Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Air Force										DATE: February 2011	
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 6: *RDT&E Management Support*				R-1 ITEM NOMENCLATURE PE 0606323F: *Multi-Service Systems Engineering*							
COST ($ in Millions)	**FY 2010**	**FY 2011**	**FY 2012 Base**	**FY 2012 OCO**	**FY 2012 Total**	**FY 2013**	**FY 2014**	**FY 2015**	**FY 2016**	**Cost To Complete**	**Total Cost**
Total Program Element	-	18.901	13.953	-	13.953	13.938	13.935	-	-	Continuing	Continuing
668101: *MSSE and JIAMD Capability Initiative*	-	18.901	13.953	-	13.953	13.938	13.935	-	-	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Multi-Service System Engineering Team (MSSET) is established as a joint acquisition effort to build the framework for future work towards achieving near-term Joint Track Management Capability (JTMC) and long-term Joint Integrated Air and Missile Defense (JIAMD) capabilities.

The MSSET will perform systems engineering activities in collaboration with the Missile Defense Agency (MDA), Services, Joint Staff and OSD. The MSSET will review Service Program of Record (PoRs) and MDA systems based upon operationally validated JIAMD requirements and Prioritized Capabilities List (PCL) needs. It will then recommend engineering changes (e.g., Interface Control Documents (ICDs), common standards, and/or specifications) that can provide incremental improvements in Joint war fighting capability, as described in the "JROC-validated Joint IAMD operational requirements, information exchange requirements, as well as other war fighter-approved requirements. The MSSET scope will encompass the collaborative efforts to provide the war fighter the ability to effectively and efficiently utilize all available resources to counter the complete air, cruise missile, and ballistic missile threats.

The objective of the MSSET is to recommend incremental improvements in fielded capabilities within the construct of Service and MDA PoRs. The following list includes several, priority Family of Systems (FOS) engineering tasks. These tasks are considered beyond the expected scope of engineering efforts conducted by an individual Service and MDA in their POR for IAMD:

• Conduct the engineering activity to develop coordinated Joint IAMD DOD Architecture Framework (DODAF) products (e.g., System Views) while maintaining and deriving common standards.
• Develop, recommend, and document as necessary overarching JIAMD technical/performance requirements.
• Perform Joint IAMD FOS engineering and related analyses, and develop recommendations for incrementally implementing Joint IAMD capabilities.
• Develop Joint IAMD FOS engineering and Capability Validation Plans and strategies.
• Recommend updates to the Joint Staff IAMD Operational Views as necessary.
• Ensure that Joint engineering tasks are conducted in a logical sequence and in a timely manner to provide the Services and MDA the most benefit and adequate time to consider engineering recommendations derived by the MSSET.
• JPEO act in the role of Secretariat for the AMD Integration Standing-Committee to Missile Defense Executive Board (MDEB).

This program is in Budget Activity 6, RDT&E Management Support, because this budget activity includes research, development, test and evaluation efforts and funds to sustain and/or modernize the installations or operations required for general research, development, test and evaluation.

Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Air Force	DATE: February 2011
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B. Program Change Summary ($ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Previous President's Budget	-	18.901	-	-	-
Current President's Budget	-	18.901	13.953	-	13.953
Total Adjustments	-	-	13.953	-	13.953
• Congressional General Reductions		-			
• Congressional Directed Reductions		-			
• Congressional Rescissions	-	-			
• Congressional Adds		-			
• Congressional Directed Transfers		-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Other Adjustments	-	-	13.953	-	13.953

Change Summary Explanation

In FY 2012: Per Cost Assessment & Program Evaluation (Office of Secretary of Defense) direction, the program element is funded in fiscal year 2012-2014 to support multi-service system engineering efforts.

Exhibit R-2A, RDT&E Project Justification: PB 2012 Air Force			DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 6: *RDT&E Management Support*	R-1 ITEM NOMENCLATURE PE 0606323F: *Multi-Service Systems Engineering*	PROJECT 668101: *MSSE and JIAMD Capability Initiative*	

COST ($ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
668101: *MSSE and JIAMD Capability Initiative*	-	18.901	13.953	-	13.953	13.938	13.935	-	-	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Air Force		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 6: *RDT&E Management Support*	R-1 ITEM NOMENCLATURE PE 0606323F: *Multi-Service Systems Engineering*	PROJECT 668101: *MSSE and JIAMD Capability Initiative*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Title: JTMC System Engineering ***Description:*** Engineering Activity (Multi-Service Systems Engineering) ***FY 2010 Accomplishments:*** ***FY 2011 Plans:*** Finalizes system architecture for JTMC demo, process engineering change documents with programs of record, acquire final Tactical Component Network licensing. ***FY 2012 Base Plans:*** ***FY 2012 OCO Plans:***	-	1.200	-	-	-
Title: JTMC Demo ***Description:*** Joint Track Manager Capability Demonstration ***FY 2010 Accomplishments:*** ***FY 2011 Plans:*** Conduct bridge demonstration between Navy's Cooperative Engagement Capability (CEC) and Army Integrated Air Missile Defense Integrated Fire Control Network (AIAMD IFCN) programs of record and develop test plans in support of demonstration. ***FY 2012 Base Plans:*** ***FY 2012 OCO Plans:***	-	9.500	-	-	-
Title: Joint Operational Requirements ***Description:*** Joint Operational Requirements ***FY 2010 Accomplishments:*** ***FY 2011 Plans:*** Support JROC-approved SIAP/JTM Capability Development Document (CDD) requirements to JIAMD community. ***FY 2012 Base Plans:***	-	1.801	-	-	-

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
FY 2012 OCO Plans:					
Title: TCN ***Description:*** TCN license payment ***FY 2010 Accomplishments:*** ***FY 2011 Plans:*** Complete final payment on TCN software license. ***FY 2012 Base Plans:*** ***FY 2012 OCO Plans:***	-	6.400	-	-	-
Title: Requirements Development ***Description:*** MSSE Requirements Development ***FY 2010 Accomplishments:*** ***FY 2011 Plans:*** ***FY 2012 Base Plans:*** Develop, recommend, and document as necessary overarching JIAMD technical/performance requirements. ***FY 2012 OCO Plans:***	-	-	1.000	-	1.000
Title: Architecture Development ***Description:*** MSSE Architecture Development ***FY 2010 Accomplishments:*** ***FY 2011 Plans:*** ***FY 2012 Base Plans:*** Conduct the engineering activity to develop coordinated Joint IAMD architecture products (e.g., System Views) while maintaining and deriving common standards. Recommend updates to the Joint Staff IAMD Operational Views as necessary. ***FY 2012 OCO Plans:***	-	-	5.000	-	5.000

Exhibit R-2A, RDT&E Project Justification: PB 2012 Air Force		DATE: February 2011
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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Title: Engineering	-	-	7.953	-	7.953
Description: MSSE Systems Engineering					
FY 2010 Accomplishments:					
FY 2011 Plans:					
FY 2012 Base Plans: Perform Joint IAMD FOS engineering, related analyses, and develop recommendations for incrementally implementing Joint IAMD capabilities. Develop Joint IAMD FOS engineering and Capability Validation Plans and strategies.					
FY 2012 OCO Plans:					
Accomplishments/Planned Programs Subtotals	-	18.901	13.953	-	13.953

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
• N/A:	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

D. Acquisition Strategy

The Multi-Service System Engineering PE will fund service Programs of Record (PoRs) to achieve incremental capability enhacements in accordance with the Joint Integrated Air and Missile Defense (JAIMD) Joint Enterprise Acquisition Plan (JEAP). The JIAMD JEAP establishes the way forward to close existing gaps between PoRs identified in the IAMD Initial Capability Document (ICD), and provides the Joint warfighter enhanced capability that allows weapons to be utilized at their full kinetic capability. This will be accomplished incrementally by establishing specification standards, agreed to interface specification, and system engineering change proposals to PoRs that will enable interoperability between disparate networks in a Family of Systems (FoS). This tasking will be accomplished in a collaberative fashion with the Services, Missile Defense Agency (MDA), the JPEO, Joint Staff and OSD.

E. Performance Metrics

Please refer to the Performance Base Budget Overview Book for information on how Air Force resources are applied and how those resources are contributing to Air Force performance goals and most importantly, how they contribute to our mission.