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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Office of Secretary Of Defense **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603923D8Z: <i>Coalition Warfare</i>
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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	12.482	13.773	13.786	0.000	13.786	14.053	14.437	14.640	14.843	Continuing	Continuing
P923: <i>Coalition Warfare</i>	12.482	13.773	13.786	0.000	13.786	14.053	14.437	14.640	14.843	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Coalition Warfare Program (CWP) is the only Office of the Secretary of Defense (OSD) program dedicated to initiating cooperative research and development (R&D) projects with allies and coalition partners. The goal of the effort is to assist the Combatant Commands, Services, and Agencies with integrating coalition-enabling solutions into existing and planned U.S. programs. This adds value to the Department's security cooperation strategy through collaborative development of warfighter capabilities to enhance operations of U.S. and coalition forces.

Fighting the war on terrorism and coping with the new and emerging threats have put coalition warfare issues on the radar screens of policy makers and senior leaders throughout the U.S. Government. Coalitions are and will be the standard means for addressing international crises, lending political legitimacy and providing resources that mitigate U.S. financial, materiel, and personnel burdens. Interoperability gaps between and among coalition partners have compromised operational effectiveness and jeopardized force protection (e.g., fratricidal incidents). CWP strives to bridge these gaps, for example, by providing the necessary financial support to develop interoperable, manageable and secure coalition networks, and demonstrating ability to share blue force situational awareness between U.S. and coalition battle command systems.

Cooperative efforts with likely coalition partners are needed to close interoperability gaps including those related to battlespace awareness, C4ISR, joint fires, intelligence fusion and data sharing, combat identification, logistics, weapon systems, and information sharing. Moreover, these small investments early in the R&D process yield large dividends and allow for sustainable coalition enabled U.S. systems. The OSD CWP encourages Combatant Commands, Services, Defense Agencies and OSD to involve friendly countries in development projects to meet coalition requirements that would otherwise not be realized. Partner nations participate to the extent permitted by security considerations (classified data and critical technology), when such partnering is advantageous to the U.S. Government and necessary in terms of security cooperation and regional threat scenarios.

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APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603923D8Z: <i>Coalition Warfare</i>
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B. Program Change Summary (\$ in Millions)

	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011 Base</u>	<u>FY 2011 OCO</u>	<u>FY 2011 Total</u>
Previous President's Budget	13.246	13.885	0.000	0.000	0.000
Current President's Budget	12.482	13.773	13.786	0.000	13.786
Total Adjustments	-0.764	-0.112	13.786	0.000	13.786
• 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	-0.522	0.000			
• SBIR/STTR Transfer	-0.215	0.000			
• Other Program Adjustments	-0.027	-0.112	13.786	0.000	13.786

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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
P923: <i>Coalition Warfare</i>	12.482	13.773	13.786	0.000	13.786	14.053	14.437	14.640	14.843	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

The Coalition Warfare Program (CWP) is dedicated to initiating cooperative research and development (R&D) projects with allies and coalition partners. The goal of the effort is to assist the Combatant Commands, Services, and Agencies with integrating coalition-enabling solutions into existing and planned U.S. programs. This adds value to the Department's security cooperation strategy through collaborative development of warfighter capabilities to enhance operations of U.S. and coalition forces.

Cooperative efforts with likely coalition partners are needed to close interoperability gaps including those related to battlespace awareness, C4ISR, joint fires, intelligence fusion and data sharing, combat identification, logistics, weapon systems, and information sharing. Moreover, these small investments early in the R&D process yield large dividends and allow for sustainable coalition enabled U.S. systems. The OSD CWP encourages Combatant Commands, Services, Defense Agencies and OSD to involve friendly countries in development projects to meet coalition requirements that would otherwise not be realized. Partner nations participate to the extent permitted by security considerations (classified data and critical technology), when such partnering is advantageous to the U.S. Government and necessary in terms of security cooperation and regional threat scenarios.

The Combatant Commands, Services, Defense Agencies, and OSD nominate candidate projects on an annual basis. These projects are funded for one to two years. The Program selects projects based on their compatibility with established criteria, which are based on DoD priorities (e.g. CONPLAN 7500, the OSD Building Partnerships Strategic Plan, the Combatant Commanders' Integrated Priority Lists), Joint Staff specified needs and requirements, equitable contributions from international partners, potential for transitions, portability across the regional and functional Combatant Commands, responsiveness to USD (AT&L) priorities for international armaments cooperation, and contributing to shaping operations and stability.

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

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY08 Continuing Projects Program provided additional funding to projects that began in FY08.	4.183	0.760	0.000	0.000	0.000

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<p><i>FY 2009 Accomplishments:</i> Projects that completed their efforts in FY09 included: project that delivered a repeatable methodology to jumpstart the equipping portion of Joint Task Force Headquarters Command and Control formation; project that developed a miniature automated chemical agent detector based on the current M256A1 chemistry; and a project that established a regional multinational virtual learning environment for the purpose of using distance learning and training for U.S. and foreign military and civilian personnel.</p> <p><i>FY 2010 Plans:</i> Some FY08 projects will receive FY10 funding. These projects will deliver fieldable fluxgate magnetometers that can be of practical use to the US military and a common solution for pilots of coalition warfare platforms operating in degraded visual environments to reduce brownout impact on loss of lives, platforms and mission degradation in current desert operations.</p>						
<p>FY09 Projects</p> <p>Program selected 14 projects in FY09 nomination cycle.</p> <p><i>FY 2009 Accomplishments:</i> Projects completed international agreements and contracting efforts required to deliver capabilities. Many projects developed CONOPS and test plans and began laboratory testing.</p> <p><i>FY 2010 Plans:</i> Projects will complete their efforts and will deliver capabilities that will include an interoperable, manageable and secure coalition network based on existing and emerging standards; software solutions that will enable shared situational awareness and command and control messages with coalition partners; enhanced capability of our coalition warfare partners to interdict smuggled nuclear devices and materials; and processed imagery of coalition platforms for inclusion into Army ground-based platform trainer.</p>		7.550	5.400	0.100	0.000	0.100

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<p><i>FY 2011 Base Plans:</i> One FY09 new start will receive FY11 funding. This project will deliver a software defined radio waveform specification that will support waveform porting to the participants' national radios.</p>						
<p>Maritime Radiological Stand-off detection and Identification (MARSII)</p> <p>MARSII is an unmanned Global War on Terror warfighting system based radiological detection program designed to provide a cost effective international solution to asymmetric terrorist threats in the maritime environment.</p> <p><i>FY 2010 Plans:</i> Complete sensor integration and conduct CONUS and OCONUS demonstrations.</p>		0.000	0.700	0.000	0.000	0.000
<p>Fire Support Ammunition Update Capability</p> <p>Establish capability to update Fire Control Information and field new ammunition to the warfighter significantly faster without completely retesting and reissuing fire support software.</p> <p><i>FY 2010 Plans:</i> Develop CONOPS and begin laboratory testing.</p> <p><i>FY 2011 Base Plans:</i> Implement capability in the annual release of the NATO Armaments Ballistic Kernel software.</p>		0.000	0.700	0.400	0.000	0.400
<p>Clip-on Night Vision Device – Sensor Fusion</p> <p>Project aims to create better nighttime vision capabilities.</p> <p><i>FY 2010 Plans:</i> Begin development, integration, and testing of fused sensors.</p>		0.000	0.450	0.525	0.000	0.525

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<p><i>FY 2010 Plans:</i> Implement secure two-way releasable data exchange with coalition partner.</p> <p><i>FY 2011 Base Plans:</i> Deliver advanced, two-way, scalable data exchange.</p>						
<p>Easy Internet Protocol</p> <p>Project will provide a network-enhanced communications capability for maritime collaboration and situational awareness.</p> <p><i>FY 2010 Plans:</i> Develop initial CONOPS and conduct initial lab testing.</p> <p><i>FY 2011 Base Plans:</i> Deliver fly-away earth terminals, maritime awareness tool, and service contracting mechanism.</p>		0.000	0.600	0.600	0.000	0.600
<p>Joint STARS / ASTOR Interoperability Project</p> <p>Project's objective is to improve interoperability between Joint STARS and ASTOR systems.</p> <p><i>FY 2010 Plans:</i> Conduct interoperability assessment and participate in stage II exercise.</p> <p><i>FY 2011 Base Plans:</i> Conduct integration testing and operational exercise.</p>		0.000	0.700	0.700	0.000	0.700
<p>Laser Damage and Jamming Protection for Mid-Wave Infrared Detectors</p> <p>Project will develop and demonstrate laser protection for MWIR detectors.</p>		0.000	0.500	0.500	0.000	0.500

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<p><i>FY 2010 Plans:</i> Incorporate identified technologies into a jamming protected detector.</p> <p><i>FY 2011 Base Plans:</i> Deliver robust MWIR detector hardened to laser jamming and damage.</p>						
<p>Riverine and Intercoastal Operations</p> <p>Project will deliver maritime and land-based sensor/communication/common operating picture system capable of monitoring and detecting activity in the riverine and inland near-water environments.</p> <p><i>FY 2010 Plans:</i> System design, integration and test in the U.S. aboard US vessel/vehicle.</p> <p><i>FY 2011 Base Plans:</i> System design, integration and test in foreign partner vessel/vehicle.</p>		0.000	0.700	0.700	0.000	0.700
<p>FY11 Project Selections</p> <p>Program will conduct competitive nomination process to identify FY11 projects.</p> <p><i>FY 2011 Base Plans:</i> FY11 projects will be selected based on COCOM, Service, Joint Staff, OSD, and DoD Agencies priorities and requirements.</p>		0.000	0.000	7.100	0.000	7.100
<p>Coalition Warfare Program Support</p> <p>Program funds contractors to support program management.</p> <p><i>FY 2009 Accomplishments:</i> Contractor provided program support.</p>		0.693	0.723	0.742	0.000	0.742

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<p><i>FY 2010 Plans:</i> Contractor will provide program support.</p> <p><i>FY 2011 Base Plans:</i> Contractor will provide program support.</p>						
<p>Interoperability and Collaboration Initiatives</p> <p>Program funds interoperability efforts and various initiatives that are aimed at increasing collaboration.</p> <p><i>FY 2009 Accomplishments:</i> Supported international conference aimed at improving coalition vertical lift capabilities, international acquisition related meetings, and other efforts aimed at increasing interoperability and collaboration.</p> <p><i>FY 2010 Plans:</i> Will provide maintenance cost for interoperability portal and support international acquisition related conferences and meetings. Program will also fund select initiatives aimed at improving U.S. interoperability with its coalition partners.</p> <p><i>FY 2011 Base Plans:</i> Will provide maintenance cost for interoperability portal and support international acquisition related conferences and meetings.</p>		0.056	0.735	0.534	0.000	0.534
Accomplishments/Planned Programs Subtotals		12.482	13.773	13.786	0.000	13.786

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C. Other Program Funding Summary (\$ in Millions) N/A		
D. Acquisition Strategy The Combatant Commands, Services, Defense Agencies, and the Office of the Secretary of Defense nominate candidate projects on an annual basis. These projects are funded for one to two years. The Program selects projects that address DoD priorities and meet the needs and requirements specified by the Joint Staff and the Combatant Commanders. Projects should have equitable contributions from international partners, strong potential for transition, and should contribute to allied interoperability and/or meet a user need.		
E. Performance Metrics After successful navigation of the competitive nomination process, initial project funding is dependent on receipt of project documentation, which includes financial information, project plan, description of project team, etc. Continued project funding is dependent on compliance with CWP requirements, which include: adequate progress toward each project's stated goals, timely reporting on financial status and project activities, provision of updated project plans and charts, and progress towards transition goals.		

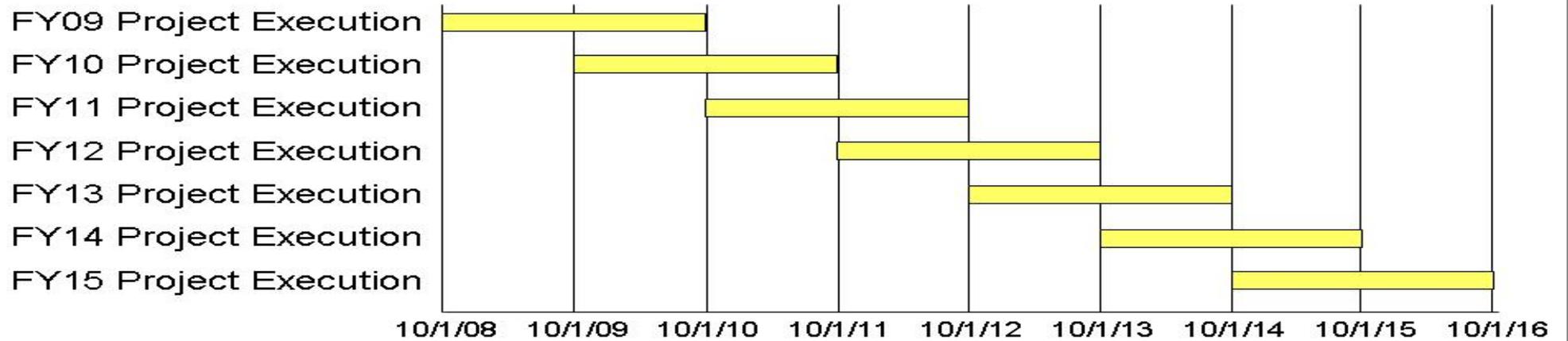
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Exhibit R-4, RDT&E Schedule Profile: PB 2011 Office of Secretary Of Defense		DATE: February 2010
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Exhibit R-4A, RDT&E Schedule Details: PB 2011 Office of Secretary Of Defense **DATE:** February 2010

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Schedule Details

Event	Start		End	
	Quarter	Year	Quarter	Year
FY09-FY10 Projects	1	2009	4	2010
FY10-FY11 Projects	1	2010	4	2011
FY11-FY12 Projects	1	2011	4	2012
FY12-FY13 Projects	1	2012	4	2013
FY13-FY14 Projects	1	2013	4	2014
FY14-FY15 Projects	1	2014	4	2015

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