Department of Defense Fiscal Year (FY) 2020 Budget Estimates

March 2019



Office of the Secretary Of Defense

Defense-Wide Justification Book Volume 1 of 2

Procurement, Defense-Wide

UNCLASSIFIED

UNCLASSIFIED
THIS PAGE INTENTIONALLY LEFT BLANK

Office of the Secretary Of Defense • Budget Estimates FY 2020 • Procurement

Table of Volumes

Chemical and Biological Defense Program	Volume 1
Defense Contract Audit Agency	
Defense Contract Management Agency	Volume 1
DoD Human Resources Activity	Volume 1
Defense Information Systems Agency	Volume 1
Defense Logistics Agency	Volume 1
Defense Media Activity	
Defense POW/MIA Accounting Agency	Volume 1
Defense Production Act Purchases	
Defense Security Service	
Defense Threat Reduction Agency	Volume 1
Department of Defense Education Activity	
Office of the Secretary Of Defense	Volume 1
The Joint Staff	
United States Special Operations Command	Volume 1
Washington Headquarters Service	Volume 1

Office of the Secretary Of Defense • Budget Estimates FY 2020 • Procurement

Joint Urgent Operational Needs Fund	Volume
Missile Defense Agency	Volume 2

Office of the Secretary Of Defense • Budget Estimates FY 2020 • Procurement

Volume 1 Table of Contents

Comptroller Exhibit P-1	Volume 1 - י
Line Item Table of Contents (by Appropriation then Line Number)	Volume 1 - xv
Line Item Table of Contents (Alphabetically by Line Item Title)	Volume 1 - xi
Exhibit P-40s	Volume 1 -



Defense-Wide FY 2020 President's Budget Exhibit P-1 FY 2020 President's Budget Total Obligational Authority (Dollars in Thousands)

12 Mar 2019

Appropriation	FY 2018 (Base + OCO)	FY 2019 Base Enacted	FY 2019 OCO Enacted	FY 2019 Total Enacted
Procurement, Defense-Wide	21,999	35,295		35,295
Total Defense-Wide	21,999	35,295		35,295

Defense-Wide FY 2020 President's Budget Exhibit P-1 FY 2020 President's Budget Total Obligational Authority (Dollars in Thousands)

12 Mar 2019

FY 2020

Appropriation	FY 2020 Base	FY 2020 OCO for Base Requirements	OCO for Direct War and Enduring Costs	FY 2020 Total OCO
Procurement, Defense-Wide	43,705			
Total Defense-Wide	43,705			

Defense-Wide
FY 2020 President's Budget
Exhibit P-1 FY 2020 President's Budget
Total Obligational Authority
(Dollars in Thousands)

12 Mar 2019

	FY 2020
Appropriation	Total (Base + OCO)
Appropriacion	(base + 000)
Procurement, Defense-Wide	43,705
Total Defense-Wide	43,705

Defense-Wide FY 2020 President's Budget Exhibit P-1 FY 2020 President's Budget Total Obligational Authority (Dollars in Thousands)

12 Mar 2019

Organization: Procurement, Defense-Wide	FY 2018 (Base + OCO)	FY 2019 Base Enacted	FY 2019 OCO Enacted	FY 2019 Total Enacted
Office of Secretary of Defense, OSD	21,999	35,295		35,295
Total	21,999	35,295		35,295

Defense-Wide FY 2020 President's Budget Exhibit P-1 FY 2020 President's Budget Total Obligational Authority (Dollars in Thousands)

12 Mar 2019

FY 2020

Organization: Procurement, Defense-Wide	FY 2020 Base	FY 2020 OCO for Base Requirements	OCO for Direct War and Enduring Costs	FY 2020 Total OCO
Office of Secretary of Defense, OSD	43,705			
Total	43,705			

Defense-Wide FY 2020 President's Budget Exhibit P-1 FY 2020 President's Budget Total Obligational Authority (Dollars in Thousands)

12 Mar 2019

Organization: Procurement, Defense-Wide	FY 2020 Total (Base + OCO)
Office of Secretary of Defense, OSD	43,705
Total	43,705

Defense-Wide FY 2020 President's Budget Exhibit P-1 FY 2020 President's Budget Total Obligational Authority (Dollars in Thousands)

12 Mar 2019

Appropriation: Procurement, Defense-Wide

Budget Activity	FY 2018 (Base + OCO)	FY 2019 Base Enacted	FY 2019 OCO Enacted	FY 2019 Total Enacted
01. Major Equipment	21,999	35,295		35,295
Total Procurement, Defense-Wide	21,999	35,295		35,295

Defense-Wide FY 2020 President's Budget Exhibit P-1 FY 2020 President's Budget Total Obligational Authority (Dollars in Thousands)

12 Mar 2019

FY 2020

Appropriation: Procurement, Defense-Wide

Budget Activity	FY 2020 Base	FY 2020 OCO for Base Requirements	OCO for Direct War and Enduring Costs	FY 2020 Total OCO
01. Major Equipment	43,705			
Total Procurement, Defense-Wide	43,705			

Defense-Wide FY 2020 President's Budget Exhibit P-1 FY 2020 President's Budget Total Obligational Authority (Dollars in Thousands)

12 Mar 2019

Appropriation: Procurement, Defense-Wide

Budget Activity	FY 2020 Total (Base + OCO
01. Major Equipment	43,705
Total Procurement, Defense-Wide	43,705

Defense-Wide FY 2020 President's Budget Exhibit P-1 FY 2020 President's Budget Total Obligational Authority

Otal Obligational Authorit (Dollars in Thousands)

Appropriation: 0300D Procurement, Defense-Wide

Line	Ident	FY (Base	2018 e + OCO)	FY 2 Base E		FY 20 OCO Ena		FY 20 Total E		s e
No Item Nomenclature	Code	Quantit	•	Quantity	Cost	Quantity	Cost	Quantity	Cost	
Budget Activity 01: Major Equipment										
Major Equipment, OSD										
45 Major Equipment, OSD	A	20	21,999		35,295				35,295	U
Total Major Equipment			21,999		35,295				35,295	
Total Procurement, Defense-Wide			21,999		35,295				35,295	

12 Mar 2019

Defense-Wide FY 2020 President's Budget Exhibit P-1 FY 2020 President's Budget Total Obligational Authority

(Dollars in Thousands)

Appropriation: 0300D Procurement, Defense-Wide

Line	Ident	FY 20 Bas		FY 20 OCO for Require	Base	OCO f Direct and End Cost	War Uuring	FY 20 Tota OCO	1	S e
No Item Nomenclature	Code	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	C
										-
Budget Activity 01: Major Equipment										
Major Equipment, OSD										
45 Major Equipment, OSD	A		43,705							U
Total Major Equipment			43,705							
Total Procurement, Defense-Wide		100	43,705							

12 Mar 2019

FY 2020

Defense-Wide FY 2020 President's Budget Exhibit P-1 FY 2020 President's Budget Total Obligational Authority (Dollars in Thousands)

igational Authority 12 Mar 2019

Appropriation: 0300D Procurement, Defense-Wide

		FY 2020	
		Total	S
Line	Ident	(Base + OCO)) e
No Item Nomenclature	Code	Quantity Cos	st c
	100 per 100 per 100 per		-
Budget Activity 01: Major Equipment			
Major Equipment, OSD			
45 Major Equipment, OSD	А	- /	05 U
Total Major Equipment		43,70	05
Total Procurement, Defense-Wide		43,7	

Office of the Secretary Of Defense • Budget Estimates FY 2020 • Procurement

Line Item Table of Contents (by Appropriation then Line Number)

Appropriation 0300D: Procurement, Defense-Wide

Line #	ВА	BSA	Line Item Number	Line Item Title	Page
45	01	01	30	Major Equipment OSDVolume	1 - 1

THIS PAGE INTENTIONALLY LEFT BLANK	UNCLASSIFIED
	THIS PAGE INTENTIONALLY LEFT BLANK

Office of the Secretary Of Defense • Budget Estimates FY 2020 • Procurement

Line Item Table of Contents (Alphabetically by Line Item Title)

Line Item Title	Line Item Number	Line #	ВА	BSA Page
Major Equipment OSD	30	45	01	01Volume 1 - 1



Exhibit P-40, Budget Line Item Justification: PB 2020 Office of the Secretary Of Defense

Date: March 2019

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

0300D: Procurement, Defense-Wide / BA 01: Major Equipment / BSA 1: Major Equipment, OSD

30 / Major Equipment OSD

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: 0902198D8Z

Line Item MDAP/MAIS Code: N/A

	Prior			FY 2020	FY 2020	FY 2020					То	
Resource Summary	Years	FY 2018	FY 2019	Base	oco	Total	FY 2021	FY 2022	FY 2023	FY 2024	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	516.119	21.999	35.295	43.705	-	43.705	37.613	36.180	37.427	37.912	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	516.119	21.999	35.295	43.705	-	43.705	37.613	36.180	37.427	37.912	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	516.119	21.999	35.295	43.705	-	43.705	37.613	36.180	37.427	37.912	Continuing	Continuing
(The following	Resource Sumi	mary rows are fo	or informational p	urposes only. Th	e corresponding	g budget request	s are documente	d elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The Office of the Secretary of Defense (OSD) is the principal staff element of the Secretary of Defense in the exercise of policy development, planning, resource management, fiscal, and program evaluation responsibilities. OSD includes the immediate offices of the Secretary and Deputy Secretary of Defense, Under Secretaries of Defense, Assistant Secretaries of Defense, General Counsel, Director of Operational Test and Evaluation, Assistants to the Secretary of Defense, Chief Management Officer, and such other staff offices as the Secretary establishes to assist in carrying out assigned responsibilities.

Exhibit P-40, Budget Line Item Justification: PB 2020 Office of the Secretary Of Defense

Date: March 2019

Appropriation / Budget Activity / Budget Sub Activity:

0300D: Procurement, Defense-Wide / BA 01: Major Equipment / BSA 1: Major

Equipment, OSD

30 / Major Equipment OSD

P-1 Line Item Number / Title:

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: 0902198D8Z

Line Item MDAP/MAIS Code: N/A

	Exhibits Schedule				Prior Years	FY 2018	FY 2019	FY 2020 OCO	FY 2020 Total	
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)
P-40a	2 / Enterprise Portals Program				- / 15.992	1 / 0.209	1 / 0.359	1 / 0.298	- / -	1 / 0.298
P-5	30 / Mentor Protege		Α	300	- / 424.596	- / 19.575	- / 29.787	- / 31.700	- / -	- / 31.700
P-40a	1 / IT Hardware, Equipment, Software, and Licenses				1 / 42.942	1 / 0.632	1 / 0.616	1 / 0.637	0 / 0.000	1 / 0.637
P-40a	2 / CAPE Internet DMZ Migration Services				1 / 0.000	1 / 0.000	1 / 2.297	1 / 0.913	0 / 0.000	1 / 0.913
P-5	30 / US Mission to NATO				- /2.780	- / 0.355	- / 0.353	- / 0.320	- / -	- / 0.320
P-5	30 / Joint Capability Technology Development (JCTD) Procurement			300	- / 19.970	- / 0.707	- / 1.636	- / 1.631	- / -	- / 1.631
P-5	30 / Countering Weapons of Mass Destruction (CWMD) Systems				- / 9.837	- / 0.471	- / 0.247	- / -	- / -	- / -
P-40a	Algorithmic Warfare Cross Functional Team (AWCFT)				- / -	- / -	- / -	- / 8.206	- / -	- / 8.206
P-40	Total Gross/Weapon System Cost	,			- / 516.119	- / 21.999	- / 35.295	- / 43.705	- 1 -	- / 43.705

^{*}Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:

In FY 2020 the Office of the Secretary of Defense request for \$43.7 Million supports funding initiatives such as the Mentor Protégé Program, Enterprise Portals Program, Joint Capability Technology Demonstration, Long Range Planning, and the U.S. Mission to NATO. The funding requested is for the modernization of office automation and Information Technology (IT) infrastructure requirements, procurement of mission essential new and replacement equipment for these components and for the Countering Weapons of Mass Destruction Systems to address National Technical Nuclear Forensics (NTNF) and a Defense-wide Countering Nuclear Threats (CNT) Materiel development Program. The funding also supports the DoD's Artificial Intelligence (AI) efforts through the Algorithmic Warfare Cross-Functional Team (AWCFT).

The FY 2020 request facilitates the National Security Strategy (NSS), National Defense Strategy (NDS) and the National Defense Business Operations Plan (NDBOP) by supporting:

Strategic Goal 1: Build a More Lethal Joint Force, and

Strategic Objective 1.2 - Lay the foundation for future readiness through recapitalization, innovation, and modernization

Strategic Objective 1.3 - Enhance information technology and cybersecurity capabilities

Strategic Objective 1.4 - Ensure the best intelligence, counterintelligence, and security support to DoD operations

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2020 Office of the Secretary Of Defense Date: March 2019								
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 01 / 1	P-1 Line Item Number / Title: 30 / Major Equipment OSD	Aggregated Items Title: Enterprise Portals Program						

							-				_									
			Р	rior Year	s		FY 2018			FY 2019		FY	′ 2020 Ba	se	FY	/ 2020 OC	o	FY	' 2020 Tot	tal
Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Enterprise Portal			,		,															
2 / Enterprise Portals Program			-	-	15.992	0.209	1	0.209	0.359	1	0.359	0.298	1	0.298	-	-	-	0.298	1	0.298
Subtotal: Enterprise Port	al		-	-	15.992	-	-	0.209	-	-	0.359	-	-	0.298	-	-	-	-	-	0.298
Total			-	-	15.992	-	-	0.209	-	-	0.359	-	-	0.298	-	-	-	-	-	0.298

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

Remarks

Buys new software capabilities / investments in support of mission and A&S-wide emerging requirements. The Office of the Under Secretary of Defense for Acquisition and Sustainment (OUSD (A&S)) uses this software in support of mission-specific systems. Functions include the improvement and efficiency of the acquisition and sustainment processes, alignment of processes for the Department; and transformation of business processes through change management.

Volume 1 - 3

Exhibit P-5, Cost Analysis: PB 2020 Office of the Secretary Of Defense

Appropriation / Budget Activity / Budget Sub Activity:

0300D / 01 / 1

Date: March 2019

Item Number / Title [DODIC]:
30 / Mentor Protege

ID Code (A=Service Ready, B=Not Service Ready) : A		N	IDAP/MAIS Code: 300)		
Resource Summary	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	424.596	19.57	29.787	31.700	-	31.700
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	424.596	19.57	5 29.787	31.700	-	31.700
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	424.596	19.57	29.787	31.700	-	31.700
(The following Resource Summary rows are for inform	national purposes only. The cor	responding budget reque	sts are documented elsewhe	re.)		3
Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Millions)	-	_	_	_	_	_

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

	F	Prior Years	6		FY 2018			FY 2019		FY	' 2020 Bas	se	F	/ 2020 OC	0	FY	/ 2020 Tot	.al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)															
Support - Suballocations Cos	t			'			'	'								'		
Defense Intelligence Agency	3.694	3	11.081	2.500	1	2.500	2.027	1	2.027	2.500	1	2.500	-	-	-	2.500	1	2.50
Army Mentor Protege Agreements	9.541	3	28.623	3.250	1	3.250	5.000	1	5.000	5.500	1	5.500	-	-	-	5.500	1	5.50
Navy Mentor Protege Agreements	8.830	3	26.489	1.775	1	1.775	1.750	1	1.750	2.500	1	2.500	-	-	-	2.500	1	2.50
Air Force Mentor Protege Agreements	8.433	3	25.298	3.250	1	3.250	6.600	1	6.600	6.000	1	6.000	-	-	-	6.000	1	6.00
MDA Mentor Protege Agreements	8.584	3	25.752	4.500	1	4.500	5.500	1	5.500	6.000	1	6.000	-	-	-	6.000	1	6.00
NGA Mentor Protege Agreements	12.222	3	36.667	1.745	1	1.745	3.500	1	3.500	2.500	1	2.500	-	-	-	2.500	1	2.50
SOCOM Mentor Protege Agreements	2.015	1	2.015	1.000	1	1.000	2.500	1	2.500	2.500	1	2.500	-	-	-	2.500	1	2.50
Joint Robotics Initiative Agreements	5.756	1	5.756	0.000	1	0.000	0.000	0	0.000	0.000	1	0.000	-	-	-	0.000	1	0.00
NSA Mentor Protege Agreements	2.605	3	7.815	0.000	1	0.000	0.000	0	0.000	0.000	1	0.000	-	-	-	0.000	1	0.00
Additional Mentor Protege Initiatives	2.619	3	7.857	0.855	1	0.855	0.855	1	0.855	0.889	1	0.889	-	-	-	0.889	1	0.88
Miscellaneous	247.245	1	247.245	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DTRA	-	-	-	0.700	1	0.700	2.055	1	2.055	3.311	1	3.311	-	-	-	3.311	1	3.31
Subtotal: Support - Suballocations Cost	-	-	424.600	-	-	19.575	-	-	29.787	-	-	31.700	-	-	-	-	-	31.70

Exhibit P-5, Cost Analysis: PB 2020 Office of the Secretary Of Defense

Date: March 2019

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

Item Number / Title [DODIC]:

0300D / 01 / 1

30 / Major Equipment OSD

30 / Mentor Protege

ID Code (A=Service Ready, B=Not Service Ready): A

MDAP/MAIS Code: 300

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

	F	rior Years	5		FY 2018			FY 2019		FY	/ 2020 Bas	se	F	Y 2020 OC	0	FY	/ 2020 Tot	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Gross/Weapon System Cost	-	-	424.596	-	-	19.575	-	-	29.787	-	-	31.700	-	-	-	-	-	31.700

Remarks:

FY 2020 funding supports the Mentor Protégé Pilot Program (MPP) that was established under Section 831 of the National Defense Authorization Act for Fiscal Year 1991 (Public Law 101-510) to assist eligible small business concerns in enhancing their capabilities to perform as subcontractors and viable suppliers under Department of Defense (DoD) contracts and other federal government and commercial contracts. This program helps to sustain a competitive supplier base which contributes to affordability in current and future defense acquisitions.

The DoD Mentor Protégé Pilot Program (MPP) focuses on several key initiatives with the intent to enable small businesses to effectively meet the Department's challenges by infusing small business utilization into the Department's major acquisition programs. The strategic focus of the DoD MPP is the cross functional alignment of DoD Service Component and Interagency Mentor Protégé Agreement's to satisfy the Department's objectives and mission; this is accomplished through the utilization of socio-economic disadvantaged small businesses. The DoD MPP identifies small businesses that possess unique mission critical capabilities; then, through technological transfer and business development efforts, it leverages these capabilities for the Department and ultimately the warfighter. This program continuously pursues small business firms that are agile and innovative to strengthen the manufacturing and industrial base throughout the DoD enterprise.

By leveraging the Mentor Protégé Program, large firms (DoD Mentors) receive financial and credit incentives to provide technical and business assistance to Small Disadvantaged Businesses (SDBs), Womenowned Small Businesses (WOSBs), Service-Disabled Veteran-owned Small Businesses (SDVOSBs), Historically Underutilized Business Zone (HUBZone) firms, and firms that employ the disabled persons. The incentives provided to DoD Mentors are either a direct cost reimbursement or credit towards established subcontracting goals for approved mentoring costs incurred. Additionally, DoD Mentor-Protégé agreements (MPAs) often provide strategic technology-inclusion engagements with minority serving institutions (MSIs), including Historically Black Colleges and Universities (HBCUs), Tribal Colleges and Universities, Hispanic Serving Institutions, and other minority institutions that provide advanced developmental assistance to DoD Protégés. DoD MPAs align to DoD Service Component and Other Defense Agency (ODA) requirements toward resolving operational challenges or other critical national security needs characterized by science and technology thrusts identified by each agency, thus concentrating on key mission needs.

Over the past 5 years (FY 2014 - FY 2018) DoD/IC Protégé participating in the program have been awarded more than \$5.4B in contracts, increased annualized revenues by an average of \$2.3B, and for every year a protégé firm participates in the program their workforce is increased by an average of 13.4 full-time employees (FTEs). The Department projected to award over 58 MPAs valued at 26.2 million in Fiscal Year 18.

The Department's new program initiatives are currently aligned with the Secretary of Defense priorities focusing on Lethality, Readiness, Affordability and Sustainment. The Mentor Protégé Program has targeted the ten technology areas and industrial base challenges addressed in the National Defense Strategy. The department has also utilizes the Mentor Protégé Program to address the cyber security challenges facing small business industrial base. In addition, fostering the productivity and innovation to sustain and increase benefits to the warfighter, Defense Industrial Base industry sector, and the DoD MPP thereby reducing total costs of ownership and management costs to include: 1) Consolidated Mentor-Protégé Agreement (MPA) solicitation framework with agile project management processes deployed to optimize workflows and approval processes to rapidly increase efficiencies of DoD MPP resources and assignments across DoD service components and Other Defense Agencies (ODAs). 2) Scaling Hybrid MPAs, the blending of Credit MPAs and Cost-Reimbursable (RE) MPAs, to meet or exceed complex Department of Defense/Intelligence Community (DoD/IC) requirements thus allowing more DoD and IC Prime contractors with new technologies for weapon systems and platforms to receive partial reimbursements for approved mentoring costs while concurrently receiving credit toward established DoD/IC subcontracting goals; the latter directly resulting in more DoD and IC Protégés leveraging credit MPAs to receive mentoring without additional funds, which is the most cost effective alternative for the government. 3) Federate Service Component and ODA MPP data to automate OSBP and MPP resource assignments for rapid MPA approvals, enhanced data tracking, capturing metrics, and providing digital analytics to OSBP and DOD/IC mission partners to improve targeted utilization of DoD MPP resources and DoD MPP interoperability across other programs in OSBP's portfolio.

LI 30 - Major Equipment OSD
Office of the Secretary Of Defense

UNCLASSIFIED

P-1 Line #45

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2020 Office of the Secretary Of Defense

Appropriation / Budget Activity / Budget Sub Activity:

0300D / 01 / 1

P-1 Line Item Number / Title:

30 / Major Equipment OSD

Aggregated Items Title:

Long Range Planning

0300070171						-	o i iviaje	Ji Equipi	nent Oo	D				-	Jily I tali	ge i iaii	illig		
		F	Prior Year	s		FY 2018			FY 2019		FY	′ 2020 Ba	se	F	7 2020 OC	0	FY	′ 2020 Tot	tal
Item Number / Title [DODIC]	ID MAIS CD Code	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Long Range Planning H	lardware/Eq	uipment																	
1 / IT Hardware, Equipment, Software, and Licenses		42.942	1	42.942	0.632	1	0.632	0.616	1	0.616	0.637	1	0.637	0.000	0	0.000	0.637	1	0.637
Subtotal: Long Range Pla Hardware/Equipment	anning	-	-	42.942		-	0.632	_	-	0.616	-	-	0.637	_	-	0.000	-	-	0.63
Long Range Planning In	nternet DMZ	Migration Se	rvices																
2 / CAPE Internet DMZ Migration Services		0.000	1	0.000	0.000	1	0.000	2.297	1	2.297	0.913	1	0.913	0.000	0	0.000	0.913	1	0.91
Subtotal: Long Range Pla Internet DMZ Migration S		-	-	0.000	-	-	0.000	-	-	2.297	-	-	0.913	-	-	0.000	-	-	0.91
Total		-	-	42.942		-	0.632	-	-	2.913	-	-	1.550	-	-	0.000	-	-	1.550

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

Remarks:

FY 2020 funding supports the Office of the Director, Cost Analysis and Program Evaluation (CAPE) high-end computer workstations, networks, in-house-developed software, and other DoD-developed simulation models and applications to enable the organization to perform its mission and unique business functions. These integrated computers and networks provide CAPE analysts with the ability to support mission functions such as: Program Review support, Program Objective Memorandum (POM) coordination, Future Years Defense Plan (FYDP) coordination, and the collection, maintenance, and analysis of Defense Cost and Resource Center (DCARC) data. In addition, these sophisticated computer tools allow CAPE analysts to conduct research, studies, technical analyses, and collaborative studies within CAPE and with other DoD agencies, and provide analysts with the flexibility of running simulation models to produce valid analyses. FY 2020 funding continues to support the migration, implementation, and sustainment of CAPE';s DoD Non-Classified Internet Protocol Router Network Demilitarized Zone (DMZ) efforts outside of the Joint Service Provider (JSP) DMZ.

CAPE will maintain a steady state Long Range Planning Procurement program throughout the outyears of the FY 2020-2024 FYDP. Due to the migration to an Enterprise solution as well as recent modernization activities, prudent planning, and effective requirements analysis, CAPE continues to align procurement expenditures for maximum efficiency in order to fund higher priority requirements in the Department.

							Ui	NCLA5	OII ILL	,								
Exhibit P-5, Cost	Analysis	s: PB 20	20 Office	of the S	ecretary	Of Defe	ense							Date: M	arch 201	19		
Appropriation / B 0300D / 01 / 1	udget A	ctivity /	Budget :	Sub Act	ivity:		ine Item Major Eq									Title [DOI to NATO		
ID Code (A=Service Read	y, B=Not Servi	ce Ready):							М	DAP/MAIS	Code:							
R	esource	Summa	ary			Prior Yea	ars	FY 20	18	FY	2019	FY 2	2020 Bas	se F	Y 2020 (ОСО	FY 2020	Total
Procurement Quantity (Unit							-		_		-			-		-		
Gross/Weapon System Co		s)					2.780		0.355		0.3	53	(0.320		-		0.320
Less PY Advance Procure	ment (\$ in Mil	lions)					-		_					-		-		_
Net Procurement (P-1) (\$ ii	n Millions)						2.780		0.355		0.3	53	(0.320		-		0.320
Plus CY Advance Procurer	ment (\$ in Mill	lions)					-		-					-		-		
Total Obligation Authorit	· · · · · · · · · · · · · · · · · · ·						2.780		0.355		0.3	53	(0.320		-		0.320
(Th	ne followina F	Resource Su	ımmarv rows	s are for info	rmational p	urposes only	. The corres	pondina bud	aet reauest	s are docum	ented elsew	here.)						
Initial Spares (\$ in Millions)						,	-	,	-					-		-		
Gross/Weapon System Un	it Cost (\$ in N	Aillions)					-		-					-		-		-
							l									I		
Note: Subtotals or Totals in	n this Exhibit	P-5 may no	t be exact o	r sum exactl	y due to rou	nding.		-										
	P	rior Years	3		FY 2018			FY 2019		FY	′ 2020 Bas	se .	F	/ 2020 OC	0	FY	Y 2020 Tota	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Hardware Cost	(\$ IVI)	(Eacii)	(\$ IVI)	(\$ IVI)	(Eacri)	(\$ 101)	(\$ IVI)	(Eacii)	(\$ IVI)	(\$ IVI)	(Eacii)	(\$ IVI)	(\$ IVI)	(Eacii)	(\$ 101)	(\$ IVI)	(Eacii)	(\$ IVI)
Recurring Cost																		
Unclassified Computers	0.018	14	0.254	0.017	3	0.050	0.017	3	0.051	0.017	3	0.051	-	-	-	0.017	3	0.051
LAN Printers	0.014	12	0.162	0.013	2	0.026	0.013	2	0.026	0.013	2	0.026	-	-	-	0.013	2	0.026
LAN Servers	0.025	10	0.246	0.030	1	0.030	0.030	1	0.030	0.030	1	0.030	-	-	-	0.030	1	0.030
Peripherals Scanners	0.058	9	0.523	0.054	1	0.054	0.054	1	0.054	0.054	1	0.054	-	-	-	0.054	1	0.054
Subtotal: Recurring Cost	-	-	1.185	-	-	0.161	-	-	0.161	-	-	0.161	-	-	-	-	-	0.161
Subtotal: Hardware Cost	-	-	1.185	-	-	0.161	-	-	0.161	-	-	0.161	-	-	-	-	-	0.161
Hardware - Network Upgrade	Cost																	
Recurring Cost Network Upgrade	0.115	12	1.382	0.122	1	0.122	0.119	1	0.119	0.086	1	0.086	_		_	0.086	1	0.086
C-LAN computers	0.115	2	0.046	0.122	2	0.122	0.119	2	0.119	0.086	2	0.060	-		-	0.086	2	0.060
Subtotal: Recurring Cost	0.023	-	1.428	0.020		0.032	0.020	-	0.032	0.020		0.032	-		_	0.020	-	0.138
Subtotal: Hardware - Network Upgrade Cost	-	-	1.428	-	-	0.174	-	-	0.171	-	-	0.138	-	-	-	-	-	0.138
Software - Software Cost															<u> </u>			
Recurring Cost																	,	
Software	0.021	8	0.167	0.021	1	0.021	0.021	1	0.021	0.021	1	0.021	-	-	-	0.021	1	0.021
Subtotal: Recurring Cost	-	-	0.167	-	-	0.021	-	-	0.021	-	-	0.021	-	-	-	-	-	0.021
Subtotal: Software - Software Cost	-	-	0.167	-	-	0.020	-	-	0.021	-	-	0.021	-	-	-	-	-	0.021

LI 30 - Major Equipment OSD Office of the Secretary Of Defense UNCLASSIFIED
Page 7 of 12

P-1 Line #45

Exhibit P-5, Cost Analysis: PB 2020 Office of the Secretary Of Defense

Date: March 2019

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

0300D / 01 / 1

30 / Major Equipment OSD

30 / US Mission to NATO

Item Number / Title [DODIC]:

ID Code (A=Service Ready, B=Not Service Ready):

MDAP/MAIS Code:

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

	F	Prior Years	 S		FY 2018			FY 2019		FY	′ 2020 Ba	se	F	7 2020 OC	0	F	Y 2020 Tot	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Gross/Weapon System Cost	-	-	2.780	-	-	0.355	-	•	0.353	•	-	0.320	-	-	-	-	-	0.320

Remarks:

FY 2020 funding provides for collaborative environments required for processing, analyzing, and distributing critical intelligence information between the U.S., NATO allies, and coalition forces. Funding supports expansion of U.S. and NATO allied multinational and bi-lateral intelligence information sharing capabilities via expanded terrestrial and satellite communications, information technology systems, integrated wide area and meshed networking, deployable command and control containers/elements, and information applications exploitation as it relates to U.S./NATO/coalition activities within USEUCOM Intelligence Fusion Center, NATO Special Operations Coordination Center, US Battlefield Information Collection and Exploitation System(s) and US JOIC world-wide architectures. In addition, funding provides work stations, computing clusters, data servers, security accreditation, and network connections for co-located strategic, operational and forward deployed elements.

Exhibit P-5, Cost Analysis: PB 2020 Office of the Secretary Of Defense

Appropriation / Budget Activity / Budget Sub Activity:
0300D / 01 / 1

P-1 Line Item Number / Title:
30 / Major Equipment OSD

Budget Activity / Budget Sub Activity:
30 / Major Equipment OSD

Date: March 2019

Item Number / Title [DODIC]:
30 / Joint Capability Technology
Development (JCTD) Procurement

ID Code (A=Service Ready, B=Not Service Ready) : MDAP/MAIS Code: 300

Resource Summary	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	19.970	0.707	1.636	1.631	-	1.631
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	19.970	0.707	1.636	1.631	-	1.631
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	19.970	0.707	1.636	1.631	-	1.631
(The following Resource Summary rows are for in	formational purposes only. The corr	esponding budget requests	are documented elsewher	re.)		
Initial Spares (\$ in Millions)	-	-	-	-	-	-

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Note. Subtotals of Totals I	II UIIS EXIIIDI	T-5 may no	or be exact of	Suili Exacti	y due to rou	nuing.												_
	F	Prior Years	s		FY 2018			FY 2019		F	′ 2020 Ba	se	F	/ 2020 OC	0	F'	Y 2020 Tot	:al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Support - JCTD Procurement	Projects Cost																	
Selected JCTD procurement projects	-	-	19.970	-	-	0.707	-	-	1.636	-	-	1.631	-	-	-	-	-	1.63
Subtotal: Support - JCTD Procurement Projects Cost	-	-	19.970	-	-	0.707	-	-	1.636	-	-	1.631	-	-	-	-	-	1.63
Gross/Weapon System Cost	-	-	19.970	-	-	0.707	-	-	1.636	-	-	1.631	-	-	-	-	-	1.631

Remarks:

FY 2020 funding supports initial acquisition of equipment for rapid transition of operational "joint unique" capabilities that have not yet completed transition into a program of record (PoR). The aim is to achieve efficiencies by aligning resources to fully integrate these more mature capabilities sooner into either an existing system or a new system being deployed or employed. In addition funding supports completion of JCTDs and prototypes in order to complete extended user evaluations and provide transition support to PoR's or fieldable prototypes. JCTDs efforts enhance DoD capabilities by gaining an "on ramp" to conventional acquisition processes for emerging capabilities.

Gross/Weapon System Unit Cost (\$ in Millions)

Exhibit P-5, Cost Analysis: PB 2020 Office of the Secretary Of Defense

Appropriation / Budget Activity / Budget Sub Activity:

0300D / 01 / 1

Date: March 2019

Item Number / Title [DODIC]:
30 / Countering Weapons of Mass Destruction (CWMD) Systems

MDAP/MAIS Code: ID Code (A=Service Ready, B=Not Service Ready): **Prior Years FY 2018 FY 2020 Base** FY 2020 Total **Resource Summary** FY 2019 **FY 2020 OCO** Procurement Quantity (Units in Each) 0.471 Gross/Weapon System Cost (\$ in Millions) 9.837 0.247 Less PY Advance Procurement (\$ in Millions) Net Procurement (P-1) (\$ in Millions) 9.837 0.471 0.247 _ _ Plus CY Advance Procurement (\$ in Millions) Total Obligation Authority (\$ in Millions) 9.837 0.471 0.247 (The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.) Initial Spares (\$ in Millions) Gross/Weapon System Unit Cost (\$ in Millions) _

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

	F	Prior Years	3		FY 2018			FY 2019		FY	1 2020 Ba	se	F	/ 2020 OC	0	F	/ 2020 Tot	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)												
Package Fielding Cost																		
Non Recurring Cost	_																	
Joint Personal Dosimeter	0.002	764	1.527	0.002	236	0.471	-	-	-	-	-	-	-	-	-	-	-	-
DISCREET OCULUS	4.340	1	4.340	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Harvester Particulate Airborne Collection System	1.573	1	1.573	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Modular Whole Air Collection System	0.960	1	0.960	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SOCOM Underwater Monitor	1.437	1	1.437	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Radiological Detection System	-	-	-	-	-	-	0.017	15	0.247	-	-	-	-	-	-	-	-	-
Subtotal: Non Recurring Cost	-	-	9.837	-	-	0.471	-	-	0.247	-	-	-	-	-	-	-	-	-
Subtotal: Package Fielding Cost	-	-	9.837	-	-	0.471	-	-	0.247	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost	-	-	9.837	-	-	0.471	-	-	0.247	-	-	-	-	-	-	-	-	-

Remarks:

Funding supports Countering Weapons of Mass Destruction Systems that address the needs of the National Technical Nuclear Forensics (NTNF) and the Countering Nuclear Threats (CNT) Defense-wide materiel development programs.

Exhibit P-5, Cost Analysis: PB 2020 Office of the Secretary	y Of Defense	Date: March 2019
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 01 / 1	P-1 Line Item Number / Title: 30 / Major Equipment OSD	Item Number / Title [DODIC]: 30 / Countering Weapons of Mass Destruction (CWMD) Systems
ID Code (A=Service Ready, B=Not Service Ready):	MDAP/MAIS Code:	·
NTNF is the collection, analysis and evaluation of pre- and post-detonation attribution of an actual or attempted nuclear attack. NTNF will develop prot nuclear detonation. Funds system installation in strategic cities to support (PACS) and the Modular Whole Air Airborne Collection Systems (M-WACS WC-135 capabilities. CNT addresses capability gaps identified by Services, Combatant Commandation of the collection and post-detonation and post-detonation attributed by Services, Combatant Commandation of pre- and post-detonation attributed by Services, Combatant Commandation of pre- and post-detonation attributed by Services, Combatant Commandation of pre- and post-detonation attributed by Services, Combatant Commandation of pre- and post-detonation attributed by Services, Combatant Commandation of pre- and post-detonation attributed by Services, Combatant Commandation of pre- and post-detonation attributed by Services, Combatant Commandation of pre- and post-detonation attributed by Services, Combatant Commandation of pre- and post-detonation attributed by Services, Combatant Commandation of pre- and post-detonation attributed by Services, Combatant Commandation of pre- and post-detonation attributed by Services, Combatant Commandation of pre- and post-detonation attributed by Services, Combatant Commandation attributed by Services attributed by Ser	otype ground-based prompt diagnostic detection systems (DISC transition to the Air Force for operation and sustainment. NTNF b) for post-detonation nuclear debris sampling. Harvester PACS	CREET OCULUS) to record signals emitted immediately following a will also develop the Harvester Particulate Airborne Collection Systems particulate and M-WACS gaseous sampling combine to augment
Navy Visit, Board, Search, and Seizure; Technical Support Groups (NIMBL of obsolete legacy dosimeters with the Joint Personal Dosimeter (JPD) and (RDS) that also incorporates lessons learned from OPERATION TOMODA	E ELDER); and the US Special Operations Command. Current the technical upgrade and standardization of the Services legal	programs for transition to service components include the modernization cy contamination monitors with the Radiological Detection System

LI 30 - Major Equipment OSD Office of the Secretary Of Defense

Exhibit P-40a, Budget Item Justification For Aggregated Ite	ms: PB 2020 Office of the Secretary Of Defense	Date: March 2019
Appropriation / Budget Activity / Budget Sub Activity: 0300D / 01 / 1	P-1 Line Item Number / Title: 30 / Major Equipment OSD	Aggregated Items Title: Algorithmic Warfare Cross Functional Team (AWCFT)

																`	,			
			P							FY 2019		F۱	/ 2020 Ba	se	F	2020 OC	0	FY	2020 Tot	tal
Item Number / Title [DODIC]	ID M	AP/ AIS ode	Unit Cost	Qty (Each)		Unit Cost	Qty (Each)	Total Cost (\$ M)												
Algorithmic Warfare Cros	s Functi	ional 1	Team (AWCF	T)		'			<u>'</u>			'		'	'					
Algorithmic Warfare Cross Functional Team (AWCFT)			-	-	-	-	-	-	-	-	-	-	-	8.206	-	-	-	-	-	8.206
Subtotal: Algorithmic Wal Functional Team (AWCFT		oss	-	-	-	-	-	-	-	-	-	_	-	8.206	-	-	-	-	-	8.206
Total			-	-	-	-	-	-	-	-	-	-	-	8.206	-	-	-	-	-	8.206
Mata, Cubtatala ar Tata																				

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

Remarks:

Algorithmic Warfare Cross Functional Team (AWCFT) funds Project Maven, a rapid fielding Artificial Intelligence (AI) program to augment and automate Processing, Exploitation and Dissemination (PED) for Full Motion Video (FMV) Tactical Unmanned Aerial Vehicles (TUAVs), Medium Altitude, High Altitude, and Wide Area Motion Imagery (WAMI) Intelligence, Surveillance and Reconnaissance (ISR) platforms in support of defeat-ISIS and National Defense Strategy (NDS) peer/ near peer competitor strategy. Maven also brings AI to Captured Enemy Material (CEM), Acoustical Intelligence (ACINT), Overhead Persistent Infrared program (OPIR) and Public Available Information (PAI) exploitation. Maven uses AI, deep learning, and computer vision algorithms to detect, classify, and track objects within FMV images (e.g., person, vehicle, and weapon) and other AI algorithms for CEM and text based projects. Maven algorithms increase the intelligence value of ISR, reduce the human burden of screening so analysts can multi-task increasing productivity, and seeds the generation of insight from Geospatial Intelligence (GEOINT). Project Maven is a commercial technology initiative that inserts commercial AI into existing programs of records. Most military intelligence exploitation systems were designed pre-AI and require specialized integration to enable the insertion of algorithms into their software baseline. Project Maven is the pathfinder AI initiative for the DoD and is investing in critical AI architecture to support the rapid expansion of AI to other mission areas besides GEOINT. As Maven algorithms increase in capability, the algorithms will move to the edge (on the sensor platform).