| Exhibit R-2, RDT&E Budget Item Justification: PB 2012 DoD Human Resources Activity | DATE: February 2011 |
|---|---|

| APPROPRIATION/BUDGET ACTIVITY<br>0400: *Research, Development, Test & Evaluation, Defense-Wide*<br>BA 3: *Advanced Technology Development (ATD)* | R-1 ITEM NOMENCLATURE<br>PE 0603769SE: *Distributed Learning Advanced Technology Development (ADL)* |
|---|---|

| 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 | 13.744 | 13.986 | 13.579 | - | 13.579 | 13.443 | 13.398 | 13.357 | 13.586 | Continuing | Continuing |
| Project 1: *Advanced Distributed Learning* | 13.744 | 13.986 | 13.579 | - | 13.579 | 13.443 | 13.398 | 13.357 | 13.586 | Continuing | Continuing |

## A. Mission Description and Budget Item Justification

The Department of Defense Human Resources Activity (DHRA) is a DoD-wide Field Activity chartered to support the Under Secretary of Defense for Personnel and Readiness (USD (P&R)).

Advanced Distributed Learning (ADL): This program develops the technologies to make learning and performance support available to service members, anytime, anywhere.  The ADL concept enables the ability to migrate online learning content to multiple hardware and software applications using the Sharable Content Object Reference Model (SCORM) standard.  It has become the de facto standard and is moving through international bodies for global accreditation; its use is mandatory throughout the Department of Defense through (DoD Instruction 1322.26).  The program continues to develop US and international partnerships with public education, vocational training, and life-long learning programs.  Policy oversight is managed by the Office of the Deputy Under Secretary of Defense/Readiness (Readiness and Training Policy and Programs).  Recent work has established a single registry where all online learning content developed by the Department can be discovered for reuse.  A fourth edition of SCORM was released in May 2009.  In FY2010, guidelines for integrating technical manuals to SCORM will be published and a strategic plan will be in place to incorporate advances from social networking and other "Web 2.0" technologies into the ADL framework.

| B. Program Change Summary ($ in Millions) | FY 2010 | FY 2011 | FY 2012 Base | FY 2012 OCO | FY 2012 Total |
|---|---|---|---|---|---|
| Previous President's Budget | 13.744 | 13.986 | - | - | - |
| Current President's Budget | 13.744 | 13.986 | 13.579 | - | 13.579 |
| Total Adjustments | - | - | 13.579 | - | 13.579 |
| • Congressional General Reductions | | - | | | |
| • Congressional Directed Reductions | | - | | | |
| • Congressional Rescissions | - | - | | | |
| • Congressional Adds | | - | | | |
| • Congressional Directed Transfers | | - | | | |
| • Reprogrammings | - | - | | | |
| • SBIR/STTR Transfer | - | - | | | |
| • Advanced Distributed Learning | - | - | 13.579 | - | 13.579 |

| Exhibit R-2A, RDT&E Project Justification: PB 2012 DoD Human Resources Activity | | DATE: February 2011 |
|---|---|---|

| APPROPRIATION/BUDGET ACTIVITY<br>0400: *Research, Development, Test & Evaluation, Defense-Wide*<br>BA 3: *Advanced Technology Development (ATD)* | R-1 ITEM NOMENCLATURE<br>PE 0603769SE: *Distributed Learning Advanced Technology Development (ADL)* | PROJECT<br>Project 1: *Advanced Distributed Learning* |
|---|---|---|

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Project 1: *Advanced Distributed Learning* | 13.744 | 13.986 | 13.579 | - | 13.579 | 13.443 | 13.398 | 13.357 | 13.586 | Continuing | Continuing |

### A. Mission Description and Budget Item Justification

This program develops the technologies to make learning and performance support available to service members, anytime, anywhere.  The ADL concept supports the ability to migrate online learning content to multiple hardware and software applications using the Sharable Content Object Reference Model (SCORM) standard developed earlier.  It has become the de facto standard and is moving through international bodies for global accreditation; it is the declared standard within the Department of Defense.  The program continues to develop US and international partnerships with public education, vocational training, and life-long learning programs.  Policy oversight is managed by the Office of the Deputy Under Secretary of Defense/Readiness (Readiness and Training Policy and Programs).  In FY2010, guidelines for integrating technical manuals to SCORM will be published and a strategic plan will be in place to incorporate advances from social networking and other "Web 2.0" technologies into the ADL framework.  In FY2011, virtual-world technologies will be incorporated through collaboration with industry and academia.

| B. Accomplishments/Planned Programs ($ in Millions) | FY 2010 | FY 2011 | FY 2012 |
|---|---|---|---|
| *Title:* Advanced Distributed Learning | 13.744 | 13.986 | 13.579 |

*Description:* Advanced Distributed Learning

*FY 2010 Accomplishments:*
•          Continue to published research articles in leading professional journals on the effectiveness of online learning compared to classroom training
• Continue to test advanced instructional methods using intelligent tutors for training Horn-of-Africa scenarios at the Joint Forces Command.
• Continue to complete specifications for bridging technical publications to the SCORM model

*FY 2011 Plans:*
•          Continue to published research articles in leading professional journals on the effectiveness of online learning compared to classroom training
• Continue to test advanced instructional methods using intelligent tutors for training Horn-of-Africa scenarios at the Joint Forces Command.
• Continue to complete specifications for bridging technical publications to the SCORM model

*FY 2012 Plans:*
•          Develop, study, and publish research articles on the effectiveness and efficiency of online learning:
•          Test and prototype advance instructional methods and new learning technologies to improve DoD training capabilities

| Exhibit R-2A, RDT&E Project Justification: PB 2012 DoD Human Resources Activity | | DATE: February 2011 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>0400: *Research, Development, Test & Evaluation, Defense-Wide*<br>BA 3: *Advanced Technology Development (ATD)* | R-1 ITEM NOMENCLATURE<br>PE 0603769SE: *Distributed Learning Advanced Technology Development (ADL)* | PROJECT<br>Project 1: *Advanced Distributed Learning* |

| B. Accomplishments/Planned Programs ($ in Millions) | FY 2010 | FY 2011 | FY 2012 |
|---|---|---|---|
| • Deploy the new SCORM standard to provide DoD with the ability for reuse and repurposing of new learning technologies into training content | | | |
| **Accomplishments/Planned Programs Subtotals** | 13.744 | 13.986 | 13.579 |

**C. Other Program Funding Summary ($ in Millions)**

N/A

**D. Acquisition Strategy**

Not Required.

**E. Performance Metrics**

By FY 2010, 2,500 online courses will conform to a SCORM format.  By FY 2011, 4,000 online courses will be SCORM-conformant.  Each course comprises a sequence of learning objects (also known as content packages).  By FY 2010, a minimum of 10,000 online learning objects will be registered in the ADL Registry; by FY 2011, 50,000; and by FY 2012, 100,000 learning objects will be registered.   Published reports will demonstrate a reduction in time to train of 35% or greater using ADL technologies in comparison to a comparable classroom course.