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USA

January 8, 2018

Catherine Roberts  
Williamson County  
508 Holly Street  
Georgetown, TX 78626

RE: Williamson County Combined DAS System Projects

Dear Mrs. Roberts

Motorola Solutions, Inc. (Motorola) is pleased to present to you the enclosed proposal for the Williamson County Combined DAS System Projects. The Proposal is based upon and subject to the terms and conditions of the H-GAC Agreement executed in May of 2015 (RA-0515) and consists of this cover letter, the Statement of Work, the System Description, Equipment List, and the HGAC Communications System Purchase Agreement (SPA).

The Proposal is valid for ninety (90) days from the date of this letter and is subject to the terms and conditions of the attached HGAC System Purchase Agreement, or a negotiated version thereof. Motorola would be happy to discuss any concerns the County may have with the proposal.

Sincerely,  
MOTOROLA SOLUTIONS, INC.



Rick Russek  
Area Sales Manager

# WILLIAMSON COUNTY COMBINED DAS SYSTEM PROJECTS



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# ANNEX DAS

## 1.1 SOLUTION OVERVIEW

In response to the request by Williamson County, Motorola is pleased to present this comprehensive proposal to provide an in-building coverage system for the Annex Building. This system solution will provide two-way communications for the building identified by the County as having insufficient RF signal for adequate two-way communication. The system is designed by Motorola's partner, GPD Telecomm, using requirements and specification provided by Motorola.

GPD Telecomm, under the direction of Motorola, utilized propagation studies to determine the most feasible solution for providing supplemental, in-building RF coverage to the specified building. The proposed in-building distributed antenna system will enhance coverage provided by the radio system.

## 1.2 SYSTEM DESIGN OVERVIEW

This section of the proposal defines requirements for the system design and implementation of the requested in- building coverage system. The proposed in-building distributed antenna system (DAS) will work in conjunction with the Williamson County 800 MHz simulcast system. This system is designed to improve the signal coverage within the Annex Building in Georgetown, Texas.

### 1.2.1 Coverage Area and Scope Defined

Based on the RF design effort, the coverage system design will provide RF coverage to designated areas within the 2 floors of the Facility predicted to experience insufficient RF signal coverage in order to provide adequate two-way communication.

The DAS will provide 95% coverage, at a Delivered Audio Quality (DAQ) 3.4 level of coverage, or better. DAQ 3.4: Speech understandable with repetition only rarely needed. Some Noise Distortion.

Note: The generally accepted industry standard for public safety radio systems is 95% criteria for coverage within a building at a minimum of DAQ 3.4 as defined.

All reasonable efforts would be made to ensure that cable routing and antenna mountings will not compromise the integrity of the installation area in the building(s). Both plenum-rated (indoors) and UV rated coaxial cable (outdoors) would be used for system interconnection.

The system would be provided on a basis, including engineering, material, and installation labor necessary to provide a working system.

## 1.2.2 Coverage Prediction Plans

The section provides coverage design plan and prediction. The plans are subjected to a field study to finalize the design.

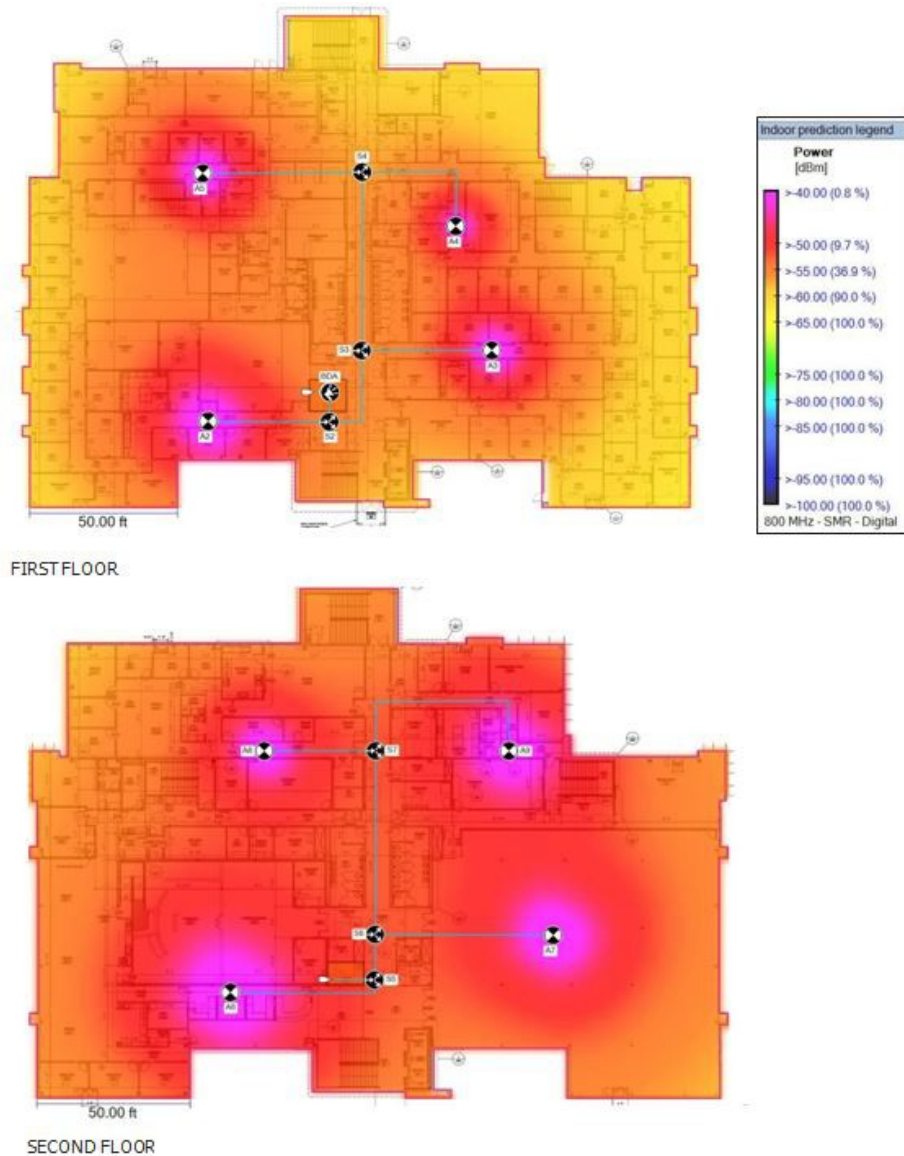


Figure 1: Preliminary DAS design Layout and Prediction

## 1.2.3 DAS Design

The total coverage solution will include (1) distributed antenna systems (DAS) with a minimum 4 hours battery backup. The system shall utilize a yagi antenna for the over-the-air interface with the Twin Tower site, and a 30 Channel Class A Signal Booster for the BDA. The BDA was chosen to accommodate the existing system and takes into consideration the future expansion.

#### RF Design Assumptions/Design Threshold Summary:

- Distance to Twin Tower Site = 2.54 Miles.
- Azimuth = 215.17.
- Estimated RSSI at the donor antenna = -70 dBm.
- Channel Count = 15 (P25 Digital Simulcast).
- Coverage Objective: -90 dBm RSSI for 95 % of Scope.
- Group Delay < 80 microseconds.

## 1.2.4 System Specification

All of the specifications listed throughout this section comprise the majority of equipment used in an in-building DAS. The collection of these specifications can be expressed as the in-building distributed antenna system specifications. The in-building distributed antenna system specifications for this proposed system are listed below.

### 1.2.4.1 Specific Services

- Installation of DAS and DAS Components
- System Optimization
- Acceptance Testing
- Indoor Mapping (DAQ and RSSI)
- Closeout Documentation
- Preventative Maintenance (Optional)
- Extended Warranty (Optional)

#### SYSTEM PARAMETER

Coverage Performance  
Primary Donor Site Name  
Path Loss to Primary Donor site  
Signal Booster Maximum Gain  
Impedance  
Donor Antenna Type  
Coverage Antenna Type  
UPS Backup Power

#### SPECIFICATION

DAQ 3.4, 95/95  
Twin Tower  
103 dB  
94 dB  
50 Ohms  
Directional  
Omni  
4 Hours

## 1.3 DESIGN ASSUMPTIONS

- Viable electrical outlets with adequate (2'X2') wall space for system electronics will be available.
- A suitable location will be available for the donor antenna mount, either a side wall mount or non-penetrating (sled) mount.
- No Roof penetrations are required for donor antenna cable runs. Motorola assumes there is existing roof penetration available to utilize.
- A pre-construction site visit should be scheduled with the County's team to validate design, materials, and installation services estimate and timelines.
- Motorola anticipate the designs will require modification after the preconstruction survey is conducted. However Motorola does not anticipate significant changes in materials required to complete they system build outs.
- Construction work days will be a minimum of 8 hours, Mon-Friday.
- Site access, security escort shall not delay construction.



- One day orientation and safety training is included in this proposal.
- Motorola assumes the site has back up generator.
- Motorola did not include integration of the DAS to the fire alarm system. In the event this is necessary, a Change Order is required and any cost associated will be the responsibility of Williamson County.

## 1.4 DAS OVERVIEW

This section gives an overview of a typical coaxial in-building distributed antenna system (DAS). All of the components listed comprise the majority of equipment used in an in-building DAS to provide a robust and efficient in- building DAS.

- Bi-Directional Amplifier(s) (BDA).
- Line Amplifier(s) if applicable.
- Coaxial cable (plenum and UV rated).
- Donor antenna(s).
- Miscellaneous passive components (splitters, directional couplers, etc.).
- In-building antennas.
- Backup battery (optional).

The BDA captures downlink radio signal via an outdoor antenna. The radio signal is amplified by the BDA and distributed through the system through a network of coaxial cables, couplers, splitters, line amplifier where applicable, and antennas to provide radio users seamless in-building radio coverage.

### 1.4.1 Bi-Directional Amplifier (BDA) Theory of Operation

A BDA is a device which is used to improve radio communications in an area where radio signal levels are degraded due to obstacles in the radio path. BDA's are bi-directional and are utilized for full duplexed frequencies (See Figure 2). BDA's are not designed to work with Simplex frequencies. The BDA is the heart of the in-building DAS and has specific RF filtering to limit signals to your specific pass band.

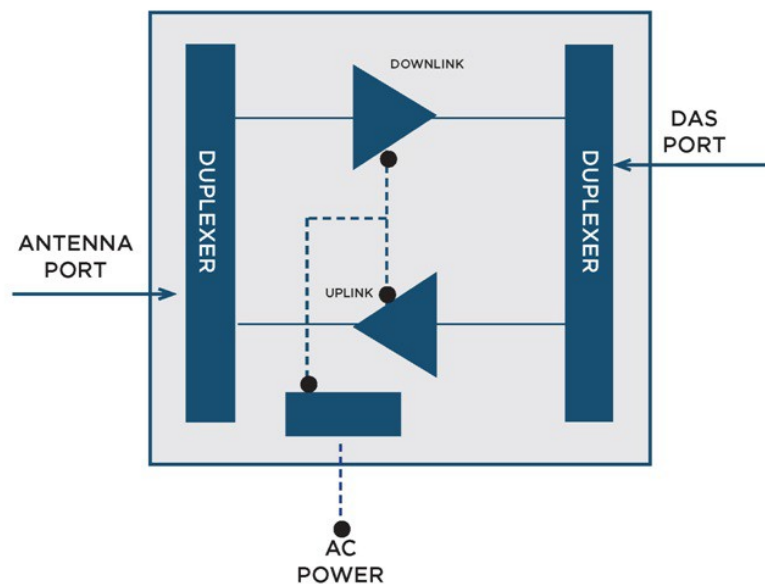


Figure 2: BDA Theory of Operation

## 1.4.2 BDA Selection: Node A

The Node A is a channelized BDA platform that is ideal for the transmission of analog or digital public safety frequencies. The Node A can support multiple frequency bands in a single unit. The Node A also utilizes a linear feed forward amplifier that provides, without signal distortion or reduction in the power, flexible channel programming and gain control technology. The FCC limits the application of BDAs and only authorizes the license holder the right to retransmit their licensed frequency or frequency band.

The head end or main BDA is typically mounted in a location acceptable to the Customer. The BDA will require a standard 120 VAC, 20-ampere circuit(s) with power duplex outlets within five (5) feet. A building ground must be available within five (5) feet of the BDA(s) location. A #2 AWG green ground wire from a NEC recognized ground source shall be provided within five (5) feet if a building ground is not readily available. All components would be properly grounded per Motorola R-56 standard. BDAs are usually mounted in a telephone equipment room and/or an IDF data closet where adequate wall space is available and where vertical access to the roof can be provided.

## 1.4.3 Coaxial Cable

Plenum-rated coaxial cable would be installed to connect all of the system components that are housed within plenum areas of the building. The plenum cable would be secured every 3' with plenum rated cable clamps, cable mounts or cable ties. Cable will typically be installed above ceiling tile and out of the public view.

Ultra-violet (UV) rated cable would be used outdoors and installed to connect the outdoor directional antenna to the BDA. Figure 3 provides examples of different cable type.



**Figure 3: Coaxial Cable**

## 1.4.4 Donor Antenna and Mounting Options

The donor antenna is usually a directional antenna, or a Yagi that is used to capture the radio signal from the donor site. This directional antenna would be mounted via a non-penetrating roof mount or a pipe mount. Once properly mounted, a UV-rated cable would be connected and run through an existing roof or wall penetration to the BDA location.

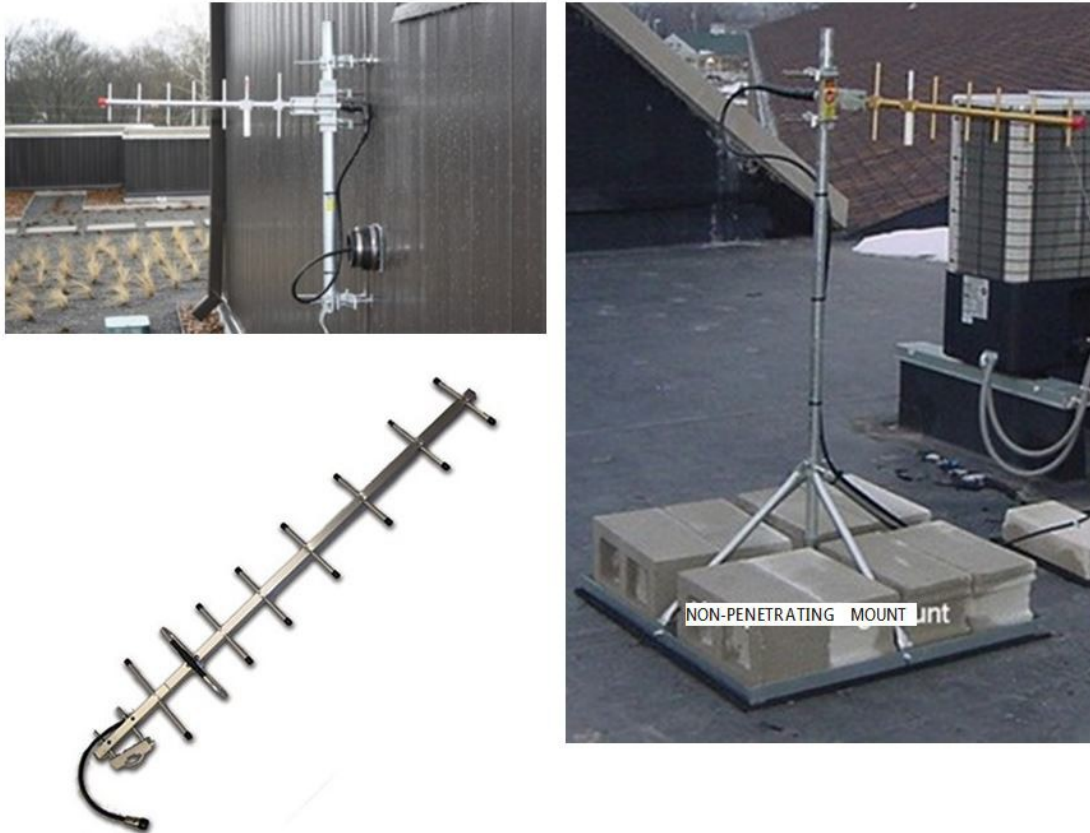


Figure 4: Donor Antenna and Mounting Example

## 1.4.5 In-Building Coverage Antennas

Coverage antennas would be mounted throughout each floor / area requiring coverage. These antennas are frequency specific and can be Omni-directional or directional. In-building coverage antennas are usually white or off-white in color and resemble small smoke detectors. They are mounted flush to the ceiling tiles or wall via different methods as the ceiling / wall structures permit.

## 1.4.6 Passive Components

The engineered design will dictate what passive components are used throughout the system. A combination of coaxial splitters or directional couplers may be used to ensure that the appropriate signal reaches every in-building antenna throughout the system.

**Table 1: Passive Components**

RF PARAMETER	2 WAY SPLITTER	3 WAY SPLITTER	4 WAY SPLITTER	6 DB DIRECTIONAL COUPLER	10 DB DIRECTIONAL COUPLER
Frequency	380-2700	380-2700	380-2700	380-2700	380-2700
Insertion Loss (Through)	3 dB	4 dB	6 dB	.5 – 1 dB	.5 – 1 dB
Insertion Loss Coupled Port	N/A	N/A	N/A	6 dB	10 dB
VSWR	1.2:1	1.2:1	1.2:1	1.2:1	1.2:1
Number of Output Ports	2	3	4	2	2
Port Isolation	25 dB typical	25 dB typical	25 dB typical	25 dB typical	25 dB typical
Connector	N, DIN	N, DIN	N, DIN	N, DIN	N, DIN

## 1.5 R-56 STANDARDS

All installations performed by Motorola's contractor, follow the published Motorola R-56 Standard. The R-56 standard is the standard related to RF communication site construction and installation practices. Much of Motorola R-56 Standard is similar to NFPA, NEC code with an extra emphasis on wireless industry standard installation and engineering best practices.

## 1.6 ACCEPTANCE TEST PLAN–COVERAGE TESTING (ATP)

### 1.6.1 Test Process

Once the DAS installation is complete, Motorola's FSO along with GPD technicians will properly align and optimize the system. Once aligned and optimized, the Motorola and GPD technicians will verify signal coverage by measuring the control channel using an Anritsu Field Spectrum Analyzer. Once satisfied with the levels.

After the technicians confirm that the DAS coverage will perform to the contractual requirement, a formal industry standard grid acceptance test of the coverage area would be conducted. To conduct the formal ATP, two radios in good operating condition with spare batteries would be required. The service area will be partitioned via a grid pattern that will establish a route where a series of tests will be performed to evaluate system performance. The grid configuration will vary by building. Depending on the size of the floor plan(s), the grid size may range from 20 to 50 feet.

The grid tests that will be performed consist of the measurement of the downlink received signal strength (RSSI) and an audio fidelity test will be performed based on the subjective delivered audio quality (DAQ) metric. The standard DAQ 3.4 metric will be used to qualify audio fidelity.

Once the ATP is conducted and the system passes the coverage criteria, a sign off sheet would be provided for formal system acceptance. Once the system is accepted in writing, the one (1) year warranty period begins.

## 1.6.2 Test Methodology

- In each test grid, these tests are required: RSSI and DAQ.
- Perform DAQ testing audio quality in each direction and if transmission quality meets or exceeds DAQ 3.4 criteria the grid receives a pass (if not then a fail).
- Tabulate the % of grids that pass and if pass grids equal or exceed 95% then the facility will receive conditional acceptance.
- If the % of passing grids is below 95%, Motorola and GPD will commence activities to immediately resolve the areas that received a fail status.
- Retesting of the complete system will be done following resolution of any failed sections of the test grid.
- Testing shall also include testing of each channel per system to verify each and every channel are operational and passes DAQ 3.4. This test will not be done for every grid but done only once.
- Measure RSSI with a spectrum analyzer for informational only.
- Testing at the donor end to ensure there is no desensing of the donor site from the DAS.

The RSSI measurement testing is for information only and will not affect the pass/fail testing of the system. DAQ testing shall be the only criteria that will dictate a pass or failure of the DAS.

# EMS TRAINING DAS

## 2.1 SOLUTION OVERVIEW

In response to the request by Williamson County, Motorola is pleased to present this comprehensive proposal to provide an in-building coverage system for the EMS Training Facility. This system solution will provide two-way communications for the EMS Training Facility identified by the County as having insufficient RF signal for adequate two-way communication. The system is designed by Motorola's partner, GPD Telecomm, using requirements and specification provided by Motorola.

GPD Telecomm, under the direction of Motorola, utilized propagation studies to determine the most feasible solution for providing supplemental, in-building RF coverage to the specified building. The proposed in-building distributed antenna system will enhance coverage provided by the radio system.

## 2.2 SYSTEM DESIGN OVERVIEW

This section of the proposal defines requirements for the system design and implementation of the requested in-building coverage system. The proposed in-building distributed antenna system (DAS) will work in conjunction with the Williamson County 800 MHz simulcast system. This system is designed to improve the signal coverage within the EMS Training Facility in Georgetown, Texas.

### 2.2.1 Coverage Area and Scope Defined

Based on the RF design effort, the coverage system design will provide RF coverage to designated areas within the 2 floors of the Facility predicted to experience insufficient RF signal coverage in order to provide adequate two-way communication.

The DAS will provide 95% coverage, at a Delivered Audio Quality (DAQ) 3.4 level of coverage, or better. DAQ 3.4: Speech understandable with repetition only rarely needed. Some Noise Distortion.

Note: The generally accepted industry standard for public safety radio systems is 95% criteria for coverage within a building at a minimum of DAQ 3.4 as defined.

All reasonable efforts would be made to ensure that cable routing and antenna mountings will not compromise the integrity of the installation area in the building(s). Both plenum-rated (indoors) and UV rated coaxial cable (outdoors) would be used for system interconnection.

The system would be provided on a basis, including engineering, material, and installation labor necessary to provide a working system.



## 2.2.2 Coverage Prediction Plans

The section provides coverage design plan and prediction. The plans are subjected to a field study to finalize the design.

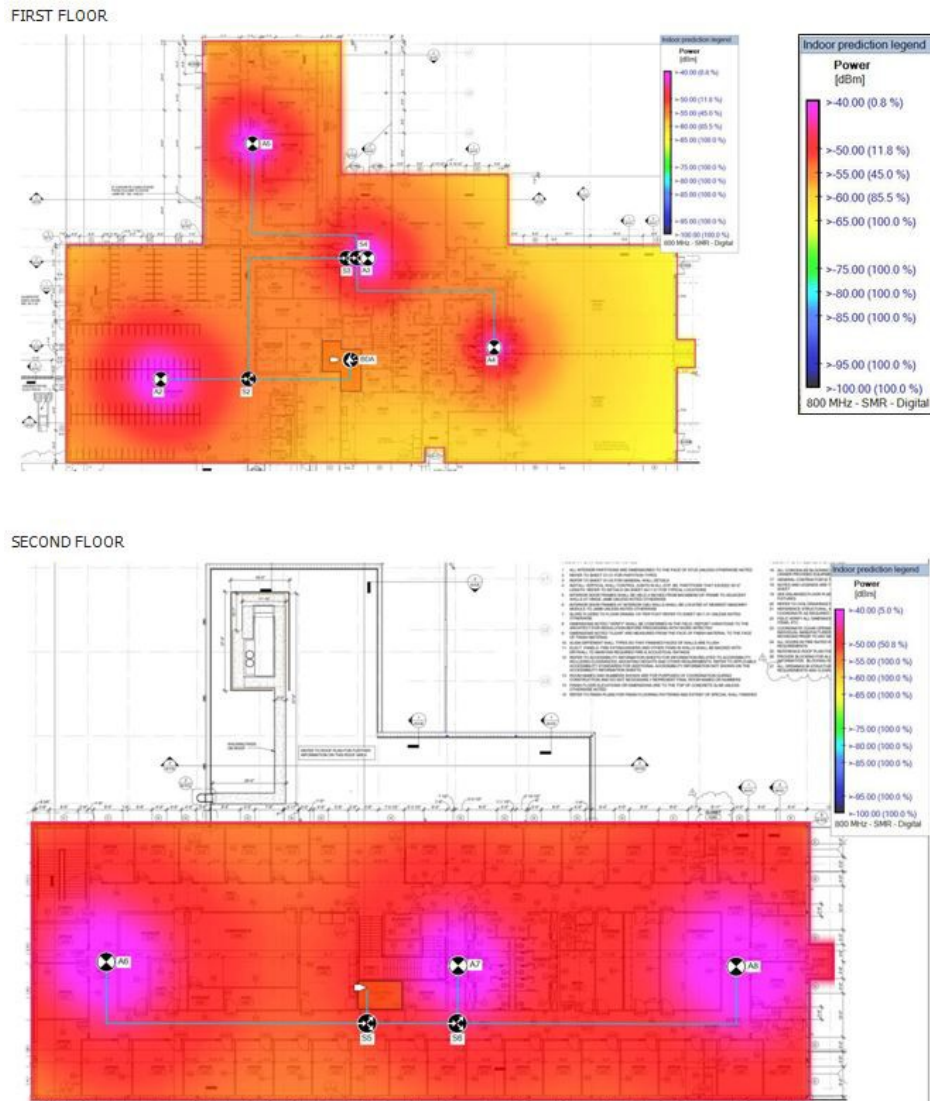


Figure 1: Preliminary DAS design Layout and Prediction

## 2.2.3 DAS Design

The total coverage solution will include (1) distributed antenna systems (DAS) with a minimum 4 hours battery backup. The system shall utilize a yagi antenna for the over-the-air interface with the Twin Tower Site, and a 30 Channel Class A Signal Booster for the BDA. The BDA was chosen to accommodate the existing system and takes into consideration the future expansion.

RF Design Assumptions/Design Threshold Summary:

- Distance to Twin Tower Site = 3.73 Miles.
- Azimuth = 214.87.
- Estimated RSSI at the donor antenna = -70 dBm.
- Channel Count = 15 (P25 Digital Simulcast).
- Coverage Objective: -90 dBm RSSI for 95 % of Scope.
- Group Delay < 80 microseconds.

## 2.2.4 System Specification

All of the specifications listed throughout this section comprise the majority of equipment used in an in-building DAS. The collection of these specifications can be expressed as the in-building distributed antenna system specifications. The in-building distributed antenna system specifications for this proposed system are listed below.

### 2.2.4.1 Specific Services

- Installation of DAS and DAS Components
- System Optimization
- Acceptance Testing
- Indoor Mapping (DAQ and RSSI)
- Closeout Documentation
- Preventative Maintenance (Optional)
- Extended Warranty (Optional)

#### **SYSTEM PARAMETER**

Coverage Performance  
Primary Donor Site Name  
Path Loss to Primary Donor site  
Signal Booster Maximum Gain  
Impedance  
Donor Antenna Type  
Coverage Antenna Type  
UPS Backup Power

#### **SPECIFICATION**

DAQ 3.4, 95/95  
Twin Tower  
106 dB  
94 dB  
50 Ohms  
Directional  
Omni  
4 Hours



## 2.3 DESIGN ASSUMPTIONS

- Viable electrical outlets with adequate (2'X2') wall space for system electronics will be available.
- A suitable location will be available for the donor antenna mount, either a side wall mount or non-penetrating (sled) mount.
- No Roof penetrations are required for donor antenna cable runs. Motorola assumes there is existing roof penetration available to utilize.
- A pre-construction site visit should be scheduled with the County's team to validate design, materials, and installation services estimate and timelines.
- Motorola anticipate the designs will require modification after the preconstruction survey is conducted. However Motorola does not anticipate significant changes in materials required to complete they system build outs.
- Construction work days will be a minimum of 8 hours, Mon-Friday.
- Site access, security escort shall not delay construction.
- One day orientation and safety training is included in this proposal.
- Motorola assumes the site has back a up generator.
- Motorola did not include integration of the DAS to the fire alarm system. In the event this is necessary, a Change Order is required and any cost associated will be the responsibility of Williamson County.

## 2.4 DAS OVERVIEW

This section gives an overview of a typical coaxial in-building distributed antenna system (DAS). All of the components listed comprise the majority of equipment used in an in-building DAS to provide a robust and efficient in- building DAS.

- Bi-Directional Amplifier(s) (BDA).
- Line Amplifier(s) if applicable.
- Coaxial cable (plenum and UV rated).
- Donor antenna(s).
- Miscellaneous passive components (splitters, directional couplers, etc.).
- In-building antennas.
- Backup battery (optional).

The BDA captures downlink radio signal via an outdoor antenna. The radio signal is amplified by the BDA and distributed through the system through a network of coaxial cables, couplers, splitters, line amplifier where applicable, and antennas to provide radio users seamless in-building radio coverage.

### 2.4.1 Bi-Directional Amplifier (BDA) Theory of Operation

A BDA is a device which is used to improve radio communications in an area where radio signal levels are degraded due to obstacles in the radio path. BDA's are bi-directional and are utilized for full duplexed frequencies (See Figure 2). BDA's are not designed to work with Simplex frequencies. The BDA is the heart of the in-building DAS and has specific RF filtering to limit signals to your specific pass band.

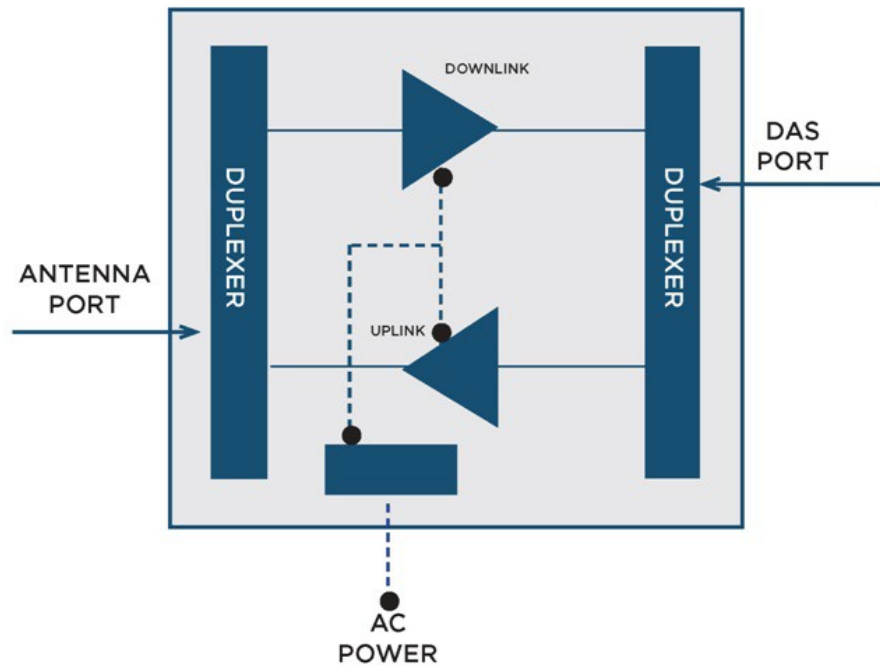


Figure 2: BDA Theory of Operation

## 2.4.2 BDA Selection: Node A

The Node A is a channelized BDA platform that is ideal for the transmission of analog or digital public safety frequencies. The Node A can support multiple frequency bands in a single unit. The Node A also utilizes a linear feed forward amplifier that provides, without signal distortion or reduction in the power, flexible channel programming and gain control technology. The FCC limits the application of BDAs and only authorizes the license holder the right to retransmit their licensed frequency or frequency band.

The head end or main BDA is typically mounted in a location acceptable to the Customer. The BDA will require a standard 120 VAC, 20-ampere circuit(s) with power duplex outlets within five (5) feet. A building ground must be available within five (5) feet of the BDA(s) location. A #2 AWG green ground wire from a NEC recognized ground source shall be provided within five (5) feet if a building ground is not readily available. All components would be properly grounded per Motorola R-56 standard. BDAs are usually mounted in a telephone equipment room and/or an IDF data closet where adequate wall space is available and where vertical access to the roof can be provided.

## 2.4.3 Coaxial Cable

Plenum-rated coaxial cable would be installed to connect all of the system components that are housed within plenum areas of the building. The plenum cable would be secured every 3' with plenum rated cable clamps, cable mounts or cable ties. Cable will typically be installed above ceiling tile and out of the public view.

Ultra-violet (UV) rated cable would be used outdoors and installed to connect the outdoor directional antenna to the BDA. Figure 3 provides examples of different cable type.



Figure 3: Coaxial Cable

## 2.4.4 Donor Antenna and Mounting Options

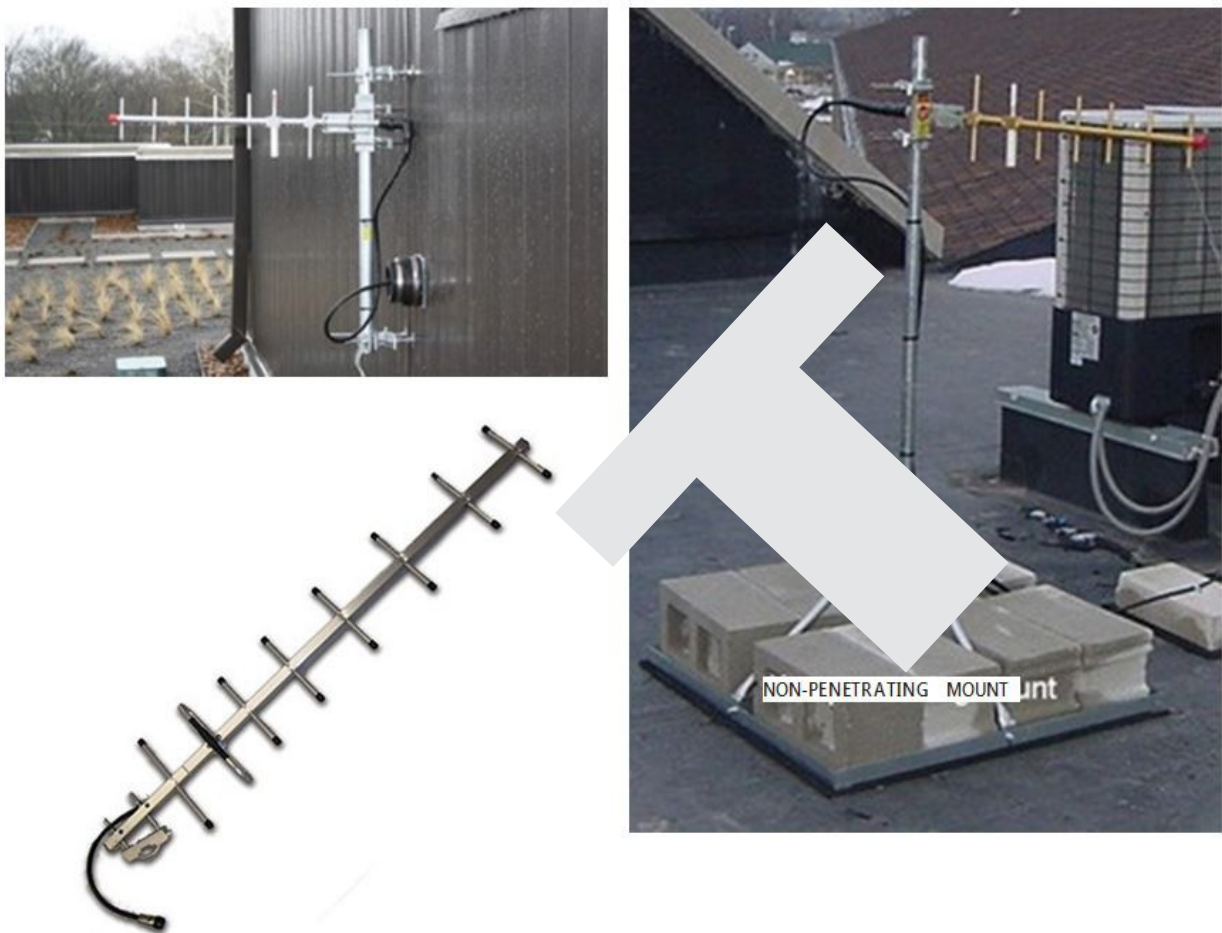


Figure 4: Donor Antenna and Mounting Example

## 2.4.5 In-Building Coverage Antennas

Coverage antennas would be mounted throughout each floor / area requiring coverage. These antennas are frequency specific and can be Omni-directional or directional. In-building coverage antennas are usually white or off-white in color and resemble small smoke detectors. They are mounted flush to the ceiling tiles or wall via different methods as the ceiling / wall structures permit.

## 2.4.6 Passive Components

The engineered design will dictate what passive components are used throughout the system. A combination of coaxial splitters or directional couplers may be used to ensure that the appropriate signal reaches every in-building antenna throughout the system.

**Table 1: Passive Components**

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Frequency	380-2700	380-2700	380-2700	380-2700	380-2700
Insertion Loss (Through)	3 dB	4 dB	6 dB	.5 – 1 dB	.5 – 1 dB
Insertion Loss Coupled Port	N/A	N/A	N/A	6 dB	10 dB
VSWR	1.2:1	1.2:1	1.2:1	1.2:1	1.2:1
Number of Output Ports	2	3	4	2	2
Port Isolation	25 dB typical	25 dB typical	25 dB typical	25 dB typical	25 dB typical
Connector	N, DIN	N, DIN	N, DIN	N, DIN	N, DIN

## 2.5 R-56 STANDARDS

All installations performed by Motorola's contractor, follow the published Motorola R-56 Standard. The R-56 standard is the standard related to RF communication site construction and installation practices. Much of Motorola R-56 Standard is similar to NFPA, NEC code with an extra emphasis on wireless industry standard installation and engineering best practices.

## 2.6 ACCEPTANCE TEST PLAN–COVERAGE TESTING (ATP)

### 2.6.1 Test Process

Once the DAS installation is complete, Motorola's FSO along with GPD technicians will properly align and optimize the system. Once aligned and optimized, the Motorola and GPD technicians will verify signal coverage by measuring the control channel using an Anritsu Field Spectrum Analyzer. Once satisfied with the levels.

After the technicians confirm that the DAS coverage will perform to the contractual requirement, a formal industry standard grid acceptance test of the coverage area would be conducted. To conduct

the formal ATP, two radios in good operating condition with spare batteries would be required. The service area will be partitioned via a grid pattern that will establish a route where a series of tests will be performed to evaluate system performance. The grid configuration will vary by building. Depending on the size of the floor plan(s), the grid size may range from 20 to 50 feet.

The grid tests that will be performed consist of the measurement of the downlink received signal strength (RSSI) and an audio fidelity test will be performed based on the subjective delivered audio quality (DAQ) metric. The standard DAQ 3.4 metric will be used to qualify audio fidelity.

Once the ATP is conducted and the system passes the coverage criteria, a sign off sheet would be provided for formal system acceptance. Once the system is accepted in writing, the one (1) year warranty period begins.

## 2.7 TEST METHODOLOGY

- In each test grid, these tests are required: RSSI and DAQ.
- Perform DAQ testing audio quality in each direction and if transmission quality meets or exceeds DAQ 3.4 criteria the grid receives a pass (if not then a fail).
- Tabulate the % of grids that pass and if pass grids equal or exceed 95% then the facility will receive conditional acceptance.
- If the % of passing grids is below 95%, Motorola and GPD will commence activities to immediately resolve the areas that received a fail status.
- Retesting of the complete system will be done following resolution of any failed sections of the test grid.
- Testing shall also include testing of each channel per system to verify each and every channel are operational and passes DAQ 3.4. This test will not be done for every grid but done only once.
- Measure RSSI with a spectrum analyzer for informational only.
- Testing at the donor end to ensure there is no desensing of the donor site from the DAS.

The RSSI measurement testing is for information only and will not affect the pass/fail testing of the system. DAQ testing shall be the only criteria that will dictate a pass or failure of the DAS.

# SHERIFF'S OFFICE DAS

## 3.1 SOLUTION OVERVIEW

In response to the request by Williamson County, Motorola is pleased to present this comprehensive proposal to provide an in-building coverage system for the Sherriff's Office Training Center. This system solution will provide two- way communications for the Training Cetner identified by Williamson County as having insufficient RF signal for adequate two-way communication. The system is designed by Motorola's partner, GPD Telecomm, using requirements and specification provided by Motorola.

GPD Telecomm, under the direction of Motorola, utilized propagation studies to determine the most feasible solution for providing supplemental, in-building RF coverage to the specified building. The proposed in-building distributed antenna system will enhance coverage provided by the radio system.

## 3.2 SYSTEM DESIGN OVERVIEW

This section of the proposal defines requirements for the system design and implementation of the requested in- building coverage system. The proposed in-building distributed antenna system (DAS) will work in conjunction with the 800 MHz system. This system is designed to improve the signal coverage within the Sherriff's Office Training Center in Hutto, Texas.

### 3.2.1 Coverage Area and Scope Defined

Based on the RF design effort, the coverage system design will provide RF coverage to designated areas within the Facility predicted to experience insufficient RF signal coverage in order to provide adequate two-way communication. The Training Center is a single level building.

The DAS will provide 95% coverage, at a Delivered Audio Quality (DAQ) 3.4 level of coverage, or better. DAQ 3.4: Speech understandable with repetition only rarely needed. Some Noise Distortion.

Note: The generally accepted industry standard for public safety radio systems is 95% criteria for coverage within a building at a minimum of DAQ 3.4 as defined.

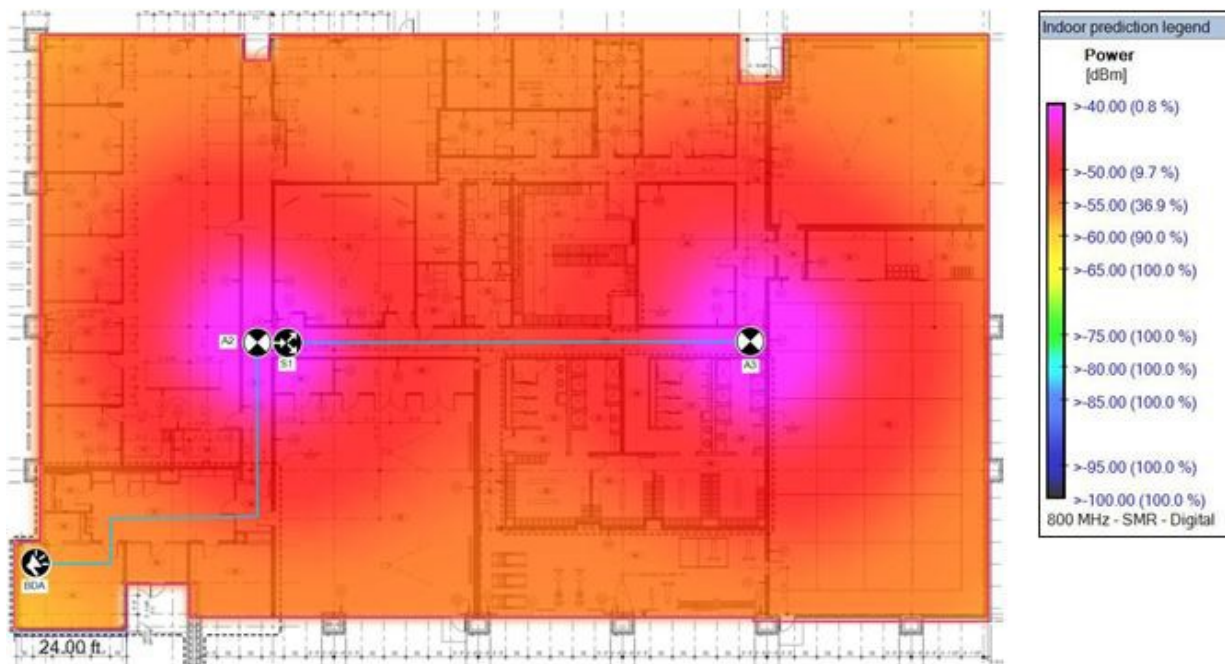
All reasonable efforts would be made to ensure that cable routing and antenna mountings will not compromise the integrity of the installation area in the building(s). Both plenum-rated (indoors) and UV rated coaxial cable (outdoors) would be used for system interconnection.

The system would be provided on a basis, including engineering, material, and installation labor necessary to provide a working system.

### 3.2.2 Coverage Prediction Plans

The section provides coverage design plan and prediction. The plans are subjected to a field study to finalize the design.





**Figure 1: Preliminary DAS design Layout and Prediction**

### 3.2.3 DAS Design

The total coverage solution will include (1) distributed antenna systems (DAS) with a minimum 4 hours battery backup. The system shall utilize a yagi antenna for the over-the-air interface with the UT RLM RF site, and a 30 Channel Class A Signal Booster for the BDA. The BDA was chosen to accommodate the existing system and takes into consideration the future GATRRS expansion.

RF Design Assumptions/Design Threshold Summary:

- Distance to High Country Tower = 8.5 Miles.
- Azimuth = 212.3.
- Estimated RSSI at the donor antenna = -70 dBm.
- Channel Count = 15 (P25 Digital Simulcast).
- Coverage Objective: -90 dBm RSSI for 95 % of Scope.
- Group Delay < 80 microseconds.

### 3.2.4 System Specification

All of the specifications listed throughout this section comprise the majority of equipment used in an in-building DAS. The collection of these specifications can be expressed as the in-building distributed antenna system specifications. The in-building distributed antenna system specifications for this proposed system are listed below.

#### 3.2.4.1 Specific Services

- Installation of DAS and DAS Components

- System Optimization
- Acceptance Testing
- Indoor Mapping (DAQ and RSSI)
- Closeout Documentation
- Preventative Maintenance (Optional)
- Extended Warranty (Optional)

SYSTEM PARAMETER	SPECIFICATION
Coverage Performance	DAQ 3.4, 95/95
Primary Donor Site Name	High Country Tower
Path Loss to Primary Donor site	113 dB
Signal Booster Maximum Gain	94 dB
Impedance	50 Ohms
Donor Antenna Type	Directional
Coverage Antenna Type	Omni
UPS Backup Power	4 Hours

### 3.3 DESIGN ASSUMPTIONS

- Viable electrical outlets with adequate (2'X2') wall space for system electronics will be available.
- A suitable location will be available for the donor antenna mount, either a side wall mount or non-penetrating (sled) mount.
- No Roof penetrations are required for donor antenna cable runs.
- A pre-construction site visit should be scheduled with the customer to validate design, materials, and installation services estimate and timelines.
- The customer' group who handles asbestos study is required to review the DAS design to verify no changes are required.
- Motorola anticipate the designs will require modification after the preconstruction survey is conducted. However Motorola do not anticipate significant changes in materials required to complete they system build outs.
- Construction work days will be a minimum of 8 hours, Mon-Friday.
- Site access, security escort shall not delay construction.
- One day orientation and safety training is included in this proposal.
- Motorola assumes the site has a backup generator
- Motorola did not include integration of the DAS to the fire alarm system. In the event this is necessary, a Change Order is required and any cost associated will be the responsibility of the Williamson County Sheriff's Office.

### 3.4 DAS OVERVIEW

This section gives an overview of a typical coaxial in-building distributed antenna system (DAS). All of the components listed comprise the majority of equipment used in an in-building DAS to provide a robust and efficient in- building DAS.

- Bi-Directional Amplifier(s) (BDA).
- Line Amplifier(s) if applicable.
- Coaxial cable (plenum and UV rated).
- Donor antenna(s).



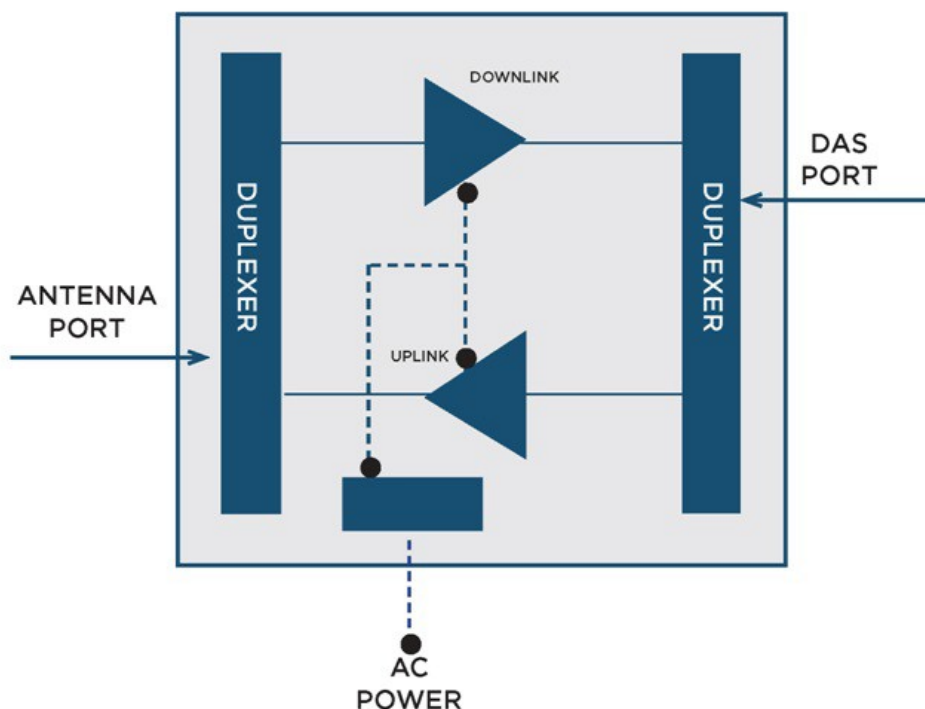
- Miscellaneous passive components (splitters, directional couplers, etc.).
- In-building antennas.
- Backup battery (optional).

The BDA captures downlink radio signal via an outdoor antenna. The radio signal is amplified by the BDA and distributed through the system through a network of coaxial cables, couplers, splitters, line amplifier where applicable, and antennas to provide radio users seamless in-building radio coverage.

### 3.4.1 Bi-Directional Amplifier (BDA) Theory Of Operation

A BDA is a device which is used to improve radio communications in an area where radio signal levels are degraded due to obstacles in the radio path. BDA's are bi-directional and are utilized for full duplexed frequencies (See Figure 2). BDA's are not designed to work with Simplex frequencies. The BDA is the heart of the in-building DAS and has specific RF filtering to limit signals to your specific pass band.

### 3.4.2 BDA Selection: Node A



**Figure 2: BDA Theory of Operation**

The Node A is a channelized BDA platform that is ideal for the transmission of analog or digital public safety frequencies. The Node A can support multiple frequency bands in a single unit. The Node A also utilizes a linear feed forward amplifier that provides, without signal distortion or reduction in the power, flexible channel programming and gain control technology.

The FCC limits the application of BDAs and only authorizes the license holder the right to retransmit their licensed frequency or frequency band.

The head end or main BDA is typically mounted in a location acceptable to the Customer. The BDA will require a standard 120 VAC, 20-ampere circuit(s) with power duplex outlets within five (5) feet. A building ground must be available within five (5) feet of the BDA(s) location. A #2 AWG green

ground wire from a NEC recognized ground source shall be provided within five (5) feet if a building ground is not readily available. All components would be properly grounded per Motorola R-56 standard. BDAs are usually mounted in a telephone equipment room and/or an IDF data closet where adequate wall space is available and where vertical access to the roof can be provided.

### 3.4.3 Coaxial Cable

Plenum-rated coaxial cable would be installed to connect all of the system components that are housed within plenum areas of the building. The plenum cable would be secured every 3' with plenum rated cable clamps, cable mounts or cable ties. Cable will typically be installed above ceiling tile and out of the public view.

Ultra-violet (UV) rated cable would be used outdoors and installed to connect the outdoor directional antenna to the BDA. Figure 3 provides examples of different cable type.



**Figure 3: Coaxial Cable**

### 3.4.4 Donor Antenna and Mounting Options

The donor antenna is usually a directional antenna, or a Yagi that is used to capture the radio signal from the donor site. This directional antenna would be mounted via a non-penetrating roof mount or a pipe mount. Once properly mounted, a UV-rated cable would be connected and run through an existing roof or wall penetration to the BDA location.



**Figure 4: Donor Antenna and Mounting Example**

### 3.4.5 In-Building Coverage Antennas

Coverage antennas would be mounted throughout each floor / area requiring coverage. These antennas are frequency specific and can be Omni-directional or directional. In-building coverage antennas are usually white or off-white in color and resemble small smoke detectors. They are mounted flush to the ceiling tiles or wall via different methods as the ceiling / wall structures permit.

### 3.4.6 Passive Components

The engineered design will dictate what passive components are used throughout the system. A combination of coaxial splitters or directional couplers may be used to ensure that the appropriate signal reaches every in-building antenna throughout the system.

**Table 1: Passive Components**

RF Parameter	2 Way Splitter	3 Way Splitter	4 Way Splitter	6 DB Directional Coupler	10 DB Directional Coupler
Frequency	380-2700	380-2700	380-2700	380-2700	380-2700
Insertion Loss (Through)	3 dB	4 dB	6 dB	.5 – 1 dB	.5 – 1 dB
Insertion Loss Coupled Port	N/A	N/A	N/A	6 dB	10 dB
VSWR	1.2:1	1.2:1	1.2:1	1.2:1	1.2:1
Number of Output Ports	2	3	4	2	2
Port Isolation	25 dB typical	25 dB typical	25 dB typical	25 dB typical	25 dB typical
Connector	N, DIN	N, DIN	N, DIN	N, DIN	N, DIN

## 3.5 R-56 STANDARDS

All installations performed by Motorola's contractor, follow the published Motorola R-56 Standard. The R-56 standard is the standard related to RF communication site construction and installation practices. Much of Motorola R-56 Standard is similar to NFPA, NEC code with an extra emphasis on wireless industry standard installation and engineering best practices.

## 3.6 ACCEPTANCE TEST PLAN–COVERAGE TESTING (ATP)

### 3.6.1 Test Process

Once the DAS installation is complete, Motorola's FSO along with GPD technicians will properly align and optimize the system. Once aligned and optimized, the Motorola and GPD technicians will verify signal coverage by measuring the control channel using an Anritsu Field Spectrum Analyzer.

After the technicians confirm that the DAS coverage will perform to the contractual requirement, a formal industry standard grid acceptance test of the coverage area would be conducted. To conduct the formal ATP, two radios in good operating condition with spare batteries would be required. The service area will be partitioned via a grid pattern that will establish a route where a series of tests will be performed to evaluate system performance. The grid configuration will vary by building. Depending on the size of the floor plan(s), the grid size may range from 20 to 50 feet.

The grid tests that will be performed consist of the measurement of the downlink received signal strength (RSSI) and an audio fidelity test will be performed based on the subjective delivered audio quality (DAQ) metric. The standard DAQ 3.4 metric will be used to qualify audio fidelity.

Once the ATP is conducted and the system passes the coverage criteria, a sign off sheet would be provided for formal system acceptance. Once the system is accepted in writing, the one (1) year warranty period begins.

### 3.6.2 Test Methodology

- In each test grid, these tests are required: RSSI and DAQ.
- Perform DAQ testing audio quality in each direction and if transmission quality meets or exceeds DAQ 3.4 criteria the grid receives a pass (if not then a fail).
- Tabulate the % of grids that pass and if pass grids equal or exceed 95% then the facility will receive conditional acceptance.
- If the % of passing grids is below 95%, Motorola and GPD will commence activities to immediately resolve the areas that received a fail status.
- Retesting of the complete system will be done following resolution of any failed sections of the test grid.
- Testing shall also include testing of each channel per system to verify each and every channel are operational and passes DAQ 3.4. This test will not be done for every grid but done only once.
- Measure RSSI with a spectrum analyzer.
- Testing at the donor end to ensure there is no desensing of the donor site

The RSSI measurement testing is for information only and will not affect the pass/fail testing of the system. DAQ testing shall be the only criteria that will dictate a pass or failure of the DAS.

# WCB DAS

## 4.1 SOLUTION OVERVIEW

In response to the request by Williamson County, Motorola is pleased to present this comprehensive proposal to provide an in-building coverage system for the Wireless Communication Building (WCB). This system solution will provide two-way communications for WCB identified by the County as having insufficient RF signal for adequate two-way communication. The system is designed by Motorola's partner, GPD Telecomm, using requirements and specification provided by Motorola.

GPD Telecomm, under the direction of Motorola, utilized propagation studies to determine the most feasible solution for providing supplemental, in-building RF coverage to the specified building. The proposed in-building distributed antenna system will enhance coverage provided by the radio system.

## 4.2 SYSTEM DESIGN OVERVIEW

This section of the proposal defines requirements for the system design and implementation of the requested in-building coverage system. The proposed in-building distributed antenna system (DAS) will work in conjunction with the Williamson County 800 MHz simulcast system. This system is designed to improve the signal coverage within the WCB in Georgetown, Texas.

### 4.2.1 Coverage Area and Scope Defined

Based on the RF design effort, the coverage system design will provide RF coverage to designated areas within the Building predicted to experience insufficient RF signal coverage in order to provide adequate two-way communication.

The DAS will provide 95% coverage, at a Delivered Audio Quality (DAQ) 3.4 level of coverage, or better. DAQ 3.4: Speech understandable with repetition only rarely needed. Some Noise Distortion.

Note: The generally accepted industry standard for public safety radio systems is 95% criteria for coverage within a building at a minimum of DAQ 3.4 as defined.

All reasonable efforts would be made to ensure that cable routing and antenna mountings will not compromise the integrity of the installation area in the building(s). Both plenum-rated (indoors) and UV rated coaxial cable (outdoors) would be used for system interconnection.

The system would be provided on a basis, including engineering, material, and installation labor necessary to provide a working system.

### 4.2.2 Coverage Prediction Plans

The section provides coverage design plan and prediction. The plans are subjected to a field study to finalize the design.



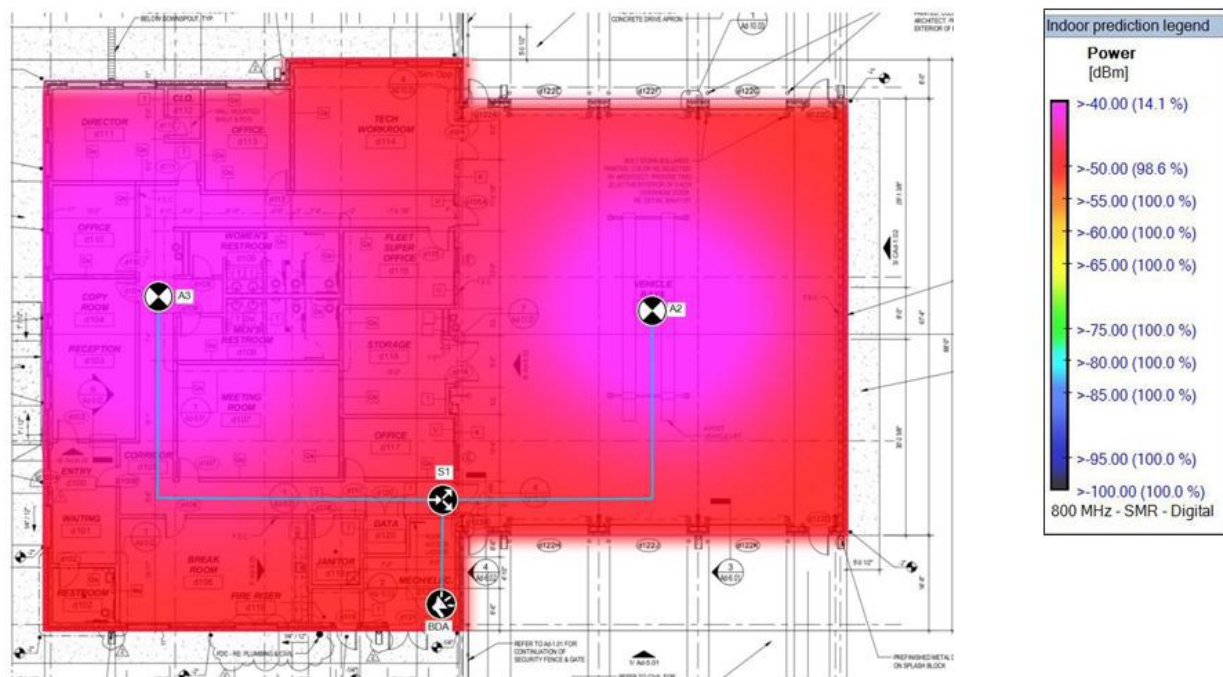


Figure 1: Preliminary DAS design Layout and Prediction

## 4.3 DAS DESIGN

The total coverage solution will include (1) distributed antenna systems (DAS) with a minimum 4 hours battery backup. The system shall utilize a yagi antenna for the over-the-air interface with the Twin Tower site, and a 30 Channel Class A Signal Booster for the BDA. The BDA was chosen to accommodate the existing system and takes into consideration the future expansion needs.

RF Design Assumptions/Design Threshold Summary:

- Distance to Twin Tower Site = 3.7 Miles.
- Azimuth = 216.15.
- Estimated RSSI at the donor antenna = -70 dBm.
- Channel Count = 15 (P25 Digital Simulcast).
- Coverage Objective: -90 dBm RSSI for 95 % of Scope.
- Group Delay < 80 microseconds.

### 4.3.1 System Specification

All of the specifications listed throughout this section comprise the majority of equipment used in an in-building DAS. The collection of these specifications can be expressed as the in-building distributed antenna system specifications. The in-building distributed antenna system specifications for this proposed system are listed below.

#### 4.3.1.1 Specific Services

- Installation of DAS and DAS Components
- System Optimization

- Acceptance Testing
- Indoor Mapping (DAQ and RSSI)
- Closeout Documentation
- Preventative Maintenance (Optional)
- Extended Warranty (Optional)

SYSTEM PARAMETER	SPECIFICATION
Coverage Performance	DAQ 3.4, 95/95
Primary Donor Site Name	Twin Tower
Path Loss to Primary Donor site	106 dB
Signal Booster Maximum Gain	94 dB
Impedance	50 Ohms
Donor Antenna Type	Directional
Coverage Antenna Type	Omni
UPS Backup Power	4 Hours

### 4.3.2 Design Assumptions

- Viable electrical outlets with adequate (2'X2') wall space for system electronics will be available.
- A suitable location will be available for the donor antenna mount, either a side wall mount or non-penetrating (sled) mount.
- No Roof penetrations are required for donor antenna cable runs. Motorola assumes there is existing roof penetration available to utilize.
- A pre-construction site visit should be scheduled with the County's team to validate design, materials, and installation services estimate and timelines.
- Motorola anticipate the designs will require modification after the preconstruction survey is conducted. However Motorola does not anticipate significant changes in materials required to complete they system build outs.
- Construction work days will be a minimum of 8 hours, Mon-Friday.
- Site access, security escort shall not delay construction.
- One day orientation and safety training is included in this proposal.
- Motorola assumes the site has back up generator.
- Motorola did not include integration of the DAS to the fire alarm system. In the event this is necessary, a Change Order is required and any cost associated will be the responsibility of Williamson County.

## 4.4 DAS OVERVIEW

This section gives an overview of a typical coaxial in-building distributed antenna system (DAS). All of the components listed comprise the majority of equipment used in an in-building DAS to provide a robust and efficient in- building DAS.

- Bi-Directional Amplifier(s) (BDA).
- Line Amplifier(s) if applicable.



- Coaxial cable (plenum and UV rated).
- Donor antenna(s).
- Miscellaneous passive components (splitters, directional couplers, etc.).
- In-building antennas.
- Backup battery (optional).

The BDA captures downlink radio signal via an outdoor antenna. The radio signal is amplified by the BDA and distributed through the system through a network of coaxial cables, couplers, splitters, line amplifier where applicable, and antennas to provide radio users seamless in-building radio coverage.

#### 4.4.1 Bi-Directional Amplifier (BDA) Theory of Operation

A BDA is a device which is used to improve radio communications in an area where radio signal levels are degraded due to obstacles in the radio path. BDA's are bi-directional and are utilized for full duplexed frequencies (See Figure 2). BDA's are not designed to work with Simplex frequencies. The BDA is the heart of the in-building DAS and has specific RF filtering to limit signals to your specific pass band.

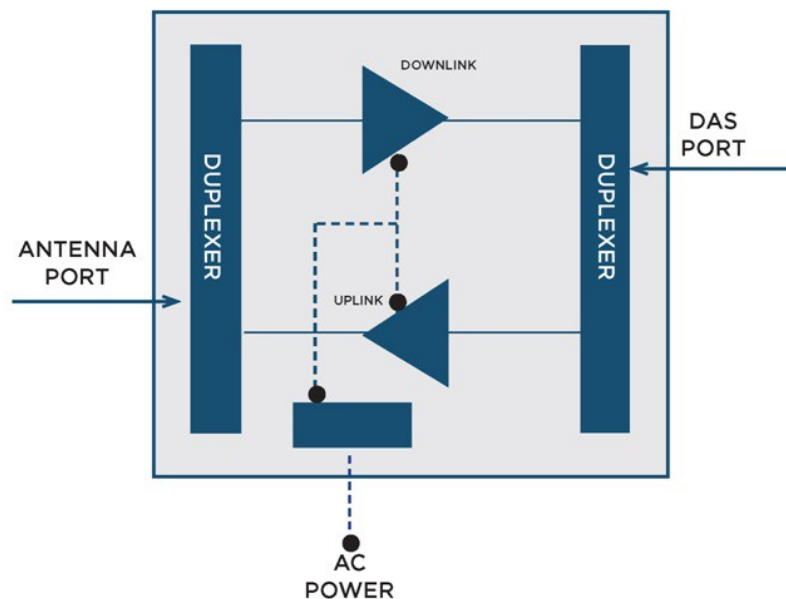


Figure 2: BDA Theory of Operation

#### 4.4.2 BDA Selection: Node A

The Node A is a channelized BDA platform that is ideal for the transmission of analog or digital public safety frequencies. The Node A can support multiple frequency bands in a single unit. The Node A also utilizes a linear feed forward amplifier that provides, without signal distortion or reduction in the power, flexible channel programming and gain control technology. The FCC limits the application of BDAs and only authorizes the license holder the right to retransmit their licensed frequency or frequency band.

The head end or main BDA is typically mounted in a location acceptable to the Customer. The BDA will require a standard 120 VAC, 20-ampere circuit(s) with power duplex outlets within five (5) feet.

A building ground must be available within five (5) feet of the BDA(s) location. A #2 AWG green ground wire from a NEC recognized ground source shall be provided within five (5) feet if a building ground is not readily available. All components would be properly grounded per Motorola R-56 standard. BDAs are usually mounted in a telephone equipment room and/or an IDF data closet where adequate wall space is available and where vertical access to the roof can be provided.

### 4.4.3 Coaxial Cable

Plenum-rated coaxial cable would be installed to connect all of the system components that are housed within plenum areas of the building. The plenum cable would be secured every 3' with plenum rated cable clamps, cable mounts or cable ties. Cable will typically be installed above ceiling tile and out of the public view.

Ultra-violet (UV) rated cable would be used outdoors and installed to connect the outdoor directional antenna to the BDA. Figure 3 provides examples of different cable type.



**Figure 3: Coaxial Cable**

### 4.4.4 Donor Antenna and Mounting Options

The donor antenna is usually a directional antenna, or a Yagi that is used to capture the radio signal from the donor site. This directional antenna would be mounted via a non-penetrating roof mount or a pipe mount. Once properly mounted, a UV-rated cable would be connected and run through an existing roof or wall penetration to the BDA location.



**Figure 4: Donor Antenna and Mounting Example**

#### 4.4.5 In-Building Coverage Antennas

Coverage antennas would be mounted throughout each floor / area requiring coverage. These antennas are frequency specific and can be Omni-directional or directional. In-building coverage antennas are usually white or off-white in color and resemble small smoke detectors. They are mounted flush to the ceiling tiles or wall via different methods as the ceiling / wall structures permit.

#### 4.4.6 Passive Components

The engineered design will dictate what passive components are used throughout the system. A combination of coaxial splitters or directional couplers may be used to ensure that the appropriate signal reaches every in-building antenna throughout the system.

**Table 1: Passive Components**

RF Parameters	2 Way Splitter	3 Way Splitter	\$ Way Splitter	6DB Directional Coupler	10 DB Directional Coupler
Frequency	380-2700	380-2700	380-2700	380-2700	380-2700
Insertion Loss (Through)	3 dB	4 dB	6 dB	.5 – 1 dB	.5 – 1 dB
Insertion Loss Coupled Port	N/A	N/A	N/A	6 dB	10 dB
VSWR	1.2:1	1.2:1	1.2:1	1.2:1	1.2:1
Number of Output Ports	2	3	4	2	2
Port Isolation	25 dB typical	25 dB typical	25 dB typical	25 dB typical	25 dB typical
Connector	N, DIN	N, DIN	N, DIN	N, DIN	N, DIN

## 4.5 R-56 STANDARDS

All installations performed by Motorola's contractor, follow the published Motorola R-56 Standard. The R-56 standard is the standard related to RF communication site construction and installation practices. Much of Motorola R-56 Standard is similar to NFPA, NEC code with an extra emphasis on wireless industry standard installation and engineering best practices.

## 4.6 ACCEPTANCE TEST PLAN–COVERAGE TESTING (ATP)

### 4.6.1 Test Process

Once the DAS installation is complete, Motorola's FSO along with GPD technicians will properly align and optimize the system. Once aligned and optimized, the Motorola and GPD technicians will verify signal coverage by measuring the control channel using an Anritsu Field Spectrum Analyzer. Once satisfied with the levels.

After the technicians confirm that the DAS coverage will perform to the contractual requirement, a formal industry standard grid acceptance test of the coverage area would be conducted. To conduct the formal ATP, two radios in good operating condition with spare batteries would be required. The service area will be partitioned via a grid pattern that will establish a route where a series of tests will be performed to evaluate system performance. The grid configuration will vary by building. Depending on the size of the floor plan(s), the grid size may range from 20 to 50 feet.

The grid tests that will be performed consist of the measurement of the downlink received signal strength (RSSI) and an audio fidelity test will be performed based on the subjective delivered audio quality (DAQ) metric. The standard DAQ 3.4 metric will be used to qualify audio fidelity.

Once the ATP is conducted and the system passes the coverage criteria, a sign off sheet would be provided for formal system acceptance. Once the system is accepted in writing, the one (1) year warranty period begins.

## 4.6.2 Test Methodology

- In each test grid, these tests are required: RSSI and DAQ.
- Perform DAQ testing audio quality in each direction and if transmission quality meets or exceeds DAQ 3.4 criteria the grid receives a pass (if not then a fail).
- Tabulate the % of grids that pass and if pass grids equal or exceed 95% then the facility will receive conditional acceptance.
- If the % of passing grids is below 95%, Motorola and GPD will commence activities to immediately resolve the areas that received a fail status.
- Retesting of the complete system will be done following resolution of any failed sections of the test grid.
- Testing shall also include testing of each channel per system to verify each and every channel are operational and passes DAQ 3.4. This test will not be done for every grid but done only once.
- Measure RSSI with a spectrum analyzer for informational only.
- Testing at the donor end to ensure there is no desensing of the donor site from the DAS.

The RSSI measurement testing is for information only and will not affect the pass/fail testing of the system. DAQ testing shall be the only criteria that will dictate a pass or failure of the DAS.

# SYSTEM SUMMARY

Total solution price per equipment and services outlined in this proposal

Description	Price
<b>Williamson County Annex DAS</b>	\$125,514.00
HGAC Contract, and 4 Project Combined Discount	\$(11,514.00)
<b>GRAND TOTAL</b>	<b>\$114,000.00</b>

Description	Price
<b>Williamson County SO Training Center DAS</b>	\$103,765.00
HGAC Contract, and 4 Project Combined Discount	\$(9,715.00)
<b>GRAND TOTAL</b>	<b>\$94,050.00</b>

Description	Price
<b>Williamson County EMS Training Center DAS</b>	\$115,167.00
HGAC Contract, and 4 Project Combined Discount	\$(10,667.00)
<b>GRAND TOTAL</b>	<b>\$104,500.00</b>

Description	Price
<b>Williamson County WCB DAS</b>	\$102,449.00
HGAC Contract, and 4 Project Combined Discount	\$(9,549.00)
<b>GRAND TOTAL</b>	<b>\$92,900.00</b>

Description	Price
<b>Combined Total</b>	\$405,450.00
Additional Combined Project Discount	\$(5,500.00)
<b>COMBINED GRAND TOTAL</b>	<b>\$399,950.00</b>



# TERMS AND CONDITIONS

Terms and Conditions are included on the pages that follow.



## **SYSTEM PURCHASE AGREEMENT (Radio Systems)**

THIS AGREEMENT ("Agreement") is made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, by and between Motorola Solutions, Inc., a Delaware corporation duly authorized to conduct business in the State of Texas ("Motorola" or "Seller") and \_\_\_\_\_, a body corporate and politic ("Purchaser").

### **WITNESSETH:**

WHEREAS, the Purchaser desires to purchase a Communications System; and

WHEREAS, Motorola desires to sell a Communications System to Purchaser; and

WHEREAS, Houston-Galveston Area Council ("H-GAC"), acting as the agent for various local governmental entities who are "End Users" under interlocal agreements (including the Purchaser) has solicited proposals for radio communications equipment and conducted discussions with Motorola concerning its proposal and, where applicable, in accordance with the competitive procurement procedures of Texas law; and

WHEREAS, H-GAC and Motorola entered into that certain Contract dated as of May 1, 2015 (the "Contract"), which provided that End Users may purchase radio communications equipment from Motorola pursuant to certain terms contained therein; and

WHEREAS, pursuant to Article 6 of the Contract, Motorola and Purchaser now wish to enter into this System Purchase Agreement to delineate the specific terms of the purchase of radio communications equipment from Motorola by the Purchaser.

THEREFORE, the parties hereby enter into an agreement pursuant to which Motorola shall perform the work and furnish the equipment and services as more fully set forth herein and in the following exhibits, which are either attached hereto or incorporated by reference and hereby made a part of this Agreement:

Exhibit A      General Provisions.

Exhibit B      Motorola Software License Agreement.

Exhibit C      Technical and Implementation Documents, consisting of: \_\_\_\_\_  
all dated \_\_\_\_\_.

Exhibit D      Motorola/H-GAC Contract dated May 1, 2015.

Exhibit E      Warranty and Maintenance Plan and Service Terms and Conditions (if applicable).

NOW, THEREFORE, for and in consideration of the mutual promises and covenants contained herein, the parties agree as follows:



## **Section 1      SCOPE OF WORK**

A.      Motorola shall furnish all of the equipment and software as outlined in Exhibit C and provide the tools, supplies, labor and supervision necessary for the installation of the items purchased in accordance with Exhibit C.

B.      In addition to responsibilities described in the Statement of Work, Purchaser shall perform the following coincident with the performance of this Agreement:

- (1)      Provide a designated Project Director.
- (2)      Provide ingress and egress to Purchaser's facilities and/or sites as requested by Motorola and have such facilities available for installation of the equipment to be installed.
- (3)      Provide adequate telephone or other communications lines (including modem access and adequate interfacing networking capabilities) for the installation, operation and support of the equipment.
- (4)      Provide adequate space, air conditioning and other environmental conditions, and adequate and appropriate electrical power outlets, distribution, equipment and connections for the installation, operation and support of the equipment.
- (5)      Provide a designated work area with adequate heat and light, and a secure storage area for equipment delivered to the Purchaser. The Purchaser shall be solely liable for loss or damage to equipment prior to, during and following installation when such equipment is on or within Purchaser's facilities and/or vehicles.

## **Section 2      SITES**

This Agreement is predicated on the utilization of sites and site configurations, which have been selected either by the Purchaser or by Motorola and set forth in Exhibit C. In either situation, should it be determined by either Motorola or Purchaser during the course of performance on this Agreement that the sites or configuration selected are no longer available or desired, new or replacement sites or configuration will be selected and approved by both Motorola and the Purchaser. If any price or schedule adjustments are necessary as a result of these new or replacement sites, such adjustments will be added to this Agreement by change order in accordance with Section 4 of the General Provisions.

## **Section 3      SUBSURFACE/STRUCTURAL CONDITIONS**

This Agreement is predicated upon normal soil conditions defined by E.I.A. standard RS-222 (latest revision). Should Motorola encounter subsurface, structural, adverse environmental and/or latent conditions at any site differing from those indicated on the specifications, or as used in the preparation of the bid price, the Purchaser will be given immediate notice of such conditions before they are further disturbed. Thereupon, Motorola and the Purchaser shall

promptly investigate the conditions and, if found to be different, will adjust the plans and/or specifications as may be necessary. Any changes that cause an adjustment in the contract price or in time required for the performance of any part of the contract shall result in a contract modification in accordance with Section 4 of the General Provisions.

#### **Section 4      PERIOD OF PERFORMANCE**

A.      Motorola projects that it will be able to obtain final acceptance and completion of the Acceptance Test Plan within the time interval specified in Exhibit C (if applicable). A more detailed timeline shall be provided to Purchaser after the design review and customer kick-off meeting.

B.      Whenever a party knows or reasonably should know that any actual or potential condition due to circumstances beyond its control is delaying or threatens to delay the timely performance of the work, the party shall within thirty (30) days give the other party notice thereof and may request an extension of time to perform the work.

C.      In order to successfully integrate and implement this project, shipments will be made F.O.B. Destination to Purchaser facilities, local Motorola staging facilities, warehousing facilities, or any combination thereof. It is agreed that this plan is acceptable to Purchaser and that Motorola will advise prior to shipment of actual destination and that Purchaser will accept shipment, and make payment as required by this Agreement.

D.      It is also agreed that equipment shipping dates reflected in this Agreement are estimates only, and that shipment may be made at any time prior to, or subsequent to these estimated shipping dates.

#### **Section 5      ACCEPTANCE CRITERIA**

A.      Motorola will test the Communications System in accordance with the Acceptance Test Plan. System acceptance will occur upon the successful completion of such testing ("System Acceptance") at which time both parties shall promptly execute a certificate of system acceptance. If the Acceptance Test Plan includes separate tests for individual subsystems or phases of the System, both parties shall promptly execute certificates of subsystem acceptance upon the successful completion of testing of such subsystems or phases. Minor omissions or variances in performance which do not materially affect the operation of the Communications System as a whole will not postpone System Acceptance. Purchaser and Motorola will jointly prepare a list of such omissions and variances which Motorola will correct according to an agreed upon schedule.

B.      Motorola agrees to notify Purchaser when the Communications System is ready for acceptance testing. Motorola and Purchaser agree to commence acceptance testing within ten (10) business days after receiving such notification. If testing is delayed for reasons within the control of Purchaser or its employees, contractors, agents or consultants for more than ten (10) business days after notification, final payment will be due within thirty (30) days after such notification and the Warranty Period will commence immediately.

C. Motorola may, but is not obligated to, issue written authorization for Purchaser to use the Communications System or its subsystem(s) for limited training or testing purposes, prior to the completion of testing by Motorola. Any use of the Communications System without prior written authorization by Motorola shall constitute System Acceptance.

## **Section 6      PAYMENT SCHEDULE**

A. Motorola agrees to sell all of the equipment and perform the services as outlined in the Scope of Work, and Purchaser agrees to buy the aforementioned equipment and services for the sum of \_\_\_\_\_ (\$\_\_\_\_\_), which includes the H-GAC administration fee. The final price may be adjusted by change orders approved pursuant to Statement of Work attached hereto as Exhibit "C".

B. Payments to Motorola shall be made according to the following milestones:

1. 20% of the total contract price is due after project kickoff and design review meeting;
2. 60% of the total contract price will be invoiced immediately after the Equipment is shipped from Motorola's facilities;
3. 10% of the total contract price will be invoiced immediately after the Equipment is installed at the sites specified in the Exhibits; and
4. 10% of the total contract price will be invoiced immediately after System Acceptance.

Motorola reserves the right to make partial shipments of equipment and to request payment upon shipment of such equipment. In addition, Motorola reserves the right to invoice for installations or civil work completed on a site-by-site basis, when applicable.

C. In the event of failure or delay by the Purchaser in providing sites, space, approvals, licenses, or any other Purchaser obligations required preceding delivery of Motorola equipment, it is agreed that Motorola, at its sole discretion, may ship equipment as planned and that the Purchaser will accept the equipment and make payment in accordance with the terms of this Agreement. Any additional costs incurred by Motorola for storage of equipment will be invoiced and paid by Purchaser.

D. Payments to Motorola shall be made as follows:

- (i) Motorola shall immediately forward an invoice for the payment requested in Section 6(B) above to Purchaser.
- (ii) Purchaser shall pay the Motorola invoice within thirty (30) calendar days of receipt.

E. Motorola will pay H-GAC's administrative fee in accordance with the payment terms of Motorola/H-GAC Contract dated May 1, 2015.

F. TERM. Unless terminated in accordance with other provisions of this Agreement or extended by mutual agreement of the Parties, the term of this Agreement begins on the date as set forth above and continues until the date of Final Project Acceptance or expiration of the Warranty Period, whichever occurs last.

## **Section 7 PROJECT MANAGEMENT**

A. If the size or complexity of the project warrants, Motorola will assign a Project Manager, who is authorized to exercise technical direction of this project. Motorola, at any time, may designate a new or alternate Project Manager with written notice to Purchaser and H-GAC.

B. All matters affecting the terms of this Agreement or the administration thereof shall be referred to Motorola's cognizant Contract Administrator who shall have authority to negotiate changes in or amendments to this Agreement.

## **Section 8 NOTICE ADDRESSES**

A. Motorola Solutions, Inc.  
1303 East Algonquin Road  
Schaumburg, IL 60196  
Attn.: Law Department

B.

C. Houston-Galveston Area Council  
3555 Timmons Lane, Suite 120  
Houston, Texas 77027  
Attn.: Public Services Manager

## **Section 9 ORDER OF PRECEDENCE**

In the event of an inconsistency in this Agreement, the inconsistency shall be resolved in the following order:

The main body of this Agreement.

Exhibit A General Provisions.

Exhibit B Motorola Software License.

Exhibit C      Technical and Implementation Documents, consisting of: \_\_\_\_\_.

Exhibit E      Warranty and Maintenance Plan and Service Terms and Conditions (if applicable)

Exhibit D      Motorola/H-GAC Contract dated \_\_\_\_\_.

## **Section 10      DISPUTES**

Motorola and the Purchaser will attempt to settle any claim or controversy arising out of this Agreement through consultation and negotiation in good faith and a spirit of mutual cooperation. If those attempts fail, then the dispute will be mediated by a mutually acceptable mediator to be chosen by Motorola and the Purchaser within thirty (30) days after written notice by one of the parties demanding non-binding mediation. Neither party may unreasonably withhold consent to the selection of a mediator. Motorola and the Purchaser will bear their own costs but will share the cost of the mediator equally. By mutual agreement, however, Motorola and Purchaser may postpone mediation until both parties have completed some specified but limited discovery about the dispute. The parties may also agree to replace mediation with some other form of non-binding alternate dispute resolution procedure ("ADR").

Any dispute which cannot be resolved between the parties through negotiation or mediation within two (2) months of the date of the initial demand for it by one of the parties may then be submitted to a court of competent jurisdiction in Texas. Both Motorola and Purchaser consent to jurisdiction over it by such a court. All communications pursuant to the negotiation and mediation will be treated as compromise and settlement negotiations for purposes of applicable rules of evidence and any additional confidentiality protections provided by applicable law. The use of any ADR procedures will not be considered under the doctrine of laches, waiver or estoppel to affect adversely the rights of either party. Nothing shall prevent either of the parties from resorting to the judicial proceedings mentioned in this paragraph if (a) good faith efforts to attempt resolution of the dispute under these procedures have been unsuccessful or (b) interim relief from the court is necessary to prevent serious and irreparable injury to one of the parties or others.

## **Section 11      SEVERABILITY**

If any portion of this Agreement or any exhibits hereto is held to be invalid, such provision or portion of such provision shall be considered severable, and the remainder of this Agreement shall not be affected.

## **Section 12      HEADINGS AND SECTION REFERENCES**

The headings given to the paragraphs are inserted for convenience only and are in no way to be construed as part of this Agreement or as a limitation of the scope of the particular paragraph to which the heading refers.

## **Section 13      SURVIVAL OF TERMS**

The following provisions will survive the expiration or termination of this Agreement for any reason: Section 6 (Payment Schedule) if any payment obligations exist; Section 9 (Order of Precedence); Section 10 (Disputes); Section 11 (Severability); Section 12 (Headings and Section References); Section 13 (Survival of Terms) and Section 14 (Full Agreement).

#### **Section 14 FULL AGREEMENT**

This Agreement and its Exhibits constitute the final expression of the agreement of the parties and supersedes all previous agreements and understandings, whether written or oral, relating to the work. This Agreement may be executed in multiple counterparts, each of which shall be an original and all of which shall constitute one and the same instrument. A facsimile copy or computer image, such as a PDF or tiff image, or a signature shall be treated as and shall have the same effect as an original signature. In addition, a true and correct facsimile copy or computer image of this Agreement shall be treated as and shall have the same effect as an original signed copy of this document. This Agreement may not be altered, amended, or modified except by written instrument signed by duly authorized representatives of the parties. The preprinted terms and conditions found on any Purchaser purchase order, acknowledgment or other form will not be considered an amendment or modification of this Agreement, even if a representative of each party signs that document.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed by their duly authorized representatives as of the last day and year written below.

**MOTOROLA SOLUTIONS, INC.**

**PURCHASER**

By: \_\_\_\_\_  
(Signature)

By: \_\_\_\_\_  
(Signature)

Name: \_\_\_\_\_  
(Print - Block Letters)

Name: \_\_\_\_\_  
(Print - Block Letters)

Title: \_\_\_\_\_  
(Print - Block Letters)

Title: \_\_\_\_\_  
(Print - Block Letters)

Date: \_\_\_\_\_

Date: \_\_\_\_\_

**EXHIBIT A**  
**GENERAL PROVISIONS**  
**MOTOROLA SOLUTIONS, INC.**

**Section 1      STANDARDS OF WORK**

Motorola agrees that the performance of work described in this Agreement and pursuant to this Agreement shall be done in a professional manner and shall conform to professional standards. All packaging and packing shall be in accordance with good commercial practice.

**Section 2      TAXES**

The prices set forth in the Agreement are exclusive of any amount for Federal, State or Local excise, sales, lease, gross income service, rental, use, property, occupation or similar taxes. If any taxes are determined applicable to this transaction or Motorola is required to pay or bear the burden thereof, the Purchaser agrees to pay to Motorola the amount of such taxes and any interest or penalty thereon no later than thirty (30) days after receipt of an invoice therefor.

**Section 3      SHIPPING, TITLE AND RISK OF LOSS**

All sales and deliveries are F.O.B. Destination. Motorola reserves the right to make deliveries in installments and the Agreement shall be severable as to such installments. Title to the equipment shall pass to the Purchaser upon receipt at the F.O.B. Destination. After delivery to the F.O.B. Destination, risk of loss and damage to the articles shall be borne by the Purchaser. The above notwithstanding, title to software and any third party supplied software shall not pass upon payment of the license fee therefor or under any circumstances.

**Section 4      CHANGES IN THE WORK**

A. The Purchaser may, at any time, by written order, make changes within the general scope of the work, including but not limited to revisions of, or additions to, portions of the work, or changes in method of shipment or packaging and place of delivery.

B. If any order under this Section 4 causes an increase or decrease in the cost of or time required for the performance of any part of the work under this Agreement, an equitable adjustment shall be made in the Agreement price or delivery schedule, or both, and the Agreement shall be modified in writing accordingly. Motorola is not obligated to comply with any order hereunder unless and until the parties reach agreement as to the aforementioned equitable adjustment and same is reflected as an addendum to this Agreement.



## **Section 5      LIMITATION OF LIABILITY**

Except for personal injury or death, Motorola's total liability whether for breach of contract, warranty, negligence, indemnification, strict liability in tort or otherwise, is limited to the price of the particular products or services sold hereunder with respect to which losses or damages are claimed. IN NO EVENT WILL MOTOROLA BE LIABLE FOR ANY LOSS OF USE, LOSS OF TIME, INCONVENIENCE, COMMERCIAL LOSS, LOST PROFITS OR SAVINGS OR OTHER INCIDENTAL, SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES TO THE FULL EXTENT SUCH MAY BE DISCLAIMED BY LAW. This limitation of liability provision survives the expiration or termination of the Agreement and applies notwithstanding any contrary provision. No action shall be brought for any breach of this contract more than two (2) years after the accrual of such cause of action except for money due upon an open account.

## **Section 6      EXCUSABLE DELAYS**

A. Neither Motorola nor the Purchaser shall be responsible for delays or lack of performance resulting from acts beyond the reasonable control of the party or parties. Such acts shall include, but are not be limited to, acts of God; fire; strikes; material shortages; compliance with laws or regulations; riots; acts of war; or any other conditions beyond the reasonable control of the party or parties.

B. Delays as identified herein may cause an impact on the Period of Performance stated in the Agreement. Such delays will be subject to an Agreement addendum as described in Section 4.

## **Section 7      DEFAULT**

A. If either party fails to perform a material obligation under this Agreement, the other party may consider the non-performing party to be in default (unless such failure has been caused by the conditions set forth in Section 6 of these General Provisions) and may assert a default claim by giving the non-performing party a written and detailed notice of default. Except for a default by Purchaser for failing to pay any amount when due under this Agreement which must be cured immediately, the defaulting party will have thirty (30) days after receipt of the notice of default to either cure the default or, if the default is not curable within thirty (30) days, provide a written cure plan. The defaulting party will begin implementing the cure plan immediately after receipt of notice by the other party that it approves the plan. If Purchaser is the defaulting party, Motorola may stop work on the project until it approves the Purchaser's cure plan.

B. If a defaulting party fails to cure the default as provided above in Section 7.A, unless otherwise agreed in writing, the non-defaulting party may terminate any unfulfilled portion of this Agreement. In the event of termination for default, the defaulting party will promptly return to the non-defaulting party any of its confidential information. If Purchaser is the non-defaulting party, terminates this Agreement as

permitted by this Section, and completes the System through a third party, Purchaser may as its exclusive remedy recover from Motorola reasonable costs incurred to complete the System to a capability not exceeding that specified in this Agreement less the unpaid portion of the contract price. Purchaser will mitigate damages and provide Motorola with detailed invoices substantiating the charges. IN THE EVENT OF DEFAULT, MOTOROLA SHALL NOT BE LIABLE FOR ANY INCIDENTAL, LIQUIDATED, SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES.

## **Section 8 DELAYS BY PURCHASER**

If the Purchaser is responsible for delays in the schedule set forth in the Agreement, the Purchaser shall be liable for actual costs incurred by Motorola resulting from these delays if Motorola requests compensation. Such charges may include, but are not limited to, additional Engineering; rescheduling charges; storage charges; maintenance charges; and transportation charges. The Purchaser shall have the option to attempt to minimize actual costs incurred by storing and transporting equipment at its own expense. Such delays will be subject to an Agreement addendum as described in Section 4.

## **Section 9 LICENSES/AUTHORIZATION**

The Purchaser is solely responsible for obtaining any licenses or other authorizations required by the Federal Communications Commission and for complying with FCC rules. Neither Motorola nor any of its employees is an agent or representative of the Purchaser in FCC matters or otherwise. Motorola, however, may assist in the preparation of the license application at no charge to the Purchaser. Purchaser acknowledges that project implementation is predicated on receipt of proper FCC licensing.

## **Section 10 INDEMNIFICATION**

Motorola agrees to and hereby indemnifies and saves Purchaser harmless from all liabilities, judgments, costs, damages and expenses which may accrue against, be charged to, or recovered from the Purchaser by reason of or on account of damage to the tangible property of the Purchaser or the property of, injury to, or death of any person, to the extent and in the proportion that such damage or injury is caused by Motorola's negligent acts or omissions or that of its employees, subcontractors, or agents while on the premises of the Purchaser during the delivery and installation of the communications equipment. IN NO EVENT WILL MOTOROLA BE LIABLE FOR INCIDENTAL, SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES.

## **Section 11 WARRANTIES**

A. WARRANTY PERIOD. Upon System Acceptance, the System Functionality representation described below is fulfilled. The Equipment and Motorola Software is warranted for a period of one (1) year after System Acceptance ("Warranty Period") in accordance with the applicable limited warranties shown below. In no event will the warranty period last longer than eighteen (18) months after the Equipment and Software

is shipped from Motorola. Purchaser must notify Motorola in writing if Equipment or Motorola Software does not conform to these warranties no later than one month after the expiration of the Warranty Period.

B. **SYSTEM FUNCTIONALITY.** Motorola represents that the Communications System will satisfy the functional requirements in Exhibit C. Upon System Acceptance, this System Functionality representation is fulfilled. After System Acceptance, the Equipment Warranty set forth below and the Software Warranty set forth in the Software License Agreement will apply.

Motorola will not be responsible for performance deficiencies of the System caused by ancillary equipment not furnished by Motorola which is attached to or used in connection with the System provided hereunder. Additionally, Motorola will not be responsible for System performance when the functionality is reduced for reasons beyond Motorola's control including, but not limited to, i) an earthquake, adverse atmospheric conditions or other natural causes; ii) the construction of a building that adversely affects the microwave path reliability or RF coverage; iii) the addition of additional frequencies at System sites that cause RF interference or intermodulation; iv) Purchaser changes to load usage and/or configuration outside the parameters specified in Exhibit C; v) any other act of parties who are beyond Motorola's control, including Purchaser or its employees, contractors, consultants or agents.

C. **EQUIPMENT WARRANTY.** Motorola warrants the Equipment against material defects in material and workmanship under normal use and service during the Warranty Period. Unless otherwise specified in writing, the Warranty Period for non-Motorola manufactured Equipment will be as stated in this Section. At no additional charge and at its option, Motorola will either repair the defective Equipment, replace it with the same or equivalent Equipment, or refund the purchase price of the defective Equipment, and such action on the part of Motorola will be the full extent of Motorola's liability hereunder. Repaired or replaced Equipment is warranted for the balance of the original applicable warranty period. All replaced parts of the Equipment shall become the property of Motorola.

#### THIS WARRANTY DOES NOT APPLY TO

- a) Defects or damage resulting from use of the Equipment in other than its normal and customary manner.
- b) Defects or damage occurring from misuse, accident, liquids, neglect or acts of God.
- c) Defects or damage occurring from testing, maintenance, installation, alteration, modification, or adjustment not provided by Motorola pursuant to this System Purchase Agreement.

- d) Breakage of or damage to antennas unless caused directly by defects in material or workmanship.
- e) Equipment that has been subjected to unauthorized modifications, disassembly or repairs (including the addition to the Equipment of non-Motorola supplied equipment if not authorized by Motorola) which adversely affect performance of the Equipment or interfere with Motorola's normal warranty inspection and testing of the Equipment to verify any warranty claim.
- f) Equipment that has had the serial number removed or made illegible.
- g) Batteries (because they carry their own separate limited warranty).
- h) Freight costs to the repair depot.
- i) Equipment that has been subject to illegal or unauthorized alteration of the software/firmware in the Equipment.
- j) Scratches or other cosmetic damage to Equipment surfaces that does not affect the operation of the Equipment.
- k) Software.
- l) Normal or customary wear and tear.

D. Motorola Software Warranty. Motorola Software is warranted in accordance with the terms of the Software License Agreement attached as Exhibit B.

E. These express limited warranties as set forth in this Section are extended by Motorola to the original end user purchasing or leasing the System for commercial, industrial, or governmental use only, and are not assignable or transferable. These are the complete warranties for the Equipment and Software provided pursuant to this Agreement.

F. THESE WARRANTIES ARE GIVEN IN LIEU OF ALL OTHER WARRANTIES. MOTOROLA DISCLAIMS ALL OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT WILL MOTOROLA BE LIABLE FOR DAMAGES IN EXCESS OF THE PURCHASE PRICE OF THE EQUIPMENT. IN NO EVENT WILL MOTOROLA BE LIABLE FOR ANY LOSS OF USE, LOSS OF TIME, INCONVENIENCE, COMMERCIAL LOSS, LOST PROFITS OR SAVINGS OR OTHER INCIDENTAL, SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE EQUIPMENT, TO THE FULL EXTENT SUCH MAY BE DISCLAIMED BY LAW.

## **Section 12      CONFIDENTIAL INFORMATION**

Motorola proprietary computer programs will be released in accordance with the Software License provisions set forth elsewhere, if applicable. All other material and information of confidential nature marked Motorola PROPRIETARY and/or CONFIDENTIAL will be released as necessary under the following conditions:

- (1) Purchaser shall exercise reasonable and prudent measures to keep these items in confidence.
- (2) Purchaser shall not disclose these items to third parties without prior written permission, unless Motorola makes them public or Purchaser learns them rightfully from sources independent of Motorola, or it is required by law to be disclosed.
- (3) Motorola, where necessary, retains the right to prescribe specific security measures for the Purchaser to follow to maintain the confidentiality.

In the event disclosure of such information is necessary, a separate Non-Disclosure Agreement will be required.

## **Section 13      SOFTWARE LICENSE**

A. Motorola Software. Any Motorola Software furnished will be licensed to Purchaser solely according to the terms and restrictions of the Software License Agreement attached as Exhibit B. Purchaser hereby accepts all of the terms and restrictions of the Software License Agreement.

B. Non-Motorola Software. Any Non-Motorola Software furnished by Motorola will be subject to the terms and restrictions of its copyright owner unless such copyright owner has granted to Motorola the right to sublicense such Non-Motorola Software pursuant to the Software License Agreement, in which case the Software License Agreement (including any addendum to satisfy such copyright owner's requirements) shall apply and the copyright owner will have all of Motorola's rights and protections under the Software License Agreement.

## **Section 14      PATENT INDEMNIFICATION**

A. Motorola will defend at its expense any suit brought against Purchaser to the extent it is based on a third-party claim alleging that the Equipment manufactured by Motorola or the Motorola Software ("Motorola Product") directly infringes a United States patent or copyright ("Infringement Claim"). Motorola's duties to defend and indemnify are conditioned upon: Purchaser promptly notifying Motorola in writing of the Infringement Claim; Motorola having sole control of the defense of the suit and all negotiations for its settlement or compromise; and Purchaser providing to Motorola cooperation and, if requested by Motorola, reasonable assistance in the defense of the Infringement Claim. In addition to Motorola's obligation to defend, and subject to the

same conditions, Motorola will pay all damages finally awarded against Purchaser by a court of competent jurisdiction for an Infringement Claim or agreed to, in writing, by Motorola in settlement of an Infringement Claim.

B. If an Infringement Claim occurs, or in Motorola's opinion is likely to occur, Motorola may at its option and expense: (a) procure for Purchaser the right to continue using the Motorola Product; (b) replace or modify the Motorola Product so that it becomes non-infringing while providing functionally equivalent performance; or (c) accept the return of the Motorola Product and grant Purchaser a credit for the Motorola Product, less a reasonable charge for depreciation. The depreciation amount will be calculated based upon generally accepted accounting standards.

C. Motorola will have no duty to defend or indemnify for any Infringement Claim that is based upon: (a) the combination of the Motorola Product with any software, apparatus or device not furnished by Motorola; (b) the use of ancillary equipment or software not furnished by Motorola and that is attached to or used in connection with the Motorola Product; (c) Motorola Product designed or manufactured in accordance with Purchaser's designs, specifications, guidelines or instructions, if the alleged infringement would not have occurred without such designs, specifications, guidelines or instructions; (d) a modification of the Motorola Product by a party other than Motorola; (e) use of the Motorola Product in a manner for which the Motorola Product was not designed or that is inconsistent with the terms of this Agreement; or (f) the failure by Purchaser to install an enhancement release to the Motorola Software that is intended to correct the claimed infringement. In no event will Motorola's liability resulting from its indemnity obligation to Purchaser extend in any way to royalties payable on a per use basis or the Purchaser's revenues, or any royalty basis other than a reasonable royalty based upon revenue derived by Motorola from Purchaser from sales or license of the infringing Motorola Product.

D. This Section 14 provides Purchaser's sole and exclusive remedies and Motorola's entire liability in the event of an Infringement Claim. Purchaser has no right to recover and Motorola has no obligation to provide any other or further remedies, whether under another provision of this Agreement or any other legal theory or principle, in connection with an Infringement Claim. In addition, the rights and remedies provided in this Section 14 are subject to and limited by the restrictions set forth in Section 5.

## **Section 15 DISCLAIMER OF PATENT LICENSE**

Nothing contained in this Agreement shall be deemed to grant, either directly or by implication, estoppel, or otherwise, any license under any patents or patent applications of Motorola, except that Purchaser shall have the normal non-exclusive royalty-free license to use that is implied, or otherwise arises by operation of law, in the sale of a product.

## **Section 16 WAIVER**

Failure or delay on the part of Motorola or Purchaser to exercise a right or power hereunder shall not operate as a waiver of the right or power. For a waiver of a right or power to be effective, it must be in a writing signed by the waiving party. An effective waiver of a right or power will not be construed as either a future or continuing waiver of that same right or power, or the waiver of any other right or power.

## **Section 17      GOVERNING LAW**

This Agreement shall be governed by and construed in accordance with the laws of the State of Texas.

## **Section 18      ASSIGNABILITY**

Except as provided herein, neither party may assign this Agreement or any of its rights or obligations hereunder without the prior written consent of the other party, which consent will not be unreasonably withheld. Any attempted assignment, delegation, or transfer without the necessary consent will be void. Notwithstanding the foregoing, Motorola may assign this Agreement to any of its affiliates or its right to receive payment without the prior consent of Purchaser. In addition, in the event Motorola separates one or more of its businesses (each a "Separated Business"), whether by way of a sale, establishment of a joint venture, spin-off or otherwise (each a "Separation Event"), Motorola may, without the prior written consent of the other party and at no additional cost to Motorola, assign this Agreement such that it will continue to benefit the Separated Business and its affiliates (and Motorola and its affiliates, to the extent applicable) following the Separation Event. Motorola may subcontract any of the work, but subcontracting will not relieve Motorola of its duties under this Agreement..

## **Section 19      SURVIVAL OF TERMS**

The following provisions will survive the expiration or termination of this Agreement for any reason: Section 2 (Taxes); Section 5 (Limitation of Liability); Section 7 (Default); Subsection 11.F (Disclaimer of Implied Warranties); Section 12 (Confidential Information); Section 13 (Software License); and Section 16 (Waiver); Section 17 (Governing Law) and Section 19 (Survival of Terms).

## **Section 20      ADMINISTRATOR LEVEL ACCOUNT ACCESS**

Motorola will provide Purchaser with Administrative User Credentials. Purchaser agrees to only grant Administrative User Credentials to those personnel with the training or experience to correctly use the access. Purchaser is responsible for protecting Administrative User Credentials from disclosure and maintaining Credential validity by, among other things, updating passwords when required. Purchaser may be asked to provide valid Administrative User Credentials when in contact with Motorola System support. Purchaser understands that changes made as the Administrative User can significantly impact the performance of the System. Purchaser agrees that it will be solely responsible for any negative impact on the System or its users by any such changes. System issues occurring as a result of changes made by an Administrative User



may impact Motorola's ability to perform its obligations under the Agreement or its Maintenance and Support Agreement. In such cases, a revision to the appropriate provisions of the Agreement, including the Statement of Work, may be necessary. To the extent Motorola provides assistance to correct any issues caused by or arising out of the use of or failure to maintain Administrative User Credentials, Motorola will be entitled to bill Purchaser and Purchaser will pay Motorola on a time and materials basis for resolving the issue.

## **Section 21     MAINTENANCE SERVICE**

If this Agreement contains a Warranty and Maintenance Plan, then, during the Warranty Period, in addition to warranty services, Motorola will provide maintenance services for the Equipment and support for the Motorola Software pursuant to the terms of this Agreement, including the Warranty and Maintenance Plan and Service Terms and Conditions. Such services and support are included in the Contract Price. If Customer wishes to purchase additional maintenance and support services during the Warranty Period, or any maintenance and support services after the Warranty Period, the description of and pricing for such services will be set forth in a separate document. Unless otherwise agreed by the Parties in writing, the terms and conditions applicable to such maintenance and support will be Motorola's standard Service Terms and Conditions, together with the appropriate statements of work.

## **Exhibit B**

### **Software License Agreement**

This Exhibit B, Software License Agreement ("Agreement") is between Motorola Solutions, Inc., ("Motorola"), and \_\_\_\_\_ ("Licensee").

For good and valuable consideration, the parties agree as follows:

#### **Section 1            DEFINITIONS**

1.1        "Designated Products" means products provided by Motorola to Licensee with which or for which the Software and Documentation is licensed for use.

1.2        "Documentation" means product and software documentation that specifies technical and performance features and capabilities, and the user, operation and training manuals for the Software (including all physical or electronic media upon which such information is provided).

1.3        "Open Source Software" means software with either freely obtainable source code, license for modification, or permission for free distribution.

1.4        "Open Source Software License" means the terms or conditions under which the Open Source Software is licensed.

1.5        "Primary Agreement" means the agreement to which this exhibit is attached.

1.6        "Security Vulnerability" means a flaw or weakness in system security procedures, design, implementation, or internal controls that could be exercised (accidentally triggered or intentionally exploited) and result in a security breach such that data is compromised, manipulated or stolen or the system damaged.

1.7        "Software" (i) means proprietary software in object code format, and adaptations, translations, de-compilations, disassemblies, emulations, or derivative works of such software; (ii) means any modifications, enhancements, new versions and new releases of the software provided by Motorola; and (iii) may contain one or more items of software owned by a third party supplier. The term "Software" does not include any third party software provided under separate license or third party software not licensable under the terms of this Agreement.

#### **Section 2            SCOPE**

Motorola and Licensee enter into this Agreement in connection with Motorola's delivery of certain proprietary Software or products containing embedded or pre-loaded proprietary Software, or both. This Agreement contains the terms and conditions of the license Motorola is providing to Licensee, and Licensee's use of the Software and Documentation.

#### **Section 3            GRANT OF LICENSE**

3.1.       Subject to the provisions of this Agreement and the payment of applicable license fees, Motorola grants to Licensee a personal, limited, non-transferable (except as permitted in Section 7) and non-exclusive license under Motorola's copyrights and Confidential Information (as defined in the Primary Agreement) embodied in the Software to use the Software, in object code form, and the Documentation solely in connection with Licensee's use of the Designated Products. This Agreement does not grant any rights to source code.

3.2. If the Software licensed under this Agreement contains or is derived from Open Source Software, the terms and conditions governing the use of such Open Source Software are in the Open Source Software Licenses of the copyright owner and not this Agreement. If there is a conflict between the terms and conditions of this Agreement and the terms and conditions of the Open Source Software Licenses governing Licensee's use of the Open Source Software, the terms and conditions of the license grant of the applicable Open Source Software Licenses will take precedence over the license grants in this Agreement. If requested by Licensee, Motorola will use commercially reasonable efforts to: (i) determine whether any Open Source Software is provided under this Agreement; (ii) identify the Open Source Software and provide Licensee a copy of the applicable Open Source Software License (or specify where that license may be found); and, (iii) provide Licensee a copy of the Open Source Software source code, without charge, if it is publicly available (although distribution fees may be applicable).

#### **Section 4                    LIMITATIONS ON USE**

4.1. Licensee may use the Software only for Licensee's internal business purposes and only in accordance with the Documentation. Any other use of the Software is strictly prohibited. Without limiting the general nature of these restrictions, Licensee will not make the Software available for use by third parties on a "time sharing," "application service provider," or "service bureau" basis or for any other similar commercial rental or sharing arrangement.

4.2. Licensee will not, and will not allow or enable any third party to: (i) reverse engineer, disassemble, peel components, decompile, reprogram or otherwise reduce the Software or any portion to a human perceptible form or otherwise attempt to recreate the source code; (ii) modify, adapt, create derivative works of, or merge the Software; (iii) copy, reproduce, distribute, lend, or lease the Software or Documentation to any third party, grant any sublicense or other rights in the Software or Documentation to any third party, or take any action that would cause the Software or Documentation to be placed in the public domain; (iv) remove, or in any way alter or obscure, any copyright notice or other notice of Motorola's proprietary rights; (v) provide, copy, transmit, disclose, divulge or make the Software or Documentation available to, or permit the use of the Software by any third party or on any machine except as expressly authorized by this Agreement; or (vi) use, or permit the use of, the Software in a manner that would result in the production of a copy of the Software solely by activating a machine containing the Software. Licensee may make one copy of Software to be used solely for archival, back-up, or disaster recovery purposes; *provided* that Licensee may not operate that copy of the Software at the same time as the original Software is being operated. Licensee may make as many copies of the Documentation as it may reasonably require for the internal use of the Software.

4.3. Unless otherwise authorized by Motorola in writing, Licensee will not, and will not enable or allow any third party to: (i) install a licensed copy of the Software on more than one unit of a Designated Product; or (ii) copy onto or transfer Software installed in one unit of a Designated Product onto one other device. Licensee may temporarily transfer Software installed on a Designated Product to another device if the Designated Product is inoperable or malfunctioning, if Licensee provides written notice to Motorola of the temporary transfer and identifies the device on which the Software is transferred. Temporary transfer of the Software to another device must be discontinued when the original Designated Product is returned to operation and the Software must be removed from the other device. Licensee must provide prompt written notice to Motorola at the time temporary transfer is discontinued.

4.4. When using Motorola's Radio Service Software ("RSS"), Licensee must purchase a separate license for each location at which Licensee uses RSS. Licensee's use of RSS at a licensed location does not entitle Licensee to use or access RSS remotely. Licensee may make one copy of RSS for each licensed location. Licensee shall provide Motorola with a list of all locations at which Licensee uses or intends to use RSS upon Motorola's request.

4.5. Licensee will maintain, during the term of this Agreement and for a period of two years thereafter, accurate records relating to this license grant to verify compliance with this Agreement. Motorola or an independent third party ("Auditor") may inspect Licensee's premises, books and records, upon reasonable

prior notice to Licensee, during Licensee's normal business hours and subject to Licensee's facility and security regulations. Motorola is responsible for the payment of all expenses and costs of the Auditor. Any information obtained by Motorola and the Auditor will be kept in strict confidence by Motorola and the Auditor and used solely for the purpose of verifying Licensee's compliance with the terms of this Agreement.

## **Section 5 OWNERSHIP AND TITLE**

Motorola, its licensors, and its suppliers retain all of their proprietary rights in any form in and to the Software and Documentation, including, but not limited to, all rights in patents, patent applications, inventions, copyrights, trademarks, trade secrets, trade names, and other proprietary rights in or relating to the Software and Documentation (including any corrections, bug fixes, enhancements, updates, modifications, adaptations, translations, de-compilations, disassemblies, emulations to or derivative works from the Software or Documentation, whether made by Motorola or another party, or any improvements that result from Motorola's processes or, provision of information services). No rights are granted to Licensee under this Agreement by implication, estoppel or otherwise, except for those rights which are expressly granted to Licensee in this Agreement. All intellectual property developed, originated, or prepared by Motorola in connection with providing the Software, Designated Products, Documentation or related services, remains vested exclusively in Motorola, and Licensee will not have any shared development or other intellectual property rights.

## **Section 6 LIMITED WARRANTY; DISCLAIMER OF WARRANTY**

6.1. The commencement date and the term of the Software warranty will be a period of ninety (90) days from Motorola's shipment of the Software (the "Warranty Period"). If Licensee is not in breach of any of its obligations under this Agreement, Motorola warrants that the unmodified Software, when used properly and in accordance with the Documentation and this Agreement, will be free from a reproducible defect that eliminates the functionality or successful operation of a feature critical to the primary functionality or successful operation of the Software. Whether a defect occurs will be determined by Motorola solely with reference to the Documentation. Motorola does not warrant that Licensee's use of the Software or the Designated Products will be uninterrupted, error-free, completely free of Security Vulnerabilities, or that the Software or the Designated Products will meet Licensee's particular requirements. Motorola makes no representations or warranties with respect to any third party software included in the Software.

6.2 Motorola's sole obligation to Licensee and Licensee's exclusive remedy under this warranty is to use reasonable efforts to remedy any material Software defect covered by this warranty. These efforts will involve either replacing the media or attempting to correct significant, demonstrable program or documentation errors or Security Vulnerabilities. If Motorola cannot correct the defect within a reasonable time, then at Motorola's option, Motorola will replace the defective Software with functionally-equivalent Software, license to Licensee substitute Software which will accomplish the same objective, or terminate the license and refund the Licensee's paid license fee.

6.3. Warranty claims are described in the Primary Agreement.

**6.4. The express warranties set forth in this Section 6 are in lieu of, and Motorola disclaims, any and all other warranties (express or implied, oral or written) with respect to the Software or Documentation, including, without limitation, any and all implied warranties of condition, title, non-infringement, merchantability, or fitness for a particular purpose or use by Licensee (whether or not Motorola knows, has reason to know, has been advised, or is otherwise aware of any such purpose or use), whether arising by law, by reason of custom or usage of trade, or by course of dealing. In addition, Motorola disclaims any warranty to any person other than Licensee with respect to the Software or Documentation.**

## **Section 7 TRANSFERS**

Licensee will not transfer the Software or Documentation to any third party without Motorola's prior written consent. Motorola's consent may be withheld at its discretion and may be conditioned upon transferee paying all applicable license fees and agreeing to be bound by this Agreement. If the Designated Products are Motorola's radio products and Licensee transfers ownership of the Motorola radio products to a third party, Licensee may assign its right to use the Software (other than RSS and Motorola's FLASHport® software) which is embedded in or furnished for use with the radio products and the related Documentation; *provided* that Licensee transfers all copies of the Software and Documentation to the transferee, and Licensee and the transferee sign a transfer form to be provided by Motorola upon request, obligating the transferee to be bound by this Agreement.

## **Section 8            TERM AND TERMINATION**

8.1        Licensee's right to use the Software and Documentation will begin when the Primary Agreement is signed by both parties and will continue for the life of the Designated Products with which or for which the Software and Documentation have been provided by Motorola, unless Licensee breaches this Agreement, in which case this Agreement and Licensee's right to use the Software and Documentation may be terminated immediately upon notice by Motorola.

8.2        Within thirty (30) days after termination of this Agreement, Licensee must certify in writing to Motorola that all copies of the Software have been removed or deleted from the Designated Products and that all copies of the Software and Documentation have been returned to Motorola or destroyed by Licensee and are no longer in use by Licensee.

8.3        Licensee acknowledges that Motorola made a considerable investment of resources in the development, marketing, and distribution of the Software and Documentation and that Licensee's breach of this Agreement will result in irreparable harm to Motorola for which monetary damages would be inadequate. If Licensee breaches this Agreement, Motorola may terminate this Agreement and be entitled to all available remedies at law or in equity (including immediate injunctive relief and repossession of all non-embedded Software and associated Documentation unless Licensee is a Federal agency of the United States Government).

## **Section 9            UNITED STATES GOVERNMENT LICENSING PROVISIONS**

This Section applies if Licensee is the United States Government or a United States Government agency. Licensee's use, duplication or disclosure of the Software and Documentation under Motorola's copyrights or trade secret rights is subject to the restrictions set forth in subparagraphs (c)(1) and (2) of the Commercial Computer Software-Restricted Rights clause at FAR 52.227-19 (JUNE 1987), if applicable, unless they are being provided to the Department of Defense. If the Software and Documentation are being provided to the Department of Defense, Licensee's use, duplication, or disclosure of the Software and Documentation is subject to the restricted rights set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause at DFARS 252.227-7013 (OCT 1988), if applicable. The Software and Documentation may or may not include a Restricted Rights notice, or other notice referring to this Agreement. The provisions of this Agreement will continue to apply, but only to the extent that they are consistent with the rights provided to the Licensee under the provisions of the FAR or DFARS mentioned above, as applicable to the particular procuring agency and procurement transaction.

## **Section 10          CONFIDENTIALITY**

Licensee acknowledges that the Software and Documentation contain Motorola's valuable proprietary and confidential information and are Motorola's trade secrets. Licensee will not disclose the Software and Documentation to any third party except as permitted by this Agreement or expressly in writing by Motorola. Licensee will take necessary and appropriate precautions to maintain the confidentiality and guard against the unauthorized disclosure of the Software and Documentation. Licensee will limit access

to the Software and Documentation only to Licensee's employees who "need to know" and are authorized to use the Software and Documentation as permitted by this Agreement.

## **Section 11        LIMITATION OF LIABILITY**

The Limitation of Liability provision is described in the Primary Agreement.

## **Section 12        NOTICES**

Notices are described in the Primary Agreement.

## **Section 13        GENERAL**

13.1.    **COPYRIGHT NOTICES.** The existence of a copyright notice on the Software will not be construed as an admission or presumption of publication of the Software or public disclosure of any trade secrets associated with the Software.

13.2.    **COMPLIANCE WITH LAWS.** Licensee acknowledges that the Software is subject to the laws and regulations of the United States and Licensee will comply with all applicable laws and regulations, including export laws and regulations of the United States. Licensee will not, without the prior authorization of Motorola and the appropriate governmental authority of the United States, in any form export or re-export, sell or resell, ship or reship, or divert, through direct or indirect means, any item or technical data or direct or indirect products sold or otherwise furnished to any person within any territory for which the United States Government or any of its agencies at the time of the action, requires an export license or other governmental approval. Violation of this provision is a material breach of this Agreement.

13.3.    **ASSIGNMENTS AND SUBCONTRACTING.** Motorola may assign its rights or subcontract its obligations under this Agreement, or encumber or sell its rights in any Software, without prior notice to or consent of Licensee.

13.4.    **GOVERNING LAW.** This Agreement is governed by the laws of the United States to the extent that they apply and otherwise by the internal substantive laws of the State to which the Software is shipped if Licensee is a sovereign government entity, or the internal substantive laws of the State of Illinois if Licensee is not a sovereign government entity. The terms of the U.N. Convention on Contracts for the International Sale of Goods do not apply. In the event that the Uniform Computer Information Transaction Act, any version of this Act, or a substantially similar law (collectively "UCITA") becomes applicable to a party's performance under this Agreement, UCITA does not govern any aspect of this Agreement or any license granted under this Agreement, or any of the parties' rights or obligations under this Agreement. The governing law will be that in effect prior to the applicability of UCITA.

13.5.    **THIRD PARTY BENEFICIARIES.** This Agreement is entered into solely for the benefit of Motorola and Licensee. No third party has the right to make any claim or assert any right under this Agreement, and no third party is deemed a beneficiary of this Agreement. Notwithstanding the foregoing, any licensor or supplier of third party software included in the Software will be a direct and intended third party beneficiary of this Agreement.

13.6.    **SURVIVAL.** Sections 4, 5, 6.4, 7, 8, 9, 10, 11 and 13 survive the termination of this Agreement.

13.7.    **ORDER OF PRECEDENCE.** In the event of inconsistencies between this Exhibit and the Primary Agreement, the parties agree that this Exhibit prevails, only with respect to the specific subject matter of this Exhibit, and not the Primary Agreement or any other exhibit as it applies to any other subject matter.

13.8    **SECURITY.** Motorola uses reasonable means in the design and writing of its own Software and the acquisition of third party Software to limit Security Vulnerabilities. While no software can be

guaranteed to be free from Security Vulnerabilities, if a Security Vulnerability is discovered, Motorola will take the steps set forth in Section 6 of this Agreement.



**Exhibit C**

**Technical and Implementation Documents**

**Exhibit D**

**Motorola/H-GAC Radio Communications Equipment & Systems Agreement**

## **Exhibit E**

### **Service Terms and Conditions**

Motorola Solutions, Inc. ("Motorola") and the customer named in this Agreement ("Customer") hereby agree as follows:

#### **Section 1      APPLICABILITY**

These Service Terms and Conditions apply to service contracts whereby Motorola will provide to Customer either (1) maintenance, support and/or other services under a Motorola Service Agreement, or (2) installation services under a Motorola Installation Agreement.

#### **Section 2      DEFINITIONS AND INTERPRETATION**

2.1 "Agreement" means these Service Terms and Conditions; the cover page for the Service Agreement or the Installation Agreement, as applicable; and any other attachments, all of which are incorporated herein by this reference. In interpreting this Agreement and resolving any ambiguities, these Service Terms and Conditions take precedence over any cover page, and the cover page takes precedence over any attachments, unless the cover page or attachment states otherwise.

2.2 "Equipment" means the equipment that is specified in the attachments or is subsequently added to this Agreement.

2.3 "Services" means those installation, maintenance, support, training, and other services described in this Agreement.

#### **Section 3      ACCEPTANCE**

Customer accepts these Service Terms and Conditions and agrees to pay the prices set forth in the Agreement. This Agreement becomes binding only when accepted in writing by Motorola. The term of this Agreement begins on the "Start Date" indicated in this Agreement.

#### **Section 4      SCOPE OF SERVICES**

4.1. Motorola will provide the Services described in this Agreement or in a more detailed statement of work or other document attached to this Agreement. At Customer's request, Motorola may also provide additional services at Motorola's then-applicable rates for the services.

4.2. If Motorola is providing Services for Equipment, Motorola parts or parts of equal quality will be used; the Equipment will be serviced at levels set forth in the manufacturer's product manuals; and routine service procedures that are prescribed by Motorola will be followed.

4.3. If Customer purchases from Motorola additional equipment that becomes part of the same system as the initial Equipment, the additional equipment may be added to this Agreement and will be billed at the applicable rates after the warranty for the additional equipment expires.

4.4. All Equipment must be in good working order on the Start Date or when additional equipment is added to the Agreement. Upon reasonable request by Motorola, Customer will provide a complete serial and model number list of the Equipment. Customer must promptly notify Motorola in writing when any Equipment is lost, damaged, stolen or taken out of service. Customer's obligation to pay Service fees for such Equipment will terminate at the end of the month in which Motorola receives the written notice.

4.5. Customer must specifically identify any Equipment that is labeled intrinsically safe for use in hazardous environments.

4.6. If Equipment cannot, in Motorola's reasonable opinion, be properly or economically serviced for any reason, Motorola may modify the scope of Services related to such Equipment; remove that Equipment from the Agreement; or increase the price to Service such Equipment.

4.7. Customer must promptly notify Motorola of any Equipment failure. Motorola will respond to Customer's notification in a manner consistent with the level of Service purchased as indicated in this Agreement.

## **Section 5 EXCLUDED SERVICES**

5.1. Service excludes the repair or replacement of Equipment that has become defective or damaged from use in other than the normal, customary, intended, and authorized manner; use not in compliance with applicable industry standards; excessive wear and tear; or accident, liquids, power surges, neglect, acts of God or other force majeure events.

5.2. Unless specifically included in this Agreement, Service excludes items that are consumed in the normal operation of the Equipment, such as batteries or magnetic tapes.; upgrading or reprogramming Equipment; accessories, belt clips, battery chargers, custom or special products, modified units, or software; and repair or maintenance of any transmission line, antenna, microwave equipment, tower or tower lighting, duplexer, combiner, or multicoupler. Motorola has no obligations for any transmission medium, such as telephone lines, computer networks, the internet or the worldwide web, or for Equipment malfunction caused by such transmission medium.

## **Section 6 TIME AND PLACE OF SERVICE**

Service will be provided at the location specified in this Agreement. When Motorola performs service at Customer's location, Customer will provide Motorola, at no charge, a non-hazardous work environment with adequate shelter, heat, light, and power and with full and free access to the Equipment. Waivers of liability from Motorola or its subcontractors will not be imposed as a site access requirement. Customer will provide all information pertaining to the hardware and software elements of any system with which the Equipment is interfacing so that Motorola may perform its Services. Unless otherwise stated in this Agreement, the hours of Service will be 8:30 a.m. to 4:30 p.m., local time, excluding weekends and holidays. Unless otherwise stated in this Agreement, the price for the Services exclude any charges or expenses associated with helicopter or other unusual access requirements; if these charges or expenses are reasonably incurred by Motorola in rendering the Services, Customer agrees to reimburse Motorola for those charges and expenses.

## **Section 7 CUSTOMER Contact**

Customer will provide Motorola with designated points of contact (list of names and phone numbers) that will be available twenty-four (24) hours per day, seven (7) days per week, and an escalation procedure to enable Customer's personnel to maintain contact, as needed, with Motorola.

## **Section 8 PAYMENT**

Unless alternative payment terms are stated in this Agreement, Motorola will invoice Customer in advance for each payment period. All other charges will be billed monthly, and Customer must pay each invoice in U.S. dollars within thirty (30) days of the invoice date. Customer will reimburse Motorola for all property taxes, sales and use taxes, excise taxes, and other taxes or assessments that are levied as a result of Services rendered under this Agreement (except income, profit, and franchise taxes of Motorola) by any governmental entity.

## **Section 9 WARRANTY**

Motorola warrants that its Services under this Agreement will be free of defects in materials and workmanship for a period of ninety (90) days from the date the performance of the Services are completed. In the event of a breach of this warranty, Customer's sole remedy is to require Motorola to re-perform the non-conforming Service or to refund, on a pro-rata basis, the fees paid for the non-conforming Service. MOTOROLA DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

## **Section 10 DEFAULT/TERMINATION**

10.1. If either party defaults in the performance of this Agreement, the other party will give to the non-performing party a written and detailed notice of the default. The non-performing party will have thirty (30) days thereafter to provide a written plan to cure the default that is acceptable to the other party and begin implementing the cure plan immediately after plan approval. If the non-performing party fails to provide or implement the cure plan, then the injured party, in addition to any other rights available to it

under law, may immediately terminate this Agreement effective upon giving a written notice of termination to the defaulting party.

10.2. Any termination of this Agreement will not relieve either party of obligations previously incurred pursuant to this Agreement, including payments which may be due and owing at the time of termination. All sums owed by Customer to Motorola will become due and payable immediately upon termination of this Agreement. Upon the effective date of termination, Motorola will have no further obligation to provide Services.

#### **Section 11      LIMITATION OF LIABILITY**

Except for personal injury or death, Motorola's total liability, whether for breach of contract, warranty, negligence, strict liability in tort, or otherwise, will be limited to the direct damages recoverable under law, but not to exceed the price of twelve (12) months of Service provided under this Agreement. ALTHOUGH THE PARTIES ACKNOWLEDGE THE POSSIBILITY OF SUCH LOSSES OR DAMAGES, THEY AGREE THAT MOTOROLA WILL NOT BE LIABLE FOR ANY COMMERCIAL LOSS; INCONVENIENCE; LOSS OF USE, TIME, DATA, GOOD WILL, REVENUES, PROFITS OR SAVINGS; OR OTHER SPECIAL, INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES IN ANY WAY RELATED TO OR ARISING FROM THIS AGREEMENT OR THE PERFORMANCE OF SERVICES BY MOTOROLA PURSUANT TO THIS AGREEMENT. No action for contract breach or otherwise relating to the transactions contemplated by this Agreement may be brought more than two (2) years after the accrual of such cause of action, except for money due upon an open account. This limitation of liability will survive the expiration or termination of this Agreement and applies notwithstanding any contrary provision.

#### **Section 12      EXCLUSIVE TERMS AND CONDITIONS**

12.1. This Agreement supersedes all prior and concurrent agreements and understandings between the parties, whether written or oral, related to the Services, and there are no agreements or representations concerning the subject matter of this Agreement except for those expressed herein. The Agreement may not be amended or modified except by a written agreement signed by authorized representatives of both parties.

12.2. Customer agrees to reference this Agreement on any purchase order issued in furtherance of this Agreement, however, an omission of the reference to this Agreement will not affect its applicability. In no event will either party be bound by any terms contained in a Customer purchase order, acknowledgement, or other writing unless: the purchase order, acknowledgement, or other writing specifically refers to this Agreement; clearly indicate the intention of both parties to override and modify this Agreement; and the purchase order, acknowledgement, or other writing is signed by authorized representatives of both parties.

#### **Section 13      PROPRIETARY INFORMATION; CONFIDENTIALITY; INTELLECTUAL PROPERTY RIGHTS**

13.1. Any information or data in the form of specifications, drawings, reprints, technical information or otherwise furnished to Customer under this Agreement will remain Motorola's property, will be deemed proprietary, will be kept confidential, and will be promptly returned at Motorola's request. Customer may not disclose, without Motorola's written permission or as required by law, any confidential information or data to any person, or use confidential information or data for any purpose other than performing its obligations under this Agreement. The obligations set forth in this Section survive the expiration or termination of this Agreement.

13.2. Unless otherwise agreed in writing, no commercial, financial or technical information disclosed in any manner or at any time by Customer to Motorola will be deemed secret or confidential. Motorola will have no obligation to provide Customer with access to its confidential and proprietary information, including cost and pricing data.

13.3. This Agreement does not grant directly or by implication, estoppel, or otherwise, any ownership right or license under any Motorola patent, copyright, trade secret, or other intellectual property including any intellectual property created as a result of or related to the Equipment sold or Services performed under this Agreement.

#### **Section 14      FCC LICENSES AND OTHER AUTHORIZATIONS**

Customer is solely responsible for obtaining licenses or other authorizations required by the Federal Communications Commission or any other federal, state, or local government agency and for complying with all rules and regulations required by such agencies. Neither Motorola nor any of its employees is an agent or representative of Customer in any governmental matters.

#### **Section 15      COVENANT NOT TO EMPLOY**

During the term of this Agreement and continuing for a period of two (2) years thereafter, Customer will not hire, engage on contract, solicit the employment of, or recommend employment to any third party of any employee of Motorola or its subcontractors without the prior written authorization of Motorola. This provision applies only to those employees of Motorola or its subcontractors who are responsible for rendering services under this Agreement. If this provision is found to be overly broad under applicable law, it shall be modified as necessary to conform to such law.

#### **Section 16      MATERIALS, TOOLS AND EQUIPMENT**

All tools, equipment, dies, gauges, models, drawings or other materials paid for or furnished by Motorola for the purpose of this Agreement will be and remain the sole property of Motorola. Customer will safeguard all such property while it is in Customer's custody or control, be liable for any loss or damage to this property, and return it to Motorola upon request. This property will be held by Customer for Motorola's use without charge and may be removed from Customer's premises by Motorola at any time without restriction.

#### **Section 17      GENERAL TERMS**

17.1. If any court renders any portion of this Agreement unenforceable, the remaining terms will continue in full force and effect.

17.2. This Agreement and the rights and duties of the parties will be governed and interpreted in accordance with the laws of the State of Texas.

17.3. Failure to exercise any right will not operate as a waiver of that right, power, or privilege.

17.4. Neither party is liable for delays or lack of performance resulting from any causes that are beyond that party's reasonable control, such as strikes, material shortages, or acts of God.

17.5. Motorola may assign its rights and obligations, and may subcontract any portion of its performance, under this Agreement.

17.6. If Motorola provides Services after the termination or expiration of this Agreement, the terms and conditions in effect at the time of the termination or expiration will apply to those Services and Customer agrees to pay for those services on a time and materials basis at Motorola's then effective hourly rates.