

**SEMINOLE COUNTY GOVERNMENT
AGENDA MEMORANDUM**

SUBJECT: COPS - Interoperability Communications Technology Grant

DEPARTMENT: Public Safety /Information Technologies

AUTHORIZED BY: Kenneth M. Roberts **CONTACT:** Greg Holcomb **EXT.** 1010

Agenda Date <u>12/9/2003</u> Regular <input type="checkbox"/> Consent <input type="checkbox"/> Work Session <input type="checkbox"/> Briefing <input checked="" type="checkbox"/>
Public Hearing – 1:30 <input type="checkbox"/> Public Hearing – 7:00 <input type="checkbox"/>

MOTION/RECOMMENDATION:

Update the Board on our participation in the State of Florida, Domestic Homeland Security Region 5, Community Oriented Policing Services (COPS) Interoperability Communications Grant Program. Request Board Direction/Approval on participating in the COPS grant program and allocation of the necessary 25% matching funds.

BACKGROUND:

One of the major issues facing the emergency services sector in the State of Florida and, specifically, in Region 5 of the Florida Domestic Homeland Security Task Force, is the inability of emergency service workers and traditional "first responders" to communicate with one another across county boundaries.

The 800 MHz communications systems in Region 5, including Seminole County's, were originally designed and engineered to meet the needs of the local community first, and interoperate with the surrounding communities secondly. As such, emergency responders generally cannot communicate with their counterparts in adjacent counties during significant events. This fact is echoed by the public safety communities throughout the state and the nation, and is the basis for the subject grant funding for interoperable communication equipment.

The grant program supports the improvement of these communications systems with other public safety agencies. Seminole County, as a member of Region 5 and a participant in the grant proposal, identified funding needs of \$2,126,195 in the process, of which \$531,549 would be necessary as matching funds of 25% of the total. This award is part of the region award of \$8,416,000. These figures are budgetary estimates needed to secure the grant. Funding will be finalized in a RFP process, as outlined in the technical specification and proposed time line attachments

Reviewed by: Co Atty: _____ DFS: _____ Other: _____ DCM: <u> <u> </u> </u> CM: <u> <u> </u> </u> File No. <u>BPSIT01</u>

The benefit of participation is true interoperability among the Public Safety communities, not only in the region, but the State. The methodology selected will allow any 800 MHz and/or VHF radio system with the proper programming to communicate within the 9 county region without requiring our units to purchase any new subscriber radios. In addition to interoperability, this grant equipment will provide another level of redundancy to our existing system. As a failsafe, the interoperable equipment could be used in the event of catastrophic equipment failure of the existing 800 MHz system. This is a benefit not only to Public Safety/Law Enforcement, but to all users of the system, including County operations; Transportation, Traffic, Environmental, Seminole County Municipalities, and the Seminole County School Board.

In the event Seminole County chooses not to participate, it could inadvertently eliminate our Region's ability to participate in the grant funding entirely. If the grant were to proceed without our participation, Seminole would lose the opportunity of interoperability for Domestic Homeland Security and the aforementioned redundancies. Our communications capabilities would be limited during such event as hurricanes, terrorism, state and federal support, and multiple county jurisdictional events.

We have prepared the attached funding options as an example of possible funding scenarios. The actual funding appropriation would not have to be finalized until the RFP process is completed and would be presented to the Board of County Commissioners for approval at a future meeting.

COPS Grant Funding - Possible Options

Option # 1

Fund Name	% Of Funding for Match	\$ Amount Provided	Reserve Remaining
General Fund	23%	\$124,382	\$5,852,307
Transportation Trust	10%	\$53,155	\$1,146,338
I.T. CIP Fund	23%	\$123,851	\$615,208
Fire Fund	23%	\$123,851	\$1,130,857
Water and Sewer	10%	\$53,155	\$3,753,821
Solid Waste	10%	\$53,155	\$2,318,264
Total	100%	\$531,549	
Total Cost of Match	\$531,549		

Option # 2

Fund Name	% Of Funding for Match	\$ Amount Provided	Reserve Remaining
General Fund	33%	\$177,183	\$5,799,506
I.T. CIP Fund	33%	\$177,183	\$561,876
Fire Fund	33%	\$177,183	\$1,077,525
Total	100%	\$531,549	
Total Cost of Match	\$531,549		

* Note - Options 1 and 2 represent possible funding scenarios. An actual Funding Request will be submitted for the Boards approval at a later date.

EQUIPMENT LISTS

CHANNEL BANKS

Qty	Part #	Item Description	Units Price	Total
19	891830	ENCLOSURE	1,500.00	\$28,500.00
19	8902	48 VDC REG	1,000.00	\$19,000.00
19	801060	DUALTIE/WAN	1,700.00	\$32,300.00
38	81130	DSX CEPT	500.00	\$19,000.00
19	892060	8TI EI CARD	1,800.00	\$34,200.00
38	816460	4 PORT 4W DSM	10,457.00	\$397,366.00
19	880160	CPU 4 TI EI	4,000.00	\$76,000.00
19	811960	4 WIRE CARDS	1,500.00	\$28,500.00
	812960	FSX CARDS	1,300.00	\$0.00
	813970	FSO CARDS	1,600.00	\$0.00
	822061	SRU BOARDS	2,400.00	\$0.00

FREQ STANDARD TRAK MODULES

10	89061	8 PORT 1RPS MODULE	787.00	\$7,870.00
19	89071	4 PORT 5 MHZ MODULE	1,123.00	\$21,337.00
		75 WATT 300 MHZ QUANTAR STATION	5,760.00	\$0.00
		ANALOG CONVENTIONAL		\$0.00
		REPEATER OPERATIONAL		\$0.00
		ASTROTAC RECEIVER	4,774.00	\$0.00
		SIMULCAST OPERATION	10,534.00	\$0.00
39			20,922.00	\$815,958.00
0		QUANTRO STATION UPGRADES to ASTROTAC SIMULCAST OPERATION	1,500.00	\$0.00
6		75 or 100 WATT VHF QUANTAR STATIONS		\$0.00
6		ANALOG CONVENTIONAL		\$0.00
6		REPEATER OPERATIONAL		\$0.00
6		ASTROTAC RECEIVER		\$0.00
6		SIMULCAST OPERATION	14,316.00	\$85,896.00
			8.00	
5		DIGITAC COMPARATORS	8,083.00	\$40,415.00
5		*with tone keying module	1,843.00	\$9,215.00
5		8 CHANNEL COMPARATOR		\$0.00
4		POVER STRIP	87.00	\$348.00
4		RACK AMOUNT	235.00	\$940.00
				\$0.00
5		CSCI CONVENTIONAL SIMULCAST CONTROLLER INTERFACE BOARDS OPTION X390AA-SP, QLN3409A	5,000.00	\$25,000.00

5	DISTRIBUTION AMPLIFIER BOARDS QRN4878A	1,500.00	\$7,500.00
	All sites need RF HARDWARE hook up kits- COAX CABLES -from all QUANTARS to FREQ STD's		\$0.00
	1/2 SUPER FLEX TRANSMITTER PORT to COMBINER PORT-then COMBINER PORTS TUNED		\$0.00
	1/4 SUPER FLEX from RCV PORT to RCV MULTI COUPLER		\$0.00
	LANDFILL, CLARCONA + STATION 52 will need VHF ANTENNAS installed on towers DB 224+7/8 LINE		\$0.00
	ANTENNA	500.00	\$0.00
	* Per foot for line and labor	3.68	\$0.00
			\$0.00
	VHF HOOKS UP 3 SITES		
6	300 CABLE PER TOWER	3,300.00	\$19,800.00
6	DB 224 ANTENNAS	500.00	\$3,000.00
6	CONNECTORS	150.00	\$900.00
60	CLAMPS	27.00	\$1,620.00
6	DUPLEXERS (VHF only)	2,250.00	\$13,500.00
12	JUMPERS 1/2" 6'2" per site	78.00	\$936.00
6	1/2 LINE + CONNECTORS in site	140.00	\$840.00
6	ANTENNA MOUNTS	160.00	\$960.00
		6,605.00	
	800 MHS HOOKS UP 8 SITES		
100	1/4 SUPER FLEX CONNECTORS N's	17.03	\$1,703.00
100	1/2 SUPER FLEX CONNECTORS N's	27.66	\$2,766.00
1200	1/4 FSJ1-50a SUPER FLEX (per ft)	1.05	\$1,260.00
1400	1/2 FSJ4-50B SUPER FLEX (per ft)	2.35	\$3,290.00
			\$0.00
	5 MHZ CABLE		\$0.00
40	30 FOOT CABLES LDF HELIAX	13.23	\$529.20
78	1/4 CONNECTOR N PLUG MALE	6.50	\$507.00
			\$1,700,956.20
	Installation	25%	\$425,239.05
	Total		\$2,126,195.25

County	Cost	Match	Federal	Double Check
Orange	\$1,678,297	\$419,574	\$1,258,723	\$1,678,297
Osceola	\$2,167,831	\$541,958	\$1,625,873	\$2,167,831
Seminole	\$2,126,195	\$531,549	\$1,594,646	\$2,126,195
Volusia	\$678,300	\$169,575	\$508,725	\$678,300
Brevard	\$302,050	\$75,513	\$226,538	\$302,050
Martin	\$113,628	\$28,407	\$85,221	\$113,628
Indian River	\$254,200	\$63,550	\$190,650	\$254,200
St. Lucie	\$107,430	\$26,858	\$80,573	\$107,430
Lake	\$988,075	\$247,019	\$741,056	\$988,075
Totals	\$8,416,007	\$2,104,002	\$6,312,005	\$8,416,007

Polk	\$1,186,803	\$296,701	\$890,102	\$1,186,803
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Region V Mutual Aid Communications System Purchasing Timeline

11-14-2003 - Complete Specifications & Forward for full grant committee review

11-19-2003 – Any/all corrections to the specifications must be received by Tom Sorley

11-24-2003 – Complete package is submitted to Orange County Sheriff Office Purchasing

12-04-2003 – RFP published in Orlando Sentinel

12-07-2003 – RFP published for second time in Orlando Sentinel

12-17-2003 – All Pre-site vendor questions due in OCSO Purchasing

12-19-2003 – 1st RFP Addendum published (if needed)

01-05-2004 thru 01-16-2004 – Site walks for each county

01-27-2004 – All vendor questions due in OCSO Purchasing

01-30-2004 – 2nd RFP Addendum published (if needed)

02-16-2004 – RFP responses due in OCSO Purchasing

02-17-2004 – RFP opening in OCSO Purchasing

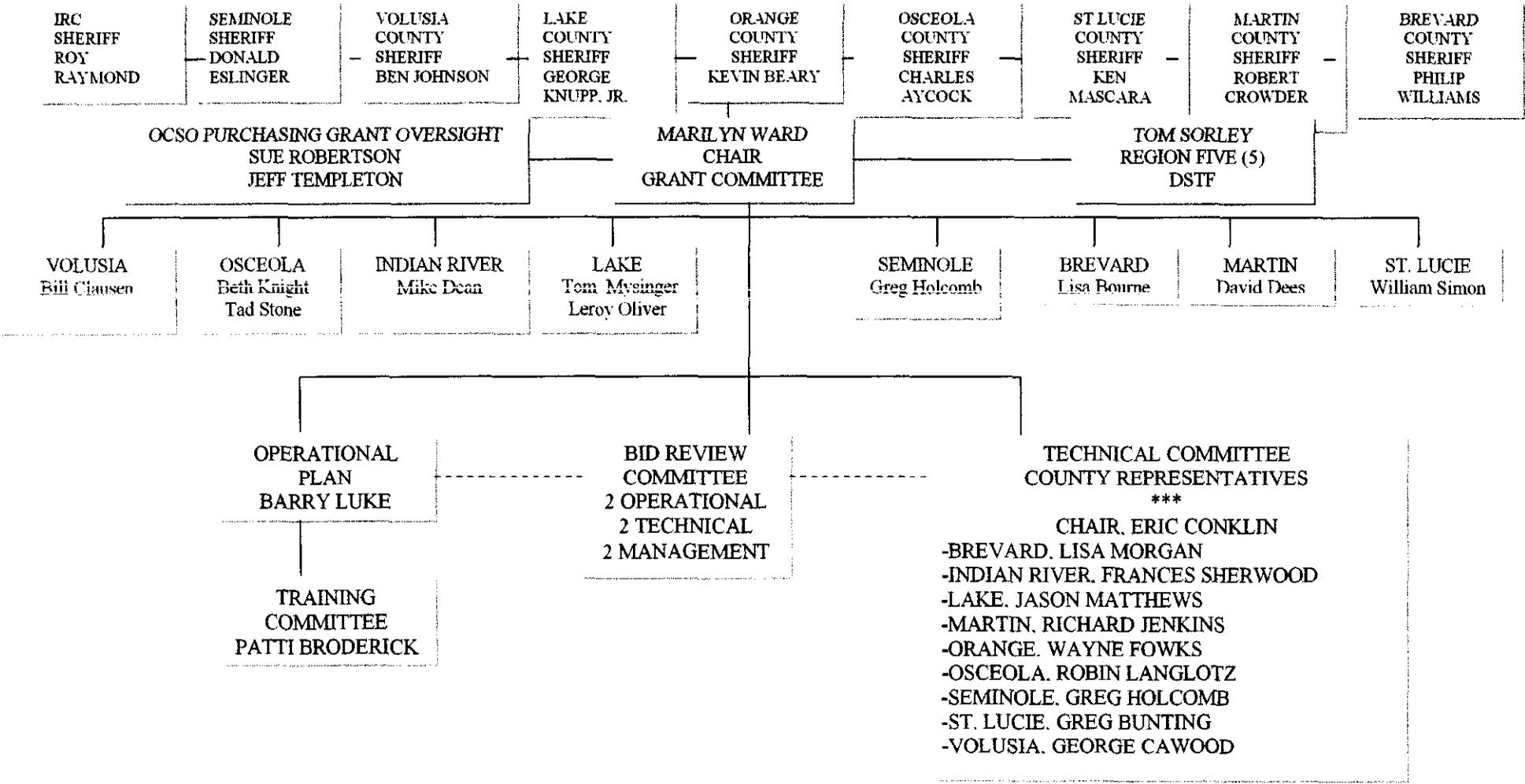
02-25-2004 – RFP Review Committee Meets to Rank vendors

03-05-2004 – RFP Awards announced

03-05-2004 thru 04-01-2004 – Contract negotiation/finalization

04-15-2004 – Project Kickoff

COPS INTEROPERABILITY GRANT



————— INDICATES DIRECT REPORT TO CHAIR

- - - - - INDICATES WORKING RELATIONSHIPS

TECHNICAL SPECIFICATION SECTION

OVERVIEW & SCOPE

1. This specification set is for selection, purchase, installation, system testing, and final acceptance of the Florida Domestic Security Task Force Region V Mutual Aid Communications System (RMACS).
2. The Orange County Sheriff's Office is the designated entity for administration of this grant. Individual points of contact that may speak to elements of the grant pertinent to each particular County will be specified by the Orange County Sheriff's Office.
3. The award made under this grant to prospective Proposers may be either an individual county, groups of counties, or awarded on a "winner takes all" basis at the discretion of the Selection Committee. The price breakdown submitted by companies proposing should be priced individually per county, with a total nine-county proposal price submitted as an elective option. The Selection Committee will consider any and all proposals made by qualified firms/companies under this Request for Proposal.
4. The successful Proposer will be responsible for system design, engineering analysis & certification, provision of equipment (to be defined as hardware, software, firmware, and any other necessary and required components), installation of the equipment, and other activities as required to complete a turnkey system installation. The Technical Subcommittee shall appoint such individuals as necessary to conduct system acceptance testing at the exclusive and sole cost of the successful Proposer. Defective equipment and/or coverage not meeting baseline standards shall be corrected by the successful Proposer prior to system acceptance & release of final payment(s) to the Proposer(s).
5. This is a TURNKEY proposal. The silence of the specifications as to a certain technical parameter or unit of equipment does not mean that the item is not necessarily needed or required. Proposers are encouraged to submit questions if an outlined requirement, in the opinion of the Proposer, is not clearly addressed in this document. The Proposer awarded a contract shall provide all engineering services, hardware/software/firmware, antenna & tower services, equipment components and technical documentation necessary to construct a complete, functioning system on a turnkey basis, even though certain items or requirements may not be specifically described in the Specifications.
6. The successful Proposer is responsible to appoint a single point of contact for coordination of activities relating to the execution of the contract.
7. The successful Proposer shall provide a fully functional system capable of meeting all specifications prior to acceptance & payment. Proposers shall acknowledge a testing & evaluation period not to exceed thirty (30) days per County beginning on a contractor-defined date attesting to substantial completion in each respective County. During this

period, each County shall evaluate the equipment suitability and performance prior to acceptance, final payment of invoice(s), and release of bond by the Orange County Sheriff's Office.

SECTION 1 – EQUIPMENT SPECIFICATIONS

1.1 Base station specifications.

1.1.1 All stations to be procured shall be type-accepted by the Federal Communications Commission.

1.1.2 All stations to be procured shall be provided with a standard AC power supply capable of operating from 120 VAC input power source. For stations to be provided to Indian River County, the stations must be capable of additional operation on 24 VDC as a power source (substituting the requirement for AC power supplies).

1.1.3 All stations to be procured shall be rated as "continuous duty" while providing constant RF power levels equal to or exceeding 100 watts. The duty cycle of these stations shall be 100% Transmit/Receive.

1.1.4 All stations to be procured shall be equipped for standard Tone Remote Control and must be capable of interface with the console switches in each respective county. Tone functions shall be selectable & be capable of being modified via programming with the respective manufacturer's Radio Service Software (or equivalent named package dependant on manufacturer).

1.1.5 All stations to be procured shall have a manufacturer's MTBF (Mean Time Between Failure) rating of no less than 10,000 hours.

1.1.6 All stations to be procured shall be capable of responding to DTMF (Dual-tone multi-frequency) tones sent from a mobile unit for commands to enable & disable repeat mode, and to provide operation for a minimum of two (2) external control functions per station. Use of an after-market controller is acceptable if the native controller on board the station is unable to execute control functions based on DTMF commands. All DTMF commands should be programmable during station setup via the manufacturer's RSS software or the controller RSS package.

1.1.7 All stations to be procured are to be capable (with upgrades) of digital transmission methods as prescribed by ANSI/EIA/TIA Standard 102 under the commonly known name "Project 25". All stations provided for the 800 MHZ Florida Mutual Aid Channel (808.3875 MHZ) and all stations provided for the VHF mutual aid channel (pair TBD) are to be configured to provide Project 25 digital transmission capabilities as a native and integral part of the station, and must be capable of operating in said digital mode at time of delivery and through any subsequent acceptance and warranty period.

Project 25 capable stations must automatically revert to an analog mode when a station with a non-Project 25 capable radio attempts to access the station.

1.1.8 All stations to be procured shall automatically power up in the "Repeat Disable" mode.

1.1.9 All stations to be procured shall be provided with an automatic timer that will automatically disable the repeat function of the station if no activity is heard on the frequency matching the programmed operational parameters of the station. The timer interval is to be user-definable via RSS software.

1.1.10 All stations to be procured (except for stations in Indian River County) shall be provided with automatic revert to a standby battery power source. The station shall be provided with a battery charger to trickle charge an emergency standby battery.

1.1.11 All stations to be procured shall be capable of automatic station identification as per FCC Rules via Morse code. The option shall be programmed via the manufacturers RSS software.

1.1.12 All stations are to be computer programmable via RSS software for technical parameters such as frequency settings, modulation adjustments, controller settings, time-out settings, CTCSS settings, and digital parameter settings (for digital stations).

1.1.13 Station cabinets/enclosures/rack(s) will be provided as requested by each County participating in this grant, both as defined in the respective County Annex attached to this RFP and during the walkthrough of the individual sites.

1.1.14 The successful Proposer shall provide one (1) copy of all technical manuals, books, documentation, drawings, schematics, and literature per site as required to allow for the ongoing service and support of the station(s) subsequent to the expiration of the warranty period. The above-referenced documentation shall be provided at time of system acceptance. The successful Proposer shall provide complimentary updates to the technical manuals/documentation during the warranty period including any applicable Technical Service Bulletins for the supplied equipment. An additional copy of all above-referenced information shall be provided to the designated contact point for each County as the County's "Master Copy". This shall be provided at the time of substantial system completion as certified by the successful Proposer.

1.1.15 The successful Proposer shall provide two copies of Radio Service Software (or the respective named equivalent per manufacturer) with manuals and installation media, two sets of programming cables, programming adapters, and station extender & service cards/fixtures to allow for the ongoing service and support of the station(s) subsequent to the expiration of the warranty period. The above-referenced software and material shall be provided at time of substantial system completion as certified by the successful Proposer.

1.1.16 One copy of as-built system documentation, copies of acceptance & testing reports, construction documents, and any other misc. undefined documentation will be provided by the successful Proposer to the county point of contact prior to system acceptance.

1.1.17 Any RSS software provided by the successful Proposer must be kept updated at the sole and complete expense of the Proposer during the period of system evaluation, acceptance and any subsequent warranty period.

1.2 Console hardware/switch specifications

1.2.1 The successful Proposer shall provide & install such hardware/firmware/software as required to interface the stations supplied under this RFP with the currently installed console hardware/software/firmware in each county. Such hardware/firmware/software must be new, original equipment manufacturer's parts and material. No substitution is acceptable.

1.2.2 Upon substantial completion, the functionality of the console switch, radio console equipment and any accessory or ancillary devices shall be equal to or exceed the original baseline capabilities of the console or console system(s) prior to beginning construction of the proposed system(s).

1.2.3 All Proposer(s) in their proposal packages shall quote installation of a *graphical display in each respective County Control Point indicating the status of all stations under this grant (whether repeat disabled, repeat enabled, or actively transmitting)* in both the individual county and the surrounding counties. Proposer(s) will be required to submit their methodology for construction of such a display along with the method of intercommunication between the respective station(s) to be displayed to pull status information. Information will be submitted in the Proposer's RFP response package.

It is our desire to have a real-time monitoring mechanism that allows a Dispatch center the capability to insure that stations in neighboring areas have their systems in the repeat and/or non-repeat mode of operation. The methodology should include a quick reference display and be inclusive of like frequency stations in adjacent Counties as a minimum requirement. The optimum goal would be to monitor the entire Region inclusive of stations owned and operated by other agencies not participating in this RFP.

1.3 Combiner/antenna system specifications

1.3.1 The successful Proposer shall provide & install such hardware as required interfacing, where possible, the stations supplied under this RFP with the currently installed combiner network on each tower that is to receive new stations in each county. Such hardware must be new, original equipment manufacturer's parts and material. No substitution is acceptable.

1.3.2 In situations where interfacing to an existing combiner network is not possible and where a new combiner network is to be installed and/or a new antenna system or system(s) are to be installed, specifications for these devices shall be determined based in part on information derived from the site walkthrough visit (such as existing space/loading, existing type/brand of equipment installed/preferred), etc...

1.4 Frequency assignment matrix

1.4.1 The successful Proposer(s) shall provide sufficient station(s) on the following frequencies in each respective County that will allow operation on the following frequencies with coverage equal or exceeding the standards set in Section 2.1 of these specifications:

National TAC 2	822.0125 MHZ/867.0125 MHZ, CTCSS 156.7 hz
National TAC 3	822.5125 MHZ/867.5125 MHZ, CTCSS 156.7 hz
National TAC 4	823.0125 MHZ/868.0125 MHZ, CTCSS 156.7 hz
Florida Mutual Aid Channel	808.3875 MHZ/853.3875 MHZ, CTCSS 210.7 hz
VHF Mutual Aid	Frequency and CTCSS TBD.

1.4.2 Current stations constructed & operational are detailed in the respective County annexes, Annex 1-9 of this specification.

SECTION 2 – Minimum coverage specifications

2.1 Minimum acceptable coverage. The coverage for each respective county system (both VHF and 800 MHZ) shall be engineered to meet or exceed a -95dbm signal strength in 95% of the geographical area of each county of the 9-county region consisting of the counties of Brevard, Indian River, Lake, Martin, Orange, Osceola, Seminole, St. Lucie, and Volusia. Certain areas designated in each County will require enhanced radio coverage as identified in section 2.2. These areas are identified in the respective County annexes, Annex 1-9 of this specification.

2.2 With respect to section 2.1 above, the minimum required outdoor signal strength level is -95dbm for outdoor mobile coverage. Signal strength levels in certain designated areas (identified in the respective County annexes) are required to equal or exceed the following standards:

2.2.1 Outdoor portable coverage – 95 dbm.

2.2.2 Light building outdoor portable coverage – 80 dbm.

2.2.3 Heavy building outdoor portable coverage – 70 dbm.

2.3 The successful Proposer shall provide the Orange County Project Manager with their proposed methodology and detailed step-by-step testing procedures to insure the coverage of the installed equipment meets the specifications contained in Sections 2.1 and 2.2 of this specification. Said coverage testing will be required to be satisfactorily completed and accepted by the Orange County Project Manager prior to release of final payment to the successful Proposer.

2.4 Pricing of additional system hardware/options/expansions to provide desired additional coverage above & beyond the -95dbm standard as requested by each county shall be broken out separately by Proposers as an elective option per County in the submitted proposal packages.

SECTION 3 – System construction, integration, and testing specifications

3.1 The successful Proposer will be responsible for the following major activities within each respective county in the nine-county area of the DSTF Region V:

3.1.1 Attendance at pre-bid meetings and site walkthrough meetings is MANDATORY. Failure to attend pre-bid and site walkthrough meetings will result in disqualification of the Proposer to tender submittal(s) for review under this RFP.

3.1.2 The Orange County Sheriff's Office will appoint an individual as the overall Project Manager on behalf of the grant committee. A meeting with the Project Manager and the contact person from each county receiving equipment under this grant

shall be attended by the successful Proposer prior to commencement of work under this grant. The successful Proposer, as per paragraph 5 in the "Overview & scope" section shall provide a single point of contact for each respective county receiving equipment under this grant.

3.1.3 Engineering services to meet or exceed the coverage requirements contained in Section 2.

3.1.4 Tower loading & engineering analysis. The successful Proposer is responsible for obtaining any and all tower analysis & loading reports, surveys, tower engineering studies, and any other engineering requirements dealing with antennas & antenna support structures. All tower analysis & engineering reports shall be sealed by a Florida licensed Professional Engineer before submission as a deliverable under this grant.

3.1.5 Federal, State, and Local regulatory compliance activities as required in each individual County by code, ordinance, rule, law, or other legally binding requirement. All installations will fully comply with the tower ordinance(s) of the respective governmental entity the tower is physically located in, whether a County or a municipality.

3.1.6 Building permits, construction permits, electrical permits, etc... as required with respect to section 3.1.5 will be obtained prior to the commencement of construction or installation activities.

3.1.7 Data compilation, preparation, submission, and/or amendment of any and all necessary Federal Communications Commission licenses, any frequency coordination that may be required (APCO, Region 9, etc...) to obtain said licenses, and any interference studies, engineering analysis, or pattern mapping required to obtain licensure will be the complete, sole, and exclusive responsibility of the successful proposer.

3.1.8 Tower services & grounding. All personnel climbing towers in execution of this contract are required to comply with OSHA standards regarding safety and standards contained in FCC bulletin OET65 regarding RF exposure & safety. Grounding systems & hardware installed as part of this proposal will meet or exceed both M/A-Com and Motorola's currently published technical standards regarding site grounding & bonding.

3.1.9 The successful Proposer will provide recommended methodology for evaluation of the proposer's engineering to insure the coverage meets or exceeds that defined & required in both Section 2 and Annexes 1-9 of these technical standards.

3.1.10 Final system evaluations, as-built documentation, required technical manuals/RSS software/programming & diagnostic hardware, and in general all post-project submittals and deliverables as referenced in other areas of this specification section.

3.2 All RF engineering will be conducted using generally accepted engineering practices in a professional manner. Coverage diagrams will be generated by the successful Proposer or the proposer's engineer(s) and presented for evaluation by the selection committee as part of the RFP package submittal.

3.3 General acceptance requirements. In order for a site to qualify for acceptance under this proposal, the following activities, at a minimum, shall be completed:

3.3.1 All equipment designated for installation will be installed, made operational, and tested via the remote equipment (i.e. dispatch consoles).

3.3.2 All connections shall be completed, wiring dressed, and outdoor connections sealed where applicable.

3.3.3 All antenna system(s) shall be read with appropriate test equipment to insure no shorts, opens, or defects exist, that standing wave is within acceptable parameters, and that RF power out meets specifications.

3.3.4 Inter-modulation & desensification testing shall be performed on the completed installation and the results documented.

3.3.5 All tower & antenna work shall be visually inspected to determine correctness of the installation. Antennas will be braced to handle wind loading equal to or exceeding building code standards of the respective County, including installation of top braces where applicable.

3.3.6 A written site inspection report shall be drawn up and presented to the county contact for each respective site.

3.4 RF coverage post-installation will be demonstrated by the proposer's personnel and jointly evaluated by the Technical Committee and the proposer's personnel for compliance with standards set under Section 2 of this specification. Procedures to be followed for testing are defined in section 2.3 of this specification. In the event that coverage at one or more site(s) is found not to meet specifications as listed in Section 2 of this specification, the successful Proposer shall be required, at no cost to the grant or to the respective Counties that are component members of the grant effort, to correct, adjust, and/or enhance the installed infrastructure to meet the coverage requirements as outlined.

3.5 All workmanship provided under this project will be conducted in a professional manner. All work sites/areas are subject to monitoring by personnel of the respective County. Services provided which, in the opinion of the County are not provided in a professional, neat, and orderly manner may be required to be reworked or revised at the discretion of the County.

3.6 Copies of credentials, a resume containing a synopsis of previous work assignments and professional qualifications, and verifiable professional reference(s) will be required to be submitted to the Grant Management Team for Proposer's representatives assigned to the following work categories prior to the commencement of taskings associated with the project:

- A. Overall project manager, and
- B. Each Professional Engineer sealing documents concerning this project, and
- C. Each RF system engineer associated with this project, and
- D. Each Project engineer/point of contact assigned to the respective counties, and
- E. Other individuals as designated by the Selection Committee or the Orange County Sheriff's Office.

3.7 Final system acceptance documentation will be required to be in written form on a per-County basis and will be signed by each County representative (per County), the designated Grant Manager from the Orange County Sheriff's Office, and the authorized representative of the successful Proposer.

SECTION 4 – Equipment warranty and maintenance

4.1 Equipment Repair. The successful Proposer shall provide factory trained repair technicians for response to calls for service on a twenty-four hour, seven-day basis.

4.2 The successful Proposer shall provide a “single source” solution (one number to call on a 24-hour/seven day basis) for each County for placing calls for service during normal business hours and after-hours emergencies due to equipment failure.

4.3 The successful Proposer shall respond technicians to the site(s) designated on a twenty-four hour, seven day basis to resolve emergency equipment trouble calls placed by the authorized administrative entity. Technicians will be required to be on site no later than two hours from the time the initial service call was received by the Proposer for calls involving system outage. Service calls for issues not involving system outage shall be guaranteed next working day (8 hours) service response.

4.4 The successful Proposer shall provide the grant management team an escalation procedure providing access to the proposer's management team in order to resolve difficulties with Proposer's personnel and to provide for emergency preparedness needs. This list shall be kept current by the Proposer and shall provide at a minimum the name, title, work telephone number, cellular telephone number, pager, and EMAIL address for Proposer's management personnel responsible for resolving issues under this contract.

4.5 Due to security restrictions in providing Public Safety communications, the successful Proposer will be required to provide the names, dates of birth, social security numbers, citizenship status, a copy of a photo ID, and other information as the Orange County Sheriff's Office may request on an on-going basis for personnel of the Proposer or any subcontractor of the Proposer entering restricted areas. Background & warrants checks will be performed by the Orange County Sheriff's Office on each name submitted to perform tasking under this RFP, Proposer's personnel will not be permitted to access sites until the results of the background check are returned.

4.6 Equipment provided by the successful Proposer (including but not limited to physical hardware & firmware, both proprietary and non-proprietary) shall be warranted by the manufacturer for a minimum of twelve (12) months from date of final system acceptance by the Orange County Sheriff's Office. The warranty shall cover all manner of defects including manufacturing defects, defects as a result of normal operation and use of the equipment, and defects resulting from design error.

4.7 The manufacturer's warranty is non-transferable to a third party and will be honored by the equipment manufacturer.

4.8 The manufacturer's warranty shall cover all costing for parts, equipment, diagnostics, labor, troubleshooting, and travel time & expenses (both direct & indirect) for manufacturer's personnel or subcontractor(s) responsible for execution of the warranty.

4.9 The equipment provided shall be upgradeable in respect to hardware, software, and firmware. All hardware revisions/upgrades and upgrades for both base operating systems and specific application software/firmware provided under this RFP/contract shall be provided at no cost for equipment (as needed), media, installation labor, or licensing fees for a minimum period of one (1) year from date of final acceptance.

4.10 Live, on-site training at each County for both technical and operational personnel as specified by the Orange County Sheriff's Office will be conducted by the successful Proposer prior to system activation. Computer-based training will not serve as a substitute for live, on-site training. An instructor must be present at all training sessions. The Proposer shall provide all training manuals and training aids at the expense of the contractor.

4.11 Technical support. The successful Proposer shall provide a number for the proposer's technical support center accessible 24 hours daily. Access to the technical support center of the equipment manufacturer shall be at no cost to the County during the acceptance and warranty period under this grant.

4.12 The Proposer shall specify, on a per-county basis, the cost for the second year's maintenance on the installed equipment. The Proposer shall agree to & certify that maintenance costs for years 3, 4, and 5 shall not increase by more than the percentage of increase of the Federal Consumer Price Index (CPI) annually.

SECTION 5 - Schedule & timeline of deliverables

5.1 The final date for completion of this project is August 30, 2004. All installations & acceptance packages must be complete by this date.

5.2 All Proposers, as part of the proposal package, will submit timeline documentation including but not limited to a schedule with major goals/milestones along with a target date for each goal/milestone, with Gantt/Pert style charting as necessary to illustrate major timelines. Upon completion of meeting(s) with each County contact, the successful Proposer shall revise the aforementioned charts & timeline(s) as necessary based on results of the post-award project meeting(s) and disseminate said revisions to the Project Manager and the county contacts in a timely manner.

Annexes 1 through 9 – Individual County submissions

1. Brevard County
2. Indian River County
3. Lake County
4. Martin County
5. Orange County
6. Osceola County
7. Seminole County
8. St. Lucie County
9. Volusia County

The respective County annexes shall contain the following types of material:

A. County equipment configurations & system overview.

1. Currently installed transmitter & site information, available combiner ports, available capacity per tower (where known), etc..

2. Currently installed console/console switches. Type, make, model, available slots for expansion in CEB/console switch, firmware revision, etc.

3. Currently installed data/telephone backbone type, model, capacity per site, and current loading/expansion information.

B. Desired RF coverage areas above & beyond the -95 dbm minimum standard in each County.

C. Known challenges for each County. This section will list other pertinent & vital information for Proposers preparing submittals under this RFP.

Annex 10 - Region V DSTF tower database

Attached to this specification document following Annex 9.

Annex 11 - Region V DSTF tower map

Attached to this specification document following Annex 10.