELDING

- Section 804 (FY2016 NDAA) – Middle Tier of Acquisition for Rapid Prototyping and Rapid Fielding
- 10 USC 2371b(f) – Prototype to Production
Prototyping, Production, and Fielding

Section 804

Rapid Prototyping

- Use innovative technology to rapidly develop fieldable prototypes to demonstrate new capabilities and meet emerging military needs.
- Must field a prototype that can be demonstrated in an operational environment; and
- Provide for residual operational capability within 5 years of an approved requirement.

Rapid Fielding

- Use proven technologies to field production quantities of new or upgraded systems with minimal development required. The objectives are:
  - Begin production within 6 months
  - Complete fielding within 5 years of an approved requirement.

Program Management Tools

Prototyping OTA

- For prototyping directly relevant to DOD mission
- 1/3 Cost Share or significant NDC participation
- Custom IP negotiated at arms length
- No FAR/DFARS or DODGARS

Not subject to JCIDS and DODD 5000.01

Procurement Tools

Production OTA

- follow-on production contract or transaction, authorized where: (A) competitive procedures were used for the selection of parties for participation in the transaction; and (B) the participants in the transaction successfully completed the prototype project provided for in the transaction.

10 USC 2371b
COOL STORY BRO
(now give us an actual example where you would use all this stuff)

Defining The Problem

User Input
Task Request
10 USC 2371b

Soldier Innovation Workshop

15 USC 3710a
Task Request
10 USC 2371b

Crowdsourcing

Government Acquisition Team

10 USC 2371b

Prototype Project

10 USC 2371b

Robotic Rodeo

10 USC 2371b(f)

RWP / Panel Pitch

10 USC 2371b

Prototyping Effort

Prototype w/ Optional Production

Negotiation and Award to Multiple Vendors

Solicitation

Problem Defined

From Idea to Hardware in The Field without a Single FAR Contract