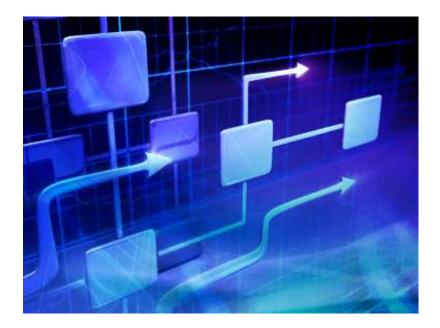
## Middle Tier of Acquisition (MTA)

MITRE Acquisition Disrupter (MAD) Team July 2019

Contact us at accelerate@mitre.org



https://aida.mitre.org/middle-tier



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## **Purpose / Outline**

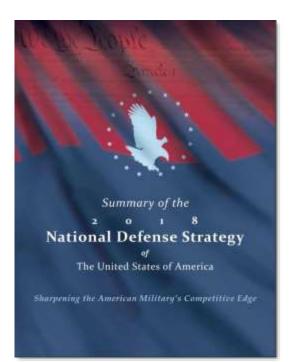
To provide an overview of Middle Tier of Acquisition and the latest updates on DoD implementation

- Legislation from FY16 NDAA
- DoD Implementation
- Other Rapid Pathways



### Why Do We Need A Middle Tier of Acquisition?

"Success goes to the country that better integrates technology and adapts its way of fighting. Our response will be to prioritize speed of delivery, continuous adaptation, and frequent upgrades."



- Deliver performance at the speed of relevance
- Organize for innovation
- Streamline rapid, iterative approaches from development to fielding



## **Section 804 Middle Tier of Acquisition**

FY16 NDAA Section 804

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#### **Rapid Prototyping**

- Use innovative technology to rapidly develop fieldable prototypes to demonstrate new capabilities, meet emerging military needs
- Field a prototype demonstrated in an operational environment
- Residual operational capability within 5 years of requirement

#### **Rapid Fielding**

- Use proven technologies to field production quantities of new or upgraded systems with minimal development
- Begin production within 6 months
- Complete fielding within 5 years of requirement



### Section 804 Overarching Guidance From FY16 NDAA

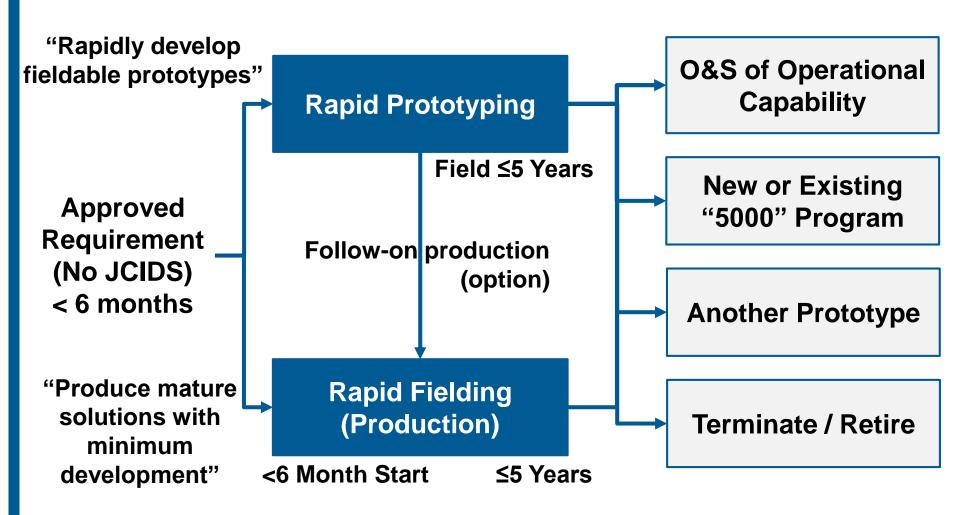
- Guidance required shall provide for a streamlined and coordinated requirements, budget, and acquisition process
  - Develop an approved requirement for each program in a period of not more than 6 months from the process initiation
- Shall not be subject to JCIDS and DODD 5000.01

#### DoD Rapid Prototyping Fund

- For acquisition programs under the rapid prototyping pathway
- Consist of appropriated funds and those credited by section 828
- Managed by a senior DoD official designed by AT&L
- Shall notify the congressional defense committees of all transfers



## **Middle Tier of Acquisition Pathways**



## Where Does Middle Tier of Acquisition Fit?

	UONS/JUONS	Middle Tier of Acquisition		DoDI 5000.02
Туре	Urgent Capability Acquisition	Rapid Prototyping	Rapid Fielding	Traditional Acquisition Programs
Technology	-	Innovative	Proven	-
Requirement	Validated UON	Exempt from JCIDS	Exempt from JCIDS	JCIDS
Timeline	Fielded <= 2 years	Field Prototype ≤5 years	Start Production ≤ 6 months; Complete fielding ≤ 5 years	None
Other	Below ACAT I and IA	Exempt from DoDI 5000; PM reports to SAE	Exempt from DoDI 5000; PM reports to SAE	Statutory requirements for MDAPs



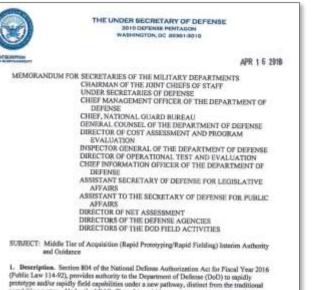
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## **Traditional 5000 vs Middle Tier Program**

#### Traditional "5000" Program IOC FOC MDD CDD RFP FRPDR **TMRR** Phase **MSA** Phase **EMD** Phase P&D Phase / O&S **Draft CDD** CDD CPD ICD **Prototypes** AoA Design Develop **Produce** Middle Tier of Acquisition Program **Operations Rapid Prototyping Prototype Rapid Fielding Produce**

### **DoD Implementation of Middle Tier Acquisition**

- USD(A&S) provided DoD Components interim authority to implement MTA in Apr 2018
- Components developed rapid prototyping and fielding processes and issued via policy memos
- OSD and Services reviewing approach and challenges of initial programs
- USD(A&S), OSD, Joint Staff, and Components collaboratively developing new DODI policy and guidance – publish by Dec 2019
- Components drafting updated policies and guidance



1. Description: a section nor to the source and definition Action Factor Factor (Factor Factor) for a 2016 (Public Law 114-92), provide anthrony to the Department of Definise (DeO) to mapily prototype and/or nepidly field capabilities under a new pathway, distinct from the moltional acquisition system. Under the Middle The of Acquisition Development System (Action System, Cardon Development System), and the Direc Capabilities Independent Development System (Action System), and and DoD Streerive 5000.01, "The Definite Acquisition System," except to the extent specifically provided in the implementating guidance. This memo has been accordinated with the Under Secretary of Definite (Camptoniller) and the Vice Chairman of the Joint Chief, of Staff.

2. Interim Authority

USD(A&S) memo 16 Apr 18

2.1. This memo provides to DoD Components the authority to implement Section 304 on an interim basis until September 30, 2019. This time period may be extended at the discretion of the Under Secretary of Defense for Acquisition and Sutainment (USD(AdES)). DoD Components are encouraged to immediately further implement the Section 804 authority by developing majid pototype and fielding processors and procedures.

## **MTA Requirements**

#### • FY16 NDAA:

- Shall not be subject to JCIDS
- Provide a streamlined process that results in the development of an "approved requirement" for each program <6 months</li>
- Services empowered to establish process for "approved requirement"
  - <u>Air Force</u>: Rapid Requirement Doc staffed via A5, SAE, CSAF
  - <u>Navy</u>: Top Level Requirements doc outline MVP acceptable to ops
  - <u>Army</u>: Abbreviated CDD (not as mature as final CDD) may be used
- As these Service requirements processes were in development, most initial MTA programs used an existing JCIDS document
  - If prototyping a subset of system requirements, should scope for MTA

#### FY16 NDAA Roles and Responsibilities: Guidance May Include...

#### SAE

- SAE is MDA (in coordination with AT&L)
- Shall appoint PM and evaluate PM job performance annually

#### Program Manager

- Shall report directly to the SAE
- Authorized to staff positions to manage the program without another organization to the maximum extent practicable
- Authorized to make cost, schedule, requirements trade-offs in coordination with the users and testers
- Expeditiously seek Congressional waiver from any statutory or regulatory requirement they determine add little/no value to program

### **Service Implementation of Decision Authority**

#### Air Force

- SAE is MDA for MTA programs > ACAT I
- PEO (or delegated) is MDA for MTA programs < ACAT I</p>

#### Navy

- ASN(RD&A) will initiate all MDA programs and designate an Acquisition Decision Authority (ADA)
- PMs will report directly to ADA

#### Army

- AAE will provide oversight and approve initial decision to use MTA
- Decision Authority: AAE for ACAT I, PEOs for ACAT II-IV

## **MTA Documentation**

#### Acquisition Decision Memo signed by MDA designates MTA program

- MTA program populates Defense Acquisition Visibility Environment (DAVE) within 30 days of MDA approval
- Initial obligation of funds establishes start of 5-year time limitation

#### Services outlined minimum set of required artifacts for MTA programs

- Heavy emphasis on tailoring and streamlining
- Waivers may be requested for statutory and regulatory requirements applicable to ACAT cost thresholds that are non-value added
- PMs propose program specific documentation, decision points, metrics, guardrails, timing and scope of decision reviews, and establish cost, schedule, risk, and performance objectives
- FAR, DFARS, and Agency FAR Supplement requirements apply

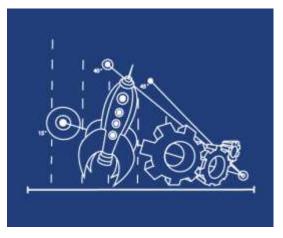
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## **Streamlining and Shaping Strategies**



#### Contracting

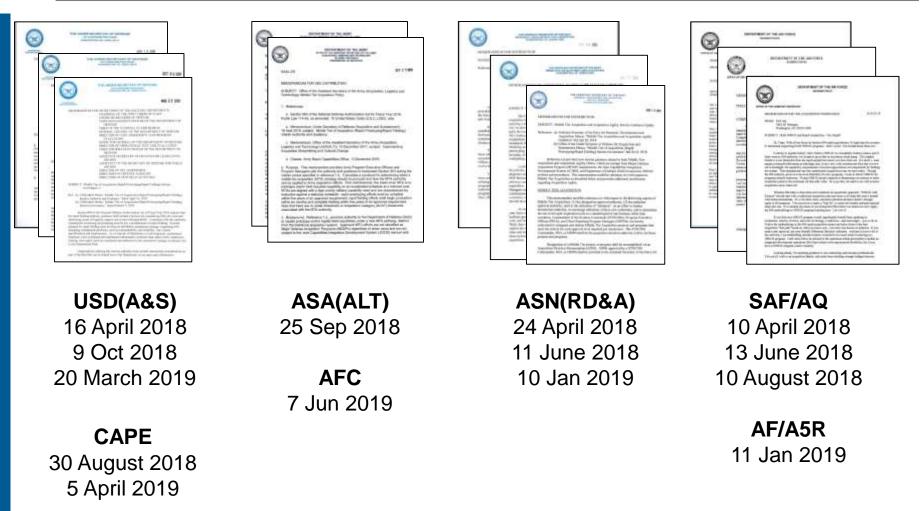
- Explore range of <u>FAR and Non-FAR</u> options to support rapid timelines
- Many initial MTA programs used existing FAR contracts; some used OTAs



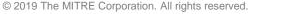
- Systems Engineering and Test and Evaluation
  - Must be tailored and streamlined to support rapid programs
  - SAEs encourage Digital engineering, MOSA, agile development approaches

MIIR

### **Published Middle Tier Policy and Guidance**



Slide tailored from DAU MTA brief Links to all references here: https://aida.mitre.org/middle-tier/references/



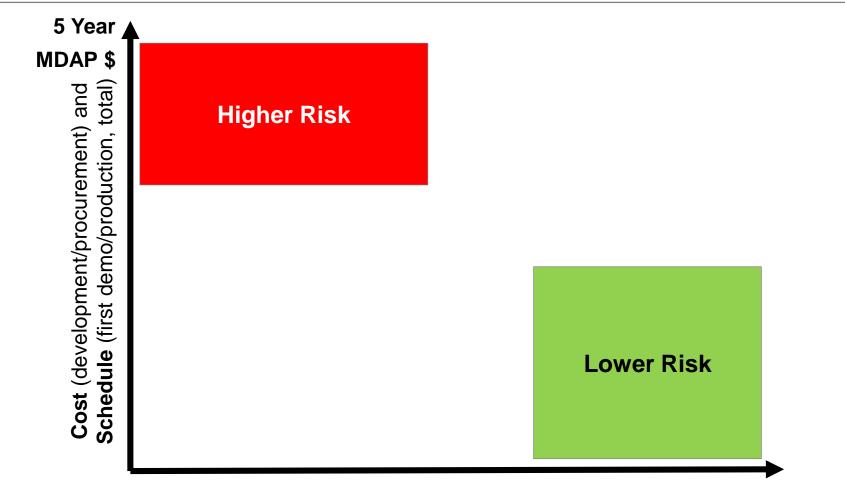
## **Middle Tier of Acquisition Programs**

	Rapid Prototyping	Rapid Fielding	TOTAL
Air Force	20	4	24
Army	8	0	8
Navy	3	0	3
USSOCOM	10	0	10
DISA	1	0	1
TOTAL	42	4	46

Number of Middle Tier of Acquisition Programs initiated as of March 2019 (Source GAO-19-439). + Initial List from SOCOM and DISA



## **MTA Program Risk Considerations**



Tech Maturity (Current and Change in TRL/MRL)



## FY20 NDAA

#### HASC Mark, Section 810

- No MTA program shall > MDAP threshold unless SECDEF waiver
- Provide DOT&E, DCAPE, USD(R&E) access to all tech data, records, and info to evaluate technical maturity of MTA programs
- SASC had no Middle Tier of Acquisition provisions





## Middle-Tier of Acquisition on AiDA

MITRE AIDA

Hot Topics ~ Policies ~

#### MIDDLE TIER ACQUISITION (SECTION 804)

#### Middle Tier Acquisition (Section 804)

#### Introduction

Guiding Principles Initiation Funding Requirements Oversight Documentation Contracting Systems Engineering

Test and Evaluation Air Force Phases

Maritime Accelerated Acq Transition NDAA Language References 804 Programs

#### Your source for Middle Tier Acquisition (Section 804) information.

As USD(A&S) and the SAEs publish implementation guidance, we integrate it here.

Middle Tier implementation guidance is organized by the functional areas on the left.

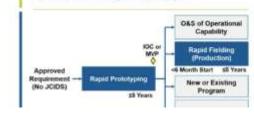
Congress in the FY16 NDAA Section 804 directed USD(AT&L), in consultation with USD Comptroller and VCJCS to establish guidance for a "middle tier" of acquisition programs that are intended to be completed in a period of 2-5 years via two acquisition pathways:

#### Rapid Prototyping

Use innovative technology to rapidly develop fieldable prototypes to demonstrate new capabilities, meet emerging military needs. The objectives are:

- · Field a prototype that can be demonstrated in an operational environment.
- · Provide for residual operational capability within 5 years of an approved requirement

#### Potential 804 Rapid Pathways



#### Latest insights from OSD, SAEs on policies, guidance, and potential strategy considerations

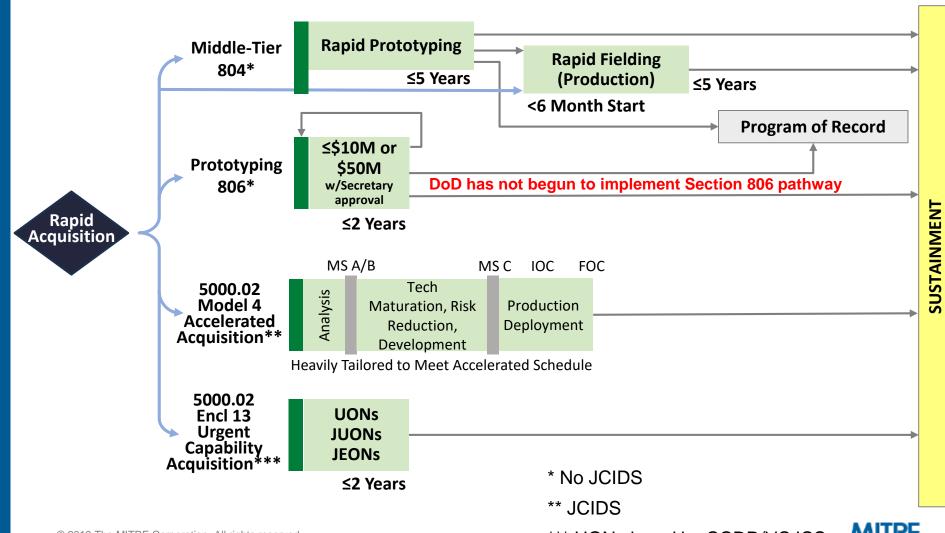
#### https://aida.mitre.org/middle-tier/



## **BACKUP SLIDES**



## **Other Rapid Acquisition Pathways**



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\*\*\* UON signed by CCDR/VCJCS



### 806: Development, Prototyping, Deployment of Weapon System Components or Tech (1)

FY17 NDAA Section 806

Projects selected by the SAE as being one of the most promising, innovative, and cost-effective prototypes that is expected to be successfully demonstrated in a relevant environment

- Must be completed within 2 years
- Limited to \$10M
  - Could be funded up to \$50M if Secretary approved, Congress notified
- Prototypes shall be funded through contracts, cooperative agreements, or OTAs
  - Prototypes can be budgeted separately from a PoR and excluded from MDAP costs
- Exempt from JCIDS

#### **DoD** has not begun to implement Section 806 pathway

https://aida.mitre.org/weapon-system-prototyping/

# 806: Development, Prototyping, Deployment of Weapon System Components or Tech (2)

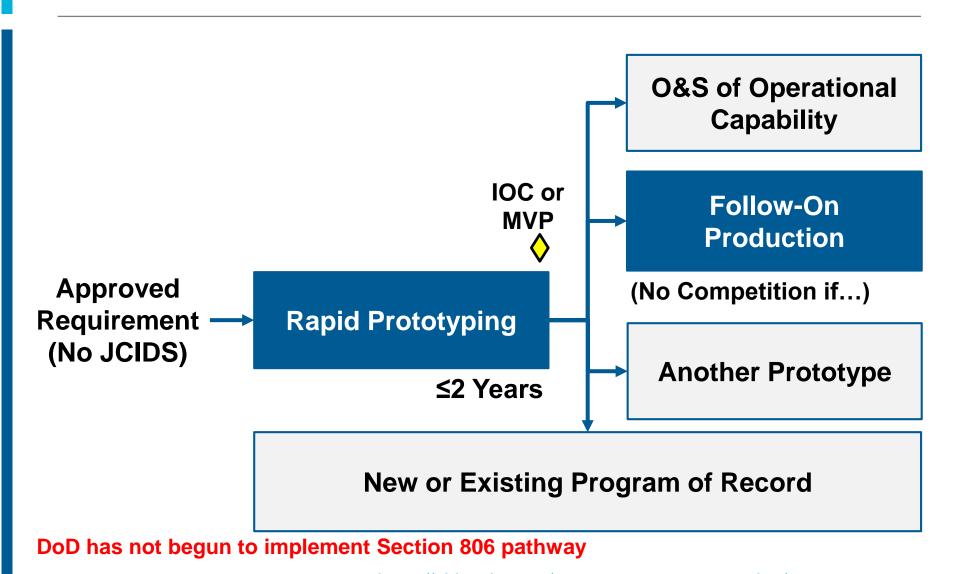
FY17 NDAA Section 806

- SAE may select the project for <u>follow-on production contract</u> or OT without competition if
  - Addresses a high priority warfighter need or reduces the costs of a weapon system
  - Competitive procedures were used for the selection of parties for participation in the original prototype project
  - Participants in the original prototype project successfully completed the requirements of the project; and
  - Prototype of the system to be procured was demonstrated in a relevant environment.
- Each Service Secretary will establish an <u>oversight board</u> or group of senior advisors to manage prototype projects
   DoD has not begun to implement Section 806 pathway

https://aida.mitre.org/weapon-system-prototyping/

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## **Potential Section 806 Pathways**



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https://aida.mitre.org/weapon-system-prototyping/



## Acquisition Tailoring in DODI 5000.02

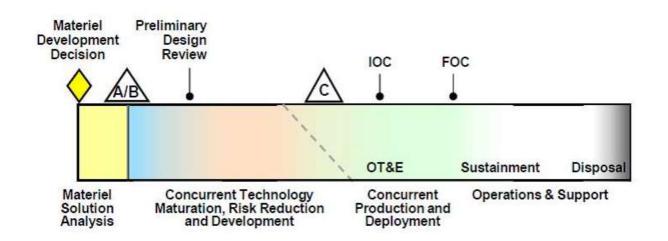
"The structure of a DoD acquisition program and the procedures used should be tailored as much as possible to the characteristics of the product being acquired, and to the totality of circumstances associated with the program including operational urgency and risk factors."

#### "MDAs will tailor

- program strategies and oversight including
- program information
- acquisition phase content
- timing and scope of decision reviews and decision levels based on the specifics of the product being acquired, including complexity, risk factors, and <u>required timelines</u> to satisfy validated capability requirements"

https://aida.mitre.org/dodi-5000/ MITRE

### **DODI 5000.02 Model 4: Accelerated Acquisition**



- When <u>schedule</u> considerations dominate over cost and technical risk.
- Compresses or eliminates phases of the process and accepts the potential for inefficiencies in order to deploy capability on a compressed schedule.
- The model shows one example of <u>tailoring</u> for accelerated acquisition and many others are possible.
- This type of structure is used when technological surprise by a potential adversary necessitates a higher-risk acquisition program.



### DODI 5000.02 Enclosure 13 Urgent Capability Acquisition

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Proc			nths)
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Legend:		Concurrent Processes	
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- Provide capabilities to fulfill urgent operational needs and other quick reaction capabilities that can be fielded in less than 2 years and are below the cost thresholds of ACAT I and IA programs.
- UON, JUON, JEON
- Exempt from JCIDS

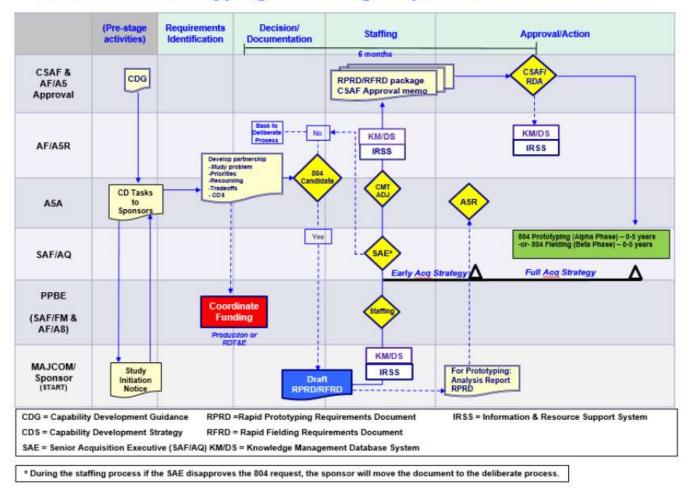
## **FAR Direction – Simple**

Agencies shall use simplified acquisition procedures to the maximum extent practicable for all purchases of supplies or services not exceeding the simplified acquisition threshold. –<u>FAR 13.003</u>



## **Air Force Process for MTA Requirements**

#### Section 804 Prototyping & Fielding Requirements Generation



#### Source: AF/A5R Requirements Development Guidebook, Jan 2019

### Army Abbreviated Capability Development Document (A-CDD)

- GEN Murray, Army Futures Command, issued memo 7 Jun 19
- Directed Requirements (DRs)
  - Established for urgent, emergent capability requirements
  - Lack specificity and depth to fully inform the solution
- Abbreviated CDD capability requirement doc used to establish Army's position on development of Army materiel capability
  - A-CDD can be used for Section 804 Middle Tier of Acq programs
- A-CDD format follows CDD format in JCIDS manual
  - All CDD paragraphs, yet not at the maturity of a final CDD
  - Approved by AFC



## **FAR Direction – Innovative**

The System should also, however, encourage innovation, and local adaptation where uniformity is not essential. –<u>FAR 1.102-2(b)(2)</u>



The contracting process shall be used to encourage the best sources from the scientific and industrial community to become involved... and must provide an environment in which the work can be pursued with reasonable flexibility and minimum administrative burden.

- <u>FAR 35.002</u>



- Modular contracting is intended to reduce program risk and to incentivize contractor performance while meeting the government's need for timely access to rapidly changing technology...
- Agencies should, to the maximum extent practicable, use modular contracting to acquire major systems (see <u>2.101</u>) of IT.
- Agencies may also use modular contracting to acquire non-major systems of IT. –<u>FAR 39.103</u>

