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**Exhibit R-2, RDT&E Budget Item Justification:** PB 2017 Army **Date:** February 2016

<b>Appropriation/Budget Activity</b> 2040: <i>Research, Development, Test &amp; Evaluation, Army / BA 6: RDT&amp;E Management Support</i>	<b>R-1 Program Element (Number/Name)</b> PE 0605718A / <i>Army Modeling &amp; Sim X-Cmd Collaboration &amp; Integ</i>
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COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
Total Program Element	-	1.081	0.938	7.959	-	7.959	1.654	3.189	2.409	2.455	-	-
S03: <i>Analysis M&amp;S Tools and Services</i>	-	1.081	0.938	7.959	-	7.959	1.654	3.189	2.409	2.455	-	-

**A. Mission Description and Budget Item Justification**

PE 0605718A promotes the Army's Modeling and Simulation (M&S) strategy, defined by five guiding priorities: (1) formulate Army M&S policies; (2) develop and employ management processes for models, simulations and data; (3) develop M&S standards, architectures, networks and environments; (4) develop/employ new M&S tools and simulation technology; (5) develop an M&S workforce. PE 0605718A focuses on priorities 3 and 4.

**M&S Standards, Architectures, Networks and Environments:** The consistent use of standards, architectures, networks and environments advances the goal of interoperability. The Army coordinates with Joint, Interagency, Intergovernmental, and Multinational (JIIM) partners along with industry and academia to develop/employ standards that promote collaboration and facilitate the sharing of tools, data and information. The Army oversees procedures and processes for the appropriate use of standards to foster common formats and increase M&S and data reuse. The Army ensures these standards, architectures, networks and environments are readily accessible and can be reliably applied by users.

**M&S Tools and Simulation Technology:** The Army must have credible M&S tools and data to support the full range of Army organizational missions and functional responsibilities. M&S results that are timely and credible enhance decision making. The Army must develop and accredit reliable M&S tools so that decision makers and senior leaders benefit from the results and thus support the continued development, integration and use of such tools. To ensure credibility and reliability of results, M&S managers, developers and users must make the capabilities, constraints, limitations and assumptions of their M&S tools readily accessible. PE 0605718A provides for the development and employment of tools in the form of models, simulations and data that support the full range of Army interests and deliver timely information to enhance effective decision making. Moreover, these tools can be documented, verified, validated and accredited for their intended purpose in order to provide timely, credible results.

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<b>B. Program Change Summary (\$ in Millions)</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017 Base</b>	<b>FY 2017 OCO</b>	<b>FY 2017 Total</b>
Previous President's Budget	1.124	0.938	1.924	-	1.924
Current President's Budget	1.081	0.938	7.959	-	7.959
Total Adjustments	-0.043	0.000	6.035	-	6.035
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.043	-			
• Adjustments to Budget Years	-	-	6.035	-	6.035

**Change Summary Explanation**

FY 2017 increase to support new modeling and simulation tools and service requirements.

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<b>Appropriation/Budget Activity</b> 2040 / 6					<b>R-1 Program Element (Number/Name)</b> PE 0605718A / Army Modeling & Sim X- Cmd Collaboration & Integ				<b>Project (Number/Name)</b> S03 / Analysis M&S Tools and Services			
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017 Base</b>	<b>FY 2017 OCO</b>	<b>FY 2017 Total</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
S03: Analysis M&S Tools and Services	-	1.081	0.938	7.959	-	7.959	1.654	3.189	2.409	2.455	-	-
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

**Note**

FY15-18 funds include those reprogrammed from PE0605718A, Project S05 - SIMTECH: \$116,000, \$117,000, \$117,000, \$118,000.

**A. Mission Description and Budget Item Justification**

The project "Analysis Tools and Services" has two functions:

Function 1 (priority 3 of the "Army M&S Strategy") -- Develop M&S standards, architectures, networks and environments that promote sharing, interoperability, access, and reliable application of tools, formats, data and information among/for users. M&S = Modeling and Simulation.

Function 2 (priority 4 of the "Army M&S Strategy") -- Develop and improve tools and technology in the form of models, simulations and data that support the full range of Army interests and deliver timely information to enhance effective decision making. These tools can be documented, verified, validated and accredited for their intended purpose.

Resources under Project S03 support the six M&S communities (Acquisition, Analysis, Experimentation, Intelligence, Test & Evaluation, Training) at the enterprise level through enabling efforts. These efforts include the following: (a) design models, simulations, data and tools that are resident within one organization but reusable and trusted by M&S users and specialists across the Army M&S Enterprise; (b) leverage industry and academia; (c) promote interoperability within M&S and between M&S and operational capabilities.

**B. Accomplishments/Planned Programs (\$ in Millions)**

	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>
<b>Title:</b> Develop M&S standards, architectures, networks and environments	0.352	0.310	2.625
<b>Description:</b> Develop M&S standards, architectures, networks and environments that promote sharing, interoperability, access, and reliable application of tools, formats, data and information among/for users.			
<b>FY 2015 Accomplishments:</b> FY15 funds are distributed among activities that promote the third priority of the Army M&S strategy: develop M&S standards, architectures, networks and environments. The specific distribution is based on requirements and priorities established prior to the start of and during FY15.			
<b>FY 2016 Plans:</b>			

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<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>
<p>FY16 funds are distributed among activities that promote the third priority of the Army M&amp;S strategy: develop M&amp;S standards, architectures, networks and environments. The specific distribution will be based on requirements and priorities established prior to the start of FY16.</p> <p><b>FY 2017 Plans:</b> FY17 funds will be distributed among activities that promote the third priority of the Army M&amp;S strategy: develop M&amp;S standards, architectures, networks and environments. The specific distribution will be based on requirements and priorities established prior to the start of and during FY17. Increase from last report will be applied to new requirements for M&amp;S tools and services.</p>				
<p><b>Title:</b> Develop M&amp;S tools and technology</p> <p><b>Description:</b> Develop and improve tools and technology in the form of models, simulations and data that support the full range of Army interests and deliver timely information to enhance effective decision making. These tools can be documented, verified and validated for their intended purpose.</p> <p><b>FY 2015 Accomplishments:</b> FY15 funds are distributed among activities that promote the fourth priority of the Army M&amp;S strategy: develop M&amp;S tools and technology. The specific distribution is based on requirements and priorities established prior to the start of and during FY15.</p> <p><b>FY 2016 Plans:</b> FY16 funds are distributed among activities that promote the fourth priority of the Army M&amp;S strategy: develop M&amp;S tools and technology. The specific distribution will be based on requirements and priorities established prior to the start of FY16.</p> <p><b>FY 2017 Plans:</b> FY17 funds will be distributed among activities that promote the fourth priority of the Army M&amp;S strategy: develop M&amp;S tools and technology. The specific distribution will be based on requirements and priorities established prior to the start of and during FY17. Increase from last report will be applied to M&amp;S tools and services.</p>		0.729	0.628	5.334
<b>Accomplishments/Planned Programs Subtotals</b>		1.081	0.938	7.959
<b>C. Other Program Funding Summary (\$ in Millions)</b>				
N/A				
<b>Remarks</b>				
<b>D. Acquisition Strategy</b>				
N/A				

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**E. Performance Metrics**

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