

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

February 2004

BUDGET ACTIVITY

7 - Operational system development

PE NUMBER AND TITLE

0208010A - Joint Tactical Communications Program
(TRI-TAC)

COST (In Thousands)	FY 2003 Actual	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	13281	16362	18177	16719	5877	1497	897	Continuing	Continuing
01D TACTICAL INTERNET MANAGEMENT SYSTEM	4601	7612	18168	16710	5867	1497	897	Continuing	Continuing
107 ISYSCON DEVELOPMENT	8680	8750	9	9	10	0	0	0	78495

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 management 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 Current Force transition path of the Transformation Campaign Plan (TCP).

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<u>B. Program Change Summary</u>	FY 2003	FY 2004	FY 2005
Previous President's Budget (FY 2004)	13506	16543	18664
Current Budget (FY 2005 PB)	13281	16362	18177
Total Adjustments	-225	-181	-487
Congressional program reductions		-155	
Congressional rescissions			
Congressional increases			
Reprogrammings	-225	-26	
SBIR/STTR Transfer			
Adjustments to Budget Years			-487

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 software 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 increase for 01D TIMS (V)4 to support Block 5 software development.

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2A Exhibit)							February 2004					
BUDGET ACTIVITY 7 - Operational system development				PE NUMBER AND TITLE 0208010A - Joint Tactical Communications Program (TRI-TAC)			PROJECT 01D					
COST (In Thousands)				FY 2003 Actual	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			4601	7612	18168	16710	5867	1497	897	Continuing	Continuing
<p><u>A. Mission Description and Budget Item Justification:-</u> Army's communication planning and engineering system for current, future, and contingency operations, brigade and below</p> <ul style="list-style-type: none"> - 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 Current Force transition path of the Transformation Campaign Plan (TCP) 												
<u>Accomplishments/Planned Program</u>									FY 2003	FY 2004	FY 2005	
Requirement Analysis, System Engineering, and Software Development Blk 4									4601	0	0	
Test & Evaluation Blk 4									0	556	700	
Requirement Analysis, System Engineering, and Software Development ABCS 6.4									0	6834	0	
Requirement Analysis, System Engineering Data Load, Data Maintenance "Must Have Beyond Good Enough" requirements									0	0	17468	
Small Business Innovative Research/Small Business Technology Transfer Programs									0	222	0	
Totals									4601	7612	18168	

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0208010A - Joint Tactical Communications
Program (TRI-TAC)

PROJECT
01D

B. Other Program Funding Summary

	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Compl	Total Cost
B93900 TIMS	12565	12967	11363	14142	8730	6360	0	0	66127

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. An Operational Requirements Document (ORD), superceding the ISYSCON ROC/2028 Change, was approved in May 02. Milestone C Limited Deployment was approved June 21, 2001 and amended June 17, 2002. Blocks 2 and 4 of the ISYSCON (V)4 ORD requirements have been deployed to 4ID, 1CD and SBCTs 1 & 2. The Block 5 KPP will be developed as part of the CSA approved ABCS 6.4 "Good Enough" initiative. The next ISYSCON (V)4 release will satisfy the CSA approved ABCS 6.4 "Good Enough" requirements. The release 6.4 IOTE will be conducted during the ABCS 6.4 Graduation exercise in early 1QFY05. FRP IPR and MR will follow in 2-3QFY05.

ARMY RDT&E COST ANALYSIS(R3)									February 2004			
BUDGET ACTIVITY 7 - Operational system development					PE NUMBER AND TITLE 0208010A - Joint Tactical Communications Program (TRI-TAC)					PROJECT 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	2447	2Q	6213	2Q	16168	2Q	Continue	24828	0
Subtotal:			0	2447		6213		16168		Continue	24828	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	100	2Q	390	2Q	Continue	854	0
b . TIMS Government Engr	MIPR	Various	0	540	2Q	487	2Q	660	2Q	Continue	1687	0
Subtotal:			0	904		587		1050		Continue	2541	0

ARMY RDT&E COST ANALYSIS(R3)									February 2004			
BUDGET ACTIVITY 7 - Operational system development					PE NUMBER AND TITLE 0208010A - Joint Tactical Communications Program (TRI-TAC)					PROJECT 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		556	2Q	700	1Q	0	1256	0
Subtotal:			0	0		556		700		0	1256	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	256	2Q	250	2Q	Continue	1756	0
Subtotal:			0	1250		256		250		Continue	1756	0
Project Total Cost:			0	4601		7612		18168		Continue	30381	0

Schedule Profile (R4 Exhibit)	February 2004
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February 2004

BUDGET ACTIVITY
7 - Operational system development

PE NUMBER AND TITLE	PROJECT
0208010A - Joint Tactical Communications Program (TRI-TAC)	01D

01D

Event Name	FY 02				FY 03				FY 04				FY 05				FY 06				FY 07				FY 08				FY 09			
	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) Full Rate Prod IPR														1																		
(2) CSA Approved ORD, (3) Mat'l Rel/Init Oper Capab			2												3																	
ISYSCON V(4)/TIMS Build Schedule																																
(4) Block 4, (5) Block 5, (6) Block 5							4						5							6												
								V2.5 Block 4					V6.4							BLK 5												
Test Schedule																																
(7) LUT2A, (8) FT 5 Block 4, (9) STRYKER IOT&E, (10) CTSF Certification, (11) Block 5 Operational Test			7			8		9					10								11											
								STRYKER IOT&E													Block 5 OT											
(12) IOT&E																12																
Fielding and NET																																
(13) SBCT 1, (14) SBCT 2, (15) 1st Cav Div, (16) SIGCEN Ft Gordon, (17) SBCT 3							13			14	15		16		17																	
								SBCT 1				1 CD SIGCEN																				
IAW ABCS 6.4 Fielding Strategy/OIF Rotations													CSA Approved COA																			

Schedule Detail (R4a Exhibit)						February 2004	
BUDGET ACTIVITY 7 - Operational system development			PE NUMBER AND TITLE 0208010A - Joint Tactical Communications Program (TRI-TAC)			PROJECT 01D	
<u>Schedule Detail</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
TIMS Delivery of V6.4		3Q					
TIMS V6.4 IOT&E			1Q				
TIMS Full Rate Production IPR 6.4			1Q				
TIMS Material Release (IOC) 6.4			4Q				
TIMS Block 5 Award				4Q			
TIMS Block 5 OT					1Q		

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2A Exhibit)							February 2004		
BUDGET ACTIVITY 7 - Operational system development				PE NUMBER AND TITLE 0208010A - Joint Tactical Communications Program (TRI-TAC)			PROJECT 107		
COST (In Thousands)	FY 2003 Actual	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	8680	8750	9	9	10	0	0	0	78495
<p><u>A. Mission Description and Budget Item Justification:-</u> A requirement exists to provide Signal Corps units the automated capability to manage multiple tactical communication systems in support of dynamic battlefield operations.</p> <ul style="list-style-type: none"> - The Integrated System Control (ISYSCON) facility provides automated tools for the Signal Staff to plan, install, operate and maintain communications networks. - 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. - The ISYSCON (V)4 Tactical Internet Management System (TIMS) funding transitioned to a new Project, 01D, within PE 208010A in FY03. - The ISYSCON supports the Current Force transition path of the Transformation Campaign Plan (TCP). 									
<u>Accomplishments/Planned Program</u>						FY 2003	FY 2004	FY 2005	
Block 3 Development (P2 Increment 2.0)						6139	900	0	
Block 3 Development (P2 Increment 2.1)						0	7451	9	
Army COMSEC Engineering System Interface						420	0	0	
System Security Accreditation						150	150	0	
TIMS S/W Development						1971	0	0	
Small Business Innovative Research/Small Business Technology Transfer Program						0	249	0	
Totals						8680	8750	9	

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PE NUMBER AND TITLE

0208010A - Joint Tactical Communications
Program (TRI-TAC)

PROJECT

107

B. Other Program Funding Summary

	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Compl	Total Cost
BX0007 ISYSCON	30518	21368	0	0	0	0	0	0	84108
028010/01D Tactical Internet Management System	4673	7696	9642	9804	2288	0	0	0	34103

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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BUDGET ACTIVITY 7 - Operational system development					PE NUMBER AND TITLE 0208010A - Joint Tactical Communications Program (TRI-TAC)					PROJECT 107		
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/CPF F	GDC4S, Taunton, MA	140793	5437	2Q	7404		9		0	153643	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	40458	1971	2Q	0		0		0	42429	0
d . JNMS Development	CPFF/TM/ FFP	SAIC, McLean, VA	10408	0		0		0		0	10408	0
Subtotal:			192309	7408		7404		9		0	207130	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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BUDGET ACTIVITY 7 - Operational system development					PE NUMBER AND TITLE 0208010A - Joint Tactical Communications Program (TRI-TAC)					PROJECT 107		
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	ATEC	2950	200	2Q	88		0		Continue	3238	0
b . ISYS Accreditation	MIPR	Software Engineering Center, CECOM, Fort Monmouth, NJ	350	125	2Q	147		0		Continue	622	0
c . TI MGR (V)4 Test Support	MIPR	ATEC	1935	0		0		0		0	1935	0
d . JNMS Accreditation	MIPR	Software Engineering Center, CECOM, Fort Monmouth, NJ	100	0		0		0		0	100	0
Subtotal:			5335	325		235		0		Continue	5895	0

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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		0		Continue	35949	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		0		Continue	40443	0
Project Total Cost:			236029	8680		8750		9		Continue	253468	0

Schedule Profile (R4 Exhibit)																				February 2004												
BUDGET ACTIVITY 7 - Operational system development										PE NUMBER AND TITLE 0208010A - Joint Tactical Communications Program (TRI-TAC)																		PROJECT 107				
Event Name	FY 03				FY 04				FY 05				FY 06				FY 07				FY 08				FY 09				FY 10			
	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				
S/W Development, INC 2.1 (Block 3), INC 3.0 (Block 6), INC 3.1 (Block 6)	[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]											
Software DT, INC 2.1 FQT, INC 3.0 FQT	[Redacted]																															
OT, OT, OT	[Redacted]				[Redacted]								[Redacted]				[Redacted]				[Redacted]											
Production	[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]											
Training	[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]			
PDSS	[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]			

Schedule Detail (R4a Exhibit)						February 2004	
BUDGET ACTIVITY 7 - Operational system development			PE NUMBER AND TITLE 0208010A - Joint Tactical Communications Program (TRI-TAC)			PROJECT 107	
<u>Schedule Detail</u>	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
ISYSCON Block 3 Phase 2 - Increment 2.0 FQT	3Q						
ISYSCON Block 6 and Objective Phase 2 - Increment 2.1 Award		2Q					
ISYSCON Block 6 and ObjectivePhase 2 -- Increment 2.1 FQT			4Q				