Exhibit R-2, RDT&E Budget Item Justification: FY 2018 DoD Human Resources Activity

Appropriation/Budget Activity R-1 Progr

0400: Research, Development, Test & Evaluation, Defense-Wide I BA 3: Advanced Technology Development (ATD)

R-1 Program Element (Number/Name)

PE 0603769SE I Distributed Learning Advanced Technology Development (ADL)

**Date:** May 2017

COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
Total Program Element	60.812	10.399	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
Project 1: Advanced Distributed Learning	60.812	10.399	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

# A. Mission Description and Budget Item Justification

This program has transferred to OSD P&R in FY 2017.

The ADL Initiative collaborates with the DoD, the Federal government, Industry, and Academia partners to shape the way people learn, grow, and perform. The ADL Program provides DoD, other Federal agencies, and international partners with innovative: (1) standards for training and education software, systems, and associated Web services that demonstrate the "art of the possible;" (2) prototypes and proofs of concept that harness the power of learning technologies, such as computer/Webbased training, serious games, virtual worlds, mobile technology, intelligent tutors, and other emerging learning technologies; (3) technologies and learning methods that empower learners; and (4) high-quality, easily accessible, adaptable, and cost-effective education and training.

The ADL Initiative's R&D efforts improve efficiencies and reduce costs by (1) reducing the need for face-to-face instruction; (2) increasing interoperability--which enables discovery, retrieval, and reuse of distributed learning content; and (3) researching and prototyping methods of distributed learning with superior motivational and learning outcomes.

ADL's research efforts resulted in the development of a Sharable Content Object Reference Model (SCORM), the current de facto internationally accepted standard for distributed learning interoperability. ADL is working in collaboration with our partners to develop the next generation training learning architecture (TLA). The TLA will modernize the way we learn by facilitating learning experiences that take advantage of current and emerging technologies based on new standards built on web services. ADL is conducting research on intelligent tutoring technologies that support the creation of a personal assistant for learning (PAL). The PAL will further empower learners with effective learning content that is more personalized and context sensitive. ADL was established by Executive Order 13111, with policy oversight by the Office of the Deputy Assistant Secretary of Defense (Readiness) (Training Readiness and Strategy).

Exhibit R-2, RDT&E Budget Item Justification: FY 2018 DoD Human Resources Activity

**Date:** May 2017

FY 2018 Total

0.000 0.000 0.000

Appropriation/Budget Activity

0400: Research, Development, Test & Evaluation, Defense-Wide I BA 3: Advanced Technology Development (ATD)

R-1 Program Element (Number/Name)

PE 0603769SE I Distributed Learning Advanced Technology Development (ADL)

B. Program Change Summary (\$ in Millions)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO
	<del></del>			
Previous President's Budget	10.399	0.000	0.000	-
Current President's Budget	10.399	0.000	0.000	-
Total Adjustments	0.000	0.000	0.000	-
<ul> <li>Congressional General Reductions</li> </ul>	-	-		
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-		
<ul> <li>Congressional Rescissions</li> </ul>	-	-		
<ul> <li>Congressional Adds</li> </ul>	-	-		
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-		
<ul> <li>Reprogrammings</li> </ul>	-	-		

# **Change Summary Explanation**

SBIR/STTR Transfer

This program has transferred to OSD P&R in FY 2017.

Exhibit R-2A, RDT&E Project Justification: FY 2018 DoD Human Resources					s Activity				Date: May 2017			
Appropriation/Budget Activity 0400 / 3				R-1 Program Element (Number/Name) PE 0603769SE I Distributed Learning Advanced Technology Development (ADL)				Project (Number/Name) Project 1 / Advanced Distributed Learning				
COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
Project 1: Advanced Distributed Learning	60.812	10.399	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

## A. Mission Description and Budget Item Justification

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

This program transferred to OSD P&R in FY 2017.

The ADL Initiative collaborates with the DoD, the Federal government, Industry, and Academia partners to shape the way people learn, grow, and perform. The ADL Program provides DoD, other Federal agencies, and international partners with innovative: (1) standards for training and education software, systems, and associated Web services that demonstrate the "art of the possible;" (2) prototypes and proofs of concept that harness the power of learning technologies, such as computer/ Web-based training, serious games, The ADL Initiative collaborates with the DoD, the Federal government, Industry, and Academia partners to shape the way people learn, grow, and perform. The ADL Program provides DoD, other Federal agencies, and international partners with innovative: (1) standards for training and education software, systems, and associated Web services that demonstrate the "art of the possible;" (2) prototypes and proofs of concept that harness the power of learning technologies, such as computer/Web-based training, serious games,

217 to complication of the familiary	1 1 2010	1 1 2017	1 1 2010
Title: Advanced Distributed Learning	10.399	-	-
<b>Description:</b> ADL serves as the thought-leader for the DoD and other government agencies for learning science and learning technologies, enabling innovation, finding efficiencies, guiding customers into the future, and creating a shared vision and strategy for ADL's partners.			
FY 2016 Accomplishments:			
Gained efficiencies in Learning Science and Technology (LS&T) through publication of a research strategy and roadmap for			
future LS&T topics;			
• Published articles in leading professional journals on the integration of emerging learning technologies to enhance training;			
• Identified emerging concepts and showcase the art-of-the-possible through the integration of emerging learning technologies and			
learning science to enhance training and education;			
• Established the next generation LS&T research and development (R&D) program by expanding research into Human dimension,			
Learner-centric technology-enabled training and education, Human performance assessment (data-driven learning), Learning			
organizations, and social computing and social learning;			
• Continued work with the DoD training community to increase sharing of DL resources, standardization of DL terminology, and			
best practices for developing and implementing efficient and effective DL technologies across DoD;			
• Partnered across DoD and other government agencies to support LS&T, enable knowledge sharing and coordinated investment			
of resources to reduce cost of training;			

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FY 2016 FY 2017

FY 2018

Appropriation/Budget Activity 0400 / 3	R-1 Program Element (Number/Name) PE 0603769SE I Distributed Learning Advanced Technology Development (ADL)		ct (Number/I et 1 / Advance	er/Name) nced Distributed Learni		
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2016	FY 2017	FY 2018	
<ul> <li>Led policy and standards discussions to improve developed</li> </ul>	nent, dissemination, and use of DL methodologies;					
• Facilitated transition, acceptance and adoption of new LS8	kT by DoD and other agencies via policy, communication and trar	nsition				
support;						
• Supported the White House educational initiatives as the D	OoD representative to the Learning Registry and Federal Game G	uild.				

**Accomplishments/Planned Programs Subtotals** 

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

N/A

#### Remarks

within DoD:

## D. Acquisition Strategy

more discoverable and retrievable

Not Required.

## **E. Performance Metrics**

In FY 2016. ADL has:

1. Delivered the next version of the xAPI, which is the first component of the TLA.

Exhibit R-2A, RDT&E Project Justification: FY 2018 DoD Human Resources Activity

Participated in NATO Training Group to influence global standardization of training.
Continued to support the Services investment in developing/maintaining SCORM content.

Continued to increase sharing of learning content among DoD and other Federal Agencies by making educational resources

• Continued to advocate open source initiatives by increasing awareness of open source and licensing policies.

• Provided best practices and lessons learned in the use of mobile devices and cloud services in support of training and education

- 2. Published results on initial field testing of a life-long learning assistant.
- 3. Influenced key Service and International ADL meetings and conference reference the discovery, sharing and delivery of interoperable training content;
- 4. Increased the sharing of data among DoD, other Federal Agencies and state and local education departments throughout the U.S., by making educational resources discoverable and retrievable and also through the open source initiative.
- 5. Evaluated an Intelligent Tutor with the intent to determine the utilization of this technology for DoDEA.

**Date:** May 2017

10.399