Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Army

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

2040: Research, Development, Test & Evaluation, Army

PE 0603766A: Tactical Electronic Surveillance System - Adv Dev

BA 4: Advanced Component Development & Prototypes (ACD&P)

COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	12.235	12.164	17.962	0.000	17.962	3.005	4.961	4.363	4.522	Continuing	Continuing
907: Tactical Exploitation of National Capabilities-MIP	12.235	12.164	17.962	0.000	17.962	3.005	4.961	4.363	4.522	Continuing	Continuing

A. Mission Description and Budget Item Justification

Execute the Congressionally-directed Tactical Exploitation of National Capabilities (TENCAP) program for the Army by leveraging multiple Intelligence Community (IC) National Agencies' technical development efforts for potential integration into Army tactical systems. TENCAP provides the technical expertise and support needed to protect Army equities in the IC and ensures that critical Army requirements are addressed in the development of: (1) new sensor capabilities; (2) data processing, exploitation, and dissemination architectures; and (3) Joint CONOPS. TENCAP also serves as the Army's centralized lead to evaluate, enhance, prototype, and transition new technologies/capabilities, developed in the Science & Technology (S&T) community, to Army tactical systems to include DCGS-A, Prophet, and WIN-T, and facilitates integration of these systems into a coherent enterprise solution that serves as a force multiplier for Intelligence, Surveillance, and Reconnaissance (ISR), Battle Command, and Force Protection capabilities. TENCAP emerging technologies (1) ensure continued access to current National and Theater sensors and supporting ground architectures; and (2) exploit new opportunities that focus on improving the tasking, analysis, processing, exploitation and dissemination of the data collected. This includes efforts to: (1) shorten targeting timelines down to Platoon level; (2) enhance target identification; (3) provide better target location (accuracy); (4) provide continued coverage of a target; and (5) develop in -theater analytic tools to exploit data in near-real-time to support contingency operations.

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Army

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

2040: Research, Development, Test & Evaluation, Army

BA 4: Advanced Component Development & Prototypes (ACD&P)

R-1 ITEM NOMENCLATURE

PE 0603766A: Tactical Electronic Surveillance System - Adv Dev

B. Program Change Summary (\$ in Millions)

	<u>FY 2009</u>	FY 2010	FY 2011 Base	FY 2011 OCO	<u>FY 2011 Total</u>
Previous President's Budget	12.235	18.228	18.057	0.000	18.057
Current President's Budget	12.235	12.164	17.962	0.000	17.962
Total Adjustments	0.000	-6.064	-0.095	0.000	-0.095
 Congressional General Reductions 		-6.064			
 Congressional Directed Reductions 		0.000			
 Congressional Rescissions 	0.000	0.000			
 Congressional Adds 		0.000			
 Congressional Directed Transfers 		0.000			
 Reprogrammings 	0.000	0.000			
 SBIR/STTR Transfer 	0.000	0.000			
 Adjustments to Budget Years 	0.000	0.000	-0.095	0.000	-0.095

Change Summary Explanation

Change Summary Explanation: Funding - FY 2010: Funding decrease for unsubstantiated growth.

Exhibit R-2A, RDT&E Project Justif	ication: PB 2	011 Army							DATE: February 2010			
APPROPRIATION/BUDGET ACTI 2040: Research, Development, Test & E BA 4: Advanced Component Development	Evaluation, Ar	•	R-1 ITEM NOMENCLATURE PE 0603766A: Tactical Electronic Surveillance System - Adv Dev PROJECT 907: Tactical Exploitation of National Capa MIP						Capabilities-			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost	
907: Tactical Exploitation of National Capabilities-MIP	12.235	12.164	17.962	0.000	17.962	3.005	4.961	4.363	4.522	Continuing	Continuing	
Quantity of RDT&E Articles												

A. Mission Description and Budget Item Justification

Execute the Congressionally-directed Tactical Exploitation of National Capabilities (TENCAP) program for the Army by leveraging multiple Intelligence Community (IC) National Agencies' technical development efforts for potential integration into Army tactical systems. TENCAP provides the technical expertise and support needed to protect Army equities in the IC and ensures that critical Army requirements are addressed in the development of: (1) new sensor capabilities; (2) data processing, exploitation, and dissemination architectures; and (3) Joint Concepts of Operations (CONOPS). TENCAP also serves as the Army's centralized lead to evaluate, enhance, prototype, and transition new technologies/capabilities, developed in the Science & Technology (S&T) community, to Army tactical systems to include Distributed Common Ground System - Army (DCGS-A), Prophet, and Warfigher Information Network - Tactical (WIN-T), and facilitates integration of these systems into a coherent enterprise solution that serves as a force multiplier for Intelligence, Surveillance, and Reconnaissance (ISR), Battle Command, and Force Protection capabilities. TENCAP emerging technologies (1) ensure continued access to current National and Theater sensors and supporting ground architectures; and (2) exploit new opportunities that focus on improving the tasking, analysis, processing, exploitation and dissemination of the data collected. This includes efforts to: (1) shorten targeting timelines down to Platoon level; (2) enhance target identification; (3) provide better target location (accuracy); (4) provide continued coverage of a target; and (5) develop in -theater analytic tools to exploit data in near-real-time to support contingency operations. FY2011 Base amount of \$17.9 million RDTE funds (1) development activities that exploit and facilitate the integration of advancing Joint and National space/airborne sensor capabilities (multiple Intelligence disciplines) to ensure Army Tactical Commanders have access to and use of those assets, and (2

B. Accomplishments/Planned Program (\$ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #1	1.950	3.993	9.042	0.000	9.042
Collaborate, develop and exploit emerging Multi-INT and space-based technologies to satisfy/accelerate ISR, Battle Command and Force Protection requirements					

	UNCLASSIFIED					
Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: Febr	ruary 2010	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603766A: Tactical Electronic Sur System - Adv Dev	veillance	PROJECT 907: Tactica MIP	ıl Exploitation	of National C	Capabilities-
B. Accomplishments/Planned Program (\$ in Millions)						
2		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #2		1.100	0.686	1.205	0.000	1.205
Develop simulations for TENCAP mission rehearsals, warfighter exe development	rcises, and CONOPS revision and					
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #3		6.700	4.650	3.850	0.000	3.850

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army			DATE: Febr	ruary 2010		
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603766A: Tactical Electronic S System - Adv Dev	Surveillance	PROJECT 907: Tactica MIP	ıl Exploitation	of National C	Capabilities-
B. Accomplishments/Planned Program (\$ in Millions)			'			
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Maintain a ready core competency of technical expertise to research a commercial and government prototypes and emerging technologies	nd evaluate classified/unclassified					
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #4		2.485	2.835	3.865	0.000	3.865
Program Support						
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						

UNCLASSIFIED

E	xhibit R-2A, RDT&E Project Justification: PB 2011 Army		DATE: February 2010
A	PPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
20	040: Research, Development, Test & Evaluation, Army	PE 0603766A: Tactical Electronic Surveillance	907: Tactical Exploitation of National Capabilities-
B	A 4: Advanced Component Development & Prototypes (ACD&P)	System - Adv Dev	MIP

B. Accomplishments/Planned Program (\$ in Millions)

			FY 2011	FY 2011	FY 2011
	FY 2009	FY 2010	Base	OCO	Total
Accomplishments/Planned Programs Subtotals	12.235	12.164	17.962	0.000	17.962

C. Other Program Funding Summary (\$ in Millions)

N/A

D. Acquisition Strategy

The acquisition strategy for TENCAP begins with the TENCAP General Officer Steering Group (TGOSG), with representatives from the G2, G3, G6, G8 and ASAALT, who validate and prioritize proposed initiatives that address Army shortfalls or capability gaps. TENCAP coordinates with PEOs and Program Managers to facilitate transfer/integration of capabilities into Program of Record (POR) systems. Increase in funds from FY10 to FY11 is based upon the intent of the 2007 TENCAP Charter that directs TENCAP to serve as the Army's primary interface to National and Theater organizations and resources. The goal is to: (1) continue to leverage billions of dollars of investment in National and Theater sensor development and exploitation at minimal cost to the Army; (2) limit duplication of effort within Army programs; and (3) improve transition of S&T capabilities to Army Programs of Record (POR). In order to realize this goal, TENCAP needs to be funded at a consistent level to allow oversight of many S&T activities throughout the IC, at Battle Labs and institutions of higher learning and be familiar with system requirements from a multitude of Army programs. The FY11 funding level enables TENCAP to achieve the broader goal envisioned by the revised Charter and facilitate transition of the TENCAP General Officer Steering Group (TGOSG) prioritized critical capabilities that will significantly improve contingency operations in OEF.

E. Performance Metrics

Performance metrics used in the preparation of this justification material may be found in the FY 2010 Army Performance Budget Justification Book, dated May 2010.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

2040: Research, Development, Test & Evaluation, Army

PE 0603766A: Tactical Electronic Surveillance

907: Tactical Exploitation of National Capabilities-

BA 4: Advanced Component Development & Prototypes (ACD&P)

System - Adv Dev

Product Development (\$ in Millions)

				FY	2010	FY :	2011 ase	FY 2	2011 CO	FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Technology Insertion - Emerging Technologies	SS/CPAF	Multiple Location could not be determined.	94.258	3.993		9.042		0.000		9.042	Continuing	Continuing	0
		Subtotal	94.258	3.993		9.042		0.000		9.042			0.000

Remarks

Support (\$ in Millions)

Support (4 m minons	')												
				FY 2	2010		2011 ase	FY:	2011 CO	FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date		Award Date		Cost To Complete	Total Cost	Target Value of Contract
Program Management	С	ASPO Alexandria, VA	25.369	2.835		3.865		0.000		3.865	Continuing	Continuing	0
		Subtotal	25.369	2.835		3.865		0.000		3.865			0.000

Remarks

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

2040: Research, Development, Test & Evaluation, Army

BA 4: Advanced Component Development & Prototypes (ACD&P)

R-1 ITEM NOMENCLATURE

PE 0603766A: Tactical Electronic Surveillance

System - Adv Dev

PROJECT

907: Tactical Exploitation of National Capabilities-

Test and Evaluation (\$ in Millions)

				FY	2010	FY Ba	2011 ase		2011 CO	FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Exercises and Architecture	SS/CPAF	Multiple Location could not be determined.	0.000	0.686		1.205		0.000		1.205	Continuing	Continuing	0
		Subtotal	0.000	0.686		1.205		0.000		1.205			0.000

Remarks

Management Services (\$ in Millions)

				FY	2010	FY : Ba	2011 ase		2011 CO	FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Technology Insertion - Subject Matter Experts	C/CPAF	Northrup Grumman ASPO, Alexandria, VA	0.000	0.000		0.000		0.000		0.000	Continuing	Continuing	0
Intelligence Subject Matter Experts and Engineering Services	C/CPAF	TBD Location could not be determined.	0.000	3.750		2.950		0.000		2.950	Continuing	Continuing	0
Imagery Intelligence Engineering Services	С	Army Geospatial Center (AGC) Alexandria, VA	0.000	0.900		0.900		0.000		0.900	Continuing	Continuing	0
		Subtotal	0.000	4.650		3.850		0.000		3.850			0.000

Remarks

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army								DA	DATE: February 2010			
				R-1 ITEM NOMENCLATURE PE 0603766A: Tactical Electronic Surveillance System - Adv Dev				PROJECT 907: Tactical Exploitation of National Capabilities- MIP				
	Total Prior Years Cost	FY	2010	FY	2011 ase	FY 2011 OCO		2011 otal	Cost To Complete	Total Cost	Target Value of Contract	
Project Cost Totals		12.164	2010	17.962		0.000	1	17.962	Complete	Total Cost	0.000	

Remarks