

Fulfillment of Urgent Operational Needs

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Report Outline

- Background – "A Mandate for Change"
- Addressing Urgent Needs Today
- Shortfalls in the Current Processes
- Findings of the Task Force
- Recommendations and Next Steps



A Mandate for Change

- Letter to Secretary of Defense Gates from Senators Joe Biden and Kit Bond, dated June 28, 2007

"We are concerned that the Department is failing to respond to urgent warfighter requirements because of unconscionable bureaucratic delays in Washington."
- Subsequently, Congress required an independent review of DOD responses to urgent needs submitted by combatant commands by July 11, 2009 (Section 801 of the 2009 National Defense Authorization Act, signed October 14, 2008)
- This Task Force was chartered on December 17, 2008 by USD(AT&L)



Addressing Urgent Needs is Evolving

- US forces went to war unequipped for ongoing stability or counterinsurgency operations; when enemy elements exploited capability gaps, responses included...
- Services and the acquisition community adapted to find urgent solutions
- Urgent, dynamically changing COCOM needs are a permanent part of the 21st Century landscape



What is the Underlying Problem in Meeting Urgent Needs?

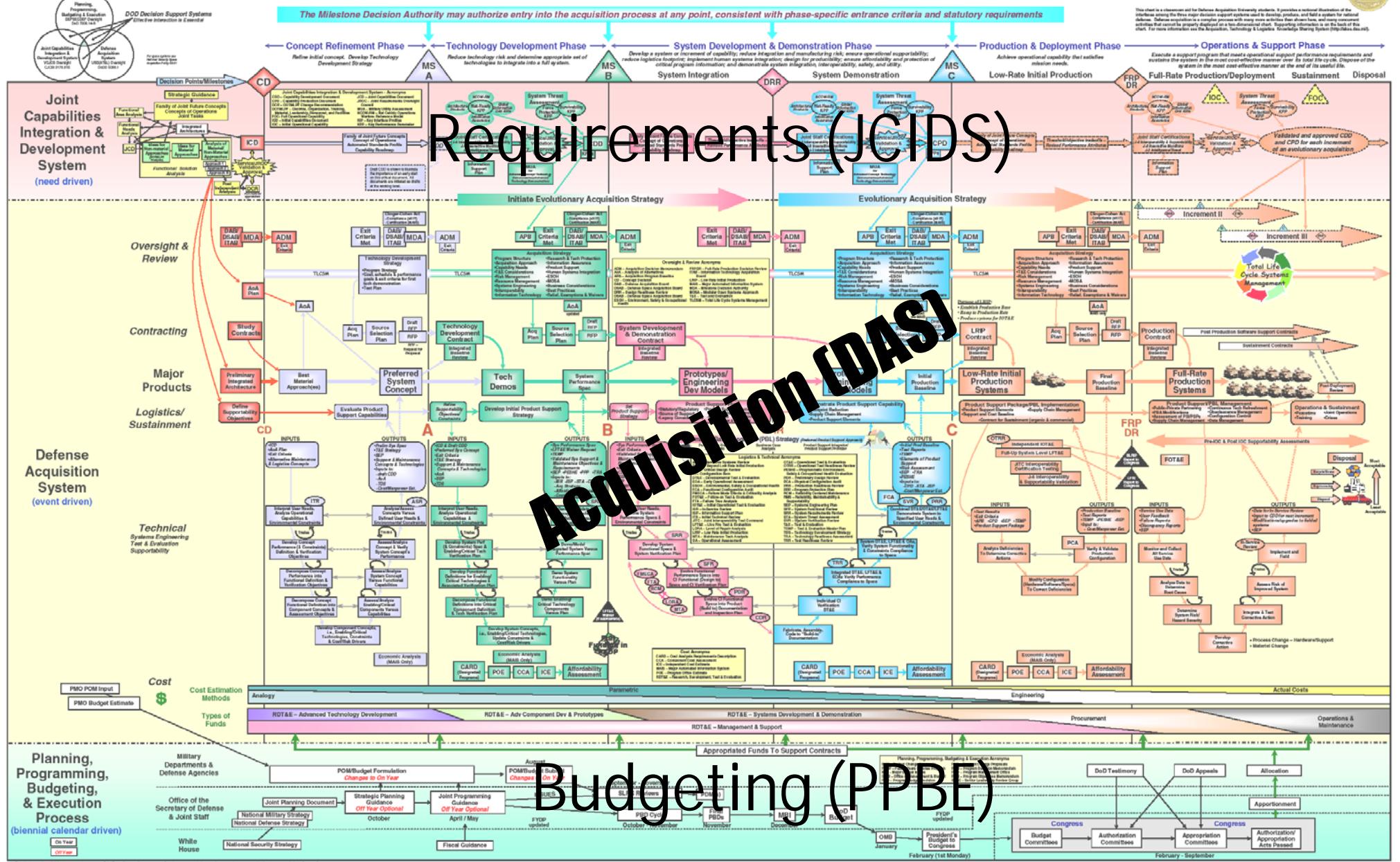
- Defense requirements, acquisition, and budgeting system is not geared for this environment
- Numerous rapid reaction programs and organizations evolved as the war evolved to respond to warfighter needs, but...
- While there has been progress, eight years later, our ad hoc "rapid" processes still experience unnecessary and bureaucratic delays in needs generation and vetting of urgent needs, and in fulfillment and fielding of urgent solutions

We lack a robust, enduring rapid fielding capability for hybrid warfare



Standard DoD Processes Have Not Led to Rapid Fielding

Integrated Defense Acquisition, Technology, & Logistics Life Cycle Management Framework



Budgeting (PPBE)



A Growing Chorus for Rapid Response

- 2006, 21st Century Strategic Technology Vectors, Defense Science Board
- 2007-2008, Defense Industrial Structure for Transformation, Defense Science Board
- 2008, Venture Capital and IT Acquisition: Managing Uncertainty, MITRE
- 2008, Institutionalization of Innovative Army Organizations, Army Science Board
- 2008, Beyond Commercial: Gaining the Cost/Schedule Benefits for DOD, Defense Science Board
- 2009, Perspectives on Potential Changes to Department of Defense Acquisition Management Framework, Government Accountability Office, GAO-09-295R
- 2009, Creating a DOD Strategic Acquisition Platform, Defense Science Board
- 2008, DSB Summer Study on Capability Surprise (forthcoming)
- 2009 National Defense Authorization Act
 - Section 253, Assessment of technology transition programs and repeal of reporting requirement.
 - **Section 801, Assessment of urgent operational needs fulfillment.**
 - Section 813, Transfer of sections of title 10 relating to Milestone A and Milestone B for clarity.

The imperative to coherently respond rapidly in the 21st century security environment is widely recognized



Task Force Membership

- Chair
 - HON Jacques Gansler
- Executive Secretary
 - Mr William Beasley
- Government Advisors
 - Mr Kevin Arnwine
 - Mr Tom Dee
 - CAPT Michael Ford
 - Mr Brian Kiviat
 - CDR Mike Moore
 - Mr Thomas Simoes
- DSB Representative
 - Lt Col Chad Lominac, USAF
- Members
 - LTG William Campbell (USA, ret)
 - Mr Richard Dunn
 - Ms Christine Fisher
 - Ms Kathleen Harger
 - Dr William Howard
 - LtGen Jan Huly (USMC, ret)
 - HON Noel Longuemare
 - Dr Michael McGrath
 - RADM David Oliver (USN, ret)
 - Ms Leigh Warner
 - HON Dov Zakheim
- Staff
 - Ms Kelly Frere
 - Mr Brian C Keller
 - Dr Toni Marechaux

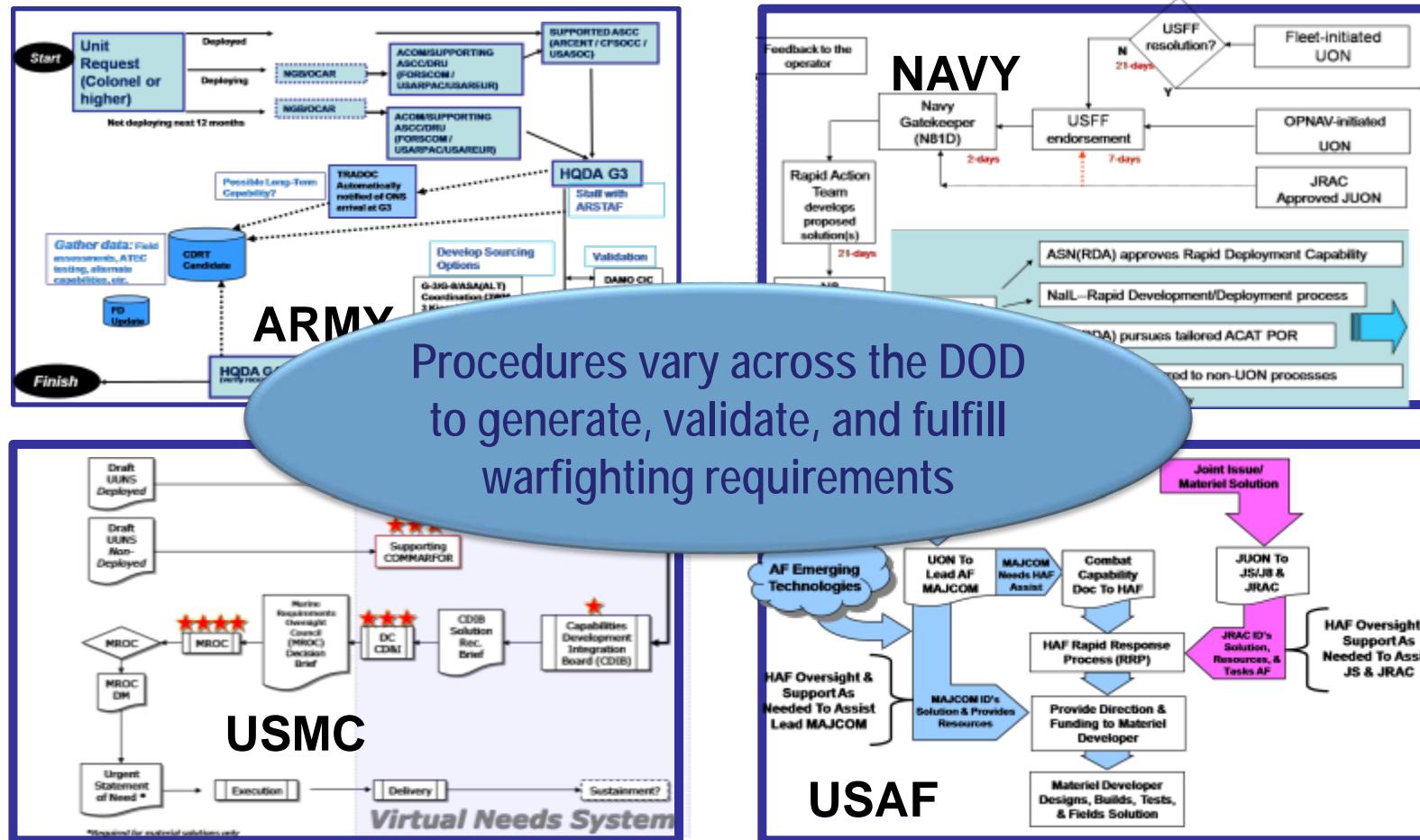


Addressing Urgent Needs Today

Once an urgent need is identified by a COCOM

- COCOM can use O&M or other discretionary funding in theatre
 - Can be for anything with a unit cost of \$500K or less (proposed to raise to \$1.5M)
 - Up to \$25K on a purchase order or IMPAC card – and can be used multiple times
 - Little oversight, low level of signature authority
- Additional paths available to resolve urgent needs
 - UONS for Service or Component needs (e.g., REF 10-liner, UUNS, ONS, C-MNS)
 - JUONS for COCOM needs to Joint Staff (then may be fulfilled via Services)
 - Simultaneous pursuit of both UONS and JUONS to access available funds or for faster response
- Signature authority needed for UONS/JUONS is more restrictive than for discretionary COCOM funds
 - UONS/JUONS tend to be used for the most difficult and costly needs – one for which solutions are not readily identifiable

Each Service Now Has an Urgent Needs Process



Some common steps:

- Generate – in the COCOMs
- Validate – a multi-step process with highest level approvals
- Fulfill – via Services acquisition



Confusing and Overlapping Terminology

- Many synonyms for "I need it now" in current use
 - Immediate – goal is 120 days to field
 - Urgent – goal is less than 12 months to field
 - Rapid – goal is 1 to 3 years to field
 - Enduring – 3+ years to field
 - Contingency – immediate need, filled in theater
- Differing Service Acronyms
 - Army - Operational Need Statement (ONS)
 - AF and Navy - Urgent Operational Need Statement (UONS)
 - USMC - Urgent Universal Need Statement (UUNS)
- Additional Joint Acronyms
 - Joint Urgent Operational Need Statement (JUONS)
 - Combat-Mission Need Statement (C-MNS), SOCOM
 - Immediate Warfare Need (IWN)
 - Integrated Priority List (IPL)



Current Understanding of "Urgent Need" Varies

- Requirement to address needs that have "*resulted in combat fatalities*" and only for "*equipment [that] is urgently needed*" limits the ability to use current rapid acquisition authorities (Rapid Acquisition Authority to Respond to Combat Emergencies, in 2005 NDAA)
- All COCOM and Service definitions reflect JCS criteria to address needs that "*if left unfulfilled, will seriously endanger personnel and/or pose a major threat to ongoing operations*" (CJCSI 3470.01)
 - SOCOM definition adds another dimension: *Supports urgent and compelling new or existing materiel needs identified during preparation for or active SOF combat or contingency operations*
 - All regulations allow for a non-materiel approach if analysis shows it as most effective solution

Joint operations demand a shared, clear definition for urgent needs. Suggest:

If left unfulfilled, will seriously endanger personnel and/or pose a major threat to ongoing or imminent operations



Multiple purposes

Urgent need statements have been used in different ways...

- To document required capability gaps
- To fulfill both materiel and operational capability gaps
- To request specific acquisition outcomes (such as brand-name systems or equipment)
- To redistribute inventory rapidly
 - Estimated that approximately 6,400 of 6,700 Army ONS were for this purpose
 - This can and should be addressed within Services
- To access funding available only through the various urgent need processes

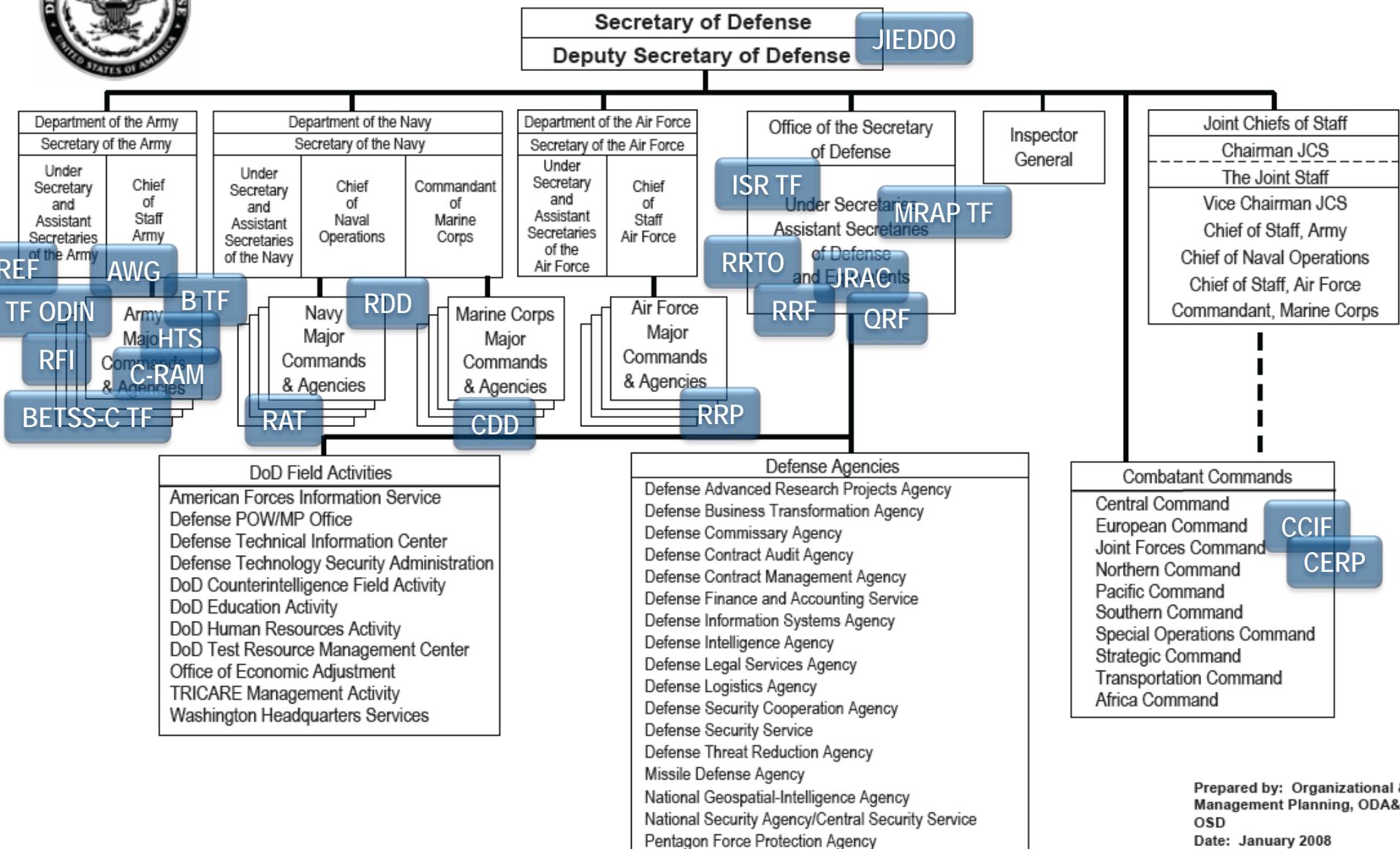
Need Statements should describe a mission need – not a specific solution



20+ Urgent/Rapid Programs, Organizations, and Funds in DOD



Department of Defense



Prepared by: Organizational & Management Planning, ODA&M, OSD
Date: January 2008

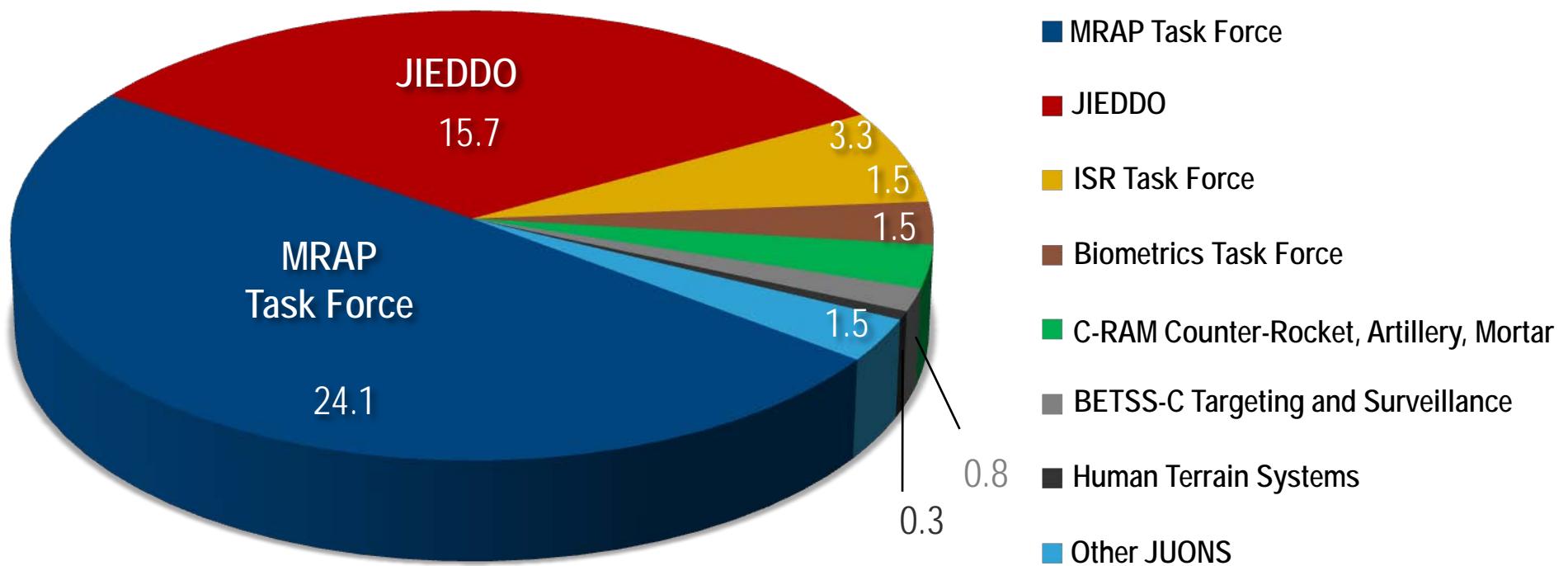


Current Tracking Metrics are Insufficient

- Extensive (and mandated) oversight of major programs exists (JIEDDO, MRAP, ISR TF)
- However, for these and others....
 - No consistent system is in place that documents total time and cost to complete
 - Uneven tracking of field performance of the capability implemented or materiel delivered
 - Ad hoc assessment of how original need was addressed
 - Little coordination among Services
 - No method to assess sustainment needs or costs
 - Inadequate formal (or informal) transition paths from rapid solutions to enduring acquisition, though there is progress
 - Some have transitioned successfully, e.g., CREW (EW jamming)
 - Army has initiated a Capability Development Rapid Transition (CDRT) program

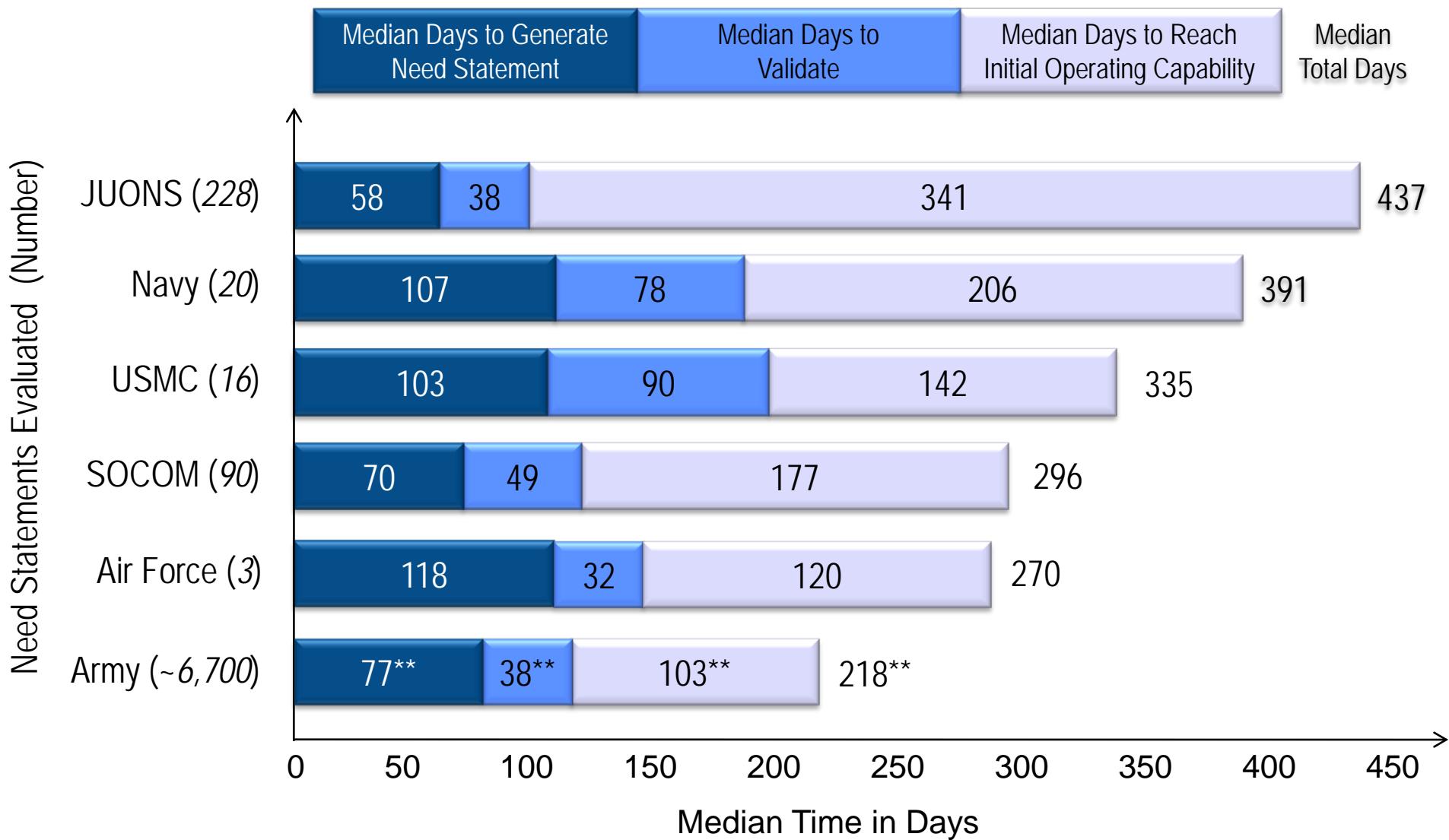
Joint Urgent Operational Need Statements - JUONS

Joint urgent operational need funding from 2005 through March 2009 totals more than \$50 billion (including development, production, and training/support/sustainment)



Majority of JUONS-initiated funding has been focused on solutions associated with one adversarial weapon system – IEDs

Rapid is Difficult to Achieve



** More than 94% of Army ONS (~6,400) were for redistribution of inventory – which skews data to shorter times (e.g., Artillery units now needing infantry equipment, soldiers assigned to guard duty now needing side arms, units creating sniper teams now needing sniper rifles, scopes)



FINDINGS SUMMARY

1. All acquisition programs are not the same; major variations in urgency, technology maturity, and life cycle considerations
2. Any rapid response must be based on proven technology
3. Rapid acquisition often challenges traditional systems, practices, cultures
4. Current approaches to "rapid" are not sustainable
5. Many existing resources and processes for urgent needs, but no integrated triage
6. Institutional barriers prevent successful rapid acquisition and fielding of new capabilities



Finding 1

All acquisition programs are not the same

COCOM urgent needs require extremely fast response

- Extensive JCIDS process is not necessary
- A "Block I" solution may be okay – even if less than 75% satisfactory, the speed of response may be more important than delivering a 99% solution
- A requirement may be broad, and may be met with new tactics, new capabilities, or new materiel (or a combination of all of these)
- T&E should be to determine capabilities and limitations (as opposed to a pass/fail test)
- Solutions may carry risk, but risk must be transparent, acknowledged and understood
- Support must be part of the plan, but can be initially performed by a contractor

By contrast, new major weapon systems (while "capabilities based" on paper) have cultural burdens ...

- Perception to fully satisfy the requirements established by the JCIDS/JROC process
- Perception that better equipment is the only solution
- Perception that they must be done at low risk
- Perception that long-term sustainment capability is always needed
- Many mandatory milestones and reviews
- Must fit into the PPBE system
- Perception that the only goal is the 99% solution



Finding 2

"Rapid" must be based on proven technology

- **Initial deployment must be quick**—"Block I" delivered in weeks to months—to demonstrate value of solution to JUONS and other COCOM needs
- To achieve timeframe, **technology must be mature**
 - Must be filled by COTS/GOTS or foreign government source
 - Needs that cannot be met with mature technology (> TRL 6) should be handed to S&T community as high priorities
- Solution can further evolve (via spiral development) to a program of record if successful and the need is persistent



Finding 3

"Rapid" is countercultural

- **"Rapid" is often perceived as a threat to a risk-averse DOD culture**
 - System holds "requirements" sacred, but "rapid" requires the developer to question detailed "requirements" to meet the schedule for Block I
 - Rapid innovation may be a threat to a program of record, so system withholds support
 - Flexible/agile acquisition tools rarely used, poorly understood, and perceived as risky
- **Allowing a parallel process "option" has not worked in other "countercultural" cases; a separate organization was required**
 - DARPA was established to address "disruptive" while Services focus on "incremental" (traditional) developments
 - IBM separated PCs from the existing Mainframes Division
 - Other examples include UAVs, cruise missiles, MRAPs, JIEDDO, and ISR Task Force
- **As supplemental funds diminish, resistance by system will increase and priority of COCOM urgent needs will decrease**
 - The hope is that, over time, the Services will see the benefits of the rapid approach—and the "countercultural" stigma will dissolve
 - Then it can be incorporated into their acquisition practices



Finding 4 Current approach to "rapid" is not sustainable (and it needs to be)

- Currently **20+** ad hoc, independent, non-institutionalized organizations
 - All attempt to achieve (and some are achieving) rapid capability
 - All utilize workarounds, with senior-level support, to sidestep traditional processes, but
 - Are disjointed
 - Fall short in needed outreach (to Services, COCOMS, commercial and global industry, others)
 - Have no institutional memory or tracking of lessons learned
 - Tend to become bureaucratized over time
- In many cases, these have
 - No "transition" plans (to "programs of record")
 - No planned organizational homes in the Services
 - No organization sunset provisions
- **Urgent needs will endure**
 - Will not end with current conflicts
 - Need to stand up sustainable organizational capability
 - Need to build on the advantages of being "outside" the bureaucracy



Finding 5 Many sources of urgent needs, but no integrated triage

- Combatant commands identify urgent needs for several different reasons
 - An urgent materiel need—usually for more/additional equipment needed from inventory; represents over 90% of Army ONS; and should be identified, managed, and be filled by the Services *separately* from new and unique urgent needs
 - A true COCOM joint or Service urgent need for a solution ASAP (e.g., new capability, Block I)
 - A perceived opportunity -- an innovative idea that can be a “game changer”, and should be tried ASAP (emergent capability)
 - A demonstration of the value of a different (but proven) technology or approach in response to a perceived COCOM need (e.g., Predator and Global Hawk JCTDs in 1995)
- While all four are based on proven technology and have schedule as the driver, all are different—and all may require a different approach
 - e.g., JCTDs aim for prototype demonstrations that offer opportunities, while JUONS aim to fill operational capability gaps



Finding 6 Institutional barriers prevent successful rapid acquisition and fielding

- The biggest barrier is **available, dedicated, flexible funds**
 - #1 issue raised by every witness before the task force
- The next priority is **people**: program managers, systems analysts/engineers, operation research people, relevant and experienced procurement people, and others
 - Both in the field and in the office
 - Working in integrated teams to support the warfighter's needs
 - Need "best and brightest"
 - Need innovative thinkers: solution-oriented, creative, "out of the box," uninhibited by bureaucracy
 - Must be perceived as career-enhancing positions
- Current acquisition and fielding **processes too complex** for hybrid warfare
 - Bureaucratic inertia prevents rapid response
 - Does not access full range of commercial options available to resourceful adversaries



Attributes of a Solution

- Institutionalized capability to rapidly and efficiently deliver joint capabilities
- Tightly coupled warfighter, acquisition, finance, technology, logistics, and training communities to enable speed and anticipatory thinking
- Global marketplace awareness and welcoming of solutions and ideas from anywhere, including commercial and foreign
- Increased use of all available contracting authorities – and possibly the addition of some – to enable speed and access to non-traditional suppliers
- A funding model that remains flexible while respecting DOD obligation/expenditure targets
- A radically different culture, nurtured to be anticipatory, agile, schedule-driven, and capability-oriented
 - Best and brightest personnel; very lean, non-bureaucratic
 - In integrated teams delivering rapid solutions (no "drive-by fieldings")
 - Leverage commercial sector personnel; access "on call" specialized capabilities via pre-arranged contracting routes
- Senior leadership priority and unwavering support



Some Good Practices Exist – None "Best"

Best Practice Needed	Where It's Good Today
for involving the warfighter from beginning to end of process	JCTD
for obtaining agile/flexible funding	JIEDDO, MRAP
to coordinate status and resolution for each -ONS	SOCOM
for coordinating technology development	DDR&E
to evaluate effectiveness of the implemented solution	--
for test and evaluation	Army
to determine whether to end or to transition each implementation	--
for a knowledgeable workforce for all rapid acquisitions	AF Big Safari
for business approaches that use existing flexibilities	DDR&E, DARPA
for institutionalizing the rapid response process	Navy/USMC



Parallel Acquisition Processes

Deliberate Acquisition Process

99%
solution

Delivers between 3 and 11 years

- ✓ Optimized for delivery of complex systems
- ✓ Methodical oversight and synchronization
- ✓ Includes sustainment resources
- ✓ Well adapted to individual Service cultures
- ✓ Scalable for large-scale military solutions
- ✓ Usually pushes state-of-the-art

Rapid Acquisition Process

75%
solution

Delivers in less than 2 years

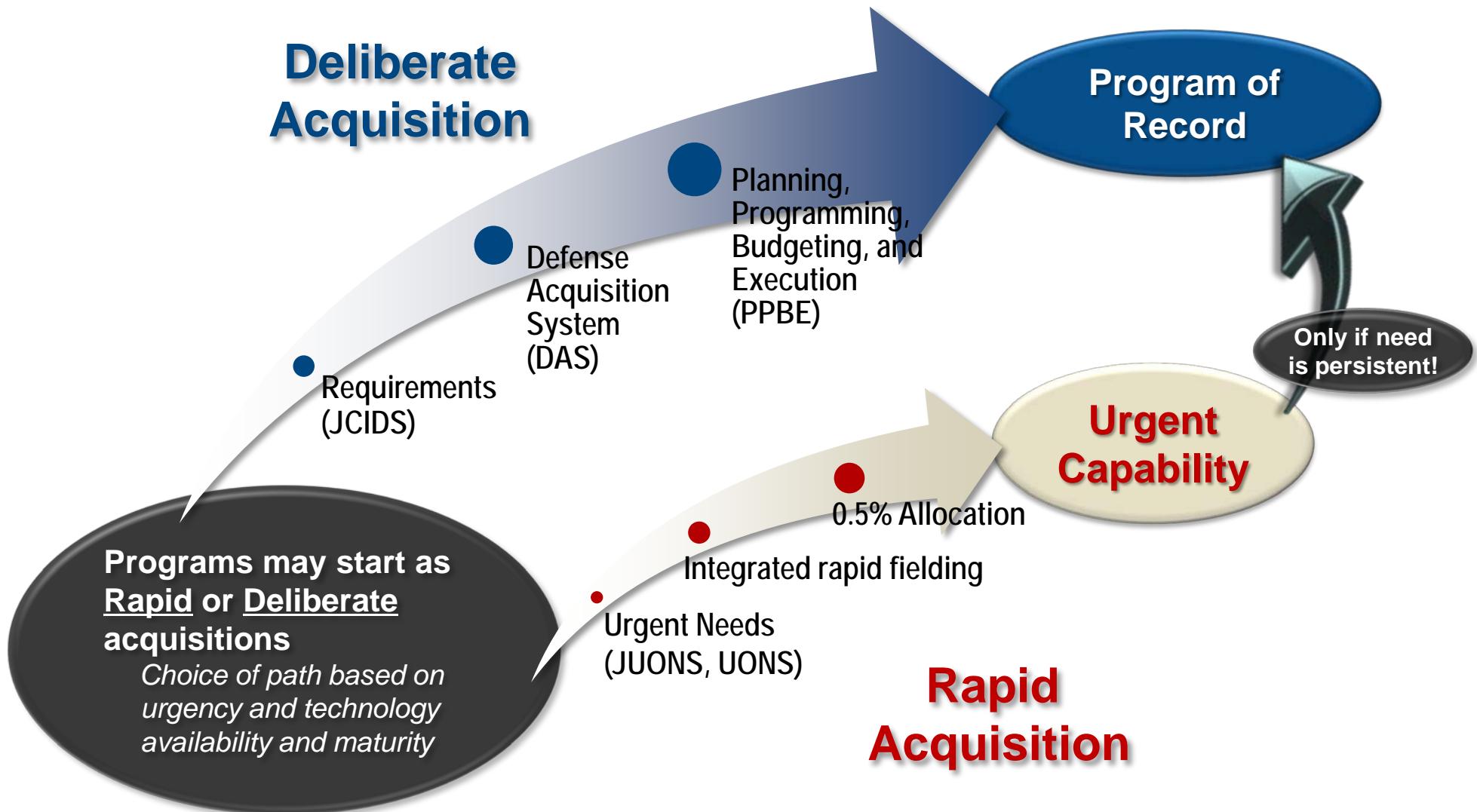
- ✓ Responsive to COCOM timelines
- ✓ Decentralizes execution
- ✓ Enables innovation, advances Transformation
- ✓ Small, non-traditional business access
- ✓ Controls costs via “try before you buy”
- ✓ Mitigates risk via spiral development
- ✓ Develops training and sustainment in parallel
- ✓ Utilizes proven technology



RECOMMENDATIONS SUMMARY

1. Formalize dual acquisition paths—"rapid" and "deliberate"—based on urgency and technology availability
2. Establish agile/flexible funding to satisfy COCOM urgent needs
3. Establish a *Rapid Acquisition and Fielding Agency* (RAFA), with appropriate funding, functions, operations, culture, and people
4. Absorb selected current *ad hoc* organizations and processes; transition others to Services where they will continue to act and be staffed Jointly (similar to JPEO Chem-Bio, JSF)
5. Establish a streamlined, integrated approach

Recommendation 1: Formalize a dual acquisition path





Recommendation 2: Funding

Executive and legislative branches must establish a fund for rapid acquisition and fielding

- Suggest 0.5% of DOD budget in current environment
 - Similar investment mechanism to SBIR appropriation
 - Replenished annually (with a cap of ~\$3 billion)
 - Not contingent on an on-going war
 - No-year, "no-color" money (similar to MRAP and JIEDDO)
 - Use precedent of the *Overseas Contingency Operations Transfer Fund* for the Balkans and Southeast Asia – but able to respond to any COCOM
- With high transparency
 - Quarterly summary reports to Congress
 - With additional notification as needed
 - Oversight group
 - Periodic meetings to prioritize
 - Co chairs: USD(AT&L) and VCJCS
 - COCOM and Services representatives, as required
- Director of RAFA is responsible for spending decisions for triaged projects



Recommendation 3: A New Agency

SECDEF should set up a new agency: The *Rapid Acquisition and Fielding Agency (RAFA)*

- What it is
 - Focused on speed, utilizing existing technologies and flexibilities (commercial, government, or foreign) to get a "75% solution" – initially "good enough" to address urgent COCOM needs
 - Joint and organizationally-parallel to defense agencies (e.g., DARPA, NSA, DLA)
 - Small – less than 250 military and civil servants
 - Headed by 3-star level officer
 - Reports directly to USD (AT&L) for high-level support and visibility (with dotted line to VCJCS)
 - Works in partnership with Services' acquisition, doctrine, training, and sustainment elements
- A successful approach is USAF "Big Safari" (and there are others!)
 - Operates 40 programs (including 25 large ones with individual Program Officers)
 - Has ~280 people, a hand-picked team
 - Has BOAs with long-standing suppliers; J&A authority for less than full and open competition (limited competition among demonstrated suppliers) (for \$8.7 billion over 7 years)



3a/RAFA – A New Mission, Operations, Culture

RAFA's Mission: To rapidly respond to and fulfill COCOM needs with proven and emerging technologies

- Fields initial new capabilities—in 2 months to (no more than) 24 months
 - Utilizes spiral development/modular open systems architecture (MOSA) for Block I/prototypes and subsequent Blocks
 - Actively seeks COTS/GOTS, commercial or foreign sources; includes an "Open Business Cell" with outreach to non-traditional commercial organizations
 - Takes full use of flexible procurement options (e.g., competitive bids, OTA, Congressional waivers)
 - Has internal contracting and finance (but utilizes Services to the maximum extent possible for execution)
 - Fosters and nurtures rapid T&E processes
- Provides oversight, milestone planning and tracking (and transition) of execution
 - Prioritizes, finds, obtains concurrence for, and acquires materiel and capability solutions
 - Tracks fielding to include DOTMLPF (training, sustainment, support) in coordination with Services and COCOM
 - Scans development of available commercial and emerging technologies to respond to future needs
 - Captures lessons learned, shares experiences, promulgates Best Practices



3b/RAFA "Triage" to Determine Acquisition Path

**RAFA provides integrated triage
for incoming needs from COCOMS**

- Oversees prioritization of COCOM requests, with cooperation of the Comptroller
 - Recommends both materiel and non-materiel solutions
 - Forms and dissolves Task Forces/Capability Teams as needed
 - Assesses technology maturity (TRL 6 or higher) and proposes appropriate solutions
 - Determines "rapid" or "deliberate" approach in response to COCOM requests
- Follows up with implementation actions
 - Brings disagreements on priorities or delays in response to the attention of SecDef/DepSecDef
- Maintains operations research and systems analysis capability (with appropriate "hot base" expertise) for rapid analysis of alternatives and cost/performance systems engineering
- Provides Red teaming and scans for opportunities or unintended consequences, includes intelligence input
- Coordinates with interagency urgent needs for homeland defense, intelligence community, etc



3c/RAFA - Human Capital

People are the key to the success of RAFA

- Strong military and civilian personnel with relevant experience are needed
 - Flexible hiring authority is needed; the RAFA Director must be able to hand-pick some employees
 - Effectiveness is multiplied when people rotate and carry the RAFA culture
- Incentives to get the military best and the brightest
 - Make "nominative assignments"
 - Target Service personnel with "high promotion potential" and identify positions as "key development positions"
 - Give "Joint" credit for service
 - Make part of precepts by Service Secretaries
 - Code only some billets as acquisition billets (to get a mix of operators and acquisition people)
- Incentives to get civilian best and brightest
 - Identify positions as "key development positions" and advertise to those who "love a challenge" and want to make an impact
 - Give both authority and responsibility to make timely decisions and tradeoffs in order to meet the time-critical schedules
 - Recruit top people from industry
 - 10% of workforce as HQEs (Highly Qualified Experts)
 - 10% of workforce from nongovernmental organizations as IPAs and PMFs, "1101" positions



Recommendation 4

Ease the Organizational Transition

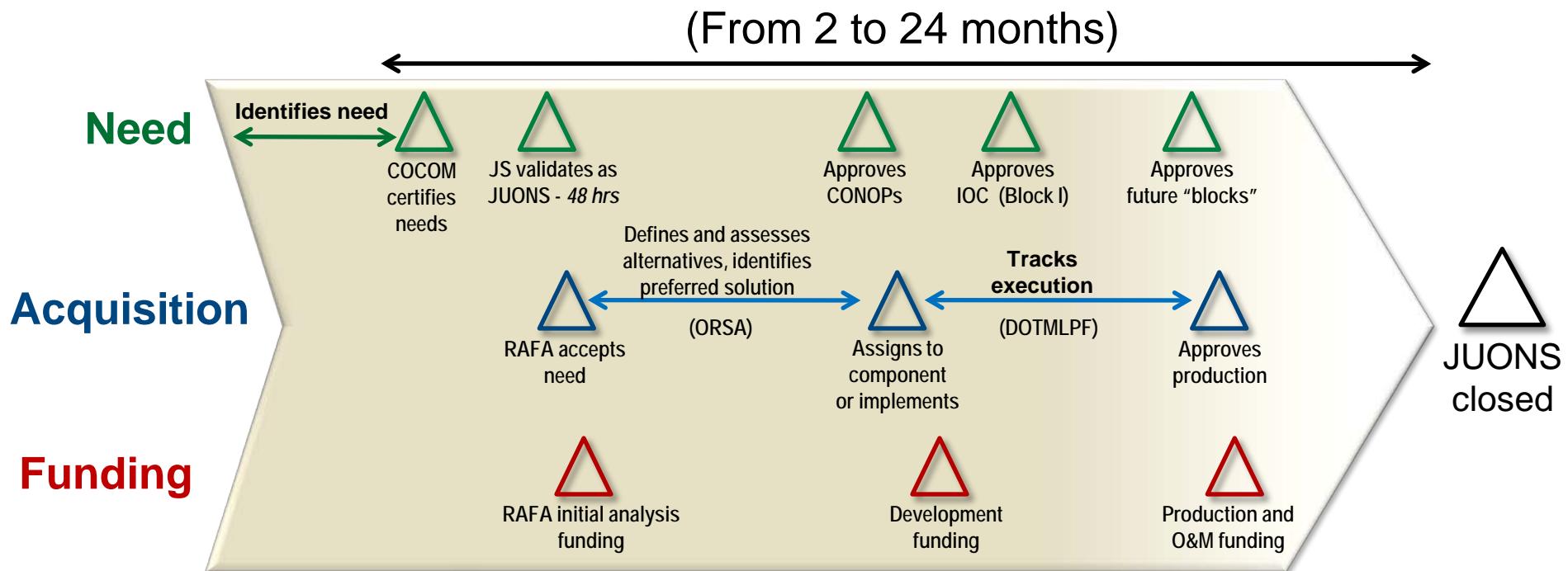
Initial funding and billets will be based on absorbing and integrating existing programs and organizations

- Draw billets from current *ad hoc* efforts that become “programs of record” and transition to Services
 - Transitioned organizations would continue to act and staff Jointly (similar to JPEO Chem-Bio, Joint Strike Fighter)
 - Similar to transition of CREW Block 3 (EW jamming), which has become a Joint program of record
- Draw billets and budgets from existing organizations that are absorbed into RAFA
 - Demonstration programs - Coalition Warrior Interoperability Demonstration (CWID), Joint Capability Technology Demonstration (JCTD)
 - Rapid Reaction Technology Office (RRT)
 - Relevant Funds: Quick Reaction Fund (QRF), Rapid Reaction Fund (RRF)
 - Relevant programs: Open Business Cell (OBC), Office of Force Transformation (OFT), Joint Rapid Acquisition Cell (JRAC)
 - Existing budgets will provide ~\$500M starting capital for RAFA

Recommendation 5

Establish a Streamlined, Integrated Approach

RAFA should follow a "essentials only" timeline for satisfying JUONS (and other COCOM urgent needs)



- RAFA provides continuous oversight of all initiatives and liaison to COCOM
 - RAFA Director has acquisition and funding decision responsibility
 - RAFA/COCOM jointly approve need/CONOPs/IOC
 - RAFA/Service jointly manage production (as appropriate)
 - RAFA works with Services to integrate DOTMLPF and life cycle issues

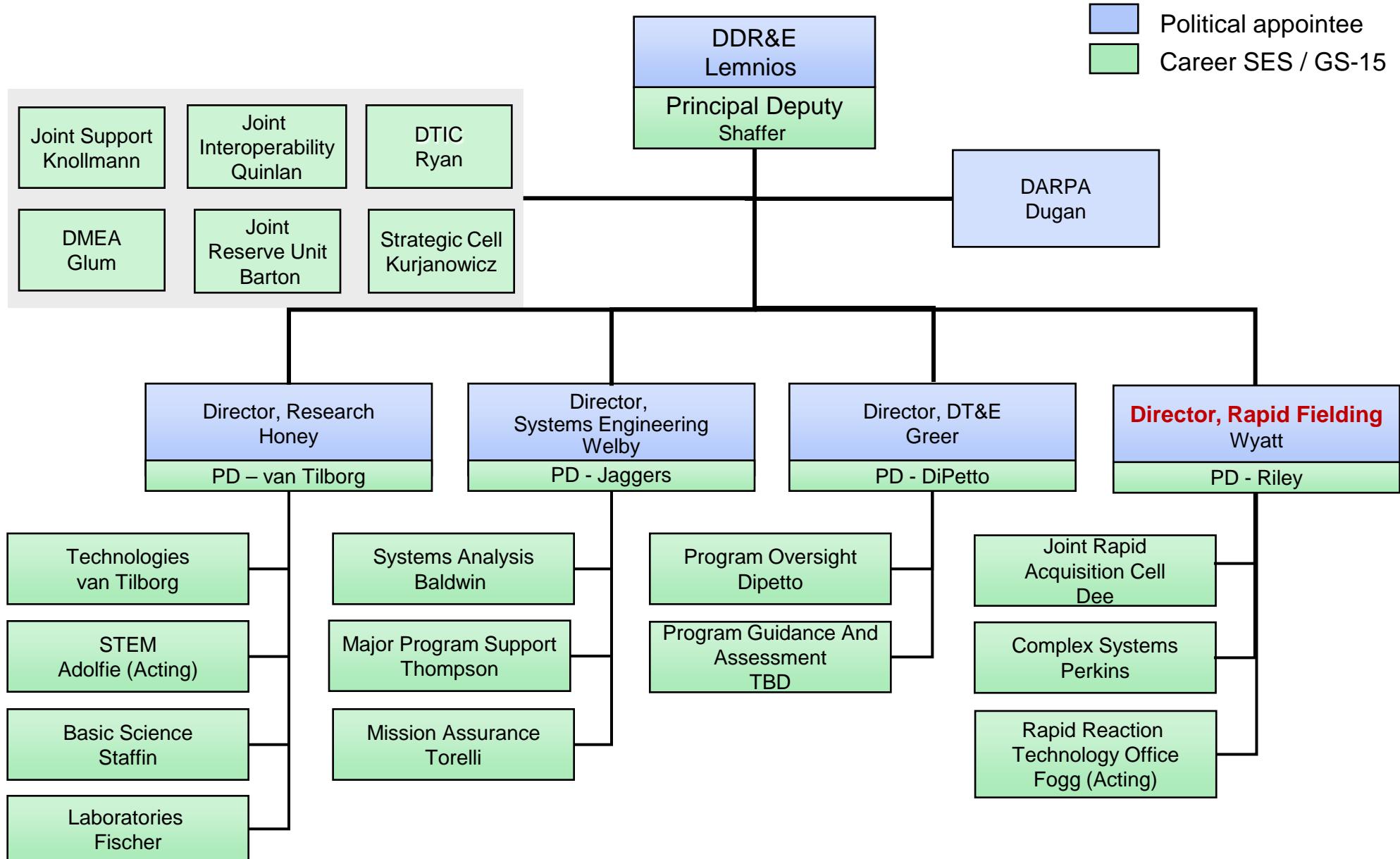


Next Steps

The Task Force encourages the Secretary of Defense, the Joint Chiefs of Staff, and the Service leaders start now to implement all five of these recommendations

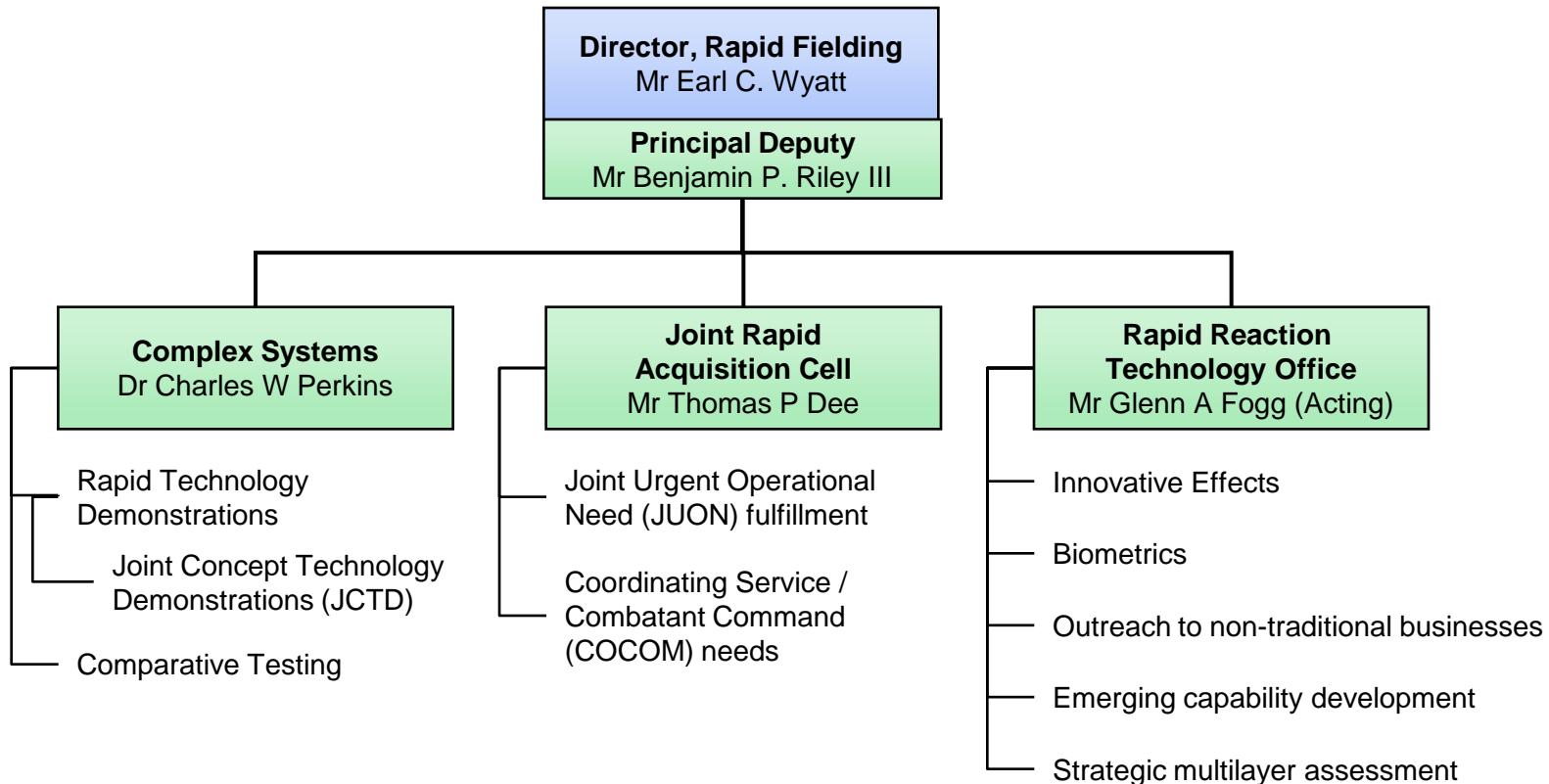
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DDR&E Organization – A new balance between research and engineering





Rapid Fielding Directorate



Primary Mission: Rapidly transition innovative concepts into critical capabilities that counter unconventional and time-sensitive threats

- Engage the services, interagency and coalition partners, industry, and academia to provide effective solutions to time-sensitive operational needs
- Enable rapid capability delivery through discovery, prototyping and demonstration of advanced technologies and concepts
- Utilize non-traditional resources/performers to identify “leap ahead” capabilities for warfighters