

| Exhibit R-2, RDT&E Budget Item Justification | | | | | | | DATE: February 2003 | |
|---|------|------|--------|--------|--|--------|---------------------|--------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07 | | | | | R-1 ITEM NOMENCLATURE Net-Centric Enterprise Services (NCES)/PE0303170K | | | |
| COST (in millions) | FY02 | FY03 | FY04 | FY05 | FY06 | FY07 | FY08 | FY09 |
| Total Program Element (PE) | 0 | 0 | 40.830 | 52.193 | 65.577 | 50.108 | 47.289 | 45.560 |
| Net-Centric Enterprise Services (NCES)/T57 | 0 | 0 | 40.830 | 52.193 | 65.577 | 50.108 | 47.289 | 45.560 |

A. Mission Description and Budget Item Justification:

This project provides for the baseline infrastructure of a network centric approach supporting the Global Information Grid (GIG) requirements for communities of interest capabilities within the DoD. Based on DoD Transformation objectives, these components will provide the services necessary for all echelons of command to better utilize the network for the rapid decision processing necessary to support operations anywhere, anytime, by any user with privileges on the DoD network. Products for this effort will change the way warfighters receive and process information today. The user will be able to rapidly leverage communities of interest data producers and their release of real-time data to a global data repository for general consumption and decision-making. This availability of information will enable a more effective speed of command execution of command and control within a given theatre of operations as well as expanding the services for all users to access the net information whether it is the warfighter or the business management of data in the Department. Other products will include the enabling of technology to allow the access of information to a multitude of appliances such as PDAs, Cell phones, and other more personal computing devices. In addition, Net-Centric Enterprise Services (NCES) will focus on implementing an open community process, which may include open source, to allow capability developers the flexibility they need to configure the infrastructure to meet their needs. This program element is under Budget Activity 7 because it supports operational systems development.

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| COST (in millions) | FY02 | FY03 | FY04 | FY05 | FY06 | FY07 | FY08 | FY09 |
| Project Cost | 0 | 0 | 40.830 | 52.193 | 65.577 | 50.108 | 47.289 | 45.560 |
| <u>Accomplishments/Planned Program:</u> | | | | | | | | |
| | <u>FY 02</u> | <u>FY 03</u> | <u>FY 04</u> | <u>FY 05</u> | | | | |
| Subtotal Cost | 0 | 0 | 15.107 | 25.574 | | | | |
| <p>Runtime Services for Net-Centric Computing: Net-Centric runtime services enable the net user to take full advantage of the information and services available across networks. The services focus not only on the warfighter ability to easily discover, retrieve and manage information needed for their mission, but also facilitates publication by information producers. These services provide the backbone for information superiority within the various echelons of command within our Joint Forces as well as our Coalition partners. FY05 funding increase supports accelerated engineering development of various runtime capabilities. FY04 - FY05 funds will be used for:</p> <ul style="list-style-type: none"> - Runtime Post and Subscribe capabilities within the network - Runtime Search and Discovery of information within the network - Runtime repository for information - Secure access and authentication to information on the network - Robust messaging for seamless exchange of email and instant messages in support of collaboration - Use of intelligent agent technology to provide user assistance for gathering of mission critical information - Interactive collaboration for users within and across communities of interest - Cross domain access of information (e.g., SIPRNET to NIPRNET data exchange to include Coalition data exchange) - Tools for network information resource metadata collection, storage, management and vending - Posting and subscribing to information from real-time combat system and Intelligence, Surveillance, and Reconnaissance (ISR) assets and sensors, and command and control situational awareness | | | | | | | | |
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| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07 | | | | | R-1 ITEM NOMENCLATURE Net-Centric Enterprise Services (NCES)/PE0303170K | | | |
| COST (in millions) | FY02 | FY03 | FY04 | FY05 | FY06 | FY07 | FY08 | FY09 |
| Project Cost | 0 | 0 | 40.830 | 52.193 | 65.577 | 50.108 | 47.289 | 45.560 |
| Subtotal Cost | <u>FY 02</u> 0 | <u>FY 03</u> 0 | <u>FY 04</u> 8.166 | <u>FY 05</u> 9.395 | | | | |
| <p>Build-time Services for Net-Centric Computing:</p> <p>Net-Centric build-time services enable the developers of capability to take full advantage of the information and services within their span of control to rapidly add capabilities to the Global Information Grid (GIG). The build-time environment will provide the tools and environment necessary to focus on producing capability and enhancing infrastructure to the GIG and its various Communities of Interest (COI). These services provide:</p> <ul style="list-style-type: none"> - Build-time environment for adding capabilities within architecturally approved platforms and the network - Build-time specifications to reach key metadata and ontologies for the build-time DoD registry for normalizing intercommunications between communities of interest - Registration of COI Extensible Mark-up Language (XML) representations of information to enable data exchange throughout the DoD - Tools for the rapid development, validation, and enhancements of services within NCES - Open community process for linking development efforts of other Services and Agencies net-centric development activities - Architectural guidance for developers of net services capabilities - Specifications and life cycle maintenance for NCES interfaces in support of developers of net capabilities - Tools to transition legacy Common Operating Environment (COE)-based programs into a net-centric capabilities based implementation - Provide an organic capability to visualize JTF information operations and flows - Provide ubiquitous infrastructure for user authentication and authorization | | | | | | | | |

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| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07 | | | | | R-1 ITEM NOMENCLATURE Net-Centric Enterprise Services (NCES)/PE0303170K | | | |
| COST (in millions) | FY02 | FY03 | FY04 | FY05 | FY06 | FY07 | FY08 | FY09 |
| Project Cost | 0 | 0 | 40.830 | 52.193 | 65.577 | 50.108 | 47.289 | 45.560 |
| Subtotal Cost | <u>FY 02</u> 0 | <u>FY 03</u> 0 | <u>FY 04</u> 9.799 | <u>FY 05</u> 10.439 | | | | |
| <p>User Services and Program Coordination:</p> <p>User services enable the user to pull any needed information when and where needed from any user appliance. The users must have the ability to pull that information and render it on a display device in a consistent but progressive way (e.g., a cell phone is not expected to have the fidelity of a personal computing workstation). The infrastructure of the network must take this into account and be able to scale the information depending upon the appliance in use. Services and Agencies have initiated efforts consistent with the NCES concept. Coordination of these efforts between various sponsors will assist in transforming consistently across the enterprise. These types of services will provide:</p> <ul style="list-style-type: none"> - Services to include progressive content delivery to the various types of user appliances - Adoption of commercial wireless initiatives for delivery of information to users - Common adaptable commercial tools for integrated information and collaboration between different appliances - Adoption of commercial products to support user visualization - Coordination and assistance for introducing net services capabilities in conjunction with Service and Agency initiatives - Validation of requirements through coordinated Joint testing - Customer interaction through technical and coordination exchanges with COIs developing to the NCES environment - Coordinated management of NCES baseline with spiral capability introduction and blocking of capabilities | | | | | | | | |

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| APPROPRIATION/BUDGET ACTIVITY | | | | | R-1 ITEM NOMENCLATURE | | | |
| RDT&E, Defense-Wide/07 | | | | | Net-Centric Enterprise Services (NCES)/PE0303170K | | | |
| COST (in millions) | FY02 | FY03 | FY04 | FY05 | FY06 | FY07 | FY08 | FY09 |
| Project Cost | 0 | 0 | 40.830 | 52.193 | 65.577 | 50.108 | 47.289 | 45.560 |
| Subtotal Cost | <u>FY 02</u> 0 | <u>FY 03</u> 0 | <u>FY 04</u> 7.758 | <u>FY 05</u> 6.785 | | | | |
| <p>Platform and Web Services:</p> <p>The definition of the platform has shifted from the hardware operating systems of old to the software platform and its support for the enterprise computing environments. The new platforms will provide the flexibility for transitioning our legacy applications into an enterprise-networking environment while preserving their functional capabilities to the end user for multitude of Department capabilities whether it's command and control or financial management. These types of services will provide:</p> <ul style="list-style-type: none"> - Ubiquitous computing platform available to any hardware configuration to host our web services and other community of interest service capabilities - Development of common software platform for hosting of horizontal fusion capabilities - Componentization of legacy applications as required to support rapid addition of future warfighting and business needs; this allows for incremental addition without massive change-out of capabilities. - Development of application environment capable of rapid reconfiguration, graceful degradation and load balancing for managing network data content shifts - Content management mechanisms to shape to available bandwidth (operational versus tactical data pull) - Guards and Gateways for exchanging information between other Federal Agencies, in support of Homeland Defense, and Coalition partners - Rapid insertion of commercial technologies as this matures in the commercial marketplace - Rapid insertion of technologies initiated within the Science and Technology initiatives of DoD such as ACTD and ATDs | | | | | | | | |

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| APPROPRIATION/BUDGET ACTIVITY | | | | R-1 ITEM NOMENCLATURE | | | | | | |
| RDT&E, Defense-Wide/07 | | | | Net-Centric Enterprise Services (NCES)/PE0303170K | | | | | | |
| COST (in millions) | FY02 | FY03 | FY04 | FY05 | FY06 | FY07 | FY08 | FY09 | | |
| Project Cost | 0 | 0 | 40.830 | 52.193 | 65.577 | 50.108 | 47.289 | 45.560 | | |
| B. <u>Program Change Summary:</u> | | | | | | | | | | |
| | | | <u>FY 02</u> | <u>FY 03</u> | <u>FY 04</u> | <u>FY 05</u> | | | | |
| Previous President's Budget | | | 0 | 0 | 0 | 0 | | | | |
| Current President's Budget | | | 0 | 0 | 40.830 | 52.193 | | | | |
| Total Adjustments | | | 0 | 0 | +40.830 | +52.193 | | | | |
| Change Summary Explanation: | | | | | | | | | | |
| FY 2004 adjustment due to New Start. | | | | | | | | | | |
| C. <u>Other Program Funding Summary:</u> | | | | | | | | | | |
| | <u>FY02</u> | <u>FY03</u> | <u>FY04</u> | <u>FY05</u> | <u>FY06</u> | <u>FY07</u> | <u>FY08</u> | <u>FY09</u> | <u>To Complete</u> | <u>Total Cost</u> |
| O&M, DW | 0.000 | 0.000 | 0.000 | 4.486 | 12.914 | 14.255 | 20.101 | 28.056 | Contg | Contg |
| O&M, DW * | <u>FY02</u> | <u>FY03</u> | <u>FY04</u> | <u>FY05</u> | <u>FY06</u> | <u>FY07</u> | <u>FY08</u> | <u>FY09</u> | <u>To Complete</u> | <u>Total Cost</u> |
| (PE0303019K) | 0.000 | 0.000 | 4.467 | 4.847 | 5.526 | 7.210 | 7.372 | 7.537 | Contg | Contg |
| * Civilian Pay | | | | | | | | | | |
| D. <u>Acquisition Strategy:</u> | | | | | | | | | | |
| Will make use of MITRE engineering support. | | | | | | | | | | |
| Jet Propulsion Laboratory (JPL) will provide engineering support. | | | | | | | | | | |
| DISA Next Generation contract vehicle will be used for development and integration of capabilities. | | | | | | | | | | |
| DISA GEMS contract will be used for program support. | | | | | | | | | | |
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| Exhibit R-3 Cost Analysis | DATE: February 2003 |
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| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07 | PROGRAM ELEMENT Net-Centric Enterprise Services (NCES)/PE0303170K | PROJECT NAME AND NUMBER Net-Centric Enterprise Services (NCES)/T57 |
|--|--|--|

| Cost Category | Contract Method & Type | Performing Activity & Location | Total PYs Cost | FY 03 Cost | FY 03 Award Date | FY 04 Cost | FY 04 Award Date | FY 05 Cost | FY 05 Award Date | Cost To Complete | Total Cost | Target Value of Contract |
|--|------------------------|---|----------------|------------|------------------|------------|------------------|------------|------------------|------------------|------------|--------------------------|
| Sys Engr Svcs | OTF&O | MITRE McLean, VA | 0 | 0 | N/A | 1.500 | Oct 03 | 1.650 | Oct 04 | Contg | Contg | 3.150 |
| Engr/Tech Svcs | MOA | Jet Propulsion Lab (JPL) San Diego, CA | 0 | 0 | N/A | 0.950 | Oct 03 | 1.025 | Oct 04 | Contg | Contg | 1.975 |
| Sys Test Svcs | MOA | SPAWAR San Diego, CA | 0 | 0 | N/A | 0.500 | Oct 03 | 0.650 | Oct 04 | Contg | Contg | 1.150 |
| Engineering/Tech Svcs | Comp/TBD | TBD | 0 | 0 | N/A | 29.230 | Various | 39.443 | Various | Contg | Contg | 68.673 |
| DISA Next Generation Contracts Program Spt | Comp/TBD | TBD | 0 | 0 | N/A | 2.700 | Various | 2.850 | Various | Contg | Contg | 5.550 |
| DISA GEM Contracts | Comp/TBD | TBD | 0 | 0 | N/A | 5.950 | Various | 6.575 | Various | Contg | Contg | 12.525 |
| Other | Comp/TBD | TBD | 0 | 0 | N/A | | | | | | | |
| Total | | | | | | 40.830 | | 52.193 | | | | |

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| Exhibit R-4 Schedule Profile | | | | | | | | | | | | | Date: February 2003 | | | | | | | | | | | | | | | | | | | | | | | | |
|--|------|---|---|--|------|---|---|---|------|---|---|---|---------------------|---|---|---|------|---|---|---|------|---|---|---|------|---|---|---|------|---|---|---|--|--|--|--|--|
| Appropriation/Budget Activity RDT&E, Defense -Wide/07 | | | | Net-Centric Enterprise Services (NCES)/PE0303170K | | | | | | | | | | | | Net-Centric Enterprise Services (NCES) / T57 | | | | | | | | | | | | | | | | | | | | | |
| Fiscal Year | 2002 | | | | 2003 | | | | 2004 | | | | 2005 | | | | 2006 | | | | 2007 | | | | 2008 | | | | 2009 | | | | | | | | |
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | | | | | |
| NCES Spiral 1 Blk1 | | | | | | | | | | △ | △ | △ | △ | | | | | | | | | | | | | | | | | | | | | | | | |
| NCES Spiral 2 Blk1 | | | | | | | | | | | △ | △ | △ | △ | △ | | | | | | | | | | | | | | | | | | | | | | |
| NCES Spiral 3 Blk1 | | | | | | | | | | | | | △ | △ | △ | △ | | | | | | | | | | | | | | | | | | | | | |
| NCES Blk1 | | | | | | | | | | | | | | | | | △ | △ | △ | | | | | | | | | | | | | | | | | | |
| NCES Spiral 1 Blk2 | | | | | | | | | | | | | | | | | △ | △ | △ | △ | △ | | | | | | | | | | | | | | | | |
| NCES Spiral 2 Blk2 | | | | | | | | | | | | | | | | | | | | | △ | △ | △ | △ | | | | | | | | | | | | | |
| NCES Spiral 3 Blk2 | | | | | | | | | | | | | | | | | | | | | | △ | △ | △ | | | | | | | | | | | | | |
| NCES Blk2 | | | | | | | | | | | | | | | | | | | | | | | △ | △ | △ | | | | | | | | | | | | |

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| Exhibit R-4a Schedule Detail | | | | | | | DATE: February 2003 | | |
|--|--|---------|---------|---------|--|---------|---------------------|---------|--|
| APPROPRIATION/BUDGET ACTIVITY | PROGRAM ELEMENT | | | | PROJECT NAME AND NUMBER | | | | |
| RDT&E, Defense-Wide/07 | Net-Centric Enterprise Services (NCES)/PE0303170K | | | | Net-Centric Enterprise Services (NCES)/T57 | | | | |
| Schedule Profile | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | |
| Network Centric Enterprise Services (NCES) Spiral 1 Block 1 | | | | | | | | | |
| - Architecture Definition | | | 2-3Q | | | | | | |
| - Development | | | 3-4Q | | | | | | |
| - Testing | | | 4Q | | | | | | |
| - Release | | | | 1Q | | | | | |
| NCES Spiral 2 Block 1 | | | | | | | | | |
| Architecture Definition | | | 3-4Q | | | | | | |
| Development | | | 4Q | 1-2Q | | | | | |
| Testing | | | | 2Q | | | | | |
| Release | | | | 3Q | | | | | |
| NCES Spiral 3 Block 1 | | | | | | | | | |
| Architecture Definition | | | | 1-2Q | | | | | |
| Development | | | | 2-3Q | | | | | |
| Testing | | | | 3-4Q | | | | | |
| Release | | | | 4Q | | | | | |
| NCES Block 1 | | | | | | | | | |
| Architecture Definition | | | | | 1Q | | | | |
| Development | | | | | 1-2Q | | | | |
| Testing | | | | | 2Q | | | | |
| Release | | | | | 3Q | | | | |

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| Exhibit R-4a Schedule Detail | | | | | | | DATE: February 2003 | |
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| APPROPRIATION/BUDGET ACTIVITY | PROGRAM ELEMENT | | | | | PROJECT NAME AND NUMBER | | |
| RDT&E, Defense-Wide/07 | Net-Centric Enterprise Services/PE0303170K | | | | | Net-Centric Enterprise Services (NCES)/T57 | | |
| Schedule Profile | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 |
| NCES Spiral 1 Block 2 | | | | | | | | |
| Architecture Definition | | | | 4Q | | | | |
| Development | | | | 4Q | 1-3Q | | | |
| Testing | | | | | 3Q | | | |
| Release | | | | | 4Q | | | |
| NCES Spiral 2 Block 2 | | | | | | | | |
| Architecture Definition | | | | | 4Q | | | |
| Development | | | | | | 1-3Q | | |
| Testing | | | | | | 3Q | | |
| Release | | | | | | 3Q | | |
| NCES Spiral 3 Block 2 | | | | | | | | |
| Architecture Definition | | | | | | 2Q | | |
| Development | | | | | | 2-4Q | | |
| Testing | | | | | | 4Q | | |
| Release | | | | | | 4Q | | |
| NCES Block 2 | | | | | | | | |
| Architecture Definition | | | | | | 4Q | | |
| Development | | | | | | 4Q | 1-2Q | |
| Testing | | | | | | | 2Q | |
| Release | | | | | | | 2Q | |

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