

**ARMY NATIONAL GUARD
FY06 UFR**

15 January 2005

SUBJECT: Joint Network Transport Capability –Spiral (JNTC-S)

FY06 UFR: \$88M Total UFR for JNN: \$371M

APPN: OPA

AREA OF INTEREST: MODERNIZATION

DESCRIPTION: The Mobile Subscriber Equipment (MSE) network cannot keep up on the modern battlefield, nor is it designed to provide the increased level of bandwidth and services the Combattant Commander requires. These services include SIPR, NIPR, and VTC, and enables both circuit switching and Internet Protocol (IP) based networking. The Joint Network Node (JNN) package is designed to provide these services to the Commander at the UEX, BCT and as far down as the UA Battalion Command post, providing the him with unprecedented communications services. It also provides the UEx, UA and BN CP headquarters the ability to operate independently into the Global Information Grid (GIG) or a joint headquarters as required. For the purposes of this UFR, the JNN package consists of:

- a. JNN terminal and vehicle
- b. Commercial Ku SATCOM with trailer
- c. Local Area Network Commercial-off-the-shelf (COTS) equipment.
- d. Network Management, ISYSCON(V)4 – one per BN / 2 per BCT / 3 per UEx

Not included is the High Capacity Line of Sight (HCLOS) radio upgrade to the AN/TRC-190(V)3 communications system. (See HCLOS FY05 UFR for details).

A Maneuver Unit of Action / BCT package includes 2 each JNNs, 5 Battalion CP Nodes and associated LAN Transit cases. Total cost of the BCT JNN package is approximately \$9.75 million. A UEx Headquarters requires 3 each JNNs and associated LAN Transit cases. The UEx Headquarters is divided into a Main, TAC 1 and TAC 2. Total cost for a UEx JNN package (minus the unit Hub terminals) is approximately \$14.25 million.

ISSUE JUSTIFICATION: The ARNG converts one UEX and three BCTs in FY05. There is no JNTC-S funding programmed for these units. Without the equipment, these units will convert to the Modular Force Structure (URS v 6.1), but not have the required communications equipment in order to properly train. This will quickly degrade Signal soldier skills, as well as degrade the overall unit (BCT) training, since the network and the communications services it provides the BCT commander is vital in providing connectivity for the ABCS (Army Battle Command System).

PROGRAM STATUS: Currently, only \$52 million is in the FY06-11 POM for ARNG units. This money is programmed for FY08. This delays the fielding of the equipment, reduces readiness levels, and delays the sustainment training of the entire BCT for three years. Additionally, by end of FY07, the ARNG will have converted a total of five UExs and fifteen BCTs, all requiring the JNTC-S suite of communications equipment.

IMPACT OF FUNDING THE CAPABILITY: Dramatic. Funding the JNTC-S program in FY05-FY07 allows the ARNG to reach a higher readiness state in a shorter period of time. Funding this capability also provides the ARNG the opportunity to increase retention, since it is difficult to recruit and retain a soldier who will not be provided the proper equipment upon which to train.

(Include for internal ARNG coordination/use only)

SUBJECT: Joint Network Transport Capability –Spiral (JNTC-S)

APPN: OPA

APE:

MDEP: BB1600

MDEP TITLE: ACUS Modernization

LIN:

DAMO-ZR 1-N List Priority Number:

Division Priority:

Functional POC: MAJ Camoroda

Div: NGB-ARF-S

Tel: 703-607-7826

Approval Authority: COL Barrineau / NGB-ARF / 703-607-7800

\$M	FY05	FY06	FY07	Total thru FY07
Validated Requirement	\$44.0	\$151.0	\$151.0	\$220.0
Unvalidated Requirement	0	0	0	0
Total Requirement	1 UEx and 3 BCTs	2 UEx and 6 BCTs	2 UEx and 6 BCTs	5 Uex and 15 BCTs
Funded Amount	0	0	0	0
Total UFR	\$44.0	\$151.0	\$151.0	\$220.0

***Note: Changes in requirements and unit costs due to the on-going design of the Modular Force require this information paper be updated periodically. Next analysis and update will occur in early March 05.**

ANALYSIS:

- Cost of JNN package is approximately \$3.2M each. Includes truck, Ku trailer, etc)
- Cost per Maneuver Unit of Action is approximately \$9.75M. Includes 2 JNNs, 5 BN CP Ku Nodes and associated Local Area Network (LAN) transit cases.
- Not included is the Network Management Tool, the ISYSCON(V)4. Cost is \$8K per suite for hardware and software only. Each JNN requires an ISYSCON.
- Not included is the 2 Hub terminals that are in the UEx. These systems are not included based upon a pending Army decision as to the final number of these Hub terminals that will be in the Army inventory. Current forecast is the Army will purchase 8 Hub Terminals to be stationed at fixed locations around the world and be operated by the unit that rotates in on the stationary equipment.
- Combattant Commanders increased use and reliance on NIPR, SIPR, VTC and other services that provide the capability to efficiently and effectively communicate with his commanders using the latest technology (ABCS and BFT for example), reinforce the requirement for the increased capability that the JNTC-S network provides
- For the Homeland Security mission of the Army National Guard forces, this suite of communications equipment can also be used to provide the Governor and other state and local agencies with voice and data communications connectivity during a manmade or natural emergency.

ARMY NATIONAL GUARD SYSTEM REQUIREMENTS ARE BASED ON THE ASSUMPTION

ALL ARMY COMPONENTS WILL EXECUTE REORGANIZATION INTO BCT (UA) MODULAR FORCE ACCORDING TO THE HQDA APPROVED TIMELINE .