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

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

1319: Research, Development, Test & Evaluation, Navy

PE 0304231N: Tactical Command System - MIP

BA 5: Development & Demonstration (SDD)

•											
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	0.000	0.000	1.318	0.000	1.318	1.081	1.286	1.308	1.344	Continuing	Continuing
2009: OSIS Evolutionary Development (OED)	0.000	0.000	1.318	0.000	1.318	1.081	1.286	1.308	1.344	Continuing	Continuing

A. Mission Description and Budget Item Justification

Trusted Information Systems MIP resources are transferred from PE 0604231N to PE 0304231N beginning in FY11.

Trusted Information Systems (TIS): Radiant Mercury is a secure information platform that provides an automated means to sanitize, downgrade, guard, and transliterate formatted data at various classifications, compartments and releasabilities. With the aid of a reliable human reviewer, RM can process nonstandard messages, such as messages with National Imagery Transmission Format (NITF) products and other non/semi-formatted file types. It enables combat commanders and operational commanders, afloat and ashore, to disseminate and receive critical operational and intelligence information with coalition and allied forces.

FY11: Begin developing capabilities needed in RM version 5.x and begin Factory Acceptance Test in preparation for Certification and Accreditation Test. Conduct security test and evaluation of RM version 5.x. Identify and define emerging requirements for RM version 5.X to meet Consolidated Afloat Network and Enterprise Services (CANES) and other Navy and non-Navy CDS requirements.

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

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

1319: Research, Development, Test & Evaluation, Navy

PE 0304231N: Tactical Command System - MIP

BA 5: Development & Demonstration (SDD)

B. Program Change Summary (\$ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	0.000	0.000	0.000	0.000	0.000
Current President's Budget	0.000	0.000	1.318	0.000	1.318
Total Adjustments	0.000	0.000	1.318	0.000	1.318
 Congressional General Reductions 		0.000			
 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			
 Program Adjustments 	0.000	0.000	1.318	0.000	1.318

Change Summary Explanation

Technical: Not applicable.

Schedule: Radiant Mercury - Schedule slip of RM Test and Integration capabilities Ver 5.X from 3QFY10 to 1QFY11 due to Ver 5.0 delivery delay in award to follow-on developer contract.

FY11 from previous President's Budget is shown as zero because no FY11-15 data was presented in President's Budget 2010.

Exhibit R-2A, RD1&E Project Ju	stification: P	3 2011 Navy	/						DAIE: Feb	ruary 2010	
APPROPRIATION/BUDGET ACT 1319: Research, Development, To BA 5: Development & Demonstration	est & Evaluatio	n, Navy			IOMENCLA 1N: <i>Tactical</i>		System -	PROJECT 2009: OS/S	S Evolutionar	y Developm	ent (OED)
COST (\$ in Millions)	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		
2009: OSIS Evolutionary Development (OED)	0.000	0.000	1.318	0.000	1.318	1.081	1.286	1.308	1.344	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0				

A. Mission Description and Budget Item Justification

Radiant Mercury (RM): Trusted Information System (TIS) Radiant Mercury (RM) is a system that successfully provides accredited Cross Domain Solutions (CDS) to the Navy, DoD, and intelligence Community. TIS RM is a critical component of network-centric warfare, supporting joint operations and coalition forces world-wide. The ability to pass sensitive, yet critical, data across security domains and to our Coalition partners in a timely fashion can only be met by accredited Cross Domain Solution (CDS) systems such as Radiant Mercury. RM enables US Navy to operate in a multi-national environment.

TIS RM provides automated, bi-directional sanitization, transliteration and guarding capability for formatted and unformatted data between security enclaves. Radiant Mercury helps ensure critical intelligence is provided quickly to operational decision-makers. TIS RM provides the capability to disseminate information for operating forces worldwide, including the operating forces of key allies in Pacific, Central and Europe Command regions. This capability to move all-source intelligence-derived track information into the realm of the operational community significantly improves the situational awareness of tactical operators and planners. Additionally, it assists in providing critical operational information to intelligence and cryptologic analysts. Unformatted data is handled by the Information Review Process (IRP). The system provides cross domain services to a wide variety of customers including Combatant Commanders, Air Force (Shared Early Warning program), Army (Blue Force Tracking program), Navy (Global Command and Control System - Maritime (GCCS-M) and Automatic Identification System (AIS)), Maritime Operations Centers (MOC), Distributed Common Ground System-Navy (DCGS-N), Tactical Ranges, and numerous other DoD and Intelligence agencies.

FY11: Begin developing capabilities needed in RM version 5.x and begin Factory Acceptance Test in preparation for Certification and Accreditation Test. Conduct security test and evaluation of RM version 5.x. Identify and define emerging requirements for RM version 5.X to meet Consolidated Afloat Network and Enterprise Services (CANES) and other Navy and non-Navy CDS requirements. The next RM version 5.x will include improvements identified by operational commands and remedies to shortfalls as identified in the Unified Cross Domain Management Office (UCDMO) roadmap. One of the major improvements include: installing RM as a blackbox at some sites where maintenance, troubleshooting, and auditing are conducted at a remote site; enhancing functional capabilities to support service oriented architectures (SOA) and enterprise services; providing automated and remote installation; simplifying the code; and providing robust network addressing capabilities.

FY OCO: Not applicable.

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE PROJECT

PE 0304231N: Tactical Command System -

2009: OSIS Evolutionary Development (OED)

BA 5: Development & Demonstration (SDD)

MIP

| MIP

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

1319: Research, Development, Test & Evaluation, Navy

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Radiant Mercury	0.000	0.000	1.318	0.000	1.318
FY 2011 Base Plans: Develop and test RM version 5.x. Identify and define emerging requirements for RM version 5.X to meet Navy and non-Navy Cross Domain Solution (CDS) requirements. Conduct RM software version 5.X certification tests by Defense Intelligence Agency and risk assessment by National Security Agency. Conduct security test and evaluation of RM version 5.x by Joint Interoperability Test Command (JITC). Identify and define emerging requirements for RM version 5.X to meet other Navy and non-Navy Cross Domain Solution (CDS) requirements. Note: Trusted Information Systems MIP resources transferred from PE 0604231N to PE 0304231N beginning in FY11.					
Accomplishments/Planned Programs Subtotals	0.000	0.000	1.318	0.000	1.318

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

			FY 2011	<u>FY 2011</u>	<u>FY 2011</u>					Cost To	
<u>Line Item</u>	FY 2009	FY 2010	<u>Base</u>	OCO	<u>Total</u>	FY 2012	FY 2013	FY 2014	FY 2015	Complete	Total Cost
• OPN/2608: GCCS-M (TIS)	0.000	0.000	0.338	0.000	0.338	0.471	0.539	0.535	0.555	Continuing	Continuing

D. Acquisition Strategy

N/A

E. Performance Metrics

Provide and develop certified, accredited Cross Domain Solution (CDS) and transfer capabilities to the Department of Defense and Intelligence Community, and provide the capability to disseminate and receive operational and intelligence information for 100% of authorized sites. Complete 100% of certification, system and security testing of Radiant Mercury (RM) version 5.x for release. Provide the capability to sanitize, downgrade, guard, and transliterate formatted data at various classifications, compartments and releasabilities to combat and operational commanders, coalition and allied forces at over 340 sites world wide.

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

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0304231N: Tactical Command System -

MIP

PROJECT

2009: OSIS Evolutionary Development (OED)

Product Development (\$ in Millions)

				FY 20	010	FY 2 Ba		FY 2		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
Systems Engineering	Various/ Various	Various Various	0.000	0.000		0.897	Jan 2011	0.000		0.897	0.000	0.897	Continuing
		Subtotal	0.000	0.000		0.897		0.000		0.897	0.000	0.897	

Remarks

No remarks.

Support (\$ in Millions)

Capport (4 iii iiiiiiioi	.0,												
				FY 2	010	FY 2 Ba		FY 2		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
Software Development	Various/ Various	Various Various	0.000	0.000		0.382	Jan 2011	0.000		0.382	0.000	0.382	Continuing
		Subtotal	0.000	0.000		0.382		0.000		0.382	0.000	0.382	

Remarks

No remarks.

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

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

1319: Research, Development, Test & Evaluation, Navy

PE 0304231N: Tactical Command System -

2009: OSIS Evolutionary Development (OED)

BA 5: Development & Demonstration (SDD)

MIP

Test and Evaluation (\$ in Millions)

				FY 20)10	FY 2 Ba		FY 2		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
Operational Test & Evaluation	WR	OPTEVFOR Norfolk, VA	0.000	0.000		0.000		0.000		0.000	0.680	0.680	Continuing
		Subtotal	0.000	0.000		0.000		0.000		0.000	0.680	0.680	

Remarks

No remarks.

Management Services (\$ in Millions)

				FY 2010		FY 2 Ba	-	FY 2		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
Program Management Support	Various/ Various	Various Various	0.000	0.000		0.039	Jan 2011	0.000		0.039	Continuing	Continuing	Continuing
Travel	WR	Not Specified Not Specified	0.000	0.000		0.000		0.000		0.000	0.000	0.000	Continuing
		Subtotal	0.000	0.000		0.039		0.000		0.039			

Remarks

No remarks.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy **DATE:** February 2010 **PROJECT R-1 ITEM NOMENCLATURE**

APPROPRIATION/BUDGET ACTIVITY

BA 5: Development & Demonstration (SDD)

1319: Research, Development, Test & Evaluation, Navy

PE 0304231N: Tactical Command System -

MIP

2009: OSIS Evolutionary Development (OED)

	Total Prior Years Cost	FY 2	2010	FY 2 Ba	FY 20		Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	0.000	0.000		1.318	0.000	1.318			

Remarks

No remarks.

Exhibit R-4, RDT&E Sch	edule	e Pro	file: F	PB 20	011 N	avy																DAT	E : Fe	ebrua	ry 20	10		
APPROPRIATION/BUDG 1319: Research, Develop BA 5: Development & Del	ment,	, Test	& Ev		tion, I	Vavy					0304		MEN l: Tac			mand	Syste	em -		PROJ 2009:		S Evo	lution	ary E	Pevelo	ррте	nt (O	ED)
Fiscal Year		20	09			20	010			20)11			20	012			201	13			20)14			20)15	
	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
Acquisition Milestones																												
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Software									Δ				Δ	DELIV	ĖRY RN	/ Versio	n 5.x		DEĻĪV	ERY RN	Versio	0.6.0			Λ			
RM 5.0 / 5.X / 6.X / 7.X SW Delivery NOTES: 1																			Δ						DELIVE	BY RM	1 Versio	<u></u>
Test & Evaluation Milestones Certification Test System Test												Δ	- RM Vo					CT&E -		ersion 6.				Δ	rsion 6.)	on 6.X	RM Ver	
NOTES:											<u> </u>														Exhibit f	R-4, Sc	hedule	Profile

UNCLASSIFIED

1) Schedule slip of RM Test and Integration capabilities Ver 5.X from 3QFY10 to 1QFY11 due to Ver 5.0 delivery delay in award to follow-on developer contract.

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Exhibit R-4A, RDT&E Schedule Details: PB 2011 Navy **DATE:** February 2010

MIP

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE PE 0304231N: Tactical Command System -1319: Research, Development, Test & Evaluation, Navy

BA 5: Development & Demonstration (SDD)

PROJECT

2009: OSIS Evolutionary Development (OED)

Schedule Details

	Sta	art	En	d
Event	Quarter	Year	Quarter	Year
RM Software - Test and Integrate Capabilities needed by CANES/operational commands in version 5.X	1	2011	1	2011
RM Software - Delivery of RM Version 5.x	1	2012	1	2012
RM Software - Delivery of RM Version 6.0	3	2013	3	2013
RM Software - Delivery of RM Version 6.x	1	2015	1	2015
RM Software - Delivery of RM Version 7.0	4	2015	4	2015
RM Test & Evaluation Milestone - CT&E - RM Version 5.x	4	2011	4	2011
RM Test & Evaluation Milestone - CT&E - RM Version 6.0	2	2013	2	2013
RM Test & Evaluation Milestone - CT&E - RM Version 6.x	4	2014	4	2014
RM Test & Evaluation Milestone - CT&E - RM Version 7.0	3	2015	3	2015
RM System Test - JITC ST&E - RM Version 5.x	4	2011	4	2011
RM System Test - JITC ST&E - RM Version 6.0	2	2013	2	2013
RM System Test - JITC ST&E - RM Version 6.x	4	2014	4	2014
RM System Test - JITC ST&E - RM Version 7.0	3	2015	3	2015