



Accelerating the Adoption of Emerging Capabilities

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NDIA By The Numbers

5 STRATEGIC PRIORITIES

- 1 Securing Budget Stability and Sufficiency
- 2 Advancing DoD Digital Modernization
- 3 Facilitating Foreign Military Sales Modernization and Technology Integration with Allies and Partners
- 4 Restoring Industrial Readiness, Capacity, and Infrastructure
- 5 Enabling More Resilient Supply Chains



3 Affiliate Organizations



NDIA engages all **3** branches of government



6,350

of NDIA's individual members
are **Military or Government**
employees



58,200

of NDIA's individual
members are **Industry**



1,760
Corporate
Members

More than half of NDIA's corporate
members are **Small Businesses***

*\$25 million or less in defense revenue annually



1 MILLION
PAGE VIEWS ANNUALLY

AT THE HEART OF THE
MISSION SINCE 1919



About ETI

- Affiliate organization of the National Defense Industrial Association (NDIA)
- Increase NDIA focus on emerging technologies, their impact on national security, and industry-government partnerships to win the global technology competition
- Deliver value to NDIA members, including traditional and non-traditional companies, universities, and international partners, on trends and opportunities in emerging technologies for national defense
- Staff delivers member value events, technical and policy analyses, and educational products to government and industry decision-makers
- Provide neutral forum for government-industry-academic exchanges on technical and technology policy matters



Background & Research Question(s)

Background

- DoD struggles to rapidly develop & deploy new capabilities
 - But, DoD has a history of “moving quickly” when it matters most (e.g., major threats to warfighters, pandemics)
- Success stories are usually based on “exceptions” to the rules
 - How can we facilitate more successes within standard operating procedures?

Research Question(s)

1. What attributes of the successful rapid capability adoption efforts of the past can be incorporated into standard development, acquisition, and deployment processes?
2. How can DoD be more prepared to rapidly develop and deploy new technologies in response to an urgent requirement or operational need?



Methodology

- **Case Studies**
 - GBU/43B: Massive Ordinance Air Blast (“MOAB”)
 - Mine-Resistant, Ambush Protected (MRAP) Vehicles
- **Interviews**
 - Senior-level acquisition experts involved in these case studies
 - Technical development SMEs
 - Other former DoD leadership
- **Analysis of existing statute and policy guidance**
 - Adaptive Acquisition Framework
 - U.S. Code
- **External Review Process**



Source: AF.mil News, 96th Air Base Wing Public Affairs



Source: National Museum of the USAF, Cougar CAT II A1



Findings: Six Principles for Rapid Acquisition

1. High-Level Support for Moving Funding and Bureaucracy
2. Few Major Policy or Regulatory Hurdles
3. Funding can be Provided for Transition Effort
4. Technology is Mature Enough to Warrant Rapid Adoption
5. Technology is Manufacturable at Required Scale
6. Suitable for Operational Use

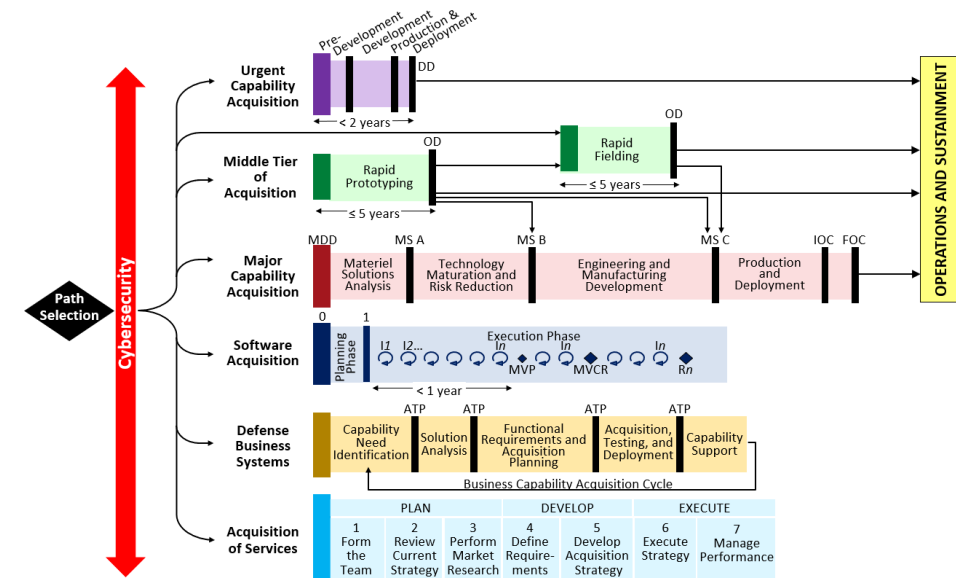
Pathway Caveats

- Funding options include:
 - If IO discovered during annual budget build → request in RDT&E BA 5 or BA 7 line item
 - If discovered after budget sent → Services' Other Procurement budgets (talk to Congress)
 - Or via reprogramming
 - If opportunity discovered outside these windows → use initiatives like APFIT program
- Requires PTТА to be highly selective – policy guidance should set standards
- IO requires understanding what capabilities benefit from 6-month timeline
 - Tech is much more mature TRL & MRL wise than Middle Tier of Acquisition (MTA)
 - Tech is not described by an UON/other need for Urgent Capability Acquisition purposes
- Understanding of what needs to go to the Urgent Capability Acquisition pathway vs what could be tried via an Immediate Opportunity Pathway
 - UCA will come from a clear operational requirement (“pull”)
 - Whereas IO Pathway is much more of an experimental “push” by the PTТА



DoD INSTRUCTION 5000.02

OPERATION OF THE ADAPTIVE ACQUISITION FRAMEWORK



Selected Recommendations

“Ensure that the existence of, and use cases for, the wide variety of budgeting and appropriation mechanisms available to the DoD widely used and clearly communicated in the President’s Budget Request and other communications with Congress to support intentional efforts to rapidly field capabilities.”

“Congressional appropriations and subsequent DoD financial management guidance should allow low-rate initial production (LRIP) to be funded by RDT&E appropriation accounts.”

“The Office of the Assistant Secretary of Defense for Industrial Base Policy (OASD(IBP)) should conduct studies on the efficacy of market shaping modalities for national security purposes.”

Questions?