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Exhibit R-2, RDT&E Budget Item Justification						Date: February 2005																																										
Appropriation/Budget Activity RDT&E Defense-Wide, BA 7					R-1 Item Nomenclature: C3I Intelligence Programs PE 0305190D8Z																																											
Cost (\$ in millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011																																								
Total PE Cost	129.581																																															
Horizontal Fusion	123.018																																															
C3I Intelligence Program Support	4.600																																															
GWOT CENTRIX	1.963																																															
<p>A. Mission Description and Budget Item Justification: This program element supports intelligence activities focused on the development, integration and assessment of systems or applications in support of non-traditional and contingency warfare. Resources will also support network-centric collaborative operations to improve situational awareness and operational-intelligence planning efforts. This program is funded under BA-7, Operational Systems Development, because it supports intelligence efforts that involve engineering development.</p> <p><u>FY 2004 Accomplishments:</u> (\$1.963 million)</p> <p><u>GWOT - CENTRIX</u></p> <ul style="list-style-type: none"> Supported development of multi-level thin client solution needed for ships and air operations centers. Implemented improved metadata tagging and search capabilities on coalition information sharing networks Provided for completion of CENTRIXS network interoperability certification. <p>B. Program Change Summary: (Show total funding, schedule, and technical changes for the program element that have occurred since the previous President's Budget Submission)</p> <table border="0"> <thead> <tr> <th></th> <th><u>FY 2004</u></th> <th><u>FY 2005</u></th> <th><u>FY 2006</u></th> <th><u>FY 2007</u></th> </tr> </thead> <tbody> <tr> <td>Previous President's Budget</td> <td>130.178</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Current BES/President's Budget</td> <td>129.581</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Total Adjustments</td> <td>-0.597</td> <td></td> <td></td> <td></td> </tr> <tr> <td> Congressional program reductions</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td> Congressional rescissions, inflation adjustments</td> <td>-0.597</td> <td></td> <td></td> <td></td> </tr> <tr> <td> Congressional increases</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td> Reprogrammings</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>										<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	Previous President's Budget	130.178				Current BES/President's Budget	129.581				Total Adjustments	-0.597				Congressional program reductions					Congressional rescissions, inflation adjustments	-0.597				Congressional increases					Reprogrammings				
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Change Summary Explanation:

FY 2004: Non-Pay Inflation Adjustment -0.597

C. Other Program Funding Summary: N/A

D. Acquisition Strategy: N/A

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Exhibit R-2a, RDT&E Project Justification						Date: February 2005		
Appropriation/Budget Activity RDT&E, Defense-Wide, BA 7				Project Name and Number: Horizontal Fusion/0305190D8Z				
Cost (\$ in millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Name: Horizontal Fusion	123.018							
GWOT - Horizontal Fusion	4.600							
<p>A. Mission Description and Budget Item Justification:</p> <p>The Secretary of Defense approved the establishment of the Horizontal Fusion Portfolio as one of his top ten priorities to make net-centric operations and warfighting a near-term operational reality consistent with the vision of force transformation. The Horizontal Fusion program overcomes acknowledged limitations in Joint Force operations caused by the inability to rapidly adjust plans and tactics for situational awareness while taking advantage of the explosion in battlefield intelligence and information sources such as advanced sensor equipped UAVs, improved Special Reconnaissance capabilities and ongoing developments and deployment of digitized support systems. Horizontal Fusion provides Joint Force Commanders and their Battle Staffs with needed capabilities for increasing the speed of Command of widely dispersed Joint Forces to operate against a wide range of threats and to support new methods of war fighting – emphasizing more rapid and effective integration of operational intelligence planning by providing operators on the edge with the applications and data access to effectively achieve situational awareness without latency and ensure that the entire chain of command can simultaneously view events as they unfold. The participants that make up the Horizontal Fusion portfolio are primarily existing programs of record, which require strict procurement and requirements control under traditional acquisition policy. The Horizontal Fusion portfolio maximizes these ongoing efforts by integrating existing capabilities and, therefore, leveraging the DoD’s resources while accelerating their inclusion in the net-centric environment. The selection for participation in the HF portfolio is based on 1) highest priority programs for net-centric joint warfighting (to include coalition and allied efforts) 2) time and cost to implement, and 3) the Joint Forces Command matrix of required capabilities to meet near-term joint warfighting conops. Today, the US Army in Iraq is using tools developed as part of the Horizontal Fusion portfolio, such as the unattended ground sensor arrays. These acoustic sensors successfully locate mortars used to fire on US troops. These capabilities were demonstrated as part of the Army Research Lab's (ARL) Warrior's Edge project within the Horizontal Fusion Portfolio prior to being used in Iraq. Other HF operational capabilities, such as the acoustic sensor, are under development within the HF portfolio. Further, Horizontal Fusion provides for the practical net-centric implementation of interoperability required to achieve the Secretary’s vision of transformation. It is a critical element in the successful implementation of the GIG systems architecture, Net-Centric Enterprise Services (NCES), DoD Data Management Strategy (DDMS) and the services oriented architecture for Information Assurance (IA). These programs support the idea of accelerating, “Revolutionary technologies that ‘change minds’ and ways of doing things.</p>								

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B. Accomplishments/Planned Program				
	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/ Effort/Subtotal Cost	127.618			
RDT&E Articles Quantity *(as applicable)				
<p>FY 2004 Accomplishments: (\$127.618)</p> <ul style="list-style-type: none"> • Demonstrated capability of Horizontal Fusion to be a force multiplier with Quantum Leap-1 • Continued efforts on first round of pilots • Basic Language Translation (BLTS) is a web-enabled application to access language databases, provide immediate gist of paper documents to tactical forces, and posts document and translation to the net for in-depth analysis • Global Net-Centric Surveillance and Targeting (GNSCT) uses smart software agents to find “possibles” in all available data; analyst does analysis vice combing databases • Demonstrated capability of Horizontal Fusion in OEF and OIF with Quantum Leap-2 • Added new initiatives in second round of pilots <ul style="list-style-type: none"> - Pilot cross-domain information sharing, secure wireless, and additional infrastructure solutions - Increase opportunities for data providers and consumers to post and access data • Selected focus areas for next round of pilots <ul style="list-style-type: none"> - Add new high-value data sources (working with IC to identify) - Expand secure wireless - Create secure, collaborative coalition environments - Use of situational awareness tools via high resolution VTC - Pilot command and control visualization <p>FY 2005 Plans: N/A</p> <p>FY 2006 Plans: N/A</p> <p>FY 2007 Plans: N/A</p>				

C. Other Program Funding Summary:

	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>Total Cost</u>
O&M, DW (PE0902198D8Z)	2.800								2.800
Proc, DW (PE 0902199D8Z)	6.212								6.212
RDT&E, DW (0305146D8Z)	16.565								16.565

Acquisition Strategy. N/A

E. Major Performers: DIA, DISA, NGA, NSA, NRO, ARMY Research Laboratory, Army HQ/G2, Navy CEC program, SPAWAR System Center – Charleston, SPAWAR System Center – San Diego, Pennsylvania State University Applied Research Laboratory, John Hopkins University Applied Physics Laboratory, Patrick AFB, Ft. Benning, GA, SOCOM, PACOM, CENTCOM, USFK, Ft. Bragg, Ft. Belvoir, USMC Quantico, JFCOM, STRATCOM, NATO, NGIC, Naval Research Laboratory, Hanscom AFB, CECOM, Department of State, Office of Naval Research, Wright Patterson AFB, INSCOM

F. Performance Metrics: Performance is based on portfolio and initiative adherence to identified DoD net-centric attributes, support to speed of COCOM decision-making process, and measured support to cross-domain and coalition information sharing. Measures include:

- Number of programs of record that incorporate (1) Core Enterprise Services, (2) meta-tagging to locate, access and control access to data, and (3) net-centric information assurance.
- Number of programs of record that utilize the operational net-centric infrastructure (the collateral space) and other DoD CIO strategic investments.
- Number of Regional Support Centers (RSC's) and DoD Enterprise Computer Centers (DECC's) that have installed the operational baseline of net-centric capabilities provided by Horizontal Fusion.
- Number of programs of record that are able to share information with coalition partners and move to higher protection levels as identified by the DoD IA organization.
- A measured and shortened decision support cycle for COCOMs.

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- A measured and shortened cycle for Time Critical Targeting.
- A measured and shortened cycle for analysts to correlate information for pattern recognition (both text and graphical) resulting in decreased timelines for event prediction and event influence.
- A measured and shortened cycle for communicating information and common blue/red force pictures during joint operations which include coalition and allied partners.

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