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ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)									DATE February 1999		
BUDGET ACTIVITY 7 - Operational System Development				PE NUMBER AND TITLE 0208010A Joint Tactical Communications Program (TRI-TAC)					PROJECT D107		
COST (In Thousands)		FY 1998 Actual	FY 1999 Estimate	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	Cost to Complete	Total Cost
D107	Integrated System Control (ISYSCON) Development	20815	35664	18432	19666	7784	7766	8843	17712	Continuing	Continuing
<p><b>A. Mission Description and Budget Item Justification:</b> A requirement exists to automate Signal Corps unit's 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 Tactical Command and Control System (ATCCS) architecture, and enable automated configuration and management in a dynamic battlefield data network. ISYSCON is being developed with 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 WIN Architecture. ISYSCON (V4) is also being developed to manage the Tactical Internet at brigade and battalion levels. FY 2000 supports the development of software (P2 Increments 2 &amp; 3), operational test and training, and software releases. FY 2001 supports the development of software (P2 Increment 3 &amp; P3 Increment 1), operational test and training, and software releases. This program element also supports any development required for PM, Warfighter Information Network – Terrestrial (WIN-T).</p> <p><b>FY 1998 Accomplishments:</b></p> <ul style="list-style-type: none"> <li>• 2500 Conducted Unit Test, System Test for IOT&amp;E Baseline</li> <li>• 1200 Conducted Formal Qualification Testing (FQT) in support of IOT&amp;E Phase I</li> <li>• 2500 Conducted test and training support of IOT&amp;E Phase I</li> <li>• 818 Post IOT&amp;E Test Support &amp; Report Preparation</li> <li>• 1975 Corrected Software Deficiencies Resulting from IOT&amp;E Phase I</li> <li>• 2200 Division XXI AWE Support – Router Management Task (RMT)</li> <li>• 1700 Conducted FQT in support of IOT&amp;E Phase II</li> <li>• 2535 Conducted Concept Requirement Review for P2 Inc 1</li> <li>• 3087 Conducted System Requirements Analysis for P2 Inc 1</li> <li>• 2300 IOT&amp;E Phase II Training &amp; Test Conduct Support</li> </ul> <p>Total 20815</p> <p><b>FY 1999 Planned Program:</b></p> <ul style="list-style-type: none"> <li>• 800 Conduct Post Test Support &amp; Report Preparation for IOT&amp;E Phase II</li> <li>• 2000 Continue Software Requirements Analysis Phase 2 Inc 1</li> <li>• 1541 Conduct Software Coding for P2 Inc 1 Baseline</li> <li>• 1200 Conduct Unit Test System Test for P2 Inc 1 Baseline</li> </ul>											
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PE NUMBER AND TITLE <b>0208010A Joint Tactical Communications Program (TRI-TAC)</b>		PROJECT <b>D107</b>
<p><b>FY 1999 Planned Program: (continued)</b></p> <ul style="list-style-type: none"> <li>• 1300 Conduct FQT for P2 Inc 1</li> <li>• 2100 Migration to COE Compliance – Level 6</li> <li>• 1000 Conduct P2 Inc 1 Software Release</li> <li>• 2100 Conduct Concept Requirement Review for P2 Inc 2</li> <li>• 3100 Conduct Software Requirements Analysis for P2 Inc 2</li> <li>• 1700 Complete System Design for P2 Inc 2 Baseline</li> <li>• 3064 Conduct Software Coding for P2 Inc 2</li> <li>• 1500 Conduct Unit Test, System Test for P2 Inc 2</li> <li>• 3800 Software &amp; Requirement Analysis for ISYSCON V4 (TI Manager)</li> <li>• 2100 Complete System Design for ISYSCON V4 (TI Manager)</li> <li>• 3414 Conduct Software Coding for ISYSCON V4 (TI Manager)</li> <li>• 2100 Integration of V4 Requirements into FBCB2 (TI Manager)</li> <li>• 1900 Develop emerging FDD (WIN-T) Dynamic Management Capabilities</li> <li>• 945 Small Business Innovation Research/Small Business Technology Transfer (SBIR/STTR) Programs</li> </ul> <p>Total 35664</p> <p><b>FY 2000 Planned Program:</b></p> <ul style="list-style-type: none"> <li>• 1200 Conduct P2 Inc 1 Limited User Test (LUT) Training</li> <li>• 2500 Conduct P2 Inc 1 LUT Testing</li> <li>• 2000 Conduct P2 Inc 2 FQT</li> <li>• 1800 Conduct P2 Inc 2 FOT&amp;E I Training</li> <li>• 1900 Conduct P2 Inc 2 FOT&amp;E I</li> <li>• 1200 Conduct P2 Inc 2 Software Release</li> <li>• 2700 Concept Requirements Review for P2 Inc 3</li> <li>• 2932 Conduct Software Requirements Analysis for P2 Inc 3</li> <li>• 2200 Conduct System Design P2 Inc 3</li> </ul> <p>Total 18432</p>		
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<b>BUDGET ACTIVITY</b> <b>7 - Operational System Development</b>	<b>PE NUMBER AND TITLE</b> <b>0208010A Joint Tactical Communications Program (TRI-TAC)</b>	<b>PROJECT</b> <b>D107</b>
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**FY 2001 Planned Program:**

- 4700 Conduct Software Coding for P2 Inc 3
  - 2000 Conduct Unit Test, System Test for P2 Inc 3
  - 2500 Conduct FQT P2 Inc 3
  - 1855 Conduct P2 Inc 3 FOT&E II Training
  - 2000 Conduct P2 Inc 3 FOT&E II
  - 1200 Conduct P2 Inc 3 Software Release
  - 2900 Conduct Concept Requirements Review for P3 Inc 1
  - 2511 Initiate Software Requirements Analysis P3 Inc 1
- Total 19666

<b>B. Program Change Summary</b>	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>
Previous President's Budget ( <u>FY 1999 PB</u> )	21105	35941	19071	20431
Appropriated Value	8983	35941		
Adjustments to Appropriated Value				
a. Congressional General Reductions	-278	-277		
b. SBIR / STTR	-218			
c. Omnibus or Other Above Threshold Reductions	+12328			
d. Below Threshold Reprogramming				
e. Rescissions				
Adjustments to Budget Years Since <u>FY 1999 PB</u>			-639	-765
Current Budget Submit ( <u>FY 2000 PB</u> )	20815	35664	18432	19666

Change Summary Explanation: FY 1998 Congressionally approved reprogramming in support of digitization (+12328).

<b>C. Other Program Funding Summary</b>	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	To <u>Compl</u>	Total <u>Cost</u>
Other Procurement, Army-2, BX0007	14740	15133	14714	17149	19244	2931	0	3	0	99356

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**D. Acquisition Strategy:** Competitive Engineering & Manufacturing Development (EMD) contract was awarded to GTE in September 1992. IOT&E I was conducted Mar 98, with IOT&E II conducted/completed in Oct 98. LRIP decision received May 1995. LRIP systems supported IOT&E. MSIII IPR scheduled for FEB 99. P2 Inc 1 software will support FDD fielding of production systems. Production systems will include acquisition of GFE (CHS/SICPS) hardware for the integration into system assemblages and fielding.

<b>E. Schedule Profile</b>	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
IOT&E Phase I	2Q							
Phase 1+ / IOT&E II		1Q						
Milestone III		2Q						
Production Contract Award		2Q						
Phase 2 – Increment 1		4Q						
LUT P2 Inc 1			2Q					
Phase 2 – Increment 2			4Q					
FOT&E I			4Q					
First Digitized Division IOC				1Q				
Phase 2 – Increment 3				2Q				
FOT&E II				4Q				
Phase 3 – Increment 1					3Q			
Phase 3 – Increment 2						3Q		
Phase 3 – Increment 3							3Q	
Phase 4 – Increment 1								3Q

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**ARMY RDT&E COST ANALYSIS (R-3)**

DATE **February 1999**

**BUDGET ACTIVITY**  
**7 - Operational System Development**

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

**PROJECT**  
**D107**

I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 1999 Cost	FY 1999 Award Date	FY 2000 Cost	FY 2000 Award Date	FY 2001 Cost	FY 2001 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a. ISYS SW Development	CPAF	GTE, Raleigh, NC	70856	16114	DEC 98	10534	DEC 99	12924	DEC 00	Cont'd.	Cont'd	
b. Award Fee Contingencies	CPAF	GTE, Raleigh, NC	2909	2000	MAR 99	1045	MAR 00	2063	MAR 01	Cont'd.	Cont'd	
c. TI Manager (V4)												
(1)	IDIQ	Raytheon, Fullerton, CA		650	JAN 99	TBD		TBD		Cont'd	Cont'd	
(2)	CPIF	TRW, Carson, CA		10764	JAN 99	TBD		TBD		Cont'd	Cont'd	
d. GFE	FFP	GTE, Taunton, Mass	2239	-0-		-0-		-0-		-0-	Cont'd	
Subtotal Product Development:			76004	29528		11579		14987		Cont'd	Cont'd	

**Remark:**

- I.a Supports ongoing ISYS (V1-3) software development to produce incremental software products. (Prior year Includes \$5.7M for Force XXI)
- I.b ISYSCON Award Fee cycles are semi-annually. (PY at 7%/FY99> at 12%)
- I.c Supports V4 TI Manager Software Development (FBCB2 & EPLRS Network Mgt)
- I.d Supports prototype hardware requirements in support of IOT&E. FY00> = OPA.

II. Support Costs: Not applicable

III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 1999 Cost	FY 1999 Award Date	FY 2000 Cost	FY 2000 Award Date	FY 2001 Cost	FY 2001 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a. Test Support		TEXCOM	1352	700	NOV 98					-0-	2052	
Subtotal Test and Evaluation:			1352	700						-0-	2052	

**Remark:**

Prior year funds provided TEXCOM, APG, EPG, Signal Ctr, & 3<sup>rd</sup> Signal Brigade test support for IOT&E I & II activity.  
 FY99 supports TEXCOM test report activity in support of MS III.  
 FY00-01 Test support converts to OPA for FOT&E activity.

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IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 1999 Cost	FY 1999 Award Date	FY 2000 Cost	FY 2000 Award Date	FY 2001 Cost	FY 2001 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a. Contractor Engr	NA	See remarks	14640	4003	NOV 98	3414	NOV 99	3337	NOV 00	Cont'd.	Cont'd	
b. Government Engr	NA		10305	1151	NOV 98	3197	OCT 99	1098	OCT 00	Cont'd.	Cont'd	
c. PM Support-CORE	NA		715	132	OCT 98	112	OCT 99	114	OCT 00	Cont'd.	Cont'd	
d. Travel	NA		655	150	FY99	130	FY00	130	FY01	Cont'd.	Cont'd	
Subtotal Management Services:			26315	5436		6853		4679		Cont'd	Cont'd	
Remark: IV.a. Contractor engineering includes PM Support contractor (Nations) , and software development support contractors [MITRE (FFDRC-CPFF) & JSC (CPAF 8%)]. IV.b. Govt Engr (FY00) includes \$2M Post Deployment SW Support (PDSS). IV.d. Travel will be expended throughout the year for Program Management Support.												
Project Total Cost:			103671	35664		18432		19666		Cont'd	Cont'd	