



Department of the Navy Gold Coast 2018

“Small Business: Sharpening the American Military’s Competitive Edge”

Navy and Marine Corps Labs – Industry Opportunities

7 August 2018

Mr. William P. Bray
***Deputy Assistant Secretary of the Navy for
Research, Development, Test, and Evaluation***



Priority of Speed in Delivery of Capabilities

“How do I retain **agility**, both for the hulls we have in the water and the hulls that we’re building, that I can continue to operate at the **pace of technology**, at the **pace of the threat**, and at the **pace of my warfighters demands**....”



“Now we've got to **quicken the pace**, we've got to do those iterative steps a lot more quickly than we are right now.”

ADM J. Richardson
CNO, FEB 2018

I’m not as focused on one single program as a **culture of affordability**”

J. “Hondo” Geurts
ASN(RDA), JAN 2018



“Accelerated acquisition is not just a theory, but something **we’re doing today**... These new approaches make **maximum use of the new authorities**.”

VADM D. Johnson, Principal Military Deputy ASN(RDA), APR 2018



Any monopoly we might have on ‘break-through’ systems **will likely be short-lived**.

GEN R. Neller, CMC, 2017

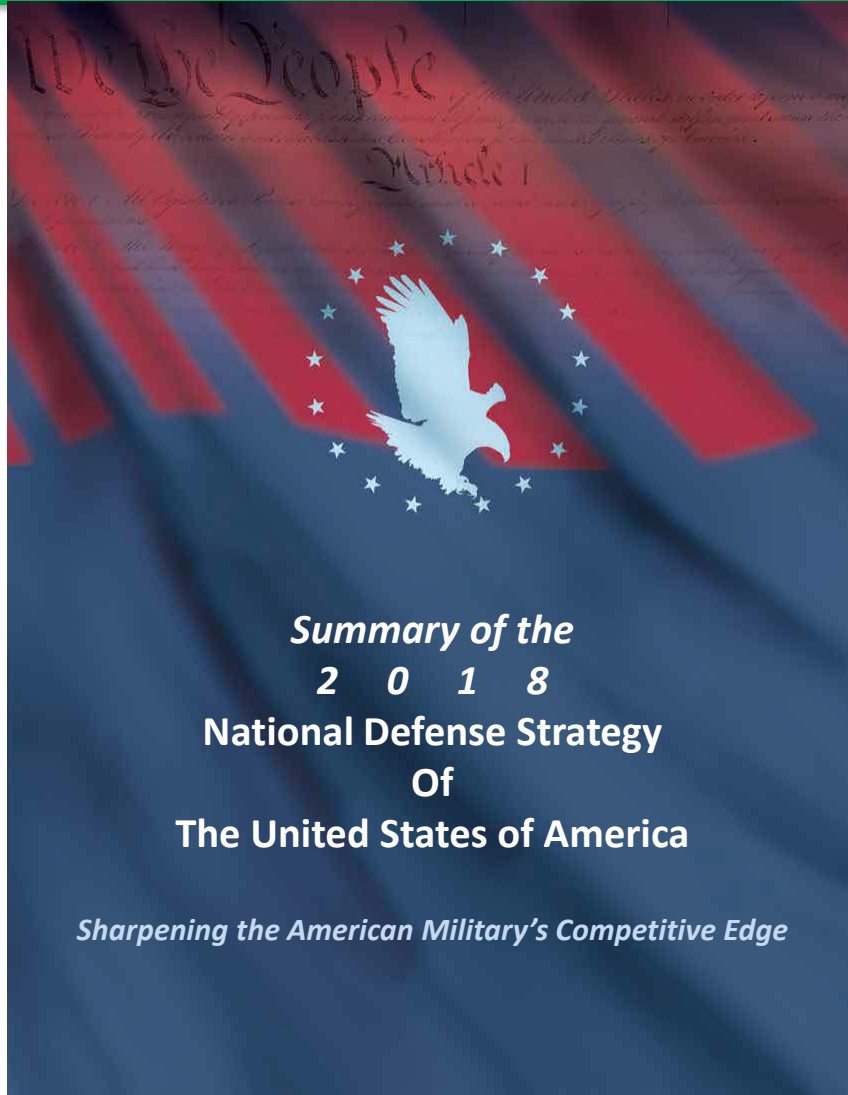
“For years, we have been warned that America is losing its **technological advantage**....That is why this Committee enacted the **most sweeping acquisition reforms in a generation** through the last two National Defense Authorization Acts....The Congress has provided you with all the tools you require.”

Sen. J. McCain
SASC Chairman, DEC 2017





Strategic Alignment



What are our RDAs strategic priorities:

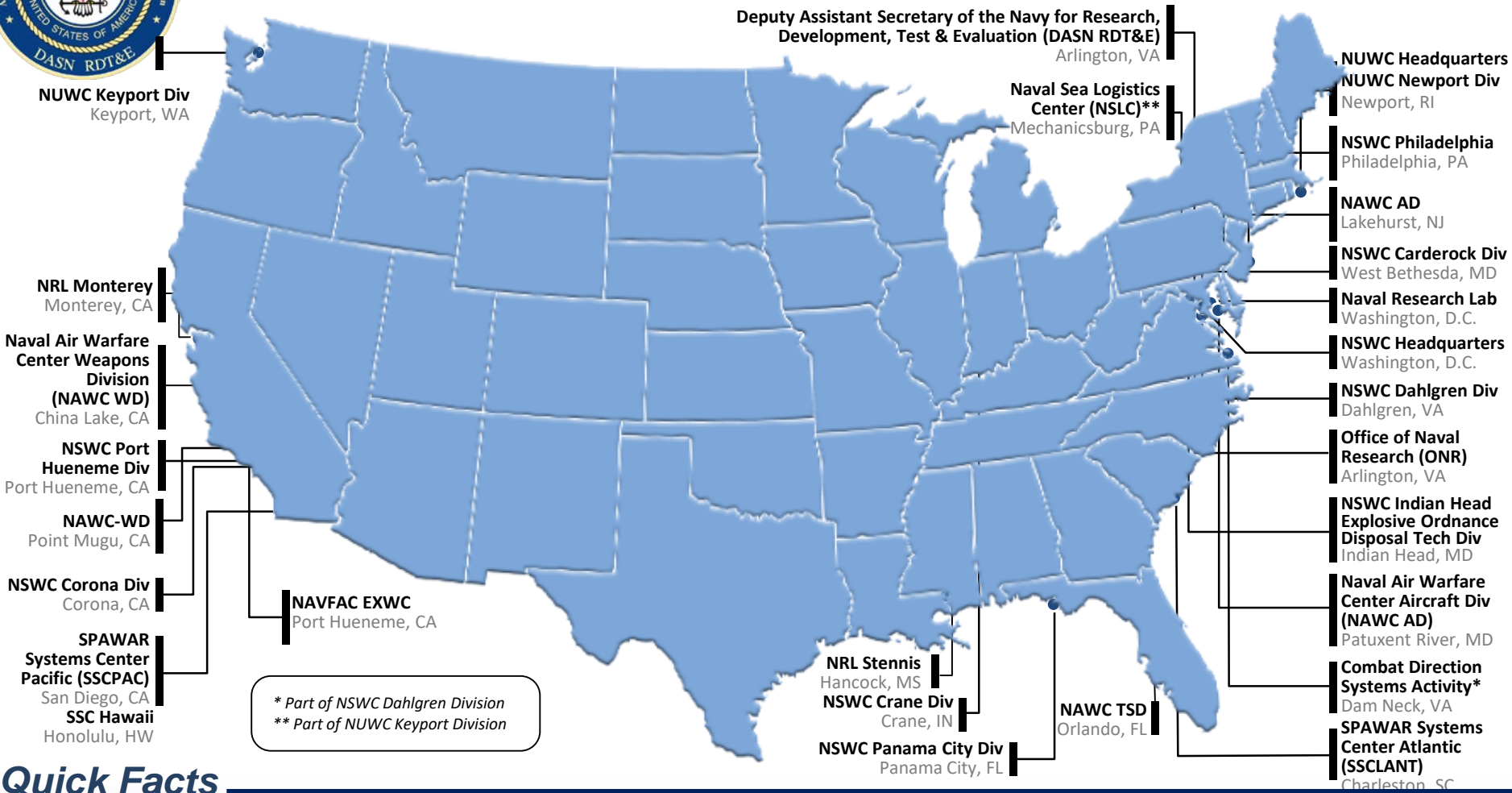
- Deliver Lethal Capacity
- Increase Agility
- Drive Affordability
- Build Workforce to Compete & Win

How will achieve it:

- Decentralize (to the lowest level)
- Differentiate (the work)
- Digitize (all facets of work)
- Develop (the workforce)



Naval Research & Development Establishment (NR&DE)



* Part of NSWC Dahlgren Division
** Part of NUWC Keyport Division

- ❑ Diverse and highly educated workforce with over 36,000 scientists, engineers, and technicians (more than 2,000 Ph.D.s); 50,000 employees; annual budget greater than \$20B
- ❑ 17 S&T Reinvention Laboratories (STRLs) spanning NAVAIR, NAVSEA, NAVFAC, SPAWAR, NRL and ONR

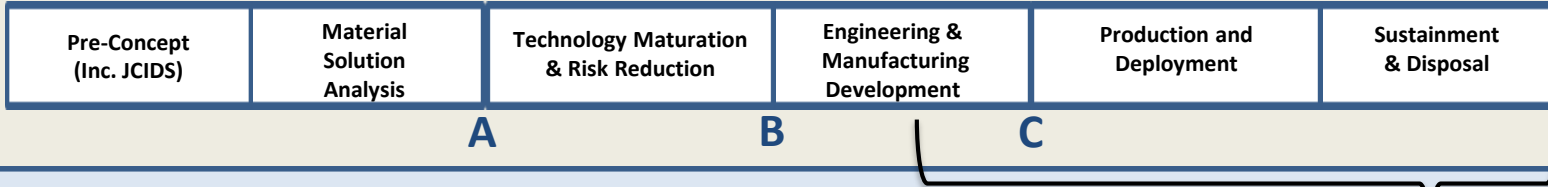
- ❑ Conducts RDT&E for the DoN to discover, develop, transition and field technologically superior naval warfighting capabilities.
 - Examples: prototype development, demonstrations and experimentation to accelerate the fielding of new operational concepts, technology and systems innovations.

- ❑ Unique RDT&E facilities and test ranges
- ❑ Infrastructure has a combined Plant Replacement Value greater than \$15B
- ❑ All designated as S&T Reinvention Laboratories (STRL)



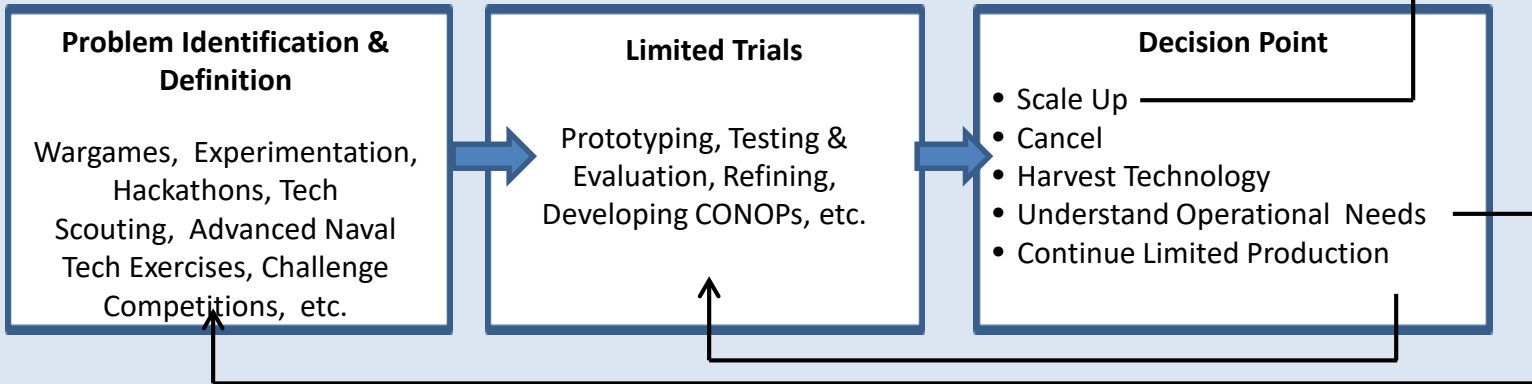
Accelerated Acquisition Pathways

Traditional Acquisition (5000.02)



Accelerated Acquisition

Alternate Pathway(s)



Rapid Acquisition Authority (RAA) Determination

FY16 NDAA Section 804 Middle Tier Acquisitions Rapid Prototyping – Rapid Fielding

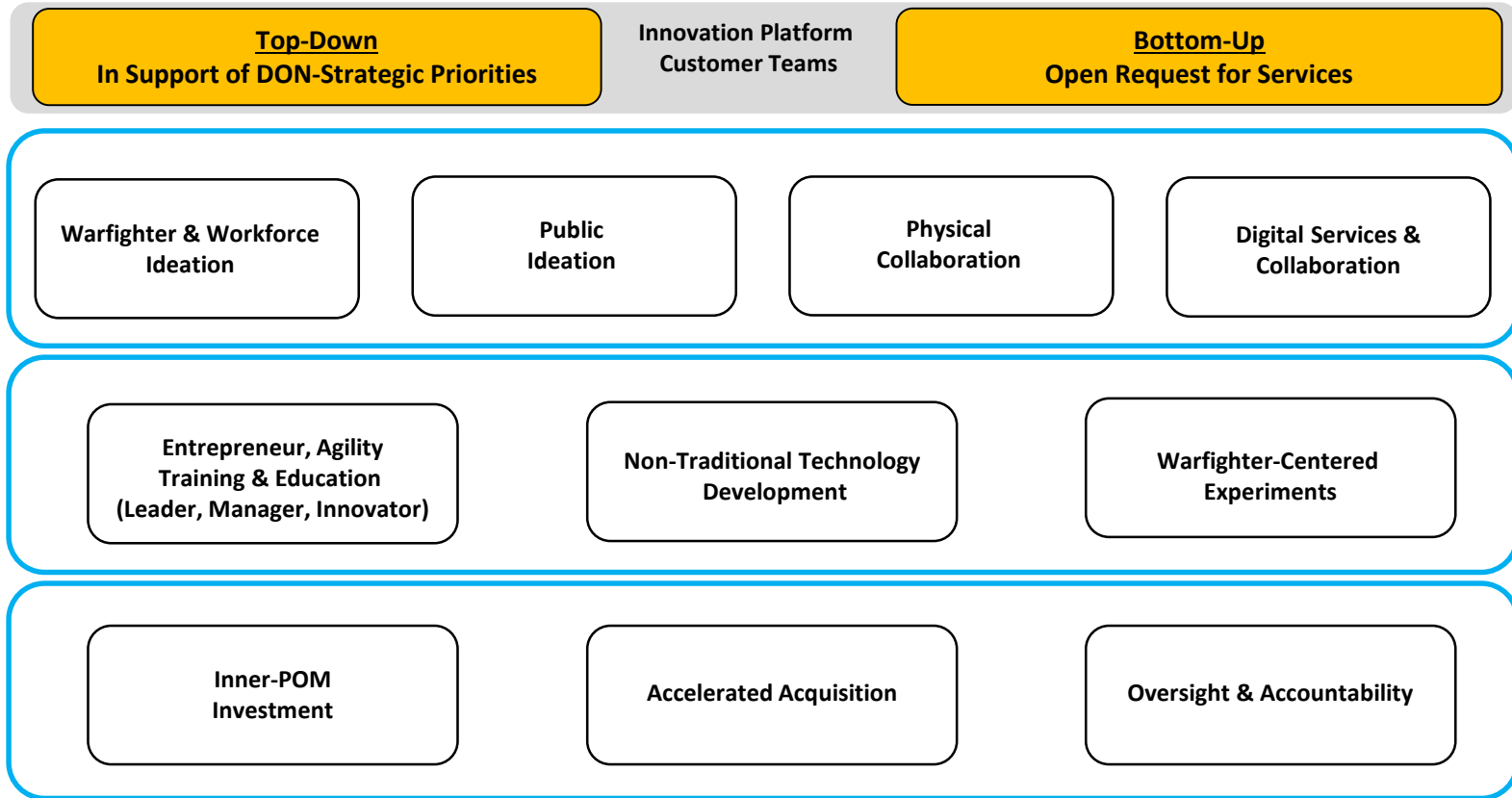
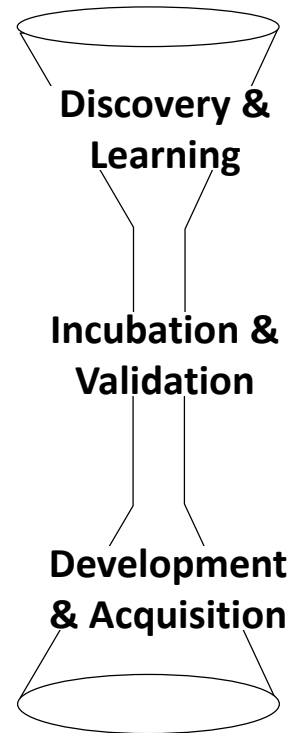
FY17 NDAA Section 806 Acquisition Agility MOSA – Component Prototyping

Key Enablers to Accelerate





Platform of Agility Service Marketplace



Agility Platform Mission: Deliver Agility service marketplace for Naval workforce teams to urgently explore and iteratively deliver emerging capabilities



Advanced Naval Technology Exercise (ANTX)

Advanced Naval Technology Exercises (ANTX) are a series of exercises led by the Naval Research and Development Establishment (NR&DE) where industry, academia, and Government R&D organizations are invited to demonstrate emerging tech/engineering innovations that address priority USN and USMC missions.

- Demonstrate emerging technologies and innovations to address Navy and Marine Corps mission priorities and gaps
- Allow collaboration of industry, academia, and Government R&D organizations
- Provide an environment for the warfighters to assess the operational utility of technological innovations before these technologies become militarized and integrated at the operational level
- Provide a forum for informational exchanges and innovations where the naval technology community can review new technologies, exchange ideas, and foster collaboration

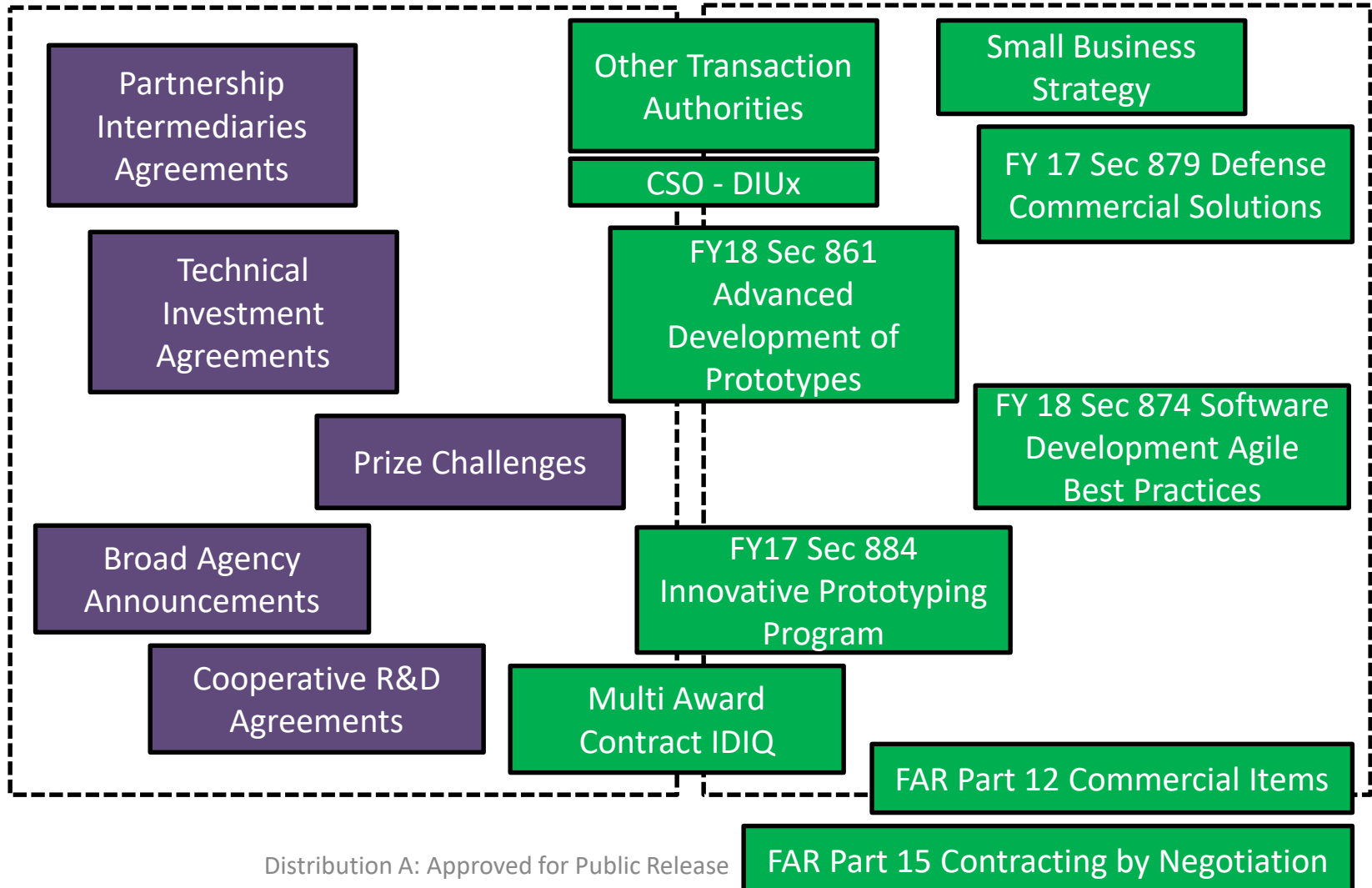




SYSCOM Fast Lane Contract & Agreement Tools

Tools to Accelerate Knowledge

Tools to Accelerate Acquisition





Other Transactions

Key Authority for R&D Community:

OTs for Prototype Projects were specifically authorized by Section 845 of the FY1994 National Defense Authorization Act (NDAA) Section 845 was recently amended and codified by Section 815 of the FY2016 NDAA. Section 815 added Section 2371b to Title 10 of the United States Code

Pilot for Training:

Create and pilot train-the-trainer materials in two primary areas: executing Other Transactions (OT) and leveraging industry Third-Party Financing (3PF) for new R&D. The goal is to pilot 10 OT projects during the performance period in order to test and evaluate the training materials.

Three levels of training under development:

- (1) Senior Executive Initial Information Brief (~20 minutes)
- (2) Action Officer Initial Information Briefing (~90 Minutes)
- (3) Action Officer Training Course (~2 days)

Benefits for the Acquisition Community

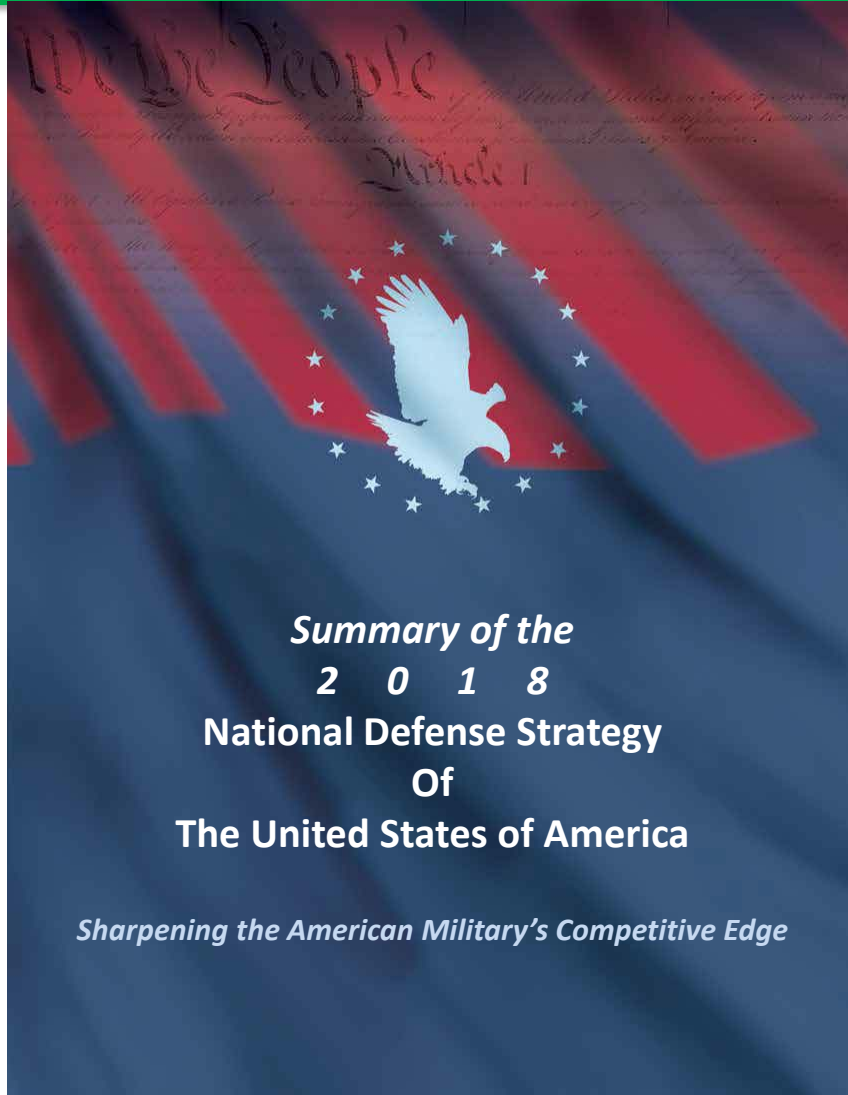
- Allow for greater speed, flexibility and accessibility in performing prototyping activities.
- OT grant access to innovative technologies.
- The agility, responsiveness and innovative nature of Small Business is essential to accelerating delivery.

Recent OTAs:

- SPAWAR Information Warfare Research Project (IWRP) OT was awarded on 26 June 2018 for \$100 million.
- Naval Undersea Warfare Center (NUWC) Division Newport OT was awarded on 18 June 2018 for \$20 million.



Strategic Alignment



USD(R&E) Top 10 Modernization Priorities:

Mission Focus:

- Fully Networked Command, Control & Communications
- Space Offense and Defense
- Missile Defense – Evolved Midcourse and Airborne BPI
- Cybersecurity – Offense and Defense
- Nuclear Modernization

Technology Focus:

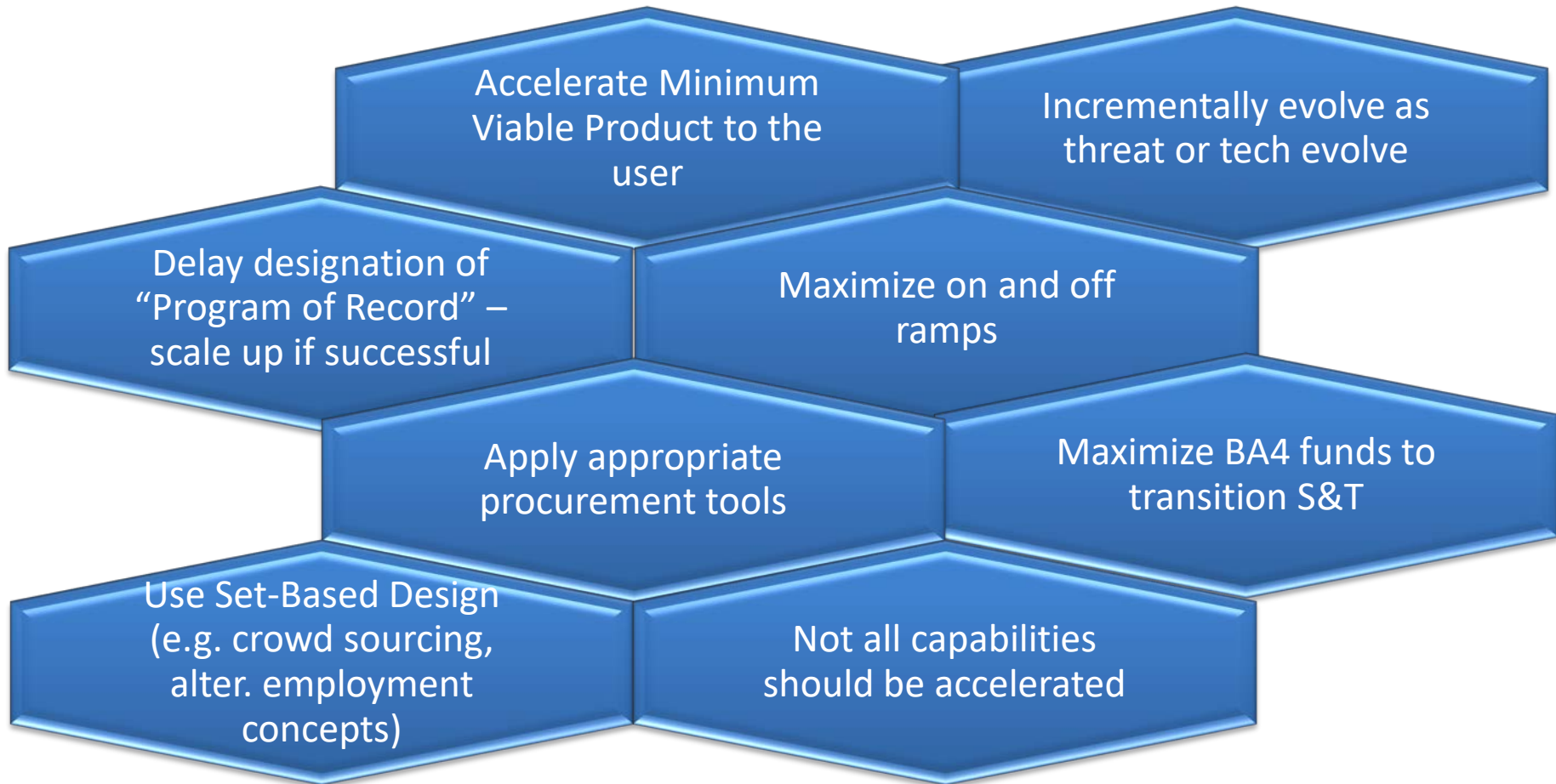
- Hypersonics – Offense and Defense
- Directed Energy
- Machine Learning (Artificial Intelligence)
- Quantum Science (Including Encryption and Computing)
- Microelectronics



Backup



Accelerated Acquisition Principles





Middle Tier Acquisition (804) Component Prototyping (806) Summary

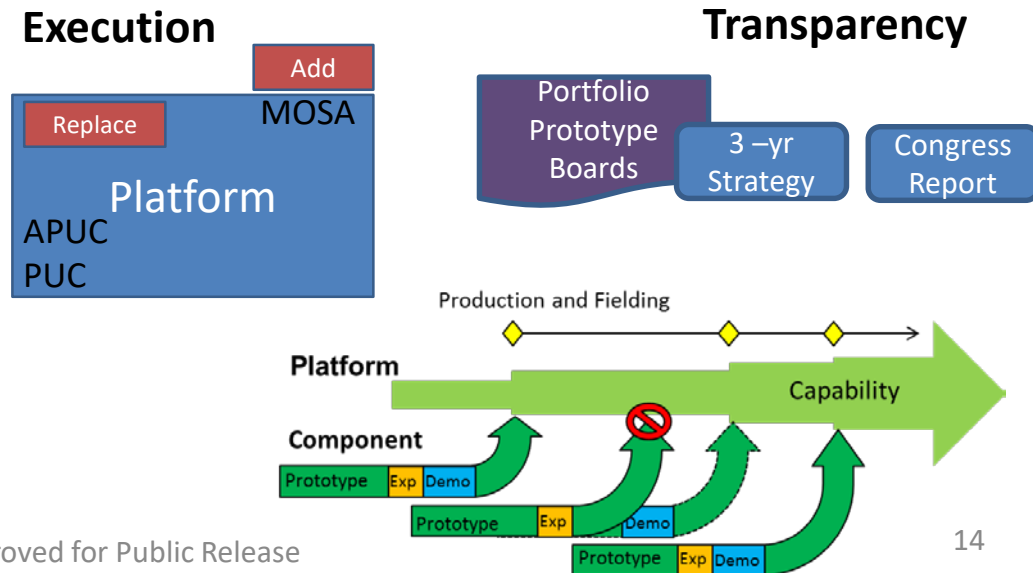
	MIDDLE TIER ACQUISITION 804	WEAPON SYSTEM COMPONENT & TECHNOLOGY PROTOTYPING 806
STATUTE	<ul style="list-style-type: none"> • Rapid Prototyping • Rapid Fielding 	<ul style="list-style-type: none"> • Prototyping major system components • Unshackle technology limitation from Major Defense Acquisition Programs (MDAPs)
INITIATION	<ul style="list-style-type: none"> • Merit Based Assessment • Appropriate approval level 	<ul style="list-style-type: none"> • Prototyping Board • Merit Based Assessment
FUNDING	<ul style="list-style-type: none"> • Navy Rapid Prototyping Fund • No Limit • Program Appropriated Funding • Special transfer authorities 	<ul style="list-style-type: none"> • \$10M (\$50M with approval) limit • Technology/components budgeted separately from MDAP
REQUIREMENTS	<ul style="list-style-type: none"> • Strategic emergent needs • Documented needs • Exempt from JCIDS 	<ul style="list-style-type: none"> • Prototyping goals • Exempt from JCIDS
TRANSITION	<ul style="list-style-type: none"> • Statutory limits of 5 years for both prototyping and fielding • Rapid fielding requires production begin within 6 months 	<ul style="list-style-type: none"> • Effort required to transition to MDAP • Statutory effects of upgrading components • Must complete within 2 years



Acquisition Agility

“Sec 806” Authorities

- Component Prototyping: Technology Insertion project within 2 years with expected cost of $\leq \$10M$ (up to $\$50M$ with SECNAV approval)
 - Replacement: i.e. Improvements in O&S Cost
 - Addition: i.e. New capability
 - Not defined in pre-planned increments 3 years in advance, but appropriate for the current environment
- Flexibility based on service needs within the FYDP
- Exempt from JCIDS and excluded from MDAP designation
- Not defined as major sub-program
- Not a part of APUC/PUC
- Platform requirements scoped appropriately for future



APUC – Average Procurement Unit Cost
 PUC – Procurement Unit Cost
 MOSA – Modular Open Systems Architecture