

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2022 Air Force **Date:** May 2021

Appropriation/Budget Activity 3600: <i>Research, Development, Test & Evaluation, Air Force I BA 7: Operational Systems Development</i>	R-1 Program Element (Number/Name) PE 0305600F / <i>International Intelligence Technology and Architectures</i>
--	--

COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
Total Program Element	-	13.515	17.283	14.473	0.000	14.473	-	-	-	-	-	-
675898: <i>International Intelligence Technology and Arc</i>	-	13.515	17.283	14.473	0.000	14.473	-	-	-	-	-	-
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-	-	-

A. Mission Description and Budget Item Justification

International Intelligence Technology and Architectures (IITA) oversees, manages, and provides the United States (US) component of the multi-national US Battlefield Information Collection and Exploitation Systems - Extended (US BICES-X). The continued development effort of IITA will provide a collaborative environment and intelligence sharing enterprise required for processing and disseminating critical intelligence information across Department of Defense (DoD), Combat Support Agencies (CSA), North Atlantic Treaty Organization (NATO), allied and coalition forces and multiple Combatant Commands (CCMD) for the Office of the Under Secretary of Defense, Intelligence and Security (OUSD(I&S)).

The US BICES RDT&E activities include the following:

- 1) Assessing new and existing intelligence sharing technologies being developed within DoD and the intelligence community.
- 2) Defining which technologies can significantly advance intelligence sharing capabilities of US and Allied/Coalition forces.
- 3) Integrating technologies into the current US BICES-X Enterprise and emerging US international intelligence architectures and systems consistent with the Defense Intelligence Information Enterprise (DI2E) Framework and Mission Partner Environment (MPE) supporting global operations.

US BICES-X responds to CCMDs and military services to develop solutions for enhanced intelligence information sharing capabilities and provisions US BICES-X equipment to US and allied/partner location. IITA is assessing potential impacts of new intelligence architectures to support the CCMDs and services. The IITA program also includes the continued integration and expansion of the US BICES-X Enterprise into the DoD's Distributed Common Ground/Surface System (DCGS) across the Services; the DoD intelligence document exploitation system (Harmony), Multi-Domain Dissemination System of Joint Worldwide Intelligence Communications System (JWICS), Secure Internet Protocol Router Network (SIPRNET) access to US BICES, and Full Motion Video (FMV).

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 Family of Systems.
- 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 enhance a federated Trusted Network Environment (TNE) that incorporates Foreign Partner information sharing networks globally to support the National Defense Strategy.

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2022 Air Force	Date: May 2021
--	-----------------------

Appropriation/Budget Activity 3600: <i>Research, Development, Test & Evaluation, Air Force I BA 7: Operational Systems Development</i>	R-1 Program Element (Number/Name) PE 0305600F / <i>International Intelligence Technology and Architectures</i>
--	--

- Develop multi-level security intelligence bi-laterals and multi-laterals to meet Combatant Commander Integrated Priority Lists.
- Expand capabilities for bi-lateral and multi-lateral federated TNEs in support of CCMD requirements.

BY funding totals include \$3.648M request for the Pacific Defense Initiative funding.

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.

B. Program Change Summary (\$ in Millions)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Previous President's Budget	13.515	13.635	13.690	0.000	13.690
Current President's Budget	13.515	17.283	14.473	0.000	14.473
Total Adjustments	0.000	3.648	0.783	0.000	0.783
• Congressional General Reductions	0.000	0.000			
• Congressional Directed Reductions	0.000	0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds	0.000	3.648			
• 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	0.783	0.000	0.783

Change Summary Explanation

N/A

C. Accomplishments/Planned Programs (\$ in Millions)	FY 2020	FY 2021	FY 2022
<p>Title: International Intelligence Technology and Architectures</p> <p>Description: 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.</p> <p>FY 2021 Plans: Developed US BICES-X capabilities to include further integration of TNE into the MPE, and development and testing of coalition ISR coalition capabilities. These efforts enable the modernization and transformation of the US BICES/BICES-X worldwide enterprise to enable instantiation or interconnection of any partner network to support any operation.</p> <p>FY 2022 Plans:</p>	13.515	17.283	14.473

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2022 Air Force	Date: May 2021
--	-----------------------

Appropriation/Budget Activity 3600: <i>Research, Development, Test & Evaluation, Air Force I BA 7: Operational Systems Development</i>	R-1 Program Element (Number/Name) PE 0305600F / <i>International Intelligence Technology and Architectures</i>
--	--

C. Accomplishments/Planned Programs (\$ in Millions)	FY 2020	FY 2021	FY 2022
Continuing to develop US BICES-X capabilities including further integration of TNE into the MPE, and development and testing of coalition ISR coalition capabilities. These efforts will enable the modernization and transformation of the US BICES/BICES-X worldwide enterprise to enable instantiation or interconnection of any partner network to support any operation.			
<i>FY 2021 to FY 2022 Increase/Decrease Statement:</i> Funding increased to accelerate the development of functionalities requested by customers, i.e. single sign-on, FMV, and chat.			
Accomplishments/Planned Programs Subtotals	13.515	17.283	14.473

D. Other Program Funding Summary (\$ in Millions)											
<u>Line Item</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u> <u>Base</u>	<u>FY 2022</u> <u>OCO</u>	<u>FY 2022</u> <u>Total</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• O&M PE 0305600F: <i>Int'l Intel Tech Architecture</i>	119.674	135.228	141.388	-	141.388	-	-	-	-	-	-
• OPAF 03 Line item 832050: <i>International Intelligence Technology and Architecture</i>	11.386	10.783	5.809	-	5.809	-	-	-	-	-	-

Remarks

E. Acquisition Strategy

Utilize existing General Dynamics Mission Systems (GDMS) contract number FA8240-18-D-0360. The contract is structured as an Indefinite Delivery Indefinite Quantity (IDIQ) contract with a period of performance beginning 1 April 2018 through 31 March 2024. US BICES also utilizes the Air Force Research Laboratory as required for all third-party lab-based security assessments of TNE upgrade releases.

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2022 Air Force												Date: May 2021			
Appropriation/Budget Activity 3600 / 7				R-1 Program Element (Number/Name) PE 0305600F / <i>International Intelligence Technology and Architectures</i>				Project (Number/Name) 675898 / <i>International Intelligence Technology and Arc</i>							
Product Development (\$ in Millions)				FY 2020		FY 2021		FY 2022 Base		FY 2022 OCO		FY 2022 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
TNE Development	Various	AFRL, GDMS AZ, TX : Rome, NY	-	13.515	Jan 2020	17.283	Jan 2021	14.473	Feb 2022	-		14.473	-	-	-
Subtotal			-	13.515		17.283		14.473		-		14.473	-	-	N/A
			Prior Years	FY 2020	FY 2021		FY 2022 Base		FY 2022 OCO		FY 2022 Total	Cost To Complete	Total Cost	Target Value of Contract	
Project Cost Totals			-	13.515	17.283	14.473	-	14.473	-	-	-	-	-	N/A	
Remarks N/A															

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2022 Air Force		Date: May 2021
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0305600F / <i>International Intelligence Technology and Architectures</i>	Project (Number/Name) 675898 / <i>International Intelligence Technology and Arc</i>

FY 2020				FY 2021				FY 2022				FY 2023				FY 2024				FY 2025				FY 2026			
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

Trusted Network Environment (TNE) Software Version 4.1 features Webapplication programming interface (API), advanced search, user notifications, user-editable GAL, 2nd phase OS upgrade

TNE

Trusted Network Environment Software Version 4.2 features UX enhancements, Cross-Domain VDI, VoIP/Video HD/VTC enhancements, 3rd phase OS upgrade

TNE

Trusted Network Environment Software Version 4.3 features UX enhancements, FMV, chat peer federation, support for mission applications, 1st phase single sign-on, final phase OS upgrade

TNE

Trusted Network Environment Software Version 5.0 features cloud-based implementation and virtualized connection methods, and updates to FMV

TNE

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2022 Air Force		Date: May 2021
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0305600F / <i>International Intelligence Technology and Architectures</i>	Project (Number/Name) 675898 / <i>International Intelligence Technology and Arc</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Trusted Network Environment (TNE) Software Version 4.1 features Webapplication programming interface (API), advanced search, user notifications, user-editable GAL, 2nd phase OS upgrade</i>				
TNE	4	2020	2	2021
<i>Trusted Network Environment Software Version 4.2 features UX enhancements, Cross-Domain VDI, VoIP/Video HD/VTC enhancements, 3rd phase OS upgrade</i>				
TNE	1	2020	4	2021
<i>Trusted Network Environment Software Version 4.3 features UX enhancements, FMV, chat peer federation, support for mission applications, 1st phase single sign-on, final phase OS upgrade</i>				
TNE	3	2020	2	2022
<i>Trusted Network Environment Software Version 5.0 features cloud-based implementation and virtualized connection methods, and updates to FMV</i>				
TNE	3	2021	2	2026

Note

- GAL - Global Address List
- OS - Operating System
- VDI - Virtual Desktop Infrastructure
- VoIP - Voice of IP
- UX - User Experience
- FMV - Full Motion Video
- HD/VTC - High Definition / Video Teleconferencing