

**UNCLASSIFIED**

Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Air Force										Date: February 2018		
Appropriation/Budget Activity 3600: Research, Development, Test & Evaluation, Air Force I BA 7: Operational Systems Development					R-1 Program Element (Number/Name) PE 0305600F I International Intelligence Technology and Architectures							
COST (\$ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
Total Program Element	-	2.360	3.491	8.464	0.000	8.464	8.515	8.660	8.711	8.780	Continuing	Continuing
675898: International Intelligence Technology and Arc	-	2.360	3.491	8.464	0.000	8.464	8.515	8.660	8.711	8.780	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

**A. Mission Description and Budget Item Justification**

International Intelligence Technology and Architectures oversees, manages, and provides the United States (US) component of the multi-national Battlefield Information Collection and Exploitation System (US BICES) with a collaborative environment and intelligence sharing enterprise required for processing and disseminating critical intelligence information between and among US, North Atlantic Treaty Organization (NATO), allied and coalition forces. The US BICES program procures and maintains a standing intelligence information sharing capability across Department of Defense (DoD), Combat Support Agencies, and multiple Combatant Commands (CCMD) for the Office of the Under Secretary of Defense, Intelligence (OUSDI). At the request of OUSDI, US BICES is extended beyond U.S. European Command (EUCOM) into all CCMDs and is known as US BICES Extended (US BICES-X). US BICES provides an "enduring" US and Coalition interoperable intelligence sharing multi-level secure technical architecture utilizing releasable elements of the Defense Intelligence Information Enterprise (DI2E) framework and functions to support the full spectrum of intelligence operations and dissemination throughout the DoD community. Also, it enables instantiation of US BICES/US BICES-X as the intelligence contribution to the Mission Partner Environment (MPE).

Research and Development funding will:

- Provide increased intelligence information sharing capabilities in support of US and coalition forces utilizing the US BICES and NATO virtual networks and provide increased database information via Distributed Common Ground System - Army.
- Expand available intelligence disciplines (Geospatial Intelligence, Signal Intelligence, and potentially Human Intelligence) to support US and allied/coalition forces. Support increased intelligence advanced analytics tools, Joint Intelligence Operation Center-IT and DI2E developments to significantly increase the timeliness of intelligence and bring US BICES/NATO Special Operations Forces Headquarters/NATO Intelligence Fusion Center capabilities into the current technology baselines.
- Develop and provide a federated Trusted Network Environment (TNE) that incorporates the Asian Pacific intelligence Information Network to support the National Defense Strategy.
- Provide multi-level security intelligence bi-laterals and multi-laterals to meet Combatant Commander Integrated Priority Lists.
- Develop the Coalition Partner Network for CENTCOM, the Coalition Information Exchange Network for SOUTHCOM, and the Coalition Partner Network for EUCOM and AFRICOM.
- Expand capabilities for bi-lateral and multi-lateral federated TNEs in support of CCMD requirements.

This program is in Budget Activity 7, Operational System Development because this budget activity includes development efforts to upgrade systems that have been fielded or have received approval for full rate production and anticipate production funding in the current or subsequent fiscal year.

**UNCLASSIFIED**

Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Air Force				Date: February 2018		
Appropriation/Budget Activity 3600: Research, Development, Test & Evaluation, Air Force I BA 7: Operational Systems Development		R-1 Program Element (Number/Name) PE 0305600F I International Intelligence Technology and Architectures				
B. Program Change Summary (\$ in Millions)		FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Previous President's Budget		2.360	3.491	3.527	0.000	3.527
Current President's Budget		2.360	3.491	8.464	0.000	8.464
Total Adjustments		0.000	0.000	4.937	0.000	4.937
• Congressional General Reductions		0.000	0.000			
• Congressional Directed Reductions		0.000	0.000			
• Congressional Rescissions		0.000	0.000			
• Congressional Adds		0.000	0.000			
• Congressional Directed Transfers		0.000	0.000			
• Reprogrammings		0.000	0.000			
• SBIR/STTR Transfer		0.000	0.000			
• Other Adjustments		0.000	0.000	4.937	0.000	4.937
Change Summary Explanation						
The FY2019 increase supports additional design, development, testing, and technical refresh for cross-domain capabilities (such as the TNE), new US BICES-enabled ISR capabilities, and new Geospatial Intelligence and biometric tools for the US BICES Enterprise. This will enable the US BICES Program Office (BPO) to: a) modernize and transform the US BICES/US BICES-X worldwide enterprise; b) align US BICES/US BICES-X with the Joint Information environment (JIE) and the DI2E standards, process, and framework; c) develop a cybersecurity roadmap and implement improved cybersecurity assessment tools; and d) smartly enhance capability, capacity, and scalability across the US BICES/US BICES-X enterprise seeking improved integration with the Distributed Common Ground/ Surface System (DCGS) family of Systems.						
C. Accomplishments/Planned Programs (\$ in Millions)				FY 2017	FY 2018	FY 2019
Title: International Intelligence Technology and Architectures				2.360	3.491	8.464
Description: Continue the research and development in emerging and maturing technologies and capabilities for modernizing and transforming US BICES/US BICES-X for improved agility, scalability, access, cybersecurity, and data and information sharing tools and infrastructure.						
FY 2018 Plans: Continue the research and development for future releases of the TNE, to include Identity and Access Management (IdAM), peer-federated chat services, and adding video to the telephony services. Begin the Certification Test and Evaluation (CT&E) of new capabilities, to include the implementation and certification of new services such as video teleconferencing (VTC), metadata handling, restricted user communities for isolating authoritative data sources, integration of multi-domain relational database operations, and an application programming interface that will enhance information sharing through the use of existing applications like Share Point with the TNE.						
FY 2019 Plans:						

**UNCLASSIFIED**

<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2019 Air Force										<b>Date:</b> February 2018		
<b>Appropriation/Budget Activity</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force I BA 7: Operational Systems Development</i>					<b>R-1 Program Element (Number/Name)</b> PE 0305600F / <i>International Intelligence Technology and Architectures</i>							
<b>C. Accomplishments/Planned Programs (\$ in Millions)</b>										<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>
Continue the research and development for future releases of the TNE, to include IdAM, peer-federated chat services, and adding video to the telephony services. Continue the CT&E of new capabilities, to include the implementation and certification of new services such as VTC, metadata handling, restricted user communities for isolating authoritative data sources, integration of multi-domain relational database operations, and an application programming interface that will enhance information sharing through the use of existing applications like Share Point with the TNE.												
<b>FY 2018 to FY 2019 Increase/Decrease Statement:</b> \$5 million was added for additional software testing to accelerate software releases to the field.												
<b>Accomplishments/Planned Programs Subtotals</b>										2.360	3.491	8.464
<b>D. Other Program Funding Summary (\$ in Millions)</b>												
<b>Line Item</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019 Base</b>	<b>FY 2019 OCO</b>	<b>FY 2019 Total</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	
• O&M PE 0305600F: <i>Int'l Intel Tech Architecture</i>	-	101.488	96.567	-	96.567	75.619	75.498	75.751	77.115	Continuing	Continuing	
• OPAF 03 Line item 832050: <i>International Intelligence Technology and Architecture</i>	18.350	22.335	8.290	-	8.290	11.386	11.314	10.884	11.167	Continuing	Continuing	
<b>Remarks</b>												
<b>E. Acquisition Strategy</b> Utilize existing General Dynamics Mission Systems (GDMS) contract number FA8240-14-D-2751. The contract is structured as a fixed price incentive fee with one base year and four option years and a period of performance beginning 1 June 2014 through 31 May 2019. US BICES also utilizes the Air Force Research Laboratory for majority of the testing of the latest TNE releases.												
<b>F. Performance Metrics</b> Please refer to the Performance Base Budget Overview Book for information on how Air Force resources are applied and how those resources are contributing to Air Force performance goals and most importantly, how they contribute to our mission.												

**UNCLASSIFIED**

<b>Exhibit R-3, RDT&amp;E Project Cost Analysis:</b> PB 2019 Air Force												<b>Date:</b> February 2018		
<b>Appropriation/Budget Activity</b> 3600 / 7						<b>R-1 Program Element (Number/Name)</b> PE 0305600F / <i>International Intelligence Technology and Architectures</i>				<b>Project (Number/Name)</b> 675898 / <i>International Intelligence Technology and Arc</i>				

  

<b>Product Development (\$ in Millions)</b>				<b>FY 2017</b>		<b>FY 2018</b>		<b>FY 2019 Base</b>		<b>FY 2019 OCO</b>		<b>FY 2019 Total</b>				
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>		<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
TNE Software	Various	AFRL : Rome, NY	-	2.360	Jan 2017	3.491	Jan 2018	8.464	Jan 2019	-		8.464	Continuing	Continuing	-	
<b>Subtotal</b>			-	2.360		3.491		8.464		-		8.464	Continuing	Continuing	N/A	

  

			<b>Prior Years</b>	<b>FY 2017</b>		<b>FY 2018</b>		<b>FY 2019 Base</b>		<b>FY 2019 OCO</b>		<b>FY 2019 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Project Cost Totals</b>			-	2.360		3.491		8.464		-		8.464	Continuing	Continuing	N/A

  

**Remarks**

## UNCLASSIFIED

Exhibit R-4, RDT&amp;E Schedule Profile: PB 2019 Air Force

Date: February 2018

## Appropriation/Budget Activity

3600 / 7

## R-1 Program Element (Number/Name)

PE 0305600F / International Intelligence  
Technology and Architectures

## Project (Number/Name)

675898 / International Intelligence  
Technology and Arc

	FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
<b>Trusted Network Environment Software Version 2.2 features Voice over IP, Cross Domain View.</b>																												
TNE																												
<b>Trusted Network Environment Software Version 3.0 features Database replication, federated P2P Voice, Non-Federated Virtual Desktop Interface</b>																												
TNE																												
<b>Trusted Network Environment Software Version 3.1 features Search, Face Phone Video, Improved Content Inspection, Increased Network Capacity</b>																												
TNE																												
<b>Trusted Network Environment Software Version 3.2 features Conferencing &amp; Video Teleconferencing, Advanced Search, Metadata, XML Messaging, Chat Peer Federation, Federated Virtual Desktop Interface</b>																												
TNE																												
<b>Trusted Network Environment Software Version 4.0 features Full Motion Video, Multi-party federated Video Teleconferencing, Intel Mission applications support, Intel Mission database federation</b>																												
TNE																												
<b>Trusted Network Environment Software Version 4.1 features SharePoint Search</b>																												

**UNCLASSIFIED**

<b>Exhibit R-4, RDT&amp;E Schedule Profile:</b> PB 2019 Air Force																						<b>Date:</b> February 2018																			
<b>Appropriation/Budget Activity</b> 3600 / 7										<b>R-1 Program Element (Number/Name)</b> PE 0305600F / <i>International Intelligence Technology and Architectures</i>								<b>Project (Number/Name)</b> 675898 / <i>International Intelligence Technology and Arc</i>																							
										<b>FY 2017</b>				<b>FY 2018</b>				<b>FY 2019</b>				<b>FY 2020</b>				<b>FY 2021</b>				<b>FY 2022</b>				<b>FY 2023</b>							
										1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
<i>enhancement, Common operating picture, Video Teleconferencing Enhancement</i>																																									
TNE																																									

## UNCLASSIFIED

Exhibit R-4A, RDT&amp;E Schedule Details: PB 2019 Air Force

Date: February 2018

Appropriation/Budget Activity

3600 / 7

R-1 Program Element (Number/Name)

PE 0305600F / International Intelligence  
Technology and Architectures

Project (Number/Name)

675898 / International Intelligence  
Technology and Arc

## Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<b><i>Trusted Network Environment Software Version 2.2 features Voice over IP, Cross Domain View.</i></b>				
TNE	1	2017	3	2017
<b><i>Trusted Network Environment Software Version 3.0 features Database replication, federated P2P Voice, Non-Federated Virtual Desktop Interface</i></b>				
TNE	1	2017	4	2018
<b><i>Trusted Network Environment Software Version 3.1 features Search, Face Phone Video, Improved Content Inspection, Increased Network Capacity</i></b>				
TNE	1	2017	3	2019
<b><i>Trusted Network Environment Software Version 3.2 features Conferencing &amp; Video Teleconferencing, Advanced Search, Metadata, XML Messaging, Chat Peer Federation, Federated Virtual Desktop Interface</i></b>				
TNE	3	2018	4	2020
<b><i>Trusted Network Environment Software Version 4.0 features Full Motion Video, Multi-party federated Video Teleconferencing, Intel Mission applications support, Intel Mission database federation</i></b>				
TNE	1	2019	4	2022
<b><i>Trusted Network Environment Software Version 4.1 features SharePoint Search enhancement, Common operating picture, Video Teleconferencing Enhancement</i></b>				
TNE	3	2020	4	2023