ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)

February 2003

BUDGET ACTIVITY	PE NUMBER AND TITLE
7 - Operational system development	**0208010A - Joint Tactical Communications Program (TRI-TAC)**

COST (In Thousands)	FY 2002 Actual	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total Cost
Total Program Element (PE) Cost	25614	13506	16543	18664	16981	17421	22813	23219	Continuing	Continuing
01D TACTICAL INTERNET MANAGEMENT SYSTEM	0	4673	7696	9642	9804	10288	16230	17144	Continuing	Continuing
107 ISYSCON DEVELOPMENT	25614	8833	8847	9022	7177	7133	6583	6075	Continuing	Continuing

A. Mission Description and Budget Item Justification:A requirement exists to automate Signal Corps units' capability to manage multiple tactical communications systems in support of battlefield operations. The Integrated System Control (ISYSCON) facility will provide centralized managemenet of the tactical communications network, establish an interface with each technical control facility in the Army Battlefield Command System (ABCS) architecture, and enable automated configuration and management in a dynamic battlefield data network, provided by MSE and the ACUS MOD Programs. ISYSCON is being developed with incremental software releases to support blocked requirements in accordance with the ORD. The ISYSCON Program serves as a baseline foundation to support future network management initiatives tied to and part of the digitized division and the Warfighter Information Network (WIN) Architecture.

The ISYSCON (V)4 Tactical Internet Management System (TIMS) is also being developed to facilitate network planning and management of the Tactical Internet at Brigade and Below, as well as the Tactical Operations Centers (TOC) and Command Posts (CP) Local Area Network (LAN) at all required Echelons.

This system supports the Legacy transition path of the Transformation Campaign Plan (TCP).

0208010A
Joint Tactical Communications Program (TRI-TAC)

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Budget Item Justification

| BUDGET ACTIVITY
7 - Operational system development | PE NUMBER AND TITLE
0208010A - Joint Tactical Communications Program (TRI-TAC) |

B. Program Change Summary	FY 2002	FY 2003	FY 2004	FY 2005
Previous President's Budget (FY 2003)	21428	14121	10822	10667
Current Budget (FY 2004/2005 PB)	25614	13506	16543	18664
Total Adjustments	4186	-615	5721	7997
Congressional program reductions				
Congressional rescissions		-154		
Congressional increases				
Reprogrammings	4186	-78		
SBIR/STTR Transfer		-383		
Adjustments to Budget Years			5721	7997

FY02 $4.186M Reprogrammed from 363 JNMS to 01D ISYSCON/TIMS(V)4 to support Block 4 Software (SW) Development.

FY04 Adjustment reflects: $1M plus up for 01D TIMS (V)4 to support Block 5 SW Development, $2.2M realigned from OPA to RDT&E TIMS to finance a rescheduled Joint Initial Operational Test and Evaluation (IOT&E), and $2.8M plus up for D107 ISYSCON (V)1&2 for SW Development Block 3.

FY05 Adjustment reflects plus up for 01D TIMS (V)4 to support Block 5 SW Development.

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Joint Tactical Communications Program (TRI-TAC)

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ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2A Exhibit)

February 2003

BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
7 - Operational system development	**0208010A - Joint Tactical Communications Program (TRI-TAC)**	**01D**

COST (In Thousands)	FY 2002 Actual	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total Cost
01D TACTICAL INTERNET MANAGEMENT SYSTEM	0	4673	7696	9642	9804	10288	16230	17144	Continuing	Continuing

A. Mission Description and Budget Item Justification: - Army's communication planning and engineering system for current, future, and contingency operations, brigade and below
- Manage Local Area Networks (LANs) devices, battalion through theater
- Performs network device management functions critical for Army Battle Command Systems (ABCS) and Force XX1 Battle Command, Brigade and Below (FBCB2)
- Located at Tactical Operation Centers (TOCs) and Command Posts (CPs)
- In FY03, funding transitioned to Project 01D from ISYSCON (V)1/(V)2 Project D107
- The TIMS system supports the Legacy transition path of the Transformation Campaign Plan (TCP)

Accomplishments/Planned Program	FY 2002	FY 2003	FY 2004	FY 2005
Requirement Analysis, System Engineering, and Software Development Blk 4	0	4673	0	0
Test & Evaluation Blk 4	0	0	2200	0
Requirement Analysis, System Engineering, and Software Development Blk 5	0	0	5496	7222
Test & Evaluation Blk 5	0	0	0	2420
Totals	0	4673	7696	9642

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2A Exhibit)

February 2003

BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
7 - Operational system development	**0208010A - Joint Tactical Communications Program (TRI-TAC)**	**01D**

B. Other Program Funding Summary	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Compl	Total Cost
B93900 TIMS	0	11522	8321	11449	14359	5800	6033	6443	Continuing	Continuing

C. Acquisition Strategy: The Tactical Internet Management System (ISYSCON (V)4/TIMS) was developed from Army Warfighter Experiments that showed tactical network management and planning to be extremely time consuming. A DD-2028 change to the ISYSCON Requirement Operational Capability (ROC) identified the need for Tactical Internet and Tactical Operation Command (TI and TOC) Local Area Network management. In Mar 99, PDM, Communications Systems Management (CMS) signed a delivery order under the PM, Force XXI Battle Command Brigade and Below (FBCB2) contract with TRW in response to the DD-2028 requirements. TIMS provides the necessary network management functions for FBCB2 and Army Battle Command System (ABCS). An Operational Requirements Document (ORD), superceding the ISYSCON ROC/2028 Change, was approved in May 02. Release 1 of TIMS software was formally tested at the contractor's facility prior to the FBCB2 Customer Test (Apr 00). Release 2.1 was used for the FBCB2 Limited User Test 2 (DCX-1). Release 2.2F was assessed at TIMS LUT2A in Dec 01. Release 2.5 was assessed at Field Test 5 (Sep 02) and was the Block 4 production representative S/W version scheduled to be tested at IOT&E. Milestone C Limited Deployment was approved June 21, 2001 and amended June 17, 2002 to reflect a combined FBCB2 and Maneuver Contol System (MCS) IOT&E originally scheduled for 3QFY03. Based on real world requirements the combined IOT&E has been postponed and is targeted to occur in FY04. Therefore, FRP IPR and MR dates are tentatively scheduled in FY05. Current TIMS Limited Deployment Decision is to field release 2.5 to III Corps elements and SBCTs.

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TACTICAL INTERNET MANAGEMENT SYSTEM

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Exhibit R-2A
Budget Item Justification

	ARMY RDT&E COST ANALYSIS(R-3)	February 2003

BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
7 - Operational system development	**0208010A - Joint Tactical Communications Program (TRI-TAC)**	**01D**

I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2003 Cost	FY 2003 Award Date	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . TIMS Software Development	CPIF	TRW, Carson, CA	0	2519	2Q	4306	2Q	5922	2Q	Continue	12747	0
Subtotal:			0	2519		4306		5922		Continue	12747	0

II. Support Cost	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2003 Cost	FY 2003 Award Date	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . TIMS Contractor Engr	MIPR/PWD	Various	0	364	2Q	310	2Q	390	2Q	Continue	Continue	0
b . TIMS Government Engr	MIPR	Various	0	540	2Q	630	2Q	660	2Q	Continue	Continue	0
Subtotal:			0	904		940		1050		Continue	Continue	0

0208010A (01D)
TACTICAL INTERNET MANAGEMENT SYSTEM

Exhibit R-3
Cost Analysis

ARMY RDT&E COST ANALYSIS(R-3)

February 2003

BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
7 - Operational system development	**0208010A - Joint Tactical Communications Program (TRI-TAC)**	**01D**

III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2003 Cost	FY 2003 Award Date	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . TIMS IOT&E	MIPR	AEC-Various	0	0		2200	2Q	0		0	2200	0
b . TIMS Block 5 OT	MIPR	AEC-Various	0	0		0		2420	2Q	0	2420	0
Subtotal:			0	0		2200		2420		0	4620	0

IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2003 Cost	FY 2003 Award Date	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . MITRE	MIPR/PWD	Eatontown, NJ	0	1250	2Q	250	2Q	250	2Q	Continue	Continue	0
Subtotal:			0	1250		250		250		Continue	Continue	0
Project Total Cost:			0	4673		7696		9642		Continue	Continue	0

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TACTICAL INTERNET MANAGEMENT SYSTEM

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Exhibit R-3
Cost Analysis

Schedule Profile Detail (R-4a Exhibit)

February 2003

BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
7 - Operational system development	**0208010A - Joint Tactical Communications Program (TRI-TAC)**	**01D**

Schedule Detail	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
TIMS Block 5 Award			2Q					
TIMS IOT&E			3Q					
TIMS Full Rate Production IPR				1Q				
TIMS Block 5 OT				3Q				
TIMS Material Release (IOC)				4Q				
TIMS Incremental Block 5 Releases					4Q	4Q	4Q	
TIMS Block 5 Operational Evaluations						3Q		3Q

0208010A (01D)
TACTICAL INTERNET MANAGEMENT SYSTEM

Exhibit R-4a
Budget Item Justification

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2A Exhibit)

February 2003

BUDGET ACTIVITY **7 - Operational system development**	PE NUMBER AND TITLE **0208010A - Joint Tactical Communications Program (TRI-TAC)**	PROJECT **107**

COST (In Thousands)	FY 2002 Actual	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total Cost
107 ISYSCON DEVELOPMENT	25614	8833	8847	9022	7177	7133	6583	6075	Continuing	Continuing

A. Mission Description and Budget Item Justification:- A requirement exists to provide Signal Corps units the automated capability to manage multiple tactical communication systems in support of dynamic battlefield operations.
 - The Integrated System Control (ISYSCON) facility provides automated tools for the Signal Staff to plan, install, operate and maintain communications networks.
 - ISYSCON will establis h an interface with technical control facilities in the Army Battlefield Command System (ABCS) architecture.
 - ISYSCON is following the Evolutionary Acquisition Strategy; software improvements/enhancements are being developed and fielded through incremental software releases.
 - The ISYSCON program serves as a baseline foundation to support future network management initiatives tied to and part of the digitized division and the Warfighter Information Network (WIN) architecture.
 - This program element will also interface with the WIN-Tactical Architecture and Network Management Facilities.

 - The ISYSCON (V)4 Tactical Internet Management System (TIMS) funding transitions to a new Project, 01D, within PE 208010A in FY03.

 - The ISYSCON supports the Legacy transition path of the Transformation Campaign Plan (TCP).

Accomplishments/Planned Program	FY 2002	FY 2003	FY 2004	FY 2005
Block 1 Enhancements (P2 Increment 1.5.2)	4311	0	0	0
Block 3 Development (P2 Increment 2.0)	6388	6292	900	0
Block 3 Development (P2 Increment 2.1)	0	0	7797	2093
Battlefield Spectrum Management Upgrade	2160	0	0	0
Army COMSEC Engineering System Interface	840	420	0	0
Block 6 Development (P2 Increment 3)	0	0	0	6779
System Security Accreditation	209	150	150	150
WIN-Tactical Network Management and Associated Activities	300	0	0	0
TIMS Conduct LUT2A (Release 2.2F)	765	0	0	0
TIMS Initiate Requirement & Analysis (Release 2.5)	630	0	0	0
TIMS Initiate Sys Engr (Release 2.5)	3586	0	0	0

BUDGET ACTIVITY **7 - Operational system development**	PE NUMBER AND TITLE **0208010A - Joint Tactical Communications Program (TRI-TAC)**	PROJECT **107**

Accomplishments/Planned Program (continued)	FY 2002	FY 2003	FY 2004	FY 2005
TIMS Initiate Software Development (Release 2.5)	4166	0	0	0
TIMS Conduct Test & Evaluation (Release 2.5)	2259	0	0	0
TIMS S/W Development	0	1971	0	0
Totals	25614	8833	8847	9022

B. Other Program Funding Summary	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Compl	Total Cost
BX0007 ISYSCON	32222	30518	21528	36375	3933	1510	0	0	0	213806
028010/01D Tactical Internet Management System	0	4833	7696	9642	9804	10288	16230	17144	Continuing	Continuing

C. Acquisition Strategy: Successful Milestone III - Feb 99 for ISYSCON (V)1 and (V)2. ISYSCON Phase 2 Increment 1 and later versions of software supports the fielding of production systems starting with echelon corps and below units. The ISYSCON ROC to ORD conversion was completed May 02 with the approval of the ISYSCON ORD. ISYSCON is following the Evolutionary Acquisition Strategy with Block upgrades for major functionality and incremental software releases for software maintenance and minor enhancements. The next Block Software Release provides Network Management for Echelons Above Corps (EAC) units. ISYSCON production systems include acquisition of Government Furnished Equipment (GFE) (Common Hardware and Software (CHS)/Standardized Integrated Command Post System (SICPS)) hardware for the integration into system assemblages and fielding.

Tactical Internet Management System (TIMS) - See 01D Exhibit R-2A in FY03 and beyond.

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ISYSCON DEVELOPMENT

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Budget Item Justification

ARMY RDT&E COST ANALYSIS(R-3)

February 2003

BUDGET ACTIVITY
7 - Operational system development

PE NUMBER AND TITLE
0208010A - Joint Tactical Communications Program (TRI-TAC)

PROJECT
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I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2003 Cost	FY 2003 Award Date	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . ISYS SW Development	CPAF/CPFF	GDC4S, Taunton, MA	127325	5590	2Q	7501	2Q	7204	2Q	Continue	Continue	0
b . TI MGR (1) Software Development	IDIQ	Raytheon, Fullerton, CA	650	0		0		0		0	650	0
c . TI MGR (2) Software Development	CPFF/TM/ CPIF	TRW, Carson, CA	29687	1971	2Q	0		0		0	31658	0
d . JNMS Development	CPFF/TM/ FFP	SAIC, McLean, VA	10408	0		0		0		0	10408	0
Subtotal:			168070	7561		7501		7204		Continue	Continue	0

II. Support Cost	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2003 Cost	FY 2003 Award Date	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Subtotal:			0	0		0		0		0	0	0

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ISYSCON DEVELOPMENT

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Cost Analysis

ARMY RDT&E COST ANALYSIS(R-3)

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BUDGET ACTIVITY
7 - Operational system development

PE NUMBER AND TITLE
0208010A - Joint Tactical Communications Program (TRI-TAC)

PROJECT
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III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2003 Cost	FY 2003 Award Date	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . ISYS Test Support	MIPR	TEXCOM/APG/EPG	2950	200	2Q	88	2Q	533	2Q	Continue	Continue	0
b . ISYS Accreditation	MIPR	Software Engineering Center, CECOM, Fort Monmouth, NJ	350	125	2Q	147	2Q	144	2Q	Continue	Continue	0
c . TI MGR (V)4 Test Support	MIPR	TEXCOM/APG/EPG	1935	0		0		0		0	1935	c . 0
d . JNMS Accreditation	MIPR	Software Engineering Center, CECOM, Fort Monmouth, NJ	100	0		0		0		0	100	0
Subtotal:			5335	325		235		677		Continue	Continue	0

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ISYSCON DEVELOPMENT

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Cost Analysis

ARMY RDT&E COST ANALYSIS(R-3)

February 2003

BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
7 - Operational system development	**0208010A - Joint Tactical Communications Program (TRI-TAC)**	**107**

IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2003 Cost	FY 2003 Award Date	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . ISYS PM Support	MIPR	Various	33891	947	1Q	1111	1Q	1141	1Q	Continue	Continue	0
b . TI MGR PM Support	MIPR	Various	3138	0		0		0		0	3138	0
c . JNMS PM Support	MIPR	Various	1356	0		0		0		0	1356	0
Subtotal:			38385	947		1111		1141		Continue	Continue	0
Project Total Cost:			211790	8833		8847		9022		Continue	Continue	0

Schedule Profile Detail (R-4a Exhibit)

February 2003

BUDGET ACTIVITY
7 - Operational system development

PE NUMBER AND TITLE
0208010A - Joint Tactical Communications Program (TRI-TAC)

PROJECT
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Schedule Detail	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
TIMS LUT 2A Release 2.2F	1Q							
ISYSCON Block 3 Phase 2 - Increment 2.0 FQT		3Q						
ISYSCON Block 3 Phase 2 - Increment 2.1 Award			2Q					
ISYSCON Block 3 Phase 2 - Increment 2.1 FQT				4Q				
ISYSCON Block 3 Phase 2 - Increment 3.0 Award					2Q			
ISYSCON Block 3 Phase 2 - Increment 3.0 FQT						4Q		
ISYSCON Block 3 Phase 2 - Increment 3.1 Award							2Q	
ISYSCON FQT								4Q

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ISYSCON DEVELOPMENT

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