Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Defense Information Systems Agency	Date: May 2017
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide* / BA 7: *Operational Systems Development*	**R-1 Program Element (Number/Name)** PE 0303131K / *Minimum Essential Emergency Communications Network (MEECN)*

COST ($ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
Total Program Element	140.481	13.384	12.206	15.855	-	15.855	15.883	15.721	16.025	16.320	Continuing	Continuing
T64: *Special Projects*	65.934	5.051	5.207	5.481	-	5.481	5.458	5.558	5.564	5.562	Continuing	Continuing
T70: *Strategic C3 Support*	74.547	8.333	6.999	10.374	-	10.374	10.425	10.163	10.461	10.758	Continuing	Continuing

A. Mission Description and Budget Item Justification

Minimum Essential Emergency Communications Network (MEECN) provides the Nuclear Command, Control, and Communications (NC3) Engineer with plans and procedures, systems analysis, operational assessments, systems engineering, and development of concepts of operation and architectures. The NC3 System provides connectivity from the President and the Secretary of Defense through the National Military Command System to nuclear execution forces integral to fighting a “homeland-to-homeland,” as well as theater nuclear war. MEECN includes the Emergency Action Message dissemination systems and those systems used for integrated Tactical Warning/Attack Assessment, presidential decision-making conferencing, force report back, re-targeting, force management, and requests for permission to use nuclear weapons. Efforts assure positive control of nuclear forces and connectivity between the Secretary of Defense, military forces, and an informed decision-making linkage between the President, the Secretary of Defense, and the Combatant Commands. MEECN ensures our national leadership has proper command and control of our forces during times of national emergency, up to and including nuclear war.

B. Program Change Summary ($ in Millions)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Previous President's Budget	13.735	12.206	16.449	-	16.449
Current President's Budget	13.384	12.206	15.855	-	15.855
Total Adjustments	-0.351	0.000	-0.594	-	-0.594
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Other Adjustment	-0.351	-	-0.594	-	-0.594

Change Summary Explanation

Program is classified and exhibit will be provided under a separate cover.

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Information Systems Agency			Date: May 2017
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0303131K / *Minimum Essential Emergency Communications Network (MEECN)*	**Project (Number/Name)** T64 / *Special Projects*	

COST ($ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
T64: *Special Projects*	65.934	5.051	5.207	5.481	-	5.481	5.458	5.558	5.564	5.562	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The mission is performing classified work. All aspects of this project are classified and require special access. Detailed information on this project is not contained in this document.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018
Title: Special Projects	5.051	5.207	5.481
Description: Program is classified and exhibit will be provided under a separate cover.			
FY 2016 Accomplishments: Program is classified and exhibit will be provided under a separate cover.			
FY 2017 Plans: Program is classified and exhibit will be provided under a separate cover.			
FY 2018 Plans: Program is classified and exhibit will be provided under a separate cover.			
Accomplishments/Planned Programs Subtotals	5.051	5.207	5.481

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

Program is classified and exhibit will be provided under a separate cover.

E. Performance Metrics

Program is classified and exhibit will be provided under a separate cover.

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Information Systems Agency			Date: May 2017
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0303131K / *Minimum Essential Emergency Communications Network (MEECN)*	Project (Number/Name) T70 / *Strategic C3 Support*	

COST ($ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
T70: *Strategic C3 Support*	74.547	8.333	6.999	10.374	-	10.374	10.425	10.163	10.461	10.758	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

This project supports the mission of the Nuclear Command, Control, and Communications (NC3) Systems Engineer to the Joint Staff and Executive Leadership. It also provides NC3 expertise to the Department of Defense (DoD) Chief Information Officer (CIO) National Leadership Command Capability (NLCC) Management Office. Systems Analysis supports long range planning and vulnerability assessments to ensure the NC3 System is adequate under all conditions of stress or war and recommends investment strategies to evolve the Nuclear Command and Control System to achieve desired capabilities. Operational Assessments of fielded systems and weapon platforms provide the sole means for verification of NC3 systems' performance in support of plans and procedures, operation orders, training, equipment, and end-to-end system configuration. Assessments provide strategic and theater level C3 interfaces into the NC3 System. Supporting efforts assure positive control of nuclear forces and connectivity between the Secretary of Defense and strategic and theater forces. Systems Engineering provides the Senior Leadership C3 System with technical and management advice, planning and engineering support, and Test & Evaluation. Leading Edge Command, Control, Communications, Computers, and Intelligence technology is assessed for all communication platforms supporting executive travelers and senior leaders to include the interoperability of hardware and operational procedures. These technology elements support the President's and other DoD command centers and aircraft (e.g., Air Force One and the National Airborne Operations Center).

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018
Title: Systems Engineering, Analysis and Architecture	8.333	6.999	10.374
FY 2016 Accomplishments: Implement a portfolio management and configuration control construct to facilitate integration and modernization of continuity of operations/continuity of government (COOP/COG), NC3 and Senior Leader Command, Control, and Communications Systems (SLC3S) capabilities that modernize and increase NLCC performance requirements. Continue updates for the Program Tracking Report, NC3 Architecture Diagrams and NC3 Scenarios document to improve NLCC capabilities. Develop engineering solutions and documentation to improve NLCC future capabilities as well as perform operational assessments of the communication platforms to identify performance, operational and any potential vulnerabilities. Expand NLCC future architecture and roadmap to identify return on investment constructs and improve/modernize NLCC capabilities.			
FY 2017 Plans: Will continue oversight and configuration control of the NLCC functional baseline. Will continue to identify NLCC capability gaps, and develop engineering courses of action to close those gaps. Will continue to shape plans for future NLCC capabilities, perform end-to-end testing of fielded capabilities, and perform operational assessments of current capabilities to provide quantitative			

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Information Systems Agency		Date: May 2017
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0303131K / *Minimum Essential Emergency Communications Network (MEECN)*	**Project (Number/Name)** T70 / *Strategic C3 Support*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018
measures of ongoing system performance and operational efficiency. Will continue to develop the NLCC Reference Architecture, its associated NLCC Roadmap, and the technical architecture patterns that will guide future solution architecture development. The decrease of -$1.566 from FY 2016 to FY 2017 is a result of decreased end-to-end user assessments for Senior Leader communications and mission effectiveness and a reduction in engineering activities supporting the transition of NLCC future capabilities to full operational capability. ***FY 2018 Plans:*** Will continue oversight and configuration control of the NLCC functional baseline. Will continue to identify NLCC capability gaps, and develop engineering courses of action to close those gaps. Will continue to shape plans for future NLCC capabilities, perform end-to-end testing of fielded capabilities, and perform operational assessments of current capabilities to provide quantitative measures of ongoing system performance and operational efficiency. Will continue to develop the NLCC Reference Architecture, its associated NLCC Roadmap, and the technical architecture patterns that will guide future solution architecture development. The increase of +$3.672 from FY 2017 to FY 2018 is due to additional number of technical assessments required, expansion of the production of architectural artifacts required to complete the NLCC Technical Architecture; development of a NLCC Modeling and Simulation (M&S) capability; support engineering and implementation of the NLCC enterprise mobility infrastructure. Part of the overall increase (-$0.297) is attributed to the Service Requirements Review Board (SSRB) contract reduction.			
Accomplishments/Planned Programs Subtotals	8.333	6.999	10.374

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
• O&M, PE 0303131K: *O&M*	15.366	19.160	24.374	-	24.374	24.683	25.081	25.599	26.023	Continuing	Continuing

Remarks

D. Acquisition Strategy

Full and open competition resulted in contract vehicles with Raytheon, Arlington, VA; Science Applications Int'l Corporation (SAIC), McLean, VA; and Pragmatics, Mclean, VA.

E. Performance Metrics

Performance is measured by compliance with contract deliverables schedules for specifically included products, such as: operational assessment plans, operational assessment reports; recommended revisions to the Joint Staff's Emergency Action Procedures (EAP-CJCS) Volumes VI and VII; updates to NC3 System Description

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Information Systems Agency		Date: May 2017
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0303131K / *Minimum Essential Emergency Communications Network (MEECN)*	**Project (Number/Name)** T70 / *Strategic C3 Support*

documents and Nuclear C3 Architecture Diagrams. In addition, performance of the NC3 System is directly measured by the operational assessments funded by this program element. These periodic assessments evaluate the connectivity used for the five functions of Nuclear command and control: Situation Monitoring, Planning, Decision Making, Force Execution, and Force Management. Performance of the SLC3S-Airborne fleet is measured by the technical assessment results documented in the assessment reports. Assessment results are used by the Joint Staff and the DoD CIO to direct changes in system engineering and integration, programmatic execution, and training.

Specific performance metrics include the following:

Provide engineering products in all task areas that satisfy DoD/CIO and Joint Staff needs within allocated resources 90% of the time.

Conduct assessments of the NC3 system and the SLC3S that provide actionable results and recommendations for the Joint Staff and DoD/CIO to pursue improvements to these capabilities 90% of the time.

MEECN achieved all its FY 2016 performance metrics and is on track to achieve the FY 2017 and FY 2018 targets of provisioning the Joint Staff requirements within the allocated resources 90% of the time.

Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Defense Information Systems Agency			Date: May 2017
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0303131K / *Minimum Essential Emergency Communications Network (MEECN)*	**Project (Number/Name)** T70 / *Strategic C3 Support*	

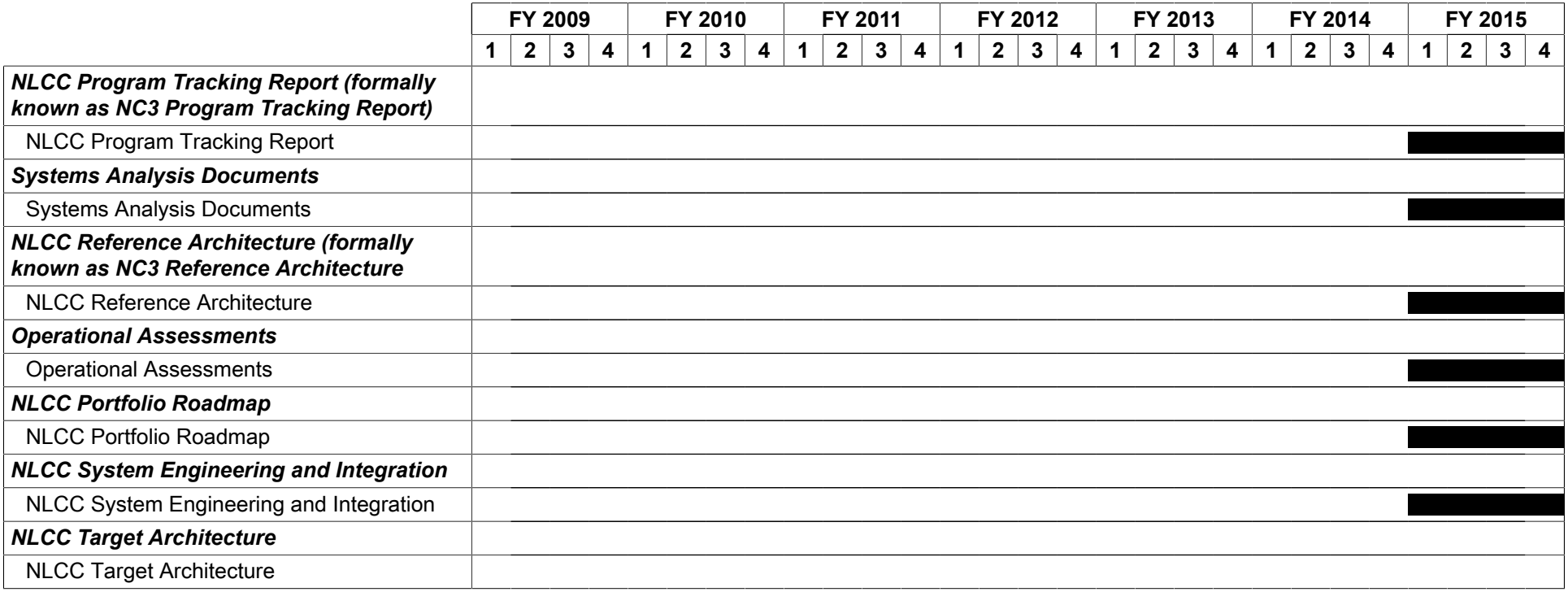
Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2016 Cost	FY 2016 Award Date	FY 2017 Cost	FY 2017 Award Date	FY 2018 Base Cost	FY 2018 Base Award Date	FY 2018 OCO Cost	FY 2018 OCO Award Date	FY 2018 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Systems Engineering 1	C/CPAF	SAIC : McLean, VA	17.628	2.432	Aug 2016	1.639	Aug 2017	-		-		-	Continuing	Continuing	Continuing
Systems Engineering 2	C/CPAF	Raytheon Company : Arlington, VA	32.258	3.342		-		-		-		-	Continuing	Continuing	Continuing
Systems Engineering 3	C/CPFF	Pragmatics : McLean, VA	10.080	-		-		-		-		-	Continuing	Continuing	10.080
Systems Engineering 4	C/FP	Raytheon Company : Arlington, VA	7.808	1.503	Feb 2016	4.419	Feb 2017	5.200	Feb 2018	-		5.200	Continuing	Continuing	Continuing
Systems Engineering 5	C/CPFF	BAH : Falls Church, VA	4.273	-		-		-		-		-	Continuing	Continuing	4.273
Systems Engineering 6	C/CPFF	Harris Corporation : Melbourne, FL	2.500	-		-		-		-		-	Continuing	Continuing	2.500
Systems Engineering 7	C/CPAF	Carson Engineering : Bethesda, MD	-	1.056	Jun 2016	-		-		-		-	Continuing	Continuing	Continuing
System Engineering 8	C/FFP	MITRE Corp : McLean, VA	-	-		0.941	Sep 2017	1.332	Oct 2018	-		1.332	Continuing	Continuing	Continuing
System Engineering 9	C/FFP	JHU APL : Laurel, MD	-	-		-		2.500	Apr 2018	-		2.500	Continuing	Continuing	-
System Engineering 10	C/FFP	TBD - New Contract : TBD	-	-		-		1.342	Aug 2018	-		1.342	Continuing	Continuing	-
		Subtotal	74.547	8.333		6.999		10.374		-		10.374	-	-	-

	Prior Years	FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	74.547	8.333		6.999		10.374		-		10.374	-	-	-

Remarks

Exhibit R-4, RDT&E Schedule Profile: FY 2018 Defense Information Systems Agency		Date: May 2017
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0303131K / *Minimum Essential Emergency Communications Network (MEECN)*	**Project (Number/Name)** T70 / *Strategic C3 Support*



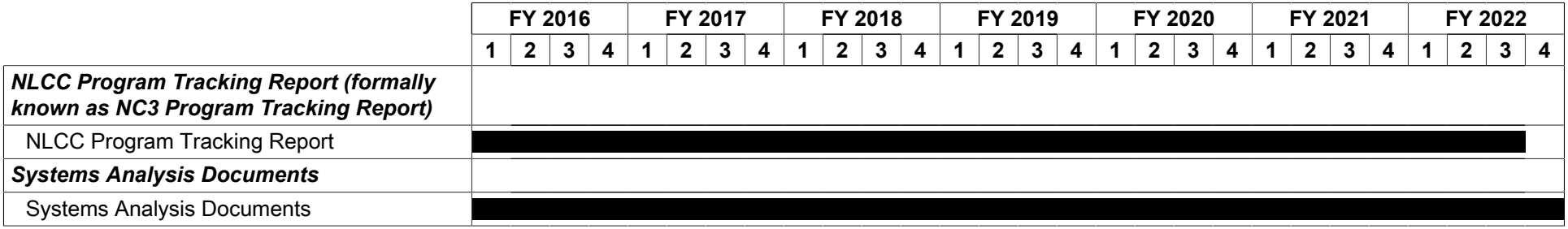


Exhibit R-4, RDT&E Schedule Profile: FY 2018 Defense Information Systems Agency		Date: May 2017
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0303131K / *Minimum Essential Emergency Communications Network (MEECN)*	**Project (Number/Name)** T70 / *Strategic C3 Support*

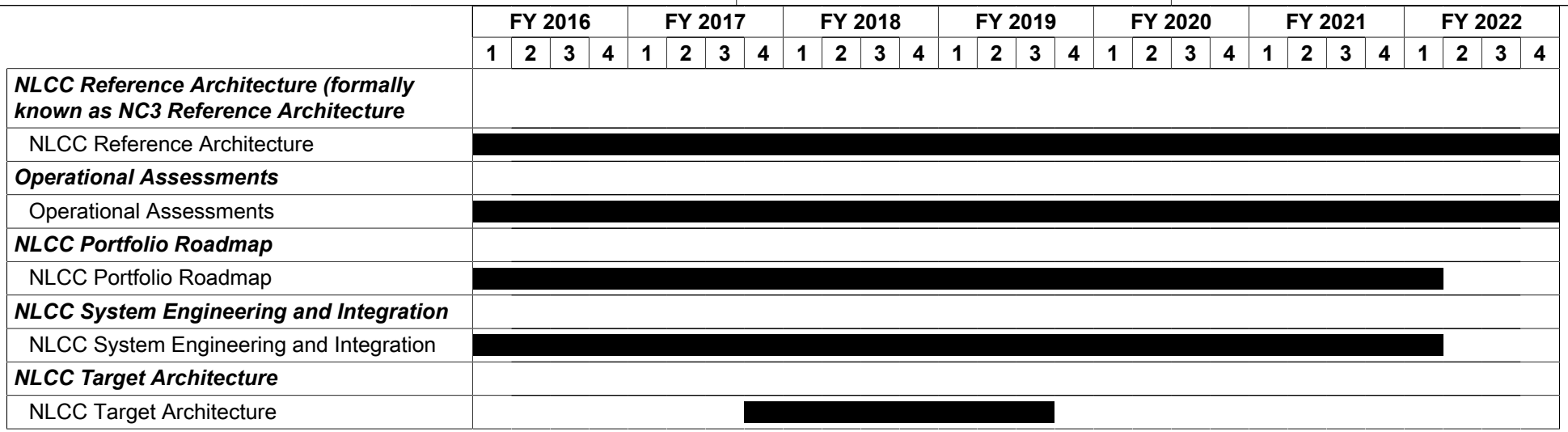


Exhibit R-4A, RDT&E Schedule Details: FY 2018 Defense Information Systems Agency		Date: May 2017
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0303131K / *Minimum Essential Emergency Communications Network (MEECN)*	**Project (Number/Name)** T70 / *Strategic C3 Support*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
NLCC Program Tracking Report (formally known as NC3 Program Tracking Report)				
NLCC Program Tracking Report	1	2015	3	2022
Systems Analysis Documents				
Systems Analysis Documents	1	2015	4	2022
NLCC Reference Architecture (formally known as NC3 Reference Architecture				
NLCC Reference Architecture	1	2015	4	2022
Operational Assessments				
Operational Assessments	1	2015	4	2022
NLCC Portfolio Roadmap				
NLCC Portfolio Roadmap	1	2015	1	2022
NLCC System Engineering and Integration				
NLCC System Engineering and Integration	1	2015	1	2022
NLCC Target Architecture				
NLCC Target Architecture	4	2017	3	2019