

**Lee County Board Of County Commissioners
Agenda Item Summary**

**Blue Sheet No.
20070585**

1. ACTION REQUESTED/PURPOSE: Approve Transfer from Government Communications Network (GCN) Reserves in the amount of \$391,109 to purchase replacement components for the 800 MHz radio system for a period of two years covering through FY07/08.

2. FUNDING SOURCE: General Fund/Public Safety-GCN Reserves

3. WHAT ACTION ACCOMPLISHES: Replaces obsolete and worn out major components to the 800 Mhz radio system before they fail and shut down the radio system. Provides secondary connectivity to remote radio sites and backup radio communications to 911 dispatch centers.

4. MANAGEMENT RECOMMENDATION: Approve

5. Departmental Category: 07

A7A

6. Meeting Date:
May 22, 2007

- 7. Agenda:**
- Consent
 - Administrative**
 - Appeals
 - Public
 - Walk-On

- 8. Requirement/Purpose: (specify)**
- Statute
 - Ordinance
 - Admin. Code
 - Other

9. Request Initiated:
Commissioner _____
Department Communications
Division Public Safety
By: *John D. Wilson*
Director

10. Background: GCN (government Communications Network) provides for and maintains the 800 Mhz radio and mobile data systems. GCN is largely funded with fees paid by radio users. The upgrades described in this document will provide necessary replacements and backup systems.

Upon transfer from Government Communications Network (GCN) reserves GC5890152000.509910, funds will be made available:

GCN	KF5290352000.506410	\$362,995
GCN	KF5290352000.505120	\$ 4,477
GCN	KF5290352000.503190	\$ 8,200
GCN	KF5290352000.505280	\$ 12,737
GCN	KF5290352000.505431	\$ 2,700
	Total	\$391,109

11. Review for Scheduling:

Department Director	Purchasing or Contracts	Human Resources	Other	County Attorney	Budget Services				County Manager/P. W. Director
					Analyst	Risk	Grants	Mgr.	
<i>4-26-07</i>	<i>N/A</i>	<i>N/A</i>		<i>Andrea Faser</i>	<i>DEH 4/26/07</i>	<i>MA</i>	<i>4/26/07</i>	<i>4/26/07</i>	<i>4-26-07</i>

12. Commission Action:

- Approved
- Deferred
- Denied
- Other

RECEIVED BY COUNTY ADMIN:
4/26/07 M@ 8:55
COUNTY ADMIN FORWARDED TO:
MP
4/26/07 to PR.

Rec. by CoAtty
Date: *4/25/07*
Time: *1:25 PM*
Forwarded To:
Admin 4-25-07

REQUEST FOR TRANSFER OF FUNDS

FUND NAME: Gov't Comm. Network DATE: 4-11-07 BATCH NO.: _____

FISCAL YEAR: 06-07 FUND NO.: 52000 DOC. TYPE: YB LEDGER TYPE: BA

TO: Public Safety Gov't Comm. Network(GCN)
(Division Name) (Program Name)

NOTE: Please list the account number below in the following order:
Business Unit (dept/div, program, fund, subfund); Object Account; Subsidiary; Subledger
(Example: BB 5120100100.503450)

<u>Account Number</u>	<u>Object Name</u>	<u>DEBIT</u>
KF5290352000.503190	Other Professional Services	\$ 8,200
KF5290352000.505120	General Office Supplies	\$ 4,477
KF5290352000.505280	Minor Equipment	\$ 12,737
KF5290352000.505431	Registration Fees	\$ 2,700
KF5290352000.506410	Furniture & Equipment	\$ 362,995
TOTAL TO:		<u>\$391,109</u>

FROM: Non- Departmental Reserves
(Division Name) (Program Name)

<u>Account Number</u>	<u>Object Name</u>	<u>CREDIT</u>
GC5890152000.509910	Reserve for Contingencies	\$391,109
TOTAL FROM:		<u>\$391,109</u>

EXPLANATION: To transfer budget from reserves to purchase replacement components for 800 MHz radio system per Bluesheet #20070585.

DIVISION DIRECTOR SIGNATURE/DATE Jan D. Welch 4/11/07
DEPARTMENT HEAD SIGNATURE/DATE

DBO: APPROVAL DENIAL David Hanis 4/26/07
OPS. ANALYST SIGNATURE DATE

OPS. MGR.: APPROVAL DENIAL _____
OPS. MGR. SIGNATURE DATE

CO. MGR.: APPROVAL DENIAL _____
CO. MANAGER SIGNATURE DATE

BCC APPROVAL DATE: _____ _____
BCC CHAIRMAN SIGNATURE

BA. NO. _____ AUTH CODE _____ TRANS DATE _____

Microwave Leased Line Backup

Recently our radio system has experienced intermittent failures caused by leased line T1 errors and outages. In order to eliminate these failures, an alternate path must be supplied that can automatically switch from leased line to microwave backup. This backup system can also be utilized during disaster recovery when leased line resources are unavailable.

During the last two hurricanes, several leased line T1's were disabled for extended periods of time. Blown over telephone poles, loss of power and even toppled trees pulled fiber and copper cabling out of the ground. These T1 losses caused large coverage holes in our radio system, typically where communications is needed the most. During Hurricane Wilma, large sections of telephone poles on Summerlin road were leveled, which resulted in loss of communications in our storm damaged coastal areas.

Larus switch gear will automatically swap T1's when a failure is detected at a predetermined threshold. Circuitry will automatically monitor both main and redundant paths to provide alarm contact closures upon detection. These closures will be tied to Lee County's existing Moscad system and will send a page alerting us to the alarm. Parts counts include spare cards to be used for minimum downtime.

Total 138,433.00

48 VDC Charger For CEB building

To replace 48 VDC aging charger. The present charger and batteries are estimated to be 17 years old. The 48VDC supplies power to the Fiber Lop Converters, Channel Banks and T1 Multiplexers, which provide radio, console and network connectivity throughout Lee County.

Total 11,716.00

Microwave Video Downlink

Replace problematic CDX-150 Video Codex

This equipment will replace the existing Cornet CDX-150 video Codex donated to us by the Florida DOT. The existing Codex is problematic and does not recover from a path or power loss independently. These Codex are used for the conversion of the aircraft NTSC video signal to T1. The video is transported over T1 to the Lee County Sheriff's Office over existing microwave and fiber. Repairs and upgrades are responsibility of GCN (Government Communications Network) for this portion of the system.

Total 11,835.00

MDC Base Station Site Expansion

Several dead spots exist through Lee County for the Mobile Data System. By expanding two sites these spots are eliminated. We will be using existing antennas, lines, multicouplers, combiners

Total 42,025.00

Larus T1 Protective Switch

Recently our radio system has experienced intermittent failures caused by leased line T1 errors and outages. In order to eliminate these failures, an alternate path must be supplied that can automatically switch from leased line to microwave backup. This backup system can also be utilized during disaster recovery when leased line resources are unavailable.

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Total 32,560.00

MED 8 UHF Repeater

To replace aging MED 8 Repeater with new. Estimated to have been manufactured in January, 1981.
Must be replaced due to State of Florida narrow band requirement. Must be maintained per Florida Staute 401

Total 20,528.00

EMS/FIRE Backup Radio Consoles

This equipment will provide backup communications in the event of a Central Electronics Bank or connectivity failure. Provisions will be made to continue the use of paging and other features available with our present console positions. We anticipate several planned outages with our transition to the proposed P25 radio system and possibly during the 800 Mhz rebanding process. When new features are programmed or upgrades are performed, into the Central Electronics Bank. (CEB) the console positions are not functional. Some system programming and upgrade sessions can last 8 hours or more.

The proposed backup system also provides protection in the event of a loss of connectivity to the CEB. During hurricanes and other disasters, Lee County has historically lost connections to the remote sites and dispatch centers. With the new backup system, we will no longer require these connections to dispatch our EMS and Fire responders.

Presently, Lee County users utilize 1990's vintage control stations which are not capable of paging, alert tones, Emergency Alerting or Alert Call. Without alert paging, Fire and EMS crews must monitor all radio traffic 24/7.

The radio resources purchased by one dispatch center can be shared among other users. Lee County Emergency Management and Lee County Sheriff's Office are also purchasing these consoles. These resources can be shared among several dispatch centers, avoiding costly duplication of funds

Total 87,187.00

Logging Recorder

Present recorder does not have enough capacity for all radio channels (talk groups) used in dispatch.
Established standards are to maintain all telephone conversations and radio traffic for a minimum of 90 days
New proposed logging recorder has unlimited talk group capability and the ability to store records long term

Total 46,826.00