



How Capabilities are Developed and Delivered to the Combatant Commanders June 23, 2011

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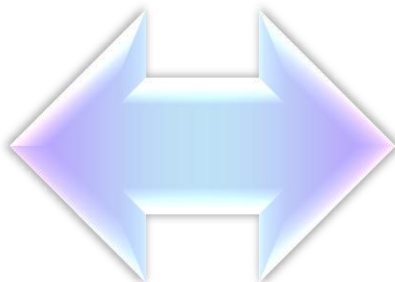
Service vs. COCOM Responsibilities

Military Services / Departments
Organize, Train & Equip

Combatant Commanders
Operationally Employ



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How Capabilities are Developed and Delivered to the Combatant Commanders



Adaptive Response to Urgent Needs

- Rapid Acquisition / Procurement / Rapid Fielding

Transition to Procurement & Sustainment

- Joint Training / Global Force Allocation

Readiness & Suitability Confirmation

- Test & Evaluation
- Military assessment of utility

Functional Validation; Tailored Form/Fit/Function

- Demonstration

Technical Concept Design & Development

- Prototyping

Alternatives Development & Assessment

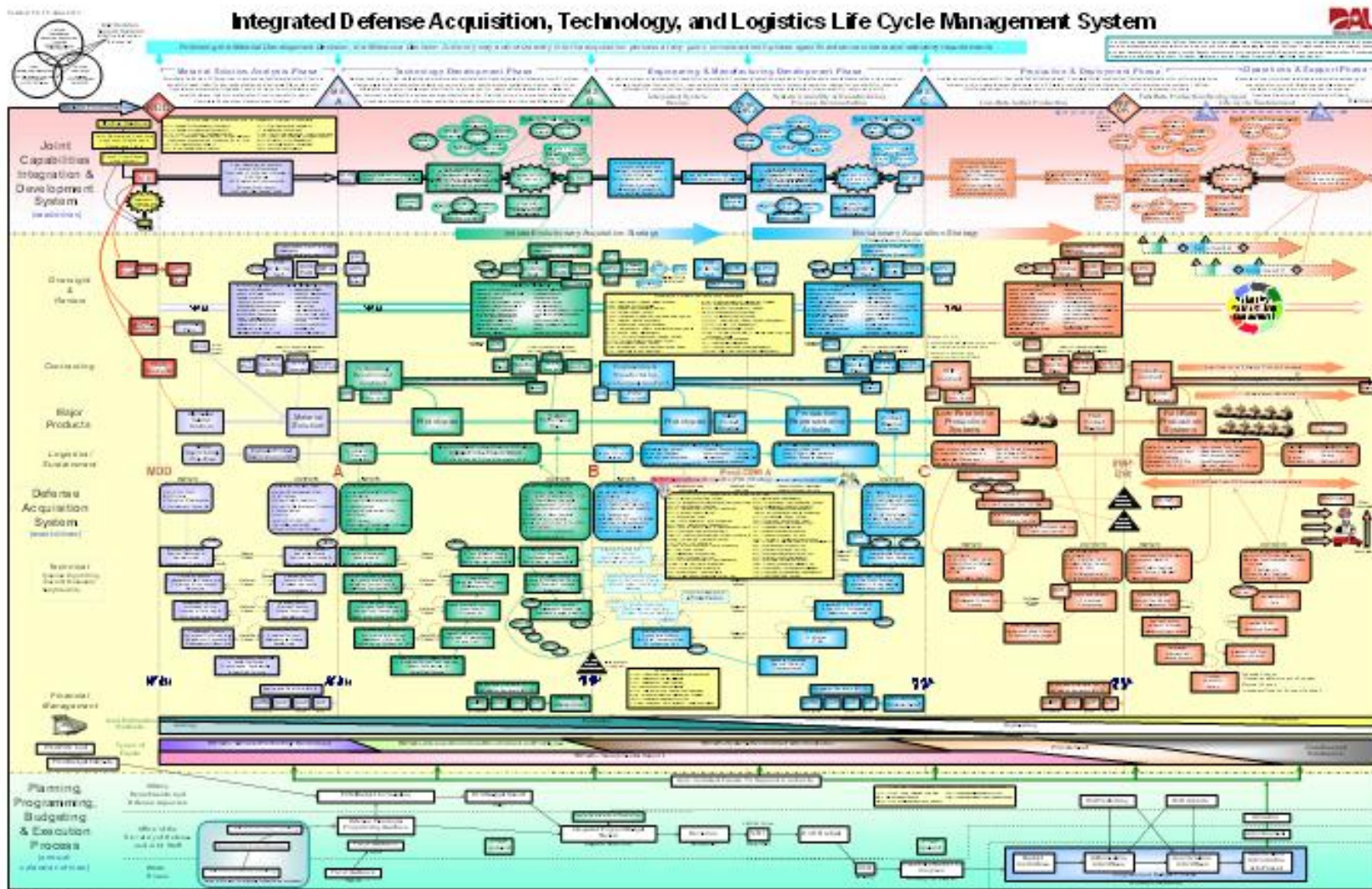
- Experimentation
- Red Teaming Analysis

Conceptualization

- Needs identification / lessons learned / assessment
- Tech push exploitation

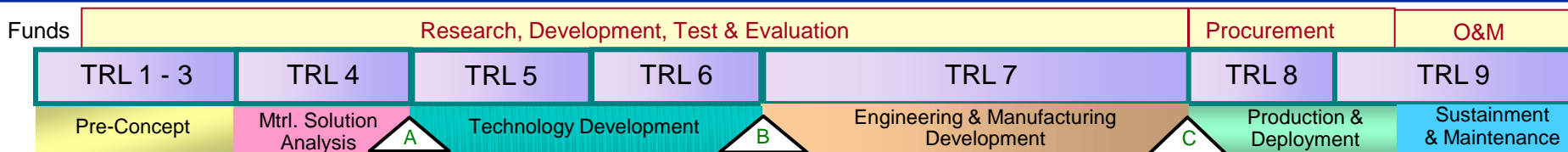


Defense Acquisition Process





ASD(R&E)Key Demonstration & Fielding Programs



Tech Demos for Irregular Warfare

Rapid Reaction Fund (RRF)

PE 0603826D8Z

New Breakthrough Capabilities to Operations

Biometrics & Forensics S&T

PE 0603665D8Z

Operational Experiments & Tech Integration for COCOMs & Interagency

Emerging Capabilities (EC)

PE 0603699D8Z

COCOM, Joint, Coalition & Interagency Capability Needs

Joint Capabilities Technology Demonstrations (JCTDs)

PE 0603648D8Z

“Gap-Filling” Technologies for OCO

Quick Reaction Funds (QRF)

PE 0603826D8Z

Assess Mature Technology from Coalition Industry

Foreign Comparative Testing (FCT)

PE 0605130D8Z

TRL: Technology Readiness Level
OCO: Overseas Contingency Operations



Rapid Reaction Fund (RRF)



- **Description**

- Identify & develop near-term capabilities to support irregular warfare needs within 6-18 months

- **Focus Areas**

- Unmanned autonomous systems and behaviors
- Evaluation of emerging commercial technologies for blue/red applications
- Addressing and responding to enhanced enemy capabilities
- ISR RDT&E architecture and integration venues
- Countering violent extremism
- Force Protection against advanced asymmetric threats

- **Participants: COCOMs, Intel Community, Interagency, Services & Defense Agencies**

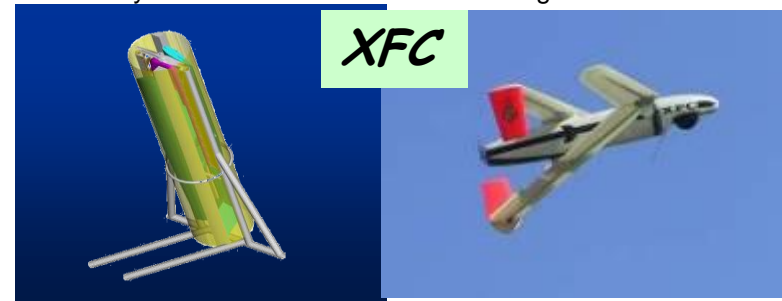
Sea Stalker



Demonstrate an operational autonomous ISR capability that can be launched from submarines and surface platforms

Folded Wing Ready for Non-Pyrotechnic Launch

Fuel Cell Powered for Long Endurance ISR



Development of a hydrogen fuel cell powered asymmetrical unmanned aerial system for persistent surveillance



Joint Capability Technology Demonstrations (JCTDs)



• Description

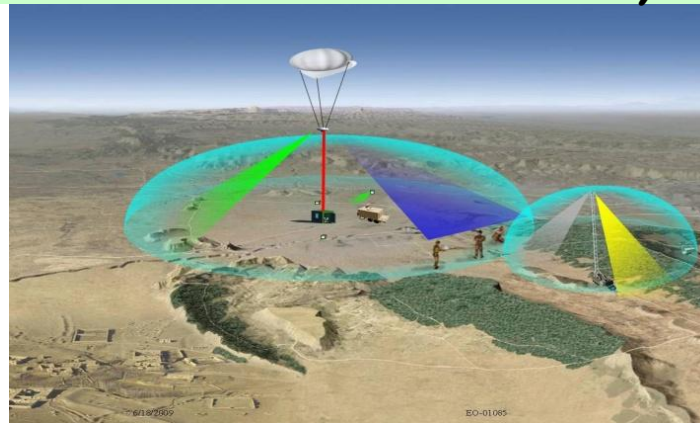
- Provide technology capability solutions through rapid prototyping to solve urgent joint, coalition, and inter-agency gaps
- Validated by Joint Staff and independent Military Utility Assessment

• Focus Areas

- Most pressing military needs as identified by COCOM's capability gaps, including Joint Urgent Operational Needs (JUONs) & Integrated Priority Lists (IPLs)
- Multiple new start opportunities annually to address emerging capability gaps within the budget period

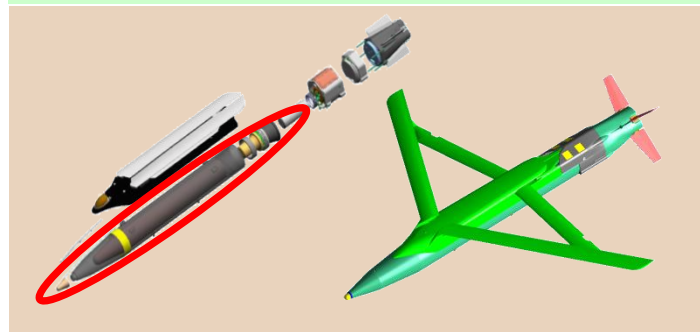
Participants: COCOMs, Coalition Partners, Services & Defense Agencies, Industry

Persistent Ground Surveillance Systems



Supports urgent need for persistent surveillance at forward operation bases in Afghanistan

Focused Lethality Munition



Demonstrate low collateral damage weapon - warhead with specialized fill to reduce frag & increase blast effects



Quick Reaction Fund (QRF)



- **Description**

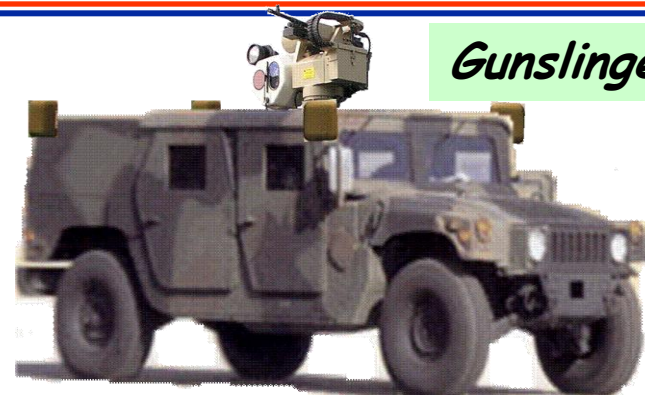
- Funds high priority, short duration technology demos during execution year responding to new adversary threats
- Identify and develop near term capabilities to support conventional forces warfare urgent needs
- Efforts completed within 12 months

- **Focus Areas**

- Anti-Access Area Denial (FY 2012)

- **Participants**

- Project Sponsors & Execution: Services & Defense Agencies
- Efforts coordinated with Combatant Commanders / Joint Staff



Gunslinger

Modular, vehicle based, on-the-move hostile fire detection and counter-fire capability

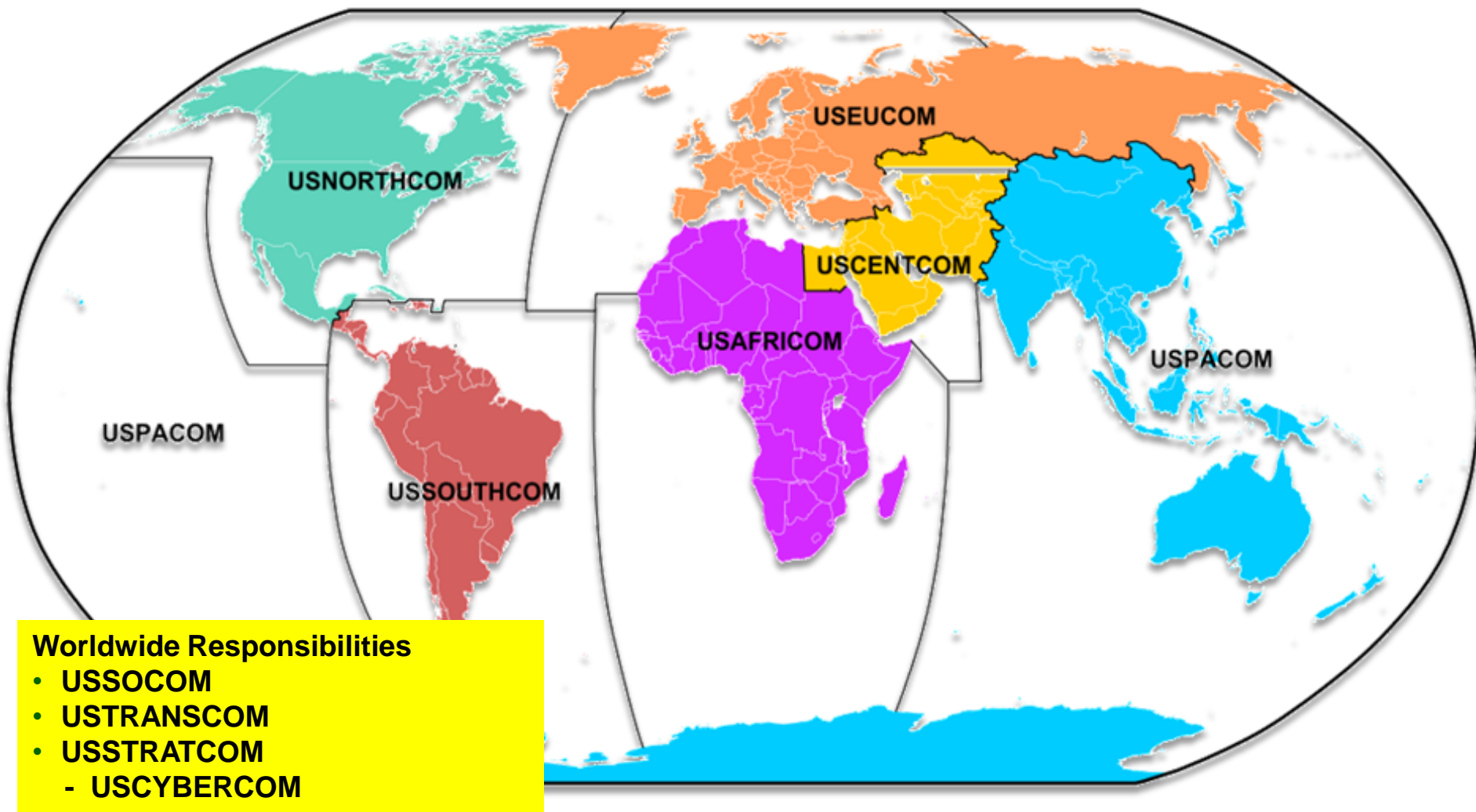
Deployable Satellite Communication System



Inflatable satellite antenna, designed to provide high-bandwidth SATCOM capability in a smaller, lighter package than conventional systems



Areas of Responsibility



Worldwide Responsibilities

- USSOCOM
- USTRANSCOM
- USSTRATCOM
- USCYBERCOM