



**Purchasing Department**  
PO Box 750416  
Dallas, TX 75275

**REQUEST FOR PROPOSAL**

***RFP Number: SMU-20250113***

***[P25 / DMR Radio System]***

***All bids in response to this RFP are due before:***

***3:00 PM Central Time on Friday, February 7, 2025***

**Please be sure to include this RFP # on Any Submissions**

**A Point by Point Response to the Technical Specifications is  
Required**

## Section 1

### Introduction

#### 1.1 Background

As a private, comprehensive university enriched by its United Methodist heritage and partnership with the Dallas-Fort Worth area, SMU seeks to enhance the intellectual, cultural, technological, ethical, and social development of a diverse student body. SMU offers undergraduate programs centered on the liberal arts and excellent graduate, professional, and continuing education programs. The SMU experience also includes accessible faculty in small classes and abundant opportunities for research experience, international study, leadership development, and service and internship opportunities beyond campus – all with the goal of preparing students to become contributing citizens and leaders for our state, nation and world.

SMU has over 12,000 students studying in eight degree-granting schools: Cox School of Business, Dedman College of Humanities and Sciences, Meadows School of the Arts, Bobby B. Lyle School of Engineering, Dedman School of Law, Annette Caldwell Simmons School of Education and Human Development, Perkins School of Theology, and Moody School of Graduate and Advanced Studies.

Founded in 1911 by what is now The United Methodist Church, SMU is nonsectarian in its teaching and committed to academic freedom and open inquiry. Owned by the South Central Jurisdiction of the United Methodist Church, SMU is managed by a Board of Trustees that includes civic, business, education, and religious leaders who represent various faiths and geographic areas.

#### 1.2 Purpose

The University is releasing this Request for Proposal (RFP) to procure Land Mobile Radio (LMR) subscriber units' equipment and associated services in accordance with the standards based Project (P25) guidelines to support public safety operations, and a standards based Digital Mobile Radio (DMR) System (non-public safety) to support campus operations, in accordance with the requirements of this Proposal invitation and any resulting contract.

The purpose of this RFP is to provide guidelines for the procurement of equipment, resources and technical expertise for the implementation of the comprehensive campus public safety and operations communications project. This project is designed to implement P25 capable communications for campus public safety, as well as non-public safety campus operations communications system, concurrently. Public safety user radio equipment must be capable of operating on both the P25 standard and the DMR standards based trunked radio system requested that will be used to support all operations. Public Safety operations will need to communicate over the local P25 700 MHz radio systems operated by Dallas / Dallas County, and the Park Cities.

This Request for Proposal (RFP) is being offered for the procurement of various types of Subscriber Radios and associated equipment and components for public safety and campus operations. In this procurement, the University is soliciting competitive bids for products and/or services, which may be purchased by the University during the contract term.

The system solution procured must provide for the following:

1. A high level of interoperability both internally and externally
2. It must conform to standards based guidelines (both P25 and DMR).
3. It must ensure a high level of coverage inside campus buildings
4. The system must provide a high level of redundancy and reliability
5. It must be installed in accordance with recognized industry standards
6. The system must include a carefully planned implementation allowing for an easy transition from the current system.

Selected company will work closely with the Subject Matter Expert (SME) contracted by the University to oversee implementation.

Final companies selected will enter into a Preferred Provider Contract with SMU.

A basic three-year term will be established with the option to extend an additional two years, as determined by the Purchasing department. Option will be exercised as long as service and quality remain excellent and pricing competitive.

SMU will review each proposal submitted and may select multiple providers that are qualified and will meet the needs of the university.

The selected provider(s) will be paid by SMU Campus Services at an hourly rate. SMU does not guarantee any minimum or maximum amount of business during the term of the contract.

### 1.3 RFP Schedule

|                                       |                                 |
|---------------------------------------|---------------------------------|
| Issue Request for Proposals           | Monday, January 13, 2025        |
| Optional Site Visit at SMU*           | Friday, January 17, 2025        |
| Last Day for Questions by 3:00 PM CST | Friday, January 24, 2025        |
| <b>Proposals Due by 3:00 PM CST</b>   | <b>Friday, February 7, 2025</b> |
| Evaluation and Notice of Award        | Week of February 17, 2025       |
| Contract Start                        | Monday, March 10, 2025          |

\*There will be an optional site visit at SMU to view rooftop antenna mounting, repeater room, the dispatch center, and some of the vehicles where mobile radios will be installed.

\*Meet at the SMU Police Department, which is at Patterson Hall, 3128 Dyer St, Dallas, TX 75205 at 9am CST on Friday, January 17, 2025. Parking will be reserved for attendees.

### 1.4 Questions and inquiries

All inquiries concerning the RFP should be directed to:

**Harmony Mei, RFP Coordinator**  
Email: [harmony@smu.edu](mailto:harmony@smu.edu)  
Phone: 214-768-6464

Questions should be submitted in writing via email. Written questions should be directly tied to the RFP and should be asked in consecutive order, following the organization of the RFP reference the RFP section. General questions will be shared with all those firms participating in the process.

Short procedural inquiries may be accepted by telephone or email by the buyer. However, oral explanations or instructions given over the telephone shall not be binding upon SMU.

#### 1.5 Bidder Responsibility

The bidder assumes sole responsibility for the complete effort required in this RFP. No special consideration shall be given because vendor's failure to be knowledgeable of all the requirements of this RFP. By submitting a proposal in response to this RFP, the vendor represents that it has satisfied itself, from its own investigation, of all the requirements of this RFP. **A point by point response to the system's technical specifications is required.**

#### 1.6 Cost Liability

SMU assumes no responsibility and bears no liability for costs incurred by firms in the preparation and submittal of proposals in response to this RFP.

#### 1.7 Revisions to this RFP

In the event that it becomes necessary to clarify or revise this RFP, such clarification or revision will be by an Amendment. RFP Amendments will be emailed to participants and posted on the Purchasing web page under the Open Solicitations tab. Any amendment to this RFP shall become part of this RFP.

#### 1.8 Proposal Acceptance and Rejections

SMU reserves the right to reject any or all proposals, to waive technicalities, to make inquiries and request additional information from all Proposers, and to award Preferred Provider Contracts in whole or in part as deemed to be in the best interest of SMU. SMU reserves the right to negotiate with any vendor if such action is deemed to be in the best interest of SMU.

#### 1.9 Proposal Submittal

Suppliers interested in participating in the RFP should submit four (4) hard copies and one electronic PDF copy of your proposal to be received no later than close of business, 5:00 PM on Closing Date indicated in RFP Schedule. Proposals received after that due date may be rejected. To the extent reasonably possible, the University shall keep all proposals confidential.

**Proposals must be received by 3:00 PM CST on or before Friday, February 7, 2025.**

Proposal delivery addresses:

Electronic

[harmony@smu.edu](mailto:harmony@smu.edu)

Postal Mail

SMU Purchasing  
Attn: Harmony Mei

PO Box 750416  
Dallas, Texas 75275-0416

Courier/Physical

SMU Purchasing  
Attn: Harmony Mei  
6116 North Central Expressway, Suite 205A  
Dallas, Texas 75275-0416

Ground Shipping

SMU Purchasing  
Attn: Harmony Mei  
3140 Dyer Street, MS #416  
Dallas, TX 75205

Proposals, modifications or withdrawals received after the date set for receipt of proposals may not be considered.

Bidders shall not contact any person within the University directly or its contracted SME, in person, by email or by telephone, other than the RFP Coordinator concerning this RFP.

Notify Harmony Mei ([harmony@smu.edu](mailto:harmony@smu.edu)) via email if company would like to pick up their proposal hard copies. SMU Purchasing will discard/recycle proposal hard copies 30 days after final award notification.

## Section 2

### RFP Proposal Content Requirements

#### 2.1 RFP Content

All companies submitting proposals should include a comprehensive response to items as specified in the RFP document and Statement of Work. Proposals are required to follow the exact order as provided in the RFP document and reference the appropriate section identification when responding to questions or providing company information. **A point by point response to the system's technical specifications is required.**

#### 2.2 Company Information

Provide the company's exact name, its legal nature (e.g., corporation, limited liability company, general partnership, limited partnership, etc.), and the state and country in which the entity was organized.

Provide a brief history of the firm and number of years in business and demonstrate that it is financially capable of providing services to the University.

Provide the company's corporate and local addresses (if different), main phone number, web address, and person authorized to commit to the terms specified in the proposal.

#### 2.3 Personnel Contact Information

Provide information on the personnel composition of the company and individuals assigned to SMU's account, including point of contact names, positions, responsibilities and a brief description of their experience (highlighting university experience).

List the local address of the office that will be serving this account. List contact information, including direct phone number and email, for daily point of contact managers.

List contact information for after 5:00 pm hours.

#### 2.4 Operational Concept Proposed

- Describe in detail how you will provide all equipment and pricing, hardware and software necessary to provide public safety interoperability and campus operations communications resources.
- Describe how you plan to provide equipment, resources and technical expertise for the University. Include a description on how the company will work with the University and any subcontractors that the firm plans to use to accommodate project requirements.
- Describe company's ability to serve the needs of SMU in a timely manner, consistent with the project requirements.
- Describe company capabilities to source, install and maintain critical project components, radios, consoles, and associated technology.
- Provide a timeline for implementation with milestones from the point of contract award to fully operational status.
- Describe process for providing on going maintenance and monitoring of the system in accordance with the project plan.

- Describe your process for submitting monthly project status reports to the University five (5) days after the end of the month for the duration of the project. Monthly status reports shall follow this general outline:
  - Activities completed during the previous month
  - Activities planned or scheduled the next month
  - Updated Project Schedule
  - Submittal Schedule: Item Status - Planned & Completed
  - Red flag items / Risk Issues
  - Punch-list items
- Provide an example of similar projects your company has undertaken.
- Provide a total project cost estimate with details. Present your best offer initially. SMU makes no guarantee that further negotiations will occur.
- A point by point response to the system's technical specifications is required.

## 2.5 Insurance

State insurance your company has or will obtain insurance to meet University requirements. See **Exhibit A** below for Insurance Requirements as set by Office of Risk Management. Suppliers must demonstrate they have insurance that meets University requirements.

Submit current COI (Certificate of Insurance) with explanation of the insurances the company has and description of its claim history. COI must be approved by Office of Risk Management.

State if company agrees to voluntarily assume all risk of loss, damage, injury to its persons or property and waives all claims or causes of action which results from operations in, on or about the University except if such loss, damage, or injury is caused by the active negligence or willful misconduct of SMU.

## 2.6 Subcontractor and Partner Company Information (if applicable)

List the names, addresses, and contact information of any subcontractors that will be utilized on this account. State what services they will provide.

## 2.7 References

Include a minimum of three accounts that are similar in size and scope to SMU. List only 1 SMU reference if you currently work with SMU, and 2 non-SMU references who you have worked with in the past year.

Include reference name, address, contact person, length of relationship, a brief description of trips provided, and the volume of work currently doing business with each reference provided. State volume of work in terms of annual sales and annual number of trips for each reference (i.e. 10 trips, estimated \$10,000 annual volume).

Complete the information requested for each reference in the following table:

| <b>Reference Information Requested</b> | <b>Information</b> |
|--|--------------------|
| <b>Reference Name #1</b>               |                    |
| Contact Name, Number, Email            |                    |
| System Type                            |                    |
| When was the system implemented        |                    |
| Vendor Project Manager                 |                    |
| <b>Reference Name #2</b>               |                    |
| Contact Name, Number, Email            |                    |
| System Type                            |                    |
| When was the system implemented        |                    |
| Vendor Project Manager                 |                    |
| <b>Reference Name #3</b>               |                    |
| Contact Name, Number, Email            |                    |
| System Type                            |                    |
| When was the system implemented        |                    |
| Vendor Project Manager                 |                    |

## Section 3

### Evaluation Criteria for Award

#### 3.1 Evaluation Information

SMU will utilize a selection committee for the evaluation of the RFP. Generally, the selection teams consist of 3-4 individuals who have a direct interest in the award of this contract.

The Evaluation Committee will ensure that the contractor with the best overall value to the University will be selected. The Committee shall be the sole judge of the comparative evaluation of the bids received. The decision of the Committee will be final. Southern Methodist University reserves the right to reject any and all bids.

The Committee will initially review all proposals for completeness and compliance with the terms and conditions of the RFP. Proposals clearly inconsistent with the RFP requirements will be eliminated from further consideration. Proposals that pass the completeness and compliance review will be evaluated against the Evaluation Criteria outlined herein.

#### 3.2 Evaluation Criteria

SMU will utilize a selection team to ensure that the contractor with the best overall value and ability to meet the requirements is selected. The evaluation criteria are listed in no particular order of importance. SMU at its sole discretion may choose to award part or all of the scope of work contained in this RFP to single or multiple firms. Furthermore, the University does not guarantee that any actual Agreement will ensue as a result of the RFP and its evaluation process.

The University intends to award contracts based on perceived best value as determined by a review including, but not limited to, the following factors:

- Firm's plan to meet requirements as outlined in the **Statement of Work**
- Firm's comprehensive responses to the **Proposal Content Requirements**
- Quality of the proposal, responsiveness to requirements and adequacy of information provided
- Financial proposal, hourly rate to be paid by SMU, and financial strength of the firm
- Key personnel who will service this account
- Acceptance of SMU Terms and Conditions
- Insurance coverage that meets University requirements
- Company management, fleet, dispatch process, response time commitment, software and record keeping.
- Industry experience, references, compliance history,
- Quality control, safety record, training programs, and security program

Companies submitting proposals should bear in mind the competitive nature of the proposal process and the fact that SMU will be looking for proposals that offer the best advantage to SMU and should draft their proposal accordingly. Note that pricing is only one component of the overall basis of selection.

### 3.3 Evaluation Matrix

The following matrix shall be used to evaluate all aspects of the proposals submitted:

| Evaluation Category   | Category # | Notes   |
|---|------------|---|
| Overall content and quality of the proposal and adherence to the requirements of the RFP                    | 1          | Response to the RFP will help gauge the vendor's willingness to comply with the needs of SMU  |
| References  | 2          | It is important that SMU Know the experience level of the awarded vendor. SMU will be working with this vendor for several years. All references shall be verified  |
| Radio System Coverage Maps, Guarantees, Testing   | 3          | Though a single site system, these coverage maps will help gauge the level of in-building coverage to be expected   |
| Overall system architecture, features and functionality, and the benefits to be derived by SMU's new system | 4          | This category shall be evaluated based on the operational features of the proposed solution including operational and interoperable features included and adherence to the requirements of the RFP.   |
| Price / Value to SMU  | 5          | This category will evaluate the price proposed for the initial implementation and on-going cost of ownership.   |
| Project Management Plan and history of delivering equipment & systems, Installation, and Training           | 6          | This category will be attached to references verification. The project management plan shall be fully detailed and will be scored appropriately   |
| Maintenance and System Support  | 7          | This category is very important in that SMU will be relying on the vendor for the life of the system. Response times, after hour's support, and ongoing preventive maintenance of the system included in the pricing will be highly considered. |

## Section 4

### Requirements and Statement of Work

#### 4. General Requirements

SMU is seeking a Contractor(s) who will:

- 1) Make recommendations concerning aspects of the business within their sphere of its expertise to provide equipment and pricing, hardware and software, installation and maintenance necessary to provide public safety interoperability and campus operations communications resources.
- 2) Provide technical expertise considering SMU's unique higher educational, public safety and emergency management needs
- 3) Provide business expertise that will bring additional value and added services to SMU
- 4) Reduce costs: Best practices and efficiencies to maintain the lowest possible cost at the highest possible quality of services
- 5) Continuously Improve: Improvement in quality and consistency for the services through collaboration, innovation, and continuous improvement processes
- 6) Contractor must be able to consistently staff all technicians and on site personnel with the highest quality personnel available and must provide background checks.
- 7) Provide thorough communication and stay in direct touch with project manager and University staff
- 8) Provide prompt and effective response if there is system failure
- 9) Provide daily and monthly updates on project progress

Contractor warrants to provide:

- 1) A radio system with an increased level of coverage that supplies 95% of the geographical boundaries of the service area with portable on-street coverage and increased in-building coverage.
- 2) Stakeholders with periodic updates and review cycles and ample opportunity to provide input/feedback throughout the project.
- 3) A stable, reliable infrastructure radio environment.
- 4) The flexibility to take advantage of future technologies.
- 5) A solution that leverages existing communications infrastructure (sites/facilities) to the greatest extent possible.
- 6) Enhanced interoperability with local, regional, State, and Federal first responder agencies and campus stakeholders.
- 7) Capacity for use during major manmade or natural catastrophic events.
- 8) All of the services to be performed by Contractor under or pursuant to the agreement shall be of the standard and quality which prevail among similar businesses and organizations of

superior knowledge and skill engaged in providing similar services under the same or similar circumstances.

- 9) Contractor has all necessary corporate power and has received all necessary corporate approvals to execute and deliver the Preferred Provider Agreement/Contract, and the individual executing Preferred Provider Agreement/Contract on behalf of Contractor has been duly authorized to act for and bind the company.
- 10) Contractor’s point of contact and assigned project manager must be attentive, available, and communicative.

#### 4.1 Current System Environment

SMU currently operates a shared MotoTRBO trunked radio system. This an 8-channel system that operates in the 450 megahertz (MHz) frequency band, it is housed at the SMU Expressway Tower at Central Expressway and SMU Boulevard. The technology is proprietary to Motorola. MOTOTRBO subscriber radio equipment, therefore, cannot be operated on dual band or dual technology radios. Radios used on this system are only able to operate on the MOTOTRBO system or over analog 450 MHz conventional systems. These radios are not standards based and are unable to communicate over the P25 system operated by the Park Cities or the City of Dallas.

The radio system is a hybrid—meaning the MOTOTRBO infrastructure shares the same equipment room and antenna systems with Highland Park Independent School District (HPISD). The table below lists the frequency information for the site, as listed in the Federal Communications Commission (FCC) database.

| Transmit Frequency | Receive Frequency | Call Sign | Licensee |
|--------------------|-------------------|-----------|----------|
| 461.4000           | 466.4000          | WQCH938   | SMU      |
| 462.0125           | 467.0125          | WQCH938   | SMU      |
| 462.3000           | 467.3000          | WQCH938   | SMU      |
| 463.9375           | 468.9375          | WQCH938   | SMU      |
| 464.2125           | 469.2125          | WQRP993   | HPISD    |
| 461.4750           | 466.4750          | WQRP993   | HPISD    |
| 461.9250           | 466.9250          | WQRP993   | HPISD    |
| 462.3250           | 467.3250          | WQRP993   | HPISD    |
| 461.9750           | 466.9750          | WQRP993   | HPISD    |
| 461.9500           | 466.9500          | WQRP993   | HPISD    |

SMU has a main and a back-up dispatch center. Dispatch consoles are RadioPro™ Dispatch, manufactured by CTI Products. The system was implemented by Megahertz Technologies in 2012. Megahertz still maintains the MOTOTRBO system, consoles, and user radio equipment.

The current console configuration includes shared use of the control station radios located at Patterson Hall. This does not represent a true back-up because of the shared use of resources. Each dispatch point does not operate independently.

The Police Department uses a HigherGround logging recorder system. The back-up system is over ten years old, and the primary system at Patterson Hall dispatch is approaching six years. Neither of the recorders are supported at this time.

Interoperability with the Park Cities occurs over a patched channel on the Park Cities radio system. This is a cumbersome transaction that includes channel switching for each agency and leads to missed communications between SMU public safety and Park Cities' responding units. Park Cities users need to change their radio channel to a dedicated talkgroup, which is patched to a MOTOTRBO radio located at University Park dispatch. Issues arise when Park Cities users tune to the SMU channel and leave their respective dispatch channel. Implementing a new system that operates on the same technology will address this issue with the use of shared interoperability channels that can be monitored by each dispatch center at all times. Additionally, dispatch centers will monitor primary talkgroups used by the Park Cities, allowing them the ability to identify incidents on the SMU campus.

Vendors must be aware that SMU fully intends to keep the current UHF system full intact and operational. Recent upgrades have allowed the system to be fully functional in the future and should be able to support over flow traffic in the future. Vendors shall include the interface of existing control stations to the new PD dispatch consoles.

## **4.2 Response Procedures**

Responders shall carefully read the requirements listed in this RFP and address each requirement with its level of compliancy. At the end of each section, there is space that the proposer may list its level of compliancy, make any clarification, or list any exceptions. If a particular item is not addressed, then SMU will consider that this item is included in the proposal and will be included in the pricing of the solution.

## **4.3 System Requirements Overview**

SMU has developed this RFP based on the needs identified in assessments of both the Public Safety users and the Non-Public Safety users. This procurement includes the following:

- 1) Implementation of a DMR Trunked Radio System operating in the 700 / 800 MHz frequency band utilizing standards based DMR technology.
- 2) Implement four (4) new dispatch consoles at the public safety center located in Patterson Hall. One of these positions will be configured as a laptop console able to communicate in SMU's mobile command vehicle or anywhere on campus able to provide a network connection to the radio system. All licenses and network connectivity for the remote console position must be clearly defined. Operation of this position will be a condition of final acceptance.
- 3) Connection of the dispatch console positions to the DMR trunked radio system using the campus network. The responder is allowed to propose another solution for connectivity if it provides a better or more reliable connection and is cost effective. The direct connection to the system will be the primary method of operation of the system from the console system however back-up communications must be detailed and included in the system solution.

- 4) The core interface must include all software licenses and any subscriptions for the interface. Any subscription costs must be included to support the system for 10 years from final system acceptance.
- 5) Provide eighty-five (85) new portable radios that are both capable of DMR and P25 Phase II operation. This must include all programming and template development.
- 6) Provide eleven (11) new mobile radios that are both capable of DMR and P25 Phase II operation. This must include installation of new equipment and removal of old radios, all programming, and template development must be included.
- 7) Provide three hundred and seventy two (372) new portable radios that are capable of DMR operation only. This must include all programming and template development.
- 8) Radios will be programmed in accordance with the terms of use of the local P25 radio system Inter-Local Agreements (ILA's).
- 9) Recommend and provide all control stations needed to communicate with the DMR system in a back-up role, and control stations that will be needed to communicate over the local P25 radio systems (Park Cities & Dallas / Dallas County).
- 10) Replace the existing logging recorder solution with a new system that will interface directly to the new radio system, new dispatch console system, and the existing telephone system. Proposers will need to provide what information they will need to quote the proper equipment.
- 11) System deployment will need to include a detailed implementation plan and schedule, an acceptance testing plan, and a comprehensive training program and plan on all new systems.
- 12) The response must include a detailed description of the vendors maintenance and support plan. This shall include a description of the local service facility, number of technicians trained to work on the proposed systems, and 24-hour on-call procedures with response times.
- 13) Vendors must be aware that SMU fully intends to keep the current UHF system fully intact and operational. Recent upgrades have allowed the system to be fully functional in the future and should be able to support overflow traffic in the future with cache radios. Vendors shall include the interface of existing control stations to the new PD dispatch consoles.

|                                     |  |
|-------------------------------------|--|
| Confirmation<br>or<br>Clarification |  |
|-------------------------------------|--|

#### **4.4 System Requirements – DMR Trunked Radio System**

##### **4.4.1 Trunked System General Requirements**

The trunked system architecture shall be described in detail, with written descriptions of all major system components and their functions. System and site block diagrams shall be provided to show the interconnection between system elements and the level of system redundancy incorporated into the system design.

- 1) The DMR Trunked Radio System must be a Tier III standards based system operating in the 7/800 MHz frequency band using TDMA technology.
- 2) The standards based system must support multiple manufacturer's user radios.

- 3) It is expected that the new system will be co-located with the existing system. Proposers shall evaluate the location to determine if this will meet the needs of SMU in regard to providing a high level of coverage, space availability, and physical security of the system.
- 4) Any site vulnerabilities should be noted in your proposal and any improvements or alternate sites shall be discussed.
- 5) Although the new trunked radio system will be a closed network, it may still have vulnerable avenues through which cyber security breaches could occur. Accordingly, Proposers shall include a section in their response that describes the proposed system's protection schemes against cyber-attacks. The discussion should include the network's vulnerable elements and potential malicious entry points.
- 6) All PC-based software utilized in the new radio system shall be Windows or UNIX/Linux based. Proposers are required to identify each software package that will not be compatible with this requirement. Proposers shall identify the proposed version of the operating system provided in all Windows or UNIX/Linux based system computers.
- 7) At the time of system cutover, all system software shall be of the latest version available unless there is a compelling and acceptable reason that this requirement cannot be met. This must include the latest versions of software in the system infrastructure equipment, microwave equipment, dispatch console equipment, system management equipment, and all radio programming software.
- 8) All FCC licensing of the trunked radio system shall be included and provided by the successful vendor.

|                                     |  |
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| Confirmation<br>or<br>Clarification |  |
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#### 4.4.2 Trunked System Features and Functions

- 1) The system must support the following features and functionality, responders shall include a description of how each operates in the proposed solution:
  - a. Dedicated Control Channel
  - b. Dynamic Channel Allocation
  - c. Multiple Call Types
  - d. Priority Calls such as emergencies and dispatch override
  - e. Individual call or private call
  - f. Call Alert Display
  - g. AES Encryption – Multi-key
  - h. Data applications must be described such as GPS location reporting, text messaging, and any SCADA applications.
  - i. Voice and Data simultaneous transmission on a single channel
  - j. Channel access priority
  - k. Selective disablement of radios from the dispatch console position

- I. Over the Air Reprogramming (OTAP)
- m. Over the air Rekeying (OTAR)
- 2) The proposal must include a full description of all of the trunked system components and supporting equipment. This will include a detailed description of the following:
  - a. Radio Repeaters and built-in redundancies
  - b. Site Controllers and built-in redundancies
  - c. Antenna systems including a description of the combiners, receive multicouplers, antennas, RF cabling (include estimated coaxial length). Model numbers of each must also be provided.
  - d. Network interface equipment

|                                     |  |
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| Confirmation<br>or<br>Clarification |  |
|-------------------------------------|--|

**4.4.3 Trunked System and Subscriber Management**

- 1) The system must include network management capabilities including a network management terminal located in the dispatch center.
- 2) The system must support alarm monitoring and reporting. The proposer shall include a full description of how this is achieved, what alarms are monitored, how they are monitored, and actions necessary when an alarm is received.
- 3) Back-up power systems shall be included and fully described. If existing UPS systems are viable, proposers shall include an evaluation and recommendation for replacement re-use.

|                                     |  |
|-------------------------------------|--|
| Confirmation<br>or<br>Clarification |  |
|-------------------------------------|--|

**4.4.4 Coverage Maps**

Proposers shall provide coverage maps of the single site system. These maps shall include round trip coverage using a portable radio on the hip with an RSM of the following:

- 1) On-street coverage
- 2) 10 dB In-building Coverage
- 3) 20 dB In-building Coverage
- 4) 30 dB In-building Coverage

Responders should note that any coverage test plans or guarantees provided will be scored heavier in the evaluation process. A guarantee of the accuracy of the coverage maps provided would be acceptable.

|                                     |  |
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| Confirmation<br>or<br>Clarification |  |
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## 4.5 System Requirements – Dispatch Console System

### 4.5.1 Dispatch Console General Requirements

The new dispatch console system proposed shall employ a state-of-the-art IP based network architecture with GUI-based operator positions. Operator positions shall be "user friendly", highly reliable, and incorporate radio control in a manner that shall provide for efficient and simple operation for the dispatchers and department personnel in any combination of configurations and functions available. The proposed system shall provide all the necessary functions to control and monitor the radio system and related subsystems. The system shall be fully compatible with the associated trunked radio system infrastructure as well as all conventional resources.

The console system shall be designed to enhance the dispatchers' ability to communicate effectively with field personnel, perform resource management tasks, and to minimize the effort and concentration required for efficient use and control of the trunked radio system. This shall in part be accomplished using high quality LCD monitors of at least 27-inch diagonal size for selecting dedicated channels and talk groups as well as other system functionality. Touch screen monitors shall be included.

Each console shall be capable of Instant Record and Recall (IRR). Consoles shall interface with an external phone system which will allow dispatchers to use the two-way console to answer phone calls using the radio console headsets when selecting a phone line. The phone system will deliver 4-wire analog audio to each console for gating. When a phone line is selected, all radio audio is routed to a select or unselect speaker and the phone call audio is routed to the headset. Headset TX audio is routed to the phone line unless the dispatcher depresses the PTT switch at which time the dispatcher audio is transmitted over the selected talk group.

- 1) Consoles require two headset jacks at each position. Each console requires a "heavy-duty" foot operated PTT "pedal".
- 2) To minimize operator confusion and the chance of errors being made, all channels, talk groups and individual ID's shall be referred to and displayed by alphanumeric names. Numeric only references for talk groups or channel names shall not be acceptable. Manually cross-referencing a channel name to a number shall not be acceptable for any dispatch operation.
- 3) It is desired that all control functions displayed be user configurable so that they can be organized on the viewing screen in the most efficient and flexible manner possible.
- 4) Once customized for the individual user, screen configurations may be saved and easily recalled by a dispatcher when desired (custom user profiles)
- 5) Each function within each channel/talk group control representation and all other functions controlled through the console shall be color-coded with user definable color choices. These functions shall include but not be limited to audio activity indicators, transmit push-to-talks, volume controls, alarm conditions, etc. Keyboard/mouse operations shall be used to select and use all dispatch functions. Touch screens monitors are not required.
- 6) Proposers shall include all of the labor and materials to work with SMU's telephone system servicer / provider in interfacing the console system's headset jacks to the telephone system.

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#### 4.5.2 Console Position Operator Position Functionality

Proposers should review the desired features listed below and provide a response to each numbered item indicating if the functionality is provided in the proposed dispatch solution.

- 1) Console Position PC Equipment - Each of the radio dispatch consoles shall provide all controls that apply to the various channel/talk groups and auxiliary functions for the console. Operator positions shall be PC based, utilizing modern, robust PC equipment and software operating systems in current production at the time the system is staged to help provide long service and equipment life. The PC shall be equipped with a heavy-duty keyboard and mouse, and an LCD display with a minimum of a 27" diagonal measurement screen. The proposal shall identify the proposed operating system and provide a description of the PC equipment proposed for the project.
- 2) User login accounts – Each operator position and Supervisory position shall require a valid user login and security password to access the console system and its capabilities. Proposers shall describe their various levels of access and system security capabilities.
- 3) Talk group/Channel Select – Each talk group or channel shall be capable of independent selection by the dispatcher. The channel window shall provide a visual window indication when the corresponding channel is selected and when that talk group is transmitting.
- 4) Select Speaker – A select speaker shall provide audio from the selected channels/talk groups, with an independent volume control. A volume level display shall be provided for each channel as well as a select speaker audio level adjustment that ranges from silent to full volume. If there is an option for audio to not be completely silenced for a channel or talk group, please describe this functionality.
- 5) Unselect Speaker – An unselect speaker shall provide audio from unselected channels/ talk groups, with an independent volume control for the unselect speaker.
- 6) Transmit Function – A color-coded transmit push-to-talk (PTT) function shall be provided to control the selected channels or talk group(s). The PTT function shall be capable of being enabled by a PTT button on the headset, by the hand operated mouse and by a foot switch at the position. An indication of the channel/talk group that is transmitting shall be illuminated on the monitor. As stated elsewhere in these specifications, for training and management purposes two headset jacks shall be included with each operator position, each of which shall operate identically.
- 7) Channel Selection – The consoles shall be capable of channel or mode changes on all control stations. Each console must be able to select between eight (8) different frequencies (modes) for a given conventional or trunked station.
- 8) PTT ID Display and PTT ID History – The PTT ID of the last subscriber unit to transmit must be prominently displayed on the GUI. The proposer shall state the number of ID's that can be reviewed in the history report
- 9) A separate PTT ID display must be provided for the selected channel, and for each talk group and conventional channel.
- 10) PTT ID entries must also display a time stamp.

- 11) If the PTT ID has been assigned to an alphanumeric alias, the alias must be displayed rather than an electronic serial number or Trunking ID code that would require the dispatcher to manually look up the user assigned to that radio.
  - a. Aliases must be maintained in a single, common database accessible from all workstations.
  - b. Aliases must support a minimum length of no less than fourteen characters.
  - c. Aliases may contain any character defined in the ASCII character set.
- 12) Each operator position shall have these capabilities and be able to pull the history for each channel on the workstation.
- 13) Proposers shall list how far back the local call history from each console position can be recorded and retrieved.
- 14) CTCSS Monitor or Disable Function – This shall disable the receiver's CTCSS decoder of the selected base / repeater station(s) for monitoring purposes.
- 15) Console Clock – A console clock shall display time in a twelve or twenty-four-hour format (user selectable) at each operator position. The clock shall automatically change in Spring and Fall.
- 16) VU Meter or Display – This shall present a visual indication of transmit audio levels.
- 17) Keypad – The console shall contain a keypad or screen representation of a keypad for numeric data entry.
- 18) Microphone – A high-quality desktop microphone shall be provided.
- 19) Talk group/Channel Cross Patch – This function shall allow cross-patching talk groups and channels to permit interoperable communications. As participants are added or deleted, there shall be no variation in audio levels or quality. All patched audio shall be digitally processed. Dispatch Consoles must have the capability to patch between:
  - a. Any trunked talk group and one or more other trunked talk groups.
  - b. One or more trunked talk groups and one or more conventional channel or resource.
  - c. Any conventional channel and one or more other conventional channels.
  - d. Proposers shall state the number of talk groups or channels that may be included in a single patch. There shall be three types of console patches:
  - e. Hard – permanently pre-programmed patches, which the dispatcher cannot modify.
  - f. Soft – predefined patch, which may be activated or deactivated from the console.
  - g. Dynamic patch – temporary patch created and controlled at the console level.
  - h. Active hard patches must be displayed to the console operators through the console workstation GUI, but the console operator must not have the capability to knock down the patch.
  - i. Talk groups and conventional channels may be added to or removed from an existing soft patch at any time by the dispatch console operator.
  - j. Talk groups and conventional channels may be added to or removed from an existing hard patch only by modifying the pre-programmed patch at the system manager level and not by the dispatch console operator.

- k. Often-used patch configurations may be stored and recalled for later use. Recall of a stored patch configuration must be through the console workstation GUI via a drop-down box or other method convenient to the console operator. Proposers will state the number of patches that can be stored.
  - l. The console system shall be capable of interfacing through a patch to wired telephone and/or wireless VOIP telephone systems such as the Cisco "Instant Connect" technologies. Proposers shall also list capabilities of an interface with different technologies such as FirstNet.
- 20) Talk group Call – The console system shall support trunked talk group calls on any talk groups programmed into the system, with appropriate management approvals.
  - 21) Trunked Announcement Group Calls – The console system shall support trunked announcement group calls on any announcement groups programmed into the system, with appropriate management approvals.
  - 22) Trunked Emergency Calls – The console system shall support trunked emergency calls from any user radio programmed into the system with appropriate management approvals.
  - 23) Private Call – Selected users and dispatchers shall have the ability to selectively communicate "privately" with another individual on the system regardless of what talk group either unit is in. The call shall allow the two users to utilize a single channel resource to communicate without the participation of other units in their respective talk groups. Private calls will be visually identified on the dispatch console and on the user's radio for management purposes.
  - 24) Selective Alert – Selected users and all dispatchers shall have the ability to selectively send and receive alerts to and from an individual user on the system regardless of what talk group either unit is on. The call shall allow an individual to alert another user with a distinctive tone and their individual ID (ID on display radios only).
  - 25) Remote Monitoring – During an emergency, it may be necessary to open (enable) the microphone of a user radio. Proposers shall describe how that functionality is achieved.
  - 26) All Mute – All console positions shall provide a one button "All Mute" function that will temporarily mute or un-mute all incoming radio traffic audio to that position. An adjustable time-out-timer shall automatically cancel the all mute function after a pre-determined time has elapsed.
  - 27) Maximum Number of Aliases – Proposers shall state the maximum number of unit and talk group aliases that can be displayed on the console and that are available on the system.
  - 28) Unselect All Receiver Mute Function – A function that will immediately mute the received audio from all unselected channels shall be provided. This condition shall be indicated visually and be automatically canceled by a user adjustable time-out timer.
  - 29) Simultaneous Select – Controls shall be provided that allows the operator to manually select any combination of console-controlled channels or talk groups for simultaneous transmissions (multi-select). Three selectable combinations shall be allowed at the discretion of the dispatcher. The combined transmission shall utilize a single trunked channel when involving more than one talk group. All selected channel receive audio is routed to the Select speaker and headset(s).
  - 30) Instant Transmit Function – Each operator position (including Supervisors) shall provide an instant transmit function which will allow the dispatcher to quickly key up a talk group by depressing the instant transmit "button".

- 31) Maximum Number of Talk Group Resources - The proposer shall state the maximum number of talk groups and or conventional resources each console can access. Note if the number of resources is affected by encryption or any other feature, this must be explained.
- 32) Emergency/Reset – All consoles shall be capable of declaring and receiving emergency alerts from user radios and other operator positions operating on the trunked radio system regardless of the status of the channel control window. Emergency messages shall be indicated by a flashing red ID, an emergency ID character and an audible alert. Dispatcher acknowledgment of the message shall silence the audible alert and stop the flashing display. The console system shall be capable of queuing multiple emergency messages in the display stack and the emergency ID character shall continue to flash until all messages have been viewed by the dispatcher. The most recent emergency declaration shall be displayed, and the dispatcher shall be able to easily scroll through the queue to view queued emergencies. If no console is monitoring the talk group, the dispatch console must be capable of routing the emergency signal in the following manners:
- a. All Consoles
  - b. No Consoles (emergency signal is discarded)
  - c. One or more consoles which have been pre-selected to receive emergency signals from that talk group in the event the talk group is un-monitored.
  - d. The disposition of emergency signals from un-monitored talk groups must be configurable by an authorized System Administrator on a talk group-by-talk group basis
  - e. The routing of emergency signals may be changed at any time by an authorized System Administrator without the need for a re-start of software or hardware
  - f. Changes must take place immediately
  - g. The response time to display the emergency condition at the console position(s) must not exceed three (3) seconds
  - h. The display must identify PTT ID alias (if one is defined) of the subscriber unit initiating the emergency signal. Otherwise, the PTT ID must be displayed
  - i. The audible and visual alerts must continue to be activated until the operator of one or more consoles acknowledge the emergency signals. Acknowledgement of the alarm at one console must silence other consoles, but must not cancel the emergency condition
  - j. A separate action (other than the acknowledgement) must be required to “clear” the emergency and return the system to normal operation
  - k. Acknowledgement of the alarm must send an electronic message to the initiating subscriber unit, which, if it is so programmed, must cause it to activate a light or another display to indicate that a dispatcher has acknowledged the emergency signal
  - l. The electronic acknowledgement must not take the place of, or interfere with, a voice acknowledgment that may be made by the dispatcher
  - m. The emergency condition must be cleared by either of the following methods (both methods must be available and functional)
  - n. An action by the dispatcher through the console workstation, or
  - o. An action by the user through the user’s subscriber unit.

- p. The Emergency feature shall be programmable to allow the alert message to be delivered and displayed in predefined ways, including display on the current talk group in use by the person declaring the emergency and display on a separate pre-defined talk group.
- 33) Alert Tones – Proposers shall describe the alert tones that are available with their proposed solution.
  - 34) Talk group/Channel Busy Indicator – Consoles shall have channel busy indicators to visually indicate that the channel is in use by another console.
  - 35) Channel Name – Designated channel control modules or windows shall include a minimum of twelve (12) character minimum alphanumeric display symbols to identify the channel.
  - 36) Talk group/Channel Cross Mute – Consoles shall include a cross mute feature, which precludes voice communication from a dispatcher’s microphone being repeated over loudspeakers at other consoles in the dispatch center.
  - 37) Supervisory Control – The supervisors’ consoles shall provide takeover control to prevent other dispatch consoles from keying repeaters or base stations for each channel supported by parallel consoles. Supervisory consoles will have the ability to override transmissions from other consoles and field units. All consoles shall have priority over subscriber transmissions.
  - 38) Repeat Disable – The Supervisors’ positions shall be equipped with the ability to disable received audio from being repeated as needed.
  - 39) Headset and Jack – Proposers shall describe wired or wireless dispatcher headsets available for use with the proposed operator positions.
  - 40) The console operator position shall provide independent level settings for audio input from the headset microphone and the console microphones, such that dispatchers may freely switch operation between microphones without affecting dispatch audio volume or quality.
  - 41) Dual headset jacks shall be provided at each console operator position. The jacks shall provide TX and RX audio and PTT as well as telephone support. The console position shall be capable to support connection to SMU’s VOIP telephone system with audio switching between telephone and radio audio. Installation and working with SMU to accomplish this functionality shall be included in the proposal.
  - 42) Footswitch – Each of the console operator positions shall be equipped with a dual function footswitch. The footswitch shall be heavy duty and shall be designed so as not to skid on a smooth flooring surface.
  - 43) Priority/Emergency Channel Marker – A low volume tone pulsed at user defined intervals must be available to indicate that the channel/talk group is handling emergency traffic. The tone must be easily distinguishable from other tones used for other functions.
  - 44) Individual Alert Capability – Dispatcher console workstations must have the ability to initiate Individual Alerts to any subscriber unit regardless of current talk group affiliation. The desired subscriber unit must be selected by the PTT ID alias if one is defined or by the PTT ID.
  - 45) Individual Call Capability – Dispatcher console workstations must have the ability to initiate an Individual Call to any subscriber unit regardless of current talk group affiliation. The desired subscriber unit must be selected by the PTT alias, if one is defined, or the PTT ID.
  - 46) End-to-End Encryption – Proposers shall describe their end-to-end encryption capabilities.
  - 47) The talk group control window must indicate clearly and prominently whether the talk group is currently in the encrypted or clear mode,

48) Talk groups must be programmable to be either encrypted or clear by default. Manual selection of encrypted or clear by the dispatcher must override the default programming.

49) Instant Recall Recorder (IRR)

- a. Each of the console operator positions and Supervisory positions shall be equipped with an instant recall recorder capable of allowing the operator to quickly retrieve and playback recent radio traffic and recent telephone calls at the operator position. The recorder playback display must be integrated as part of the Radio Dispatch Console screen. The recorder shall be capable of recording and replay of the latest incoming radio traffic from any radio channel or system talk group selected on the radio dispatch console for transmission and the latest radio transmissions received on the selected talk group or channel at that position.
- b. Proposers shall describe the IRR storage capabilities and storage time available.
- c. The control panel shall contain at least the following controls:
  - 1. Fast Forward
  - 2. Fast Rewind
  - 3. Pause
  - 4. Restore
  - 5. Save
  - 6. Volume Control.
- d. Proposers shall describe what will be displayed in the IRR control window such as the alphanumeric display showing such information as message length, message ID, radio user ID or alias, number, date, time. Proposer shall state where IRR audio is routed during playback i.e. headset, select speaker or another device.

50) GPS Tracking / Location Data – Proposers shall include a complete description of how the included radio location feature will function. This would include a description and example of the display, where this display will reside in the proposed solution, and if it will be part of the main system GUI.

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4.5.3 Remote Dispatch Console Position

One of the dispatch console positions must be included in a portable configuration. This must be a rapidly deployable console that will be used in a mobile command post or any other location on the campus as needed with proper network connectivity. Responders must include the following in their proposal:

Describe all of the functionality included with the remote position.

- 1) If the remote console does not have any of the features or functionalities included with the primary positions, these must be listed and described.
- 2) Proposers shall include a list of network requirements associated with connecting the console to the primary dispatch infrastructure.

- 3) Proposers shall provide a detailed description of how the remote console can operate wirelessly and what is required at the connection to the radio system infrastructure.

All hardware, software, licenses, and any subscriptions must be included to make this operate remotely. Any licenses or subscriptions required shall be included in the proposal covering 10 years of operation from final system acceptance.

The proposal shall include the necessary labor to allow working through connectivity issues with SMU's IT Department.

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#### 4.5.4 Training

Radio dispatch console training must be included in this new deployment. Training must include general operation of the new dispatch console system and include at a minimum:

- 1) Detailed training on all features
- 2) Training on back-up systems
- 3) Training on all radio manipulation features.

### 4.6 System Requirements – User Radio Equipment

There are different requirements for the radio equipment needed to support the public safety users and the non-public safety users.

#### 4.1.1 Public Safety User Radio Equipment

Public safety radios will need to be capable of operating over the new DMR system as well as the local 700 MHz P25 Phase II trunked radio systems operated by Dallas and the Park Cities. SMU will work with these agencies to secure the necessary agreements and programming information. The proposal must include template development and programming of radios.

- 1) Portable Radios for Public Safety must meet the following specifications:
  - a. The portable radio shall meet MIL 810 C, D, E, and F standards for shock, vibration, salt, fog, dust, and rain and shall consist of a weather-resistant, FM transmitter, receiver battery power supply, and operating controls, all housed in a durable, attractive, weather-resistant enclosure. The case of the unit shall fit comfortably in, and permit, one-hand operation.
  - b. The power output of the transmitter shall be a minimum of 2.5 watts.
  - c. Portable radios supplied under this procurement shall be frequency synthesized and furnished to operate on all channels in the 700/800-megahertz (MHz) land mobile bands. Specific channel assignment will be made by the trunking control system.
  - d. In the event the portable radio unit begins operating on a site or subsystem that is in a failed mode, a unique tone will be heard on the unit's speaker and indicated on the display if applicable.

- e. The proposer shall describe the capabilities of the proposed portable radios to provide an indication to the user when the trunked system is operating in an abnormal mode. It is preferred that users can silence the failure indication tone.
- f. Radios shall be delivered with all necessary channels already programmed. Detailed operational and technical instructions on programming shall be supplied.
- g. User training, including a minimum of three (3) training sessions and training materials that can be distributed with each radio issued, shall be provided.
- h. One-page channel plans shall be provided for each radio issued.
- i. The radio set shall be capable of withstanding severe operating conditions. The portable housing shall be constructed of high-impact-resistant material. It shall be sealed and gasketed to protect internally mounted circuitry against dust, foreign particles, moisture, and splashing water. Opening the battery compartment shall not break the seal to the radio circuitry. Ruggedized portable radios are preferred. If available, ruggedized portable radios shall be offered and thoroughly described.
- j. The radio shall be single battery operated to insure uniform battery depletion. For the purposes of the proposal, the proposer shall use a rechargeable Lithium-ion battery, which shall be quickly and easily removed. Battery life, based on a 10% transmit, 10% receive, 80% stand-by duty cycle, measured in accordance with EIA RS-316 at 250 milliwatts of audio output, shall be at least twelve (12) hours. Batteries must be capable of a recharge in one (1) hour or less. Batteries provided must be capable of withstanding a three-foot drop test to concrete without damaging battery performance or visibly cracking the battery housing.
- k. SMU is interested in considering different types of batteries. MSI shall include in its proposal a section describing the pros and cons of its available battery types, including their operational parameters. SMU intends to make final decisions on battery types after evaluating this response. The proposal shall include the provision of standard batteries with each portable and state their specifications.
- l. Proposers shall propose batteries certified as intrinsically safe as an option.
- m. Further battery information required for the different types of batteries, including standard batteries, shall include:
  - a. Total battery life cycle expectancy
  - b. Recharge time
  - c. Dimensions
  - d. Weight
  - e. Warranty
- n. The volume and mode selection controls on the portable radios shall be mounted on the top of the unit for easy access. A rotary control knob shall be provided to select talkgroups as desired, simultaneously selecting the correct transmitter and receiver digital code. Other controls shall include a volume control/on-off switch; the switch shall not rotate through more than 355 degrees. A sealed transmitter PTT switch shall be provided on the side of the unit. A transmit indicator shall be visible on the top of the radio and in the front panel display.

- o. Emergency buttons shall be provided on all radios and protected from inadvertent activation.
  - p. A variable automatic transmit timer (time-out timer [TOT]) shall turn off the transmitter after a predetermined length of transmission and audibly alert the operator that its transmitter is off with a tone. The audio output level of the tone shall be independent of the volume control.
  - q. All portables shall be available with a variety of devices such as belt clips and leather cases.
  - r. Public safety speaker/microphone assemblies shall be available and thoroughly described in the proposal. It must be possible for an operator to remove the public safety speaker/microphone assembly from a portable radio without the use of tools and then operate the radio in normal fashion.
    - a. Speaker/microphones shall not have antennas on the microphone.
    - b. All speaker/microphones shall use coiled cords to connect the speaker microphone to the radio and shall be available in at least three (3) different lengths.
    - c. Speaker microphones shall be noise canceling.
    - d. Ruggedized remote speaker microphones and radios shall be available in black, yellow, and green housings.
  - s. Proposers shall include the functionality to interface with hearing-aid devices or provide an option to allow full operation for the hearing impaired.
  - t. Bluetooth capabilities shall be described. If not available on a certain model, this shall be clearly stated.
  - u. All portables regardless of the model type shall have OTAP and OTAR.
  - v. GPS location capabilities on portable equipment must be included
- 2) Mobile Radios for Public Safety must meet the following specifications:
- a. Mobile Radios: Mobile radios shall be capable of performing all functions and features of the system, as noted in this RFP. At a minimum, mobile radios shall duplicate features provided with the public safety portables.
  - b. Programming: Radio programming shall be provided by direct connection to a computer equipped with the proper programming software. Radio programming shall also be provided through over-the-air programming (OTAP) provided via the trunked radio infrastructure. Any limitations to this requirement must be stated.
  - c. Serial Numbers: All mobile radios shall have a multi digit unique serial number. These shall be of such type and located in such a position that their removal or alteration is difficult to do and as obvious to spot as economically feasible. As part of the implementation services, the selected Contractor shall provide a complete inventory listing of all equipment delivered with unique serial numbers. The equipment inventory shall be provided in both printed and electronic formats. Electronic versions shall be provided in Microsoft Excel format. This data shall also be included in the final system documentation as noted in the subscriber unit's last ID at acceptance..
  - d. Data Fields shall, at a minimum, include Manufacturer, Description, Model number, Serial number, Unit ID, and VIN number for mobile radio installations.

- e. Exterior Construction: The mobile radio exterior housing shall be made of plated or painted steel or aluminum of sufficient gauge to provide for adequate physical and RF protection and theft deterrence.
- f. Cabling: For mobile installations, the interconnecting cable, including DC power, shall be of such construction that frequent exposure to hydraulic fluids and petroleum-based oils will cause minimal damage such as cracking or softening of the cable jacket. All exposed wiring and cables must be loomed appropriately. All mobile wiring shall be encased in wire loom up to 8" of its connection point.
- g. TOT: A variable transmitter time out timer must be provided to limit key down time.
- h. Basic Functionality: Mobile radio equipment proposed shall incorporate the latest available technology and shall be fully functional in the vehicular environment. This shall include, but not be limited to, RF immunity, DC input voltage fluctuations, noise introduced in the DC line, and typical usage impact. Any degradation of functional parameters of the equipment supplied due to normal or emergency operation of the vehicle in which it is installed shall be corrected by the Contractor. Further the new radio equipment shall not interfere with any existing vehicular equipment. Any issues shall be corrected by the contractor.
- i. Accessories: All installation cabling, brackets, miscellaneous hardware, etc., must be included as part of this procurement.
- j. Control Heads: Control head mounting locations shall be subject to the approval of SMU. Mobile antennas and cabling to trunk or dash mounted units must be supplied as part of this procurement, replacing any existing cabling and antennas. No existing radio cables, mounting brackets or accessories will be re-used.
- k. DC Power: The mobile radio shall be capable of operation from a nominal 12-Volt DC primary power source, with positive action reverse polarity protection to avoid damage if the radio were to be incorrectly installed. In that event, the only damage allowed shall be blown fuses if the radio is turned "ON". The radio set shall operate from a negative ground primary source and shall be wired to the "cold" side of the vehicle ignition switch.
- l. All power should be derived directly from the vehicle battery, without using active components. Primary power input shall be adequately fused to assure fast and positive action.
- m. Talkgroup Scan: Some mobile radios will require priority-scanning capability. These units shall scan a minimum of ten (10) talkgroups. Proposers shall identify the maximum number of talkgroups that can be placed in a scan list. The operator shall be readily able to select the talkgroups to be scanned, to designate and change the priority channel, and to enable or disable the scanning mode.
- n. Emergency Alarm Switch: Mobile radio control heads shall be equipped with an emergency switch which will encode a unit identification and emergency status message when depressed. This indication shall be placed onto the system immediately and shall be decoded and displayed at the pre-designated dispatch console(s).
- o. Status Tones: Shall provide audible indication of the following conditions:
  - 1. System busy
  - 2. Call back when channel is available.

3. Time out timer activation
  4. Access to system denied
  5. Out of trunked radio system range
  6. Other reduced capability indicator.
  7. NOTE: To avoid user confusion during emergency operations, no single tone shall represent more than one function or condition.
  8. Control – The following items shall pertain to mobile unit control requirements
  9. Displays - Shall be clearly labeled and shall be backlit (variable) for nighttime visibility
  10. Microphone - Palm type, with push to talk switch
  11. An "on off" switch shall control primary power to the radio set
  12. A volume control shall regulate the audio level of the speaker from zero to full volume
  13. Indicators (either incandescent, LED, or LCD devices) shall be provided which indicate "radio set on" and "transmitter carrier on" functions
  14. A channel or talkgroup selector switch; and
- p. Transmission Lines and Antennas: As part of the standard package, a roof mount antenna shall be proposed. All mobile RF connections must be weatherproof and corrosion resistant.
- q. Portable Radio Adaptors (Convert-a-coms e.g.): Vendors shall provide details about any portable adaptor kits that could possibly be used to replace the need for mobile radios in some cases. These would need to be provided with a mobile microphone, speaker, external antenna, and portable charging capabilities.
- r. Multiple Product Tiers - Mobile Radios: Section 13: Pricing provides details on the tiered feature sets required for each agency/department.

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**4.1.2 Non-Public Safety User Radio Equipment**

Non-Public safety (NPS) radios will need to be capable of operating over the new DMR system only. These will all be portable radios. NPS radios will be provided to operate over the DMR system only. Radios for the NPS users will be proposed as follows:

- 1) Portable Radios for NPS users must meet the following specifications:
  - a. The power output of the transmitter shall be a minimum of 2.5 watts.
  - b. Portable radios supplied under this procurement shall be frequency synthesized and furnished to operate on all channels in the 700/800-megahertz (MHz) land mobile bands. Specific channel assignment will be made by the trunking control system.
  - c. In the event the portable radio unit begins operating on a site or subsystem that is in a failed mode, a unique tone will be heard on the unit's speaker and indicated on the display if applicable.

- d. The proposer shall describe the capabilities of the proposed portable radios to provide an indication to the user when the trunked system is operating in an abnormal mode. It is preferred that users can silence the failure indication tone.
- e. Radios shall be delivered with all necessary channels already programmed. Detailed operational and technical instructions on programming shall be supplied.
- f. User training, including a minimum of three (3) training sessions and training materials that can be distributed with each radio issued, shall be provided.
- g. One-page channel plans shall be provided for each radio issued.
- h. The radio set shall be capable of withstanding severe operating conditions. The portable housing shall be constructed of high-impact-resistant material. It shall be sealed and gasketed to protect internally mounted circuitry against dust, foreign particles, moisture, and splashing water. Opening the battery compartment shall not break the seal to the radio circuitry. Ruggedized portable radios are preferred. If available, ruggedized portable radios shall be offered and thoroughly described.
- i. The radio shall be single battery operated to insure uniform battery depletion. For the purposes of the proposal, the proposer shall use a rechargeable Lithium-ion battery, which shall be quickly and easily removed. Battery life, based on a 10% transmit, 10% receive, 80% stand-by duty cycle, measured in accordance with EIA RS-316 at 250 milliwatts of audio output, shall be at least twelve (12) hours. Batteries must be capable of a recharge in one (1) hour or less. Batteries provided must be capable of withstanding a three-foot drop test to concrete without damaging battery performance or visibly cracking the battery housing.
- j. SMU is interested in considering different types of batteries. MSI shall include in its proposal a section describing the pros and cons of its available battery types, including their operational parameters. SMU intends to make final decisions on battery types after evaluating this response. The proposal shall include the provision of standard batteries with each portable and state their specifications.
- k. Proposers shall propose batteries certified as intrinsically safe as an option.
- l. Further battery information required for the different types of batteries, including standard batteries, shall include:
  - 1. Total battery life cycle expectancy
  - 2. Recharge time
  - 3. Dimensions
  - 4. Weight
  - 5. Warranty
- m. The volume and mode selection controls on the portable radios shall be mounted on the top of the unit for easy access. A rotary control knob shall be provided to select talkgroups as desired, simultaneously selecting the correct transmitter and receiver digital code. Other controls shall include a volume control/on-off switch; the switch shall not rotate through more than 355 degrees. A sealed transmitter PTT switch shall be provided on the side of the unit. A transmit indicator shall be visible on the top of the radio and in the front panel display.

- n. A variable automatic transmit timer (time-out timer [TOT]) shall turn off the transmitter after a predetermined length of transmission and audibly alert the operator that its transmitter is off with a tone. The audio output level of the tone shall be independent of the volume control.
- o. All portables shall be available with a variety of devices such as belt clips and leather cases.
- p. Speaker/microphone assemblies shall be available and thoroughly described in the proposal. It must be possible for an operator to remove the public safety speaker/microphone assembly from a portable radio without the use of tools and then operate the radio in normal fashion.
  - 1. Speaker/microphones shall not have antennas on the microphone.
  - 2. All speaker/microphones shall use coiled cords to connect the speaker microphone to the radio and shall be available in at least three (3) different lengths.
  - 3. Speaker microphones shall be noise canceling.
- q. All portables regardless of the model type shall have OTAP capabilities, encryption is not required on the NPS portable radios.
- r. GPS location capabilities on portable equipment must be included

**4.1.3 Training on User Radios**

Radios to be used by the different departments will be different from their current radios as will the new system. It will be the vendors responsibility to train the users on operation of the new radios and the new system.

Vendors shall provide a detailed plan for user radio training for both the public safety users and the non-public safety user.

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**4.1.4 System Encryption**

All public safety radios must include AES Multi-Key Encryption. Proposers shall include a description of how the radios can be rekeyed over the air (OTAR). These radios will need to be capable of receiving encryption keys from the Park Cities radio system. Proposers shall include a solution to achieve this. In addition, proposers shall include a description of how radios will be manually keyed, such as with a key loader. All requirements needed for AES Multi-Key Encryption must be included in the proposal.

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#### 4.7 System Requirements – Logging recorder

SMU requires a new digital two-way radio system, which must be connected to a Voice Logging Recorder. Proposers shall include in their solution a new network-based logging recorder. The recorder shall be equipped to log audio on the trunked radio system, dispatch consoles, back-up control stations, and the telephone system currently used. Implementation of this will require the following:

- 1) Proposers shall evaluate the current system to determine what is being recorded currently and develop their proposal based on the current configuration and the audio logging resources required with the new system.
- 2) The system shall be a state-of-the-art IP network architecture-based logging system with GUI based operational controls and administrative control that is "user friendly", highly reliable, and incorporate audio logging in a manner that shall provide for efficient and simple operation by the dispatchers and department personnel in any combination of functions available in the system. At a minimum, the new system shall provide time stamped recordings that include the following:
  - a. Date of the recorded transmission
  - b. Time of the recorded transmission
  - c. Radio Talk group of the recorded transmission
  - d. Radio system ID's of transmissions within the recording
- 3) The system shall have the capability of reconstructing trunked radio system conversations.
- 4) The ability to record analog radio resources that might include back-up control stations or interoperability base / control stations.
- 5) Recorder inputs shall be available to interface with the current SMU telephone system. Proposers will need to confirm the details and provide a listing of what information they need to provide the logging solution that meets the needs of SMU.
- 6) Proposers shall provide information about their storage methods offered in their solution with a complete description of its initial capacity and expansion capabilities. Proposer shall provide an estimated storage capacity and method to offload and store old recordings.
- 7) All equipment supplied under this specification must be completely operational when installed. After the equipment has been tested and accepted by SMU, the Contractor must provide repair parts and labor for a minimum period of one year following system acceptance and must replace any parts, which become dis-functional during the one-year period at no additional charge.
- 8) The equipment furnished under this specification must be designed for continuous duty operation, 24 hours per day, 365 days per year. If additional servers are required, they must be equipped with an internal, hot swappable, RAID-5 hard disk configuration, and hot swappable power supplies.
- 9) Proposer shall state the number of talk-path hours of storage included with the recorder.
- 10) The System must be capable of recording and recovery of individual talk groups including the ability to search for replay by, at a minimum, date, time, talk group, radio ID, or radio alias name. Conventional channels must also be recorded. This may include control / base stations as determined by the proposer's design.

- 11) Concurrent Users – Access for monitor/replay functions must be available for two (2) users. Proposers shall provide seat licenses or other costs for multiple users to search and operate the recording system.
- 12) The recording system must be reachable/searchable by any user on the SMU network with proper credentials.
- 13) Search Parameters – The user will be able to define available search parameters. Proposer should list all parameters capable of being defined, and which parameters are not capable of being defined.
- 14) Tagging and Filing Multiple Recordings – The system Search & Replay software must be capable of "Tagging" a single recording in a manner which will allow a search by that individual "Tag." It must also save a large number of recordings into a single file; the Proposer will define the maximum number and size of recordings in the Proposal. It must allow Naming of the file up to 32 alphanumeric characters and playing the recordings from the file, when selected, in date/time sequence. It must allow additional recordings to be added at any time after the file has been created.
- 15) Non-Affecting Operation – The system must continue to record all channels during any mode or multiple remote accesses to the Search and Replay operations. The Search and Replay operations must not affect the continuity of recording operations in any manner.
- 16) Security Levels – The system must provide two levels of security with assignable password and user ID protection for each access capability.
- 17) The system must be capable of setting customizable parameters per channel when no recording has taken place for a defined and adjustable (from at least one hour to twenty-four hours) time period. The new system must detect and report any differences between the data collected and provide an alarm indication when the backup system is being used.
- 18) Error Record Log – The system must provide an error log to maintain records of all alerts, faults, error messages, and conditions. The system should also track and make an audit trail of all user access and maintenance functions, recording who accessed the system, at what time and date, and for what purpose.
- 19) Diagnostic Center – The Proposer shall describe any automatic failure reporting capabilities if available such as automatic placement of a report to a Contractor-supplied diagnostic center in the event of a failure or alert. When this feature is incorporated into the system, the Contractor or Contractor's designated representative will initiate a service call to dispatch and assign a service technician.
- 20) Real-Time Channel Monitoring – The system must provide real-time channel monitoring at all system access locations.
- 21) Diagnostic Help Screens – The system must provide diagnostic help screens to assist in areas such as alarm definition and operations such as how to change recording media.
- 22) Review Back-up – The system must provide a review capability, allowing backup in at least five (5) second increments.
- 23) Media Remaining Indicator – The system must provide a media remaining indicator measuring actual time remaining or actual percent of time remaining on the media, along with 10% and 5% visual and audible time remaining warnings.

- 24) Hot Spares –The Proposer must include a pre-installed “Hot Spare” drive within the RAID array, which will automatically replace a failed drive.
- 25) On-Site Spare Parts Kit: Proposers shall provide costs for an On-Site Spare Parts Kit and recommended components as an option.
- 26) Archive to Network Attached Storage (NAS): If Proposer can provide the capability to archive recorded data to a Customer Provided NAS, describe how this is accomplished, and provide the cost to do so. This function must occur over the SMU network. Solutions using transcribed DVD disks are not acceptable.
- 27) Record retention - SMU needs storage capability to retain these records indefinitely.

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**4.8 System Requirements – System Installation Guidelines**

The new radio system, dispatch console system, and control stations must be installed in accordance with recognized industry standards. Site inspections at the conclusion of the implementation will be performed following Motorola’s R56 guidelines and by requirements of the National Electrical Code.

**4.8.1 General Requirements for Trunked System Site**

- 1) All installation work performed shall be in accordance with laws and regulations of the U.S. Department of Labor, the State of Texas, and local government agencies.
- 2) At a minimum, the Contractor shall provide at least one experienced, qualified Project Manager dedicated to the project. The Project Manager shall oversee all aspects of system implementation, including site preparation, equipment programming, staging, installation, etc. Other individuals may assist the Project Manager in various functions such as reporting, accounting, testing, optimization, etc., but this individual shall have primary responsibility for the performance of the system.
- 3) It shall be the responsibility of the Contractor to provide the design, equipment, software, and services to successfully install the new SMU replacement radio system as described in this RFP. System optimization, troubleshooting, and adjustment of each subsystem shall be the Contractor’s responsibility. Installation shall include the removal of existing mobile radio equipment and ancillary subsystems that will be replaced under this procurement. All equipment removed from service shall be kept together with any associated parts, cables, accessories, etc. Care shall be taken to prevent damage to any equipment, parts, cables or accessories, so that the equipment can be reused if needed. The Contractor shall inventory these items as they are collected and shall be transported to a storage facility designated by SMU.
- 4) To the extent possible, the existing radio communications systems shall remain fully operational during installation of the new system and until successful completion of the 30-Day Operational Test. Because the existing systems support current operations, interruptions in service due to Contractor or Contractor activities cannot be tolerated. If interruptions in service are deemed by the Contractor to be unavoidable, written notification detailing the nature and duration of such interruptions shall be provided to SMU for review and approval.

- 5) Any equipment or parts required to provide a complete and operational system, and not specifically mentioned herein, shall be provided by the Contractor without any claim for additional payment.
- 6) Mobile installations performed in vehicles that are equipped with air-bag protection devices shall be installed in a manner that will not in any way impede the ability of the air bag to protect the occupants during a collision.
- 7) When applicable, Contractor must prepare and submit required documents for plan review and building permits and inspections as required.

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**4.8.2 Antennas and Transmission Lines**

- 1) For each RF cable provided, the coaxial antenna transmission line shall be cut to the proper length. The radio equipment at the end of this line shall terminate at a point where the lengths of jumper cables are kept as short as possible.
- 2) The ends of rigid transmission line shall not be connected directly to the antenna, to any RF equipment interference protection, or multiplexing devices. Appropriate RF jumper cables shall be used and installed.
- 3) Transmission line runs inside equipment rooms shall be supported every 3 feet, with cable trays or stainless-steel cable hangers. Transmission lines will be clearly labeled with preprinted permanent labels at end of the cable. Multiple cable runs shall not be bundled together, but rather, shall be strung and supported adjacent to each other.
- 4) All coaxial RF jumper cables shall be high quality, low loss, and with low interference generating connectors. The size and type of the cables shall be selected by the Contractor will be consistent for the single site system.
- 5) Appropriate jumper cables shall be used to interconnect all interference protection or multiplexing devices with the coaxial antenna transmission line and radio frequency equipment.
- 6) A jumper cable shall be used to interconnect the antenna(s) to the top end of the coaxial antenna transmission line. Jumper cables used to reach a wall mounted antenna shall be shaped to form a drip loop. Jumper cable interconnections shall be weather proofed by installation of 3M cold shrink weather proofing kits or equivalent. The use of vinyl tape is not acceptable for this purpose.
- 7) All antenna jumper cables shall be cut to length and shall use type 'N male' connectors except as dictated by the connector supplied with the antenna.
- 8) All coaxial cables exiting the equipment room (if used) shall do so through cabinet feed-throughs or purpose made cable entry ports. The use of caulk, glue or expanding foam is not an acceptable method of sealing or weatherproofing cable feed-throughs.
- 9) RF surge arrestors shall be included on all antenna systems.

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#### 4.8.3 System Grounding

All system components at the tower site, dispatch point, and any other new system component locations must follow all grounding requirements in accordance with recognized industry standards such as Motorola’s R56 Installation Guidelines and NEC Code.

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#### 4.8.4 General Requirements for Dispatch Console System Installation

- 1) The installation of the new dispatch consoles and associated equipment shall be provided by the Contractor as described in this RFP
- 2) The Contractor shall supply and install all required termination blocks, terminal strips, and/or cables needed to interface the new console electronics to all systems proposed or existing as needed
- 3) The proposer shall be responsible for working with SMU’s telephone system provider for the radio / telephone / headset interface.
- 4) All new console inter-cabling, including those that are to terminate at existing punch blocks, shall be labeled with pre-printed adhesive wire markers. The markers shall be placed at each cable end, adjacent to the connector or plug. All cables and/or cable bundles will be hidden from view and will be neatly secured by means of plastic tie wraps as available.
- 5) All inter-cabling to the operator positions shall be provided with sufficient slack to permit movement of at least 5 feet in any direction. As stated previously, all cabling within console furnishings shall adhere to the cable management systems within the console furniture.
- 6) Lengths of cable shall be provided to accommodate raisings and lowering of console furniture work surfaces. Headset jacks, and any other radio system peripherals shall conform to the console furniture system.

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### 4.9 System Requirements – As-Built Documentation

Thorough “as built” documentation shall be provided by the Contractor and delivered to SMU’s Project Manager. Three (3) copies of the documentation shall be provided in 3-ring binders and on an unencrypted flash drive in the original software format, including AutoCAD, Excel, and Word for drawings, spreadsheets, and text. At a minimum, the following “as built” documentation shall be included in each set:

- 1) A general system description that includes the overall system layout, architecture, its operating and failure modes, and the exact location where all system elements are installed.

- 2) System block diagrams
- 3) Site layouts and floor plans of each equipment site and dispatch facility, to scale
- 4) Rack face drawings for all racks, to scale
- 5) Drawings showing cable tray location details, to scale
- 6) Site construction documents
- 7) Radio propagation coverage maps
- 8) System Acceptance Testing documentation (Functional and Coverage testing)
- 9) All external equipment inter-cabling lists, whether NETWORK, RF, AC, AUDIO or CONTROL cables and/or wiring, consistent with the field cable labels
- 10) Interconnection drawings that show all connections between sub-assemblies, such as terminal boards, panel assemblies or other equipment, and which external connections are made, shall be provided.
- 11) Numbering and labeling lists of all interconnecting cabling between repeaters, the central control, any remote site controllers or processors, alarm circuits, leased telephone company circuits, and SMU network designations.
- 12) A log of level settings for all control circuits
- 13) Documentation and labeling lists of transmission line routing and antenna mounting at the tower site, with detailed drawings showing all mounting hardware and accessories.
- 14) Complete set of maintenance and operations manuals shall be provided for the system and for each category of equipment purchased in association with this project.
- 15) Manuals for OEM hardware for each component of the system
- 16) Any unique wiring configurations or circuit modifications that are not part of the standard equipment documentation provided shall be included. All information as described in the previous paragraph shall be included, in addition to the theory and method of operation
- 17) A complete inventory of all provided equipment and software including model numbers, serial numbers, and version numbers.
- 18) Final fleetmap configuration, with all group I.D.'s and aliases
- 19) A complete roster of unit I.D.'s and aliases
- 20) Documentation of final programming configuration for all software programmable equipment
- 21) A soft copy and printed copy of all equipment programming templates used in the system
- 22) Copies of the Hardware Acceptance Test Plan, with all recorded measurements.

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**4.10 System Requirements – Acceptance Testing**

- 1) Proper operation of the new trunked radio system is essential, both initially and in the long term. To help assure that the system is ready for use, SMU and the selected Contractor will jointly undertake a structured Acceptance Testing Plan (ATP) to verify proper installation, optimization, and performance of the system and its components. The proposer shall include the following:
- 2) The successful contractor shall perform the ATP on all equipment prior to the official ATP that will be witnessed by SMU. By doing so, the contractor will be able to identify any improper functionality prior to SMU's participation.
- 3) The ATP shall be performed on all systems, a sampling of any common configuration will not be permitted, and all components must be tested as part of the ATP.
- 4) Following final installation and optimization of the system and all subsystem components, the installation, performance and operational tests shall be performed by the Contractor and witnessed by SMU. Representatives of SMU as appropriate and the Consultant to verify proper operation of all subsystems, features, and capabilities of the system. Physical inspections of all sites will be conducted to observe the quality and correctness of equipment and facility installations.
- 5) Following physical inspections, the Contractor and the SMU team will perform and successfully complete acceptance testing prior to final system acceptance. Again, the contractor shall perform the ATP themselves before scheduling the official ATP to be witnessed by SMU and its consultants to ensure that all issues have been identified and corrected prior to SMU absorbing the costs for retesting if a certain test fails.
- 6) The Contractor shall provide all test equipment required for the ATP, and all such test equipment must be in current calibration with appropriate calibration records.
- 7) The Proposer shall provide a detailed Coverage Acceptance Test Plan (CATP) that proves their coverage maps as presented
- 8) The Proposer shall provide an outline of the proposed Functional Acceptance Test Plan (FATP). Detailed test scripts are not required for the proposal but will be required prior to contract execution.

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**4.11 System Requirements – Final System Acceptance**

Final system acceptance will be granted after the system goes live for 30 days without any major failure and all of the above criteria have been met, and all punch list items have been completed.

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**4.12 System Service and Support**

Responders shall provide a full description of their servicing capabilities and an overview of how they will support SMU in the maintenance of the system solution proposed. Information shall include:

- 1) Radio service center location for drive-up service calls.
- 2) Hours of operation.
- 3) Number of after-hours service technicians available and the call-out rotation
- 4) A full description of the after-hours service request process
- 5) Response times available and a full description of what service levels and response is guaranteed in this proposal.
- 6) A full description of the technician training level of all technicians that might be responding to service calls on the equipment included in this proposed solution.
- 7) A full description of advanced replacement capabilities of the system and the spares provided with the proposed solution.

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#### **4.13 Proposed Pricing Response Instructions**

This section provides tables that responders shall fill out illustrating the proposed pricing for the system based on these requirements.

- 1) Proposers must break out its pricing for each table presented in this section. Please modify the tables as necessary to help break out costs.
- 2) To the extent possible, please avoid using the term “lot” when pricing an item.
- 3) Any discounts, trade-ins, cost incentives, or signing bonuses extended to SMU should be contained and described in this section.
- 4) Responders must submit all pricing for its proposal based on the pricing worksheets that follow. The forms provided in these worksheets serve as the basis for the proposed pricing of all equipment and all services including, but not limited to, equipment delivery, freight, installation, programming, optimization, project management, engineering, training, testing, vendor travel and per-diem, supplies, etc.
- 5) The vendors proposal shall be conclusive evidence that the vendor has investigated and is satisfied as to the conditions to be encountered in performing the work.
- 6) Proposers should expand on the specifics of these forms and duplicate the forms as required to adequately portray the proposed architecture.
- 7) Proposers must be as descriptive as possible and include equipment model names, supplier names, and model numbers for third-party equipment, etc.
- 8) Proposers should clearly and effectively communicate the system concept, infrastructure configuration, and user equipment options. Pricing should reflect both system and component level costs.
- 9) Please round all costs to the nearest dollar.

#### 4.14 Pricing Tables

| Table 4.14.1 Trunked Radio System   |     |           |            |
|---|-----|-----------|------------|
| Equipment Description   | Qty | Unit Cost | Total Cost |
| Trunked Radio System Control Equipment  |     | \$        | \$         |
| Trunked Repeaters / Base Stations   |     | \$        | \$         |
| Network Management Equipment  |     | \$        | \$         |
| Network Interface Equipment   |     | \$        | \$         |
| Antenna Systems   |     | \$        | \$         |
| Alarm System Equipment  |     | \$        | \$         |
| Services: Installation, Project Management, Engineering, Optimization, Programming, and Other Services Related to Implementation of Trunked Radio Site (includes all interfaces as necessary) |     | \$        | \$         |
| Add additional lines as necessary   |     | \$        | \$         |
| Total Proposed Costs for Trunked Radio Site Equipment & Services  |     |           | 0          |

| Table 4.14.2 Dispatch Console Equipment   |     |           |            |
|---|-----|-----------|------------|
| Equipment Description   | Qty | Unit Cost | Total Cost |
| IP-based LCD Touchscreen Dispatch Consoles at Primary Dispatch (24" Monitors)   |     | \$        | \$         |
| IRRs (one per console)  |     | \$        | \$         |
| Interface to Existing Consolettes   |     | \$        | \$         |
| Logging Recorder Interface to System  |     | \$        | \$         |
| Telephone / Headset Interface   |     | \$        | \$         |
| Auxiliary I/O Interface for Local I/Os  |     | \$        | \$         |
| Provisioning Manager (with all software, licenses, and any other hardware or software that may be included for fully functional preventative maintenance)                   |     | \$        | \$         |
| Services: Installation, Project Management, Engineering, Optimization, Programming, and Other Services Related to Dispatch Equipment (includes all interfaces as necessary) |     | \$        | \$         |

| Table 4.14.2 Dispatch Console Equipment                        |     |           |            |
|--|-----|-----------|------------|
| Equipment Description  | Qty | Unit Cost | Total Cost |
| Civil Work Related to Dispatch Console Implementation          |     | \$        | \$         |
| Add additional lines as necessary                              |     | \$        | \$         |
| Total Proposed Costs for Dispatch Console Equipment & Services |     |           | 0          |

| Table 4.14.3 Portable Radio Equipment – Public Safety |     |           |            |
|---|-----|-----------|------------|
| Equipment Description                                 | Qty | Unit Cost | Total Cost |
| Digital P25 700/800 MHz and DMR Portable Radio        |     | \$        | \$         |
| 1,000 Modes Minimum (trunked and conventional)        |     | \$        | \$         |
| Alphanumeric Display                                  |     | \$        | \$         |
| Partial Keypad  |     | \$        | \$         |
| PTT ID  |     | \$        | \$         |
| Emergency Alert                                       |     | \$        | \$         |
| Priority Scan   |     | \$        | \$         |
| Individual Call and Call Alert                        |     | \$        | \$         |
| GPS Location  |     | \$        | \$         |
| Text Messaging  |     | \$        | \$         |
| Group Services  |     | \$        | \$         |
| Wi-Fi   |     | \$        | \$         |
| Bluetooth   |     | \$        | \$         |
| Security Bundle                                       |     | \$        | \$         |
| AES-256 Multikey Voice Encryption                     |     | \$        | \$         |
| AES OTR   |     | \$        | \$         |
| ADP Encryption  |     |           |            |
| OTAP  |     | \$        | \$         |
| Key Variable Loader (with AES and ADP)                |     | \$        | \$         |
| Multi-Unit Charger/Battery Conditioner                |     | \$        | \$         |
| Speaker Microphone (no antenna)                       |     | \$        | \$         |
| Spare Batteries                                       |     | \$        | \$         |

| Table 4.14.3 Portable Radio Equipment – Public Safety      |     |           |            |
|--|-----|-----------|------------|
| Equipment Description                                      | Qty | Unit Cost | Total Cost |
| Standard Belt Case with 3-inch Belt Clip                   |     | \$        | \$         |
| User Training Sessions                                     |     | \$        | \$         |
| Services: Subscriber Deployment, Fleetmapping, Programming |     | \$        | \$         |
| Total Proposed Costs for Portable Equipment and Services   |     |           | 0          |

| Table 4.14.4 Portable Radio Equipment – <b>NON</b> -Public Safety |     |           |            |
|---|-----|-----------|------------|
| Equipment Description   | Qty | Unit Cost | Total Cost |
| DMR 700/800 MHz Portable Radio                                    |     | \$        | \$         |
| 1,000 Modes Minimum (trunked and conventional)                    |     | \$        | \$         |
| Alphanumeric Display  |     | \$        | \$         |
| Partial Keypad  |     | \$        | \$         |
| PTT ID  |     | \$        | \$         |
| Emergency Alert   |     | \$        | \$         |
| Priority Scan   |     | \$        | \$         |
| Individual Call and Call Alert                                    |     | \$        | \$         |
| GPS Location  |     | \$        | \$         |
| Text Messaging  |     | \$        | \$         |
| Group Services  |     | \$        | \$         |
| Wi-Fi   |     | \$        | \$         |
| Bluetooth   |     | \$        | \$         |
| OTAP  |     | \$        | \$         |
| Multi-Unit Charger/Battery Conditioner                            |     | \$        | \$         |
| Speaker Microphone (no antenna)                                   |     | \$        | \$         |
| Spare Batteries   |     | \$        | \$         |
| Standard Belt Case with 3-inch Belt Clip                          |     | \$        | \$         |
| User Training Sessions  |     | \$        | \$         |
| Services: Subscriber Deployment, Fleetmapping, Programming        |     | \$        | \$         |
| Total Proposed Costs for Portable Equipment and Services          |     |           | 0          |

| Table 4.14.5 Control Station and Mobile Equipment                     |     |           |            |
|---|-----|-----------|------------|
| Equipment Description   | Qty | Unit Cost | Total Cost |
| Digital P25 700/800 MHz Control Station                               |     | \$        | \$         |
| 1,000 Modes Minimum (trunked and conventional)                        |     | \$        | \$         |
| Alphanumeric Display  |     | \$        | \$         |
| Partial Keypad  |     | \$        | \$         |
| PTT ID  |     | \$        | \$         |
| Emergency Alert   |     | \$        | \$         |
| Priority Scan   |     | \$        | \$         |
| Individual Call and Call Alert  |     | \$        | \$         |
| Desktop Microphone  |     | \$        | \$         |
| Internal Power Supply   |     | \$        | \$         |
| 700/800 MHz Antenna System  |     | \$        | \$         |
| Services: Subscriber Deployment, Fleet mapping, Programming           |     | \$        | \$         |
| Total Proposed Costs for Control Station, TxDPS Mobiles, and Services |     |           | 0          |

| Table 4.14.6 Optional Equipment / Services                     |           |
|--|-----------|
| Description  | Unit Cost |
| Single Unit One-hour Charger                                   | \$        |
| Holster with Swivel Belt Clip                                  | \$        |
| Cost for Dispatch Console Spares                               | \$        |
| Non-Public Safety Mobile Radio with Installation & Programming | \$        |

| Table 4.14.7 Maintenance Costs Years 3-10 |           |
|---|-----------|
| Description                               | Unit Cost |
| Maintenance Costs Year 3                  | \$        |
| Maintenance Costs Year 4                  | \$        |
| Maintenance Costs Year 5                  | \$        |
| Maintenance Costs Year 6                  | \$        |

| Table 4.14.7 Maintenance Costs Years 3-10 |           |
|---|-----------|
| Description                               | Unit Cost |
| Maintenance Costs Year 7                  | \$        |
| Maintenance Costs Year 8                  | \$        |
| Maintenance Costs Year 9                  | \$        |
| Maintenance Costs Year 10                 | \$        |
| Total 10-Year Maintenance Costs           |           |

| Table 4.14.8 Total System Cost Summary       |           |
|--|-----------|
| Description                                  | Unit Cost |
| Trunked Radio System                         | \$        |
| Dispatch Console System                      | \$        |
| Portable Radio Equipment – Public Safety     | \$        |
| Portable Radio Equipment – Non-Public Safety | \$        |
| Mobile Radio Equipment – Public Safety       | \$        |
| Control Station Equipment                    | \$        |
| Year 1 and 2 Total Cost                      | \$        |
| Maintenance Costs Years 3-10                 | \$        |
| Total Cost of Ownership through Year 10      | \$        |

**SAMPLE CONTRACT**  
**TO PROVIDE SERVICES ON AN**  
**ANNUAL BASIS**  
**TO**  
**SOUTHERN METHODIST UNIVERSITY**  
**BY**  
**(CONTRACTOR)**

This Contract to provide services ("the Services") on an Annual Basis (this "Contract") is made by and between Southern Methodist University ("SMU"), a Texas nonprofit corporation, with its principal offices located at 6425 Boaz Lane, Dallas, Texas 75205, and [enter vendor] ("Contractor"), a [enter state] corporation, with its principal offices located at [enter address].

**ARTICLE 1: SERVICES TO BE PROVIDED UNDER THIS CONTRACT**

Contractor will provide to SMU the services described in Contractor's Proposal, attached hereto as Exhibit A. The term "Services" means the services to be provided pursuant to this contract and includes all labor, materials, equipment, subcontractor services and/or miscellaneous items provided by Contractor to fulfill Contractor's obligations hereunder. Labor shall include straight-time wages, fringe benefits, workers' compensation and other insurance, applicable taxes, small tools expenses, truck allowance, overhead and profit. Contractor shall not charge SMU for overtime unless authorized by SMU's Representative designated in Exhibit C.

**ARTICLE 2: TERM**

The term of this Contract shall commence on [enter date] and shall end at the conclusion of business on [enter date]. SMU reserves the right to extend this Contract by written direction of the President, a Vice President or other authorized signatory identified in Exhibit C, for three (3) additional one-year terms on the terms, including, without limitation, pricing terms, specified in this Contract.

**ARTICLE 3: CONTRACT SUM AND PAYMENTS**

3.1 SMU shall pay to Contractor the Contract sum **not to exceed** [enter estimated amount] \$XXX,XXX (XXXX Dollars and No Cents) during each annual term of this Contract. Contractor will invoice SMU on a monthly basis based upon completion of Services as described in quotes or proposals accepted by SMU. Each invoice will be delivered to SMU at the address set forth in Exhibit C and will specify the location of Services performed, the purchase order number, and will be delivered to the address set forth in Exhibit V. The term of the Contract will not extend beyond the latest date set forth in Article 2, without the written agreement of the President, a Vice President, or other authorized signatory identified in Exhibit C.

3.2 Each invoice will be due and payable by SMU thirty (30) days after satisfactory completion of Services and acceptance and approval of the Services and of such invoice by SMU.

3.3 Payments will be made only to Contractor and will be sent to Contractor at the address designated in Exhibit C.

3.4 Contractor must present all invoices to SMU no later than ninety (90) days after completion of Services. Invoices should be sent electronically to [invoices@smu.edu](mailto:invoices@smu.edu).

3.5. Contractor shall not charge SMU for overtime unless authorized by a Contractor Directive. No overtime shall be charged during a week unless SMU requires Contractor to furnish personnel in excess of a Weekly Full Schedule. Contract shall not charge SMU for items other than labor unless specifically authorized by Contractor Directive.

3.6 Contractor agrees to keep full and detailed accounts of costs and exercise such controls as may be necessary for proper financial management under this Contract. SMU shall be afforded access to Contractor's records books, correspondence, instructions, receipts, vouchers, memoranda and other data relating to this Contract for a period of three (3) years after final payment or for such longer period as may be required by law.

**ARTICLE 4: CONTRACT DOCUMENTS**

The following documents form a part of this Contract and are attached hereto and incorporated herein by reference (including plans, specifications and drawings, if applicable):

| <b><u>Exhibit</u></b> | <b><u>Title</u></b>   | <b><u>Pages</u></b> |
|-----------------------|---|---------------------|
| A                     | Contractor's Proposal/Statement of Services   | XX                  |
| B                     | Insurance Requirements  | x                   |
| C                     | Primary Location of Business to Receive Invoices and Payments; Designated Persons to Receive Notices, Operational Points of Contact, and Authorized to Sign | x                   |

In the event of a conflict between (i) the provisions of this Contract and the attached Exhibits B and C and any Directive, as completed by SMU, and (ii) the provisions of Exhibit A or any other proposal or bid from Contractor, then the provisions of this Contract, the attached Exhibits B and C, and the Directive, as completed by SMU, will control.

## ARTICLE 5: RESPONSIBILITIES OF CONTRACTOR

5.1 By execution of this Contract, Contractor represents that Contractor has visited the SMU premises where Contractor is to perform the Services under this Contract and is familiar with the local conditions under which the Services are to be performed.

5.2 Contractor will be responsible to SMU for the acts and omissions of Contractor's employees, subcontractors, sub-subcontractors, suppliers, volunteers, agents and any other persons performing any part of the Services hereunder. Contractor is responsible for ensuring that all persons performing any part of the Services comply with the obligations of the Contractor set forth in this Contract.

5.3 Contractor will not subcontract any portion of the Services to be performed under this Contract without advance written approval by SMU. Contractor will notify SMU's Representative of the names of any subcontractors, persons or entities (including those who are to furnish materials or equipment fabricated to a special design) proposed for each of the principal portions of the Services. Contractor will not contract with any subcontractor, person or entity to which SMU has made reasonable objection. By appropriate written agreement, Contractor will

(a) require each subcontractor, person or entity, to the extent of the Services to be performed, to be bound to Contractor by terms of this Contract, and to assume toward Contractor all obligations and responsibilities which Contractor, by this Contract assumes toward SMU;

(b) allow to each subcontractor, person or entity the benefit of all rights, remedies and redress afforded to Contractor by this Contract; and

(c) require each subcontractor to enter into similar agreements with sub-subcontractors. Contractor will maintain all subcontractor agreements, purchase orders, and certificates of insurance at its offices and upon SMU's request will provide SMU with copies of same.

5.4 Contractor will give notices required by and comply with all applicable laws, ordinances, rules, regulations and lawful orders of public authorities relating to the Services, including, without limitation, those bearing on safety of persons and property and their protection from damage, injury or loss. Contractor will obtain and pay for all required permits, licenses and inspections and will pay all governmental fees. Contractor will be responsible for all fines, penalties and other costs resulting from Contractor's failure to meet its obligations under this Contract.

5.5 Contractor will supervise and direct the performance of the Services, using Contractor's best skill and attention. Contractor will be solely responsible for and have control over the means, methods, techniques, sequences and procedures involved in performance of the Services, so long as such are consistent with all specifications of this Contract, and for coordination of all portions of performance of the Services under this Contract, unless otherwise specifically agreed by the parties elsewhere in this Contract.

5.6 Unless otherwise provided in this Contract, Contractor will provide and pay for labor, materials, subcontractors, equipment, tools, machinery, transportation, and other facilities and services necessary for the proper performance of the Services hereunder, whether temporary or permanent. Contractor will certify that materials furnished by it hereunder are free of asbestos, meaning that the materials, if sampled and analyzed, can be determined to contain no asbestos.

5.7 (a) Contractor will enforce strict discipline and good order among Contractor's

employees and others performing any part of the Services under this Contract. When not a safety hazard, a photo ID badge must be worn in plain sight by all persons performing any part of the Services under this Contract. Contractor will not permit unfit persons or persons unskilled in the tasks assigned to them to perform any part of the Services hereunder. Contractor will independently verify whether any person assigned to work on SMU property has a record of a conviction of any felony or of a misdemeanor involving alcoholic beverages, animals, assault, computers, controlled substances, criminal mischief, dishonesty, disorderly conduct, explosives, fire alarms, fraud, harassment, indecent exposure, public indecency, public lewdness, riot, stalking or theft ("Misdemeanor") under Texas law or the equivalent under the laws of another jurisdiction. Contractor will also ensure that employment screenings are conducted on all persons who are expected to perform Services, consistent with the duties and responsibilities associated with such individuals' positions, locations of work and other factors. Contractor will not permit any person to perform Services hereunder if Contractor deems such individual to be an unreasonable risk on the basis of the results of such screenings. In addition, Contractor will not permit any person to perform Services on SMU property who has been convicted of any felony or Misdemeanor under Texas law, or the equivalent under the laws of another jurisdiction, without first obtaining written approval from the SMU Police Department. SMU reserves the right to refuse to grant such permission if, in its sole judgment, business necessity requires it to do so. SMU reserves the right to remove immediately from SMU's property (or to require Contractor to remove immediately) any person performing any part of the Services, should such person pose, in the reasonable judgment of SMU, an immediate threat of harm or nuisance to persons or property.

(b) To the extent required by law, all persons performing any part of the Services will be United States citizens or nationals, lawful permanent residents, or aliens properly authorized to work in the United States.

(c) At SMU's request, Contractor will provide appropriate documentation demonstrating compliance with the requirements of this Section 5.7.

5.8 Contractor warrants to SMU that the Services performed hereunder will be performed in a good and workmanlike manner and that they will conform to the requirements of this Contract. If Contractor provides professional or other expertise for performance of the Services, Contractor warrants that the Services will be performed in accord with the highest appropriate professional and/or industry standard. SMU relies upon Contractor's expertise to perform the Services in a manner fit to accomplish those particular purposes stated herein and all other foreseeable purposes. If required by SMU, Contractor will furnish to SMU satisfactory evidence of the kind and quality of materials and equipment it will use to perform the Services hereunder.

5.9 Unless otherwise provided in this Contract, Contractor will pay sales, consumer, use and other similar taxes which are legally enacted when bids are received or negotiations concluded, whether or not yet effective or merely scheduled to go into effect during the term of this Contract.

5.10 Contractor will confine the Services to areas permitted by law, ordinances, permits and this Contract, and will not unreasonably encumber the area with materials or equipment. Unless approved by SMU's Representative, Contractor will not permit use of cellular telephones on construction sites. In addition, Contractor will restrict all persons performing any part of the Services to such areas. Contractor must obtain authorization for parking of vehicles or equipment on SMU property from SMU's Representative. Vehicles and equipment will also conform to all parking regulations of SMU as directed by SMU's Police Department. Without limiting the foregoing, no driving or parking is permitted on pedestrian walkways.

5.11 Contractor will be permitted to use existing entrances and stairs and such other areas only with SMU's prior approval and subject to SMU's security arrangements. Contractors given keys, cards or codes allowing access to SMU properties will use diligence in safeguarding the keys, cards or

codes and will only use for the purpose of fulfilling the services under the contract.

5.12 Contractor will permit SMU access to observe and evaluate Contractor's performance of the Services at any time desired by SMU.

**5.13 INDEMNIFICATION.**

(a) TO THE FULLEST EXTENT PERMITTED BY LAW, AND EXCEPT TO THE EXTENT CAUSED BY THE NEGLIGENCE OR FAULT OF THE INDEMNIFIED PARTY, CONTRACTOR WILL INDEMNIFY, DEFEND (WITH COUNSEL ACCEPTABLE TO SMU) AND HOLD HARMLESS SMU, ITS TRUSTEES, OFFICERS, EMPLOYEES, VOLUNTEERS AND/OR AGENTS AND/OR THE SUCCESSORS AND/OR ASSIGNS OF ANY OF THEM (EACH, AN "INDEMNIFIED PARTY") FROM AND AGAINST ANY AND ALL LOSS, COST, EXPENSE, DAMAGE, INJURY, LIABILITY, CLAIM, DEMAND, FINE, PENALTY OR CAUSE OF ACTION, INCLUDING, BUT NOT LIMITED TO, ATTORNEYS' FEES AND COSTS AND EXPENSES OF ANY DISPUTE RESOLUTION PROCEEDING (EACH A "CLAIM" AND COLLECTIVELY, "CLAIMS"), DIRECTLY OR INDIRECTLY ARISING OUT OF, RESULTING FROM, OR RELATING TO CONTRACTOR'S PERFORMANCE OF THE SERVICES HEREUNDER OR OTHER ACTIVITIES OF THE CONTRACTOR, INCLUDING, BUT NOT LIMITED TO:

- (i) CONTRACTOR'S BREACH OF THIS CONTRACT;
- (ii) ANY CLAIM ATTRIBUTABLE TO BODILY INJURY, SICKNESS, DISEASE, OR DEATH OF ANY PERSON, OR TO INJURY TO OR DESTRUCTION OF PROPERTY, INCLUDING, BUT NOT LIMITED TO, LOSS OF USE OF THE PROPERTY;

(iii) ANY LIEN CLAIM OR NOTICE OF LIEN CLAIM ASSERTED BY ANY SUBCONTRACTOR, SUB-SUBCONTRACTOR, SUPPLIER OR EQUIPMENT PROVIDER OF ANY TIER WHO PROVIDES LABOR, MATERIALS OR EQUIPMENT TO THE PROJECT TO CARRY OUT ANY OF THE SERVICES PROVIDED IN THIS CONTRACT, TO THE EXTENT CONTRACTOR HAS BEEN PAID FOR THE SERVICES; OR

(iv) THE ACT OR OMISSION OF CONTRACTOR, A SUBCONTRACTOR, SUB-SUBCONTRACTOR, SUPPLIER, OR ANY OTHER PERSON OR ENTITY DIRECTLY OR INDIRECTLY EMPLOYED BY SUCH PARTIES OR FOR WHOSE ACTS OR OMISSIONS THEY MAY BE LIABLE.

In the event that an Indemnified Party is found by final award to be negligent or at fault at whole or in part, the indemnity and hold harmless obligation of Contractor with regard to attorneys' fees and costs and expenses of any dispute resolution proceeding will be reduced by the percentage of fault or negligence of the Indemnified Party. These obligations will not be construed to negate, abridge or reduce other rights or obligations of indemnity which would otherwise exist as to a party or person described in this Section 5.16.

(b) INDEMNITY – EMPLOYEE INJURY CLAIMS; INTELLECTUAL PROPERTY INFRINGEMENT CLAIMS. IN ADDITION TO THE INDEMNIFICATION PROVIDED IN SECTION 5.16(a) AND TO THE FULLEST EXTENT PERMITTED BY LAW, CONTRACTOR WILL INDEMNIFY, DEFEND (WITH COUNSEL ACCEPTABLE

**TO SMU), AND HOLD HARMLESS EACH INDEMNIFIED PARTY FROM AND AGAINST ANY CLAIM (i) DIRECTLY OR INDIRECTLY ARISING OUT OF, RESULTING FROM, OR RELATING TO BODILY INJURY, SICKNESS, DISEASE OR DEATH OF ANY EMPLOYEE OF CONTRACTOR, ANY SUBCONTRACTOR OR ANYONE DIRECTLY OR INDIRECTLY EMPLOYED BY EITHER, BROUGHT BY SUCH INJURED EMPLOYEE OR THE EMPLOYEE'S WORKERS' COMPENSATION INSURANCE CARRIER; AND/OR (ii) ANY CLAIM THAT ANY MATERIALS CONTRACTOR PRODUCES FOR OR USES AT SMU INFRINGE ON THE COPYRIGHT, TRADEMARK, SERVICE MARK, OR TRADE NAME OR OTHER INTELLECTUAL PROPERTY RIGHT OF A THIRD PARTY, OR PLAGIARIZE THE WORK OF A THIRD PARTY, IT BEING THE EXPRESSED INTENT OF SMU AND CONTRACTOR THAT THE CONTRACTOR IS TO INDEMNIFY, DEFEND AND HOLD HARMLESS EACH INDEMNIFIED PARTY EVEN TO THE EXTENT SUCH CLAIM IS ALLEGED TO BE CAUSED, IN WHOLE OR IN PART, BY THE SOLE OR CONCURRENT NEGLIGENCE OF AN INDEMNIFIED PARTY.**

**(c) The indemnification of this Section 5.16 will not be limited by a limitation on amount or type of damages, compensation or benefits payable by or for Contractor under workers' compensation acts, disability benefit acts or other employee benefit acts. The obligations of Contractor under this Section 5.16 will survive the expiration of this Contract.**

5.14 (a) The consumption of alcoholic beverages and the illegal use of controlled substances will not be permitted on SMU's property nor will Contractor employees or any other person performing any part of the Services be under the influence of such substances while on SMU's property. Contractor will comply with SMU's Non-Smoking Policy, a copy of which can be obtained from SMU's Representative. Smoking will not be permitted at any location where either SMU or Contractor has posted a "No Smoking" sign, it being understood that Contractor has the obligation to post appropriate "No Smoking" signs as necessary for safety reasons within the spaces for which Contractor is responsible. Further, it is understood that SMU has designated all campus buildings as "No Smoking" areas, which designation must be respected unless a "Smoking Permitted" sign has been posted by SMU.

(b) To the fullest extent permitted by law, the use or possession of dangerous weapons or facsimiles of dangerous weapons on SMU property is prohibited for all persons except for persons duly authorized by the SMU Police Department or by an accredited law enforcement office, to carry a firearm in the performance of their duty.

5.15 (a) Without altering in any way Contractor's liability under this Contract or applicable law, Contractor agrees to comply with the "Insurance Requirements of the Contract" attached hereto as Exhibit B and incorporated herein by reference.

(b) None of the requirements as to types, limits or SMU's approval of Contractor's insurance coverage limits, qualifies or quantifies the liabilities and obligations assumed by Contractor under this Contract or otherwise provided by law. Contractor is responsible for maintaining its own insurance coverage on its personal property.

5.16 Contractor will be responsible for ensuring that the performance of the Services and the completed work comply with the Americans with Disabilities Act of (42 U.S.C. Section 12101 et seq.) and with Chapter 469, Texas Government Code, Elimination of Architectural Barriers, and with other laws affecting the rights of individuals with disabilities, and related federal and state regulations, as amended from time to time. If required by law or by SMU's Representative, Contractor will enter into a

subcontract with a third-party Registered Accessibility Specialist (RAS) acceptable to SMU. The cost of RAS services will be billed by Contractor as a direct pass-through cost to SMU without mark-up.

5.17 Minors on Campus. Contractor agrees to comply with Texas Education Code, Section 51.976, which mandates that all persons in a position involving contact with minors enrolled in a "campus program for minors" as defined in Texas Education Code, Section 51.976, must successfully complete an approved training and examination program on sexual abuse and child molestation. Contractor agrees to provide to SMU written certification of such training of Contractor employees, volunteers or others performing any part of the Services who will have contact with minors enrolled in a campus program for minors on SMU property.

## ARTICLE 6: MISCELLANEOUS PROVISIONS

6.1 With respect to the Services to be provided by Contractor and the administration of this Contract, SMU and Contractor shall designate a) the primary location of business to receive notices, invoices and payments; b) the parties to receive notices and communications and to act for SMU and Contractor in all respects; and, c) the parties authorized to sign agreements and changes to this Contract. Such designations are listed in the Primary Location of Business to Receive Notices, Invoices and Payments; Designated Persons to Receive Notices and Authorized to Sign, attached hereto as Exhibit C.

6.2 Any assignment of this Contract by Contractor, and more specifically assignment to a factoring company, shall be void without the express written consent of the President or a Vice President of SMU. Contractor shall not be relieved of its obligations under this Contract in the event of an authorized assignment. It is agreed that any sale, merger, corporate reorganization, or significant change of ownership of Contractor or any substantial alteration in the nature or character of its business shall constitute a change in Contractor, and it is agreed that continuation of this Contract after such a change shall be considered to be an assignment.

6.3 It is understood and agreed that the relationship of Contractor to SMU shall be that of an independent contractor. Nothing contained herein or inferable herefrom shall be deemed or construed to (1) make Contractor the agent, servant or employee of SMU; or (2) create any partnership, joint venture or other association between SMU and Contractor. Any directions or instructions by SMU in respect of the Services shall relate to the results SMU desires to obtain from the Services and shall in no way affect Contractor's independent contractor status as described herein.

6.4 (a) In the event of the breach of any of the terms of this Contract by either party, the non-breaching party may terminate this Contract if (1) the non-breaching party provides written notice to the breaching party that a breach has occurred, the nature of the breach, and the date this Contract shall terminate, which shall be no less than thirty (30) days from the date of the written notice, and (2) the breaching party fails to cure the breach within the thirty (30) day period. In no event shall SMU be liable to Contractor for damages for delay.

(b) If a party files a petition or be adjudged bankrupt or insolvent under any applicable federal or state bankruptcy or insolvency law, or admits that it cannot meet its financial obligations as they become due; or if a receiver or trustee is appointed for all or substantially all of the assets of the party; or if a party makes a transfer in fraud of creditors or makes an assignment for the benefit of creditors that shall be considered a breach of this Contract and the non-breaching party may terminate this Contract immediately.

6.5 Contractor represents and warrants that no trustee, officer, employee, student or agent of SMU has been or will be employed, retained, or paid a fee, or otherwise has received or will receive

any personal compensation or consideration by or from Contractor or any of Contractor's directors, officers, employees, or agents in connection with the obtaining, arranging, or negotiation of this Contract. Contractor agrees that the consideration to be paid by SMU under this Contract represents fair and reasonable consideration relative to the value of services to be provided by Contractor to SMU.

6.6 In its performance of this Contract, Contractor warrants that it will not discriminate against any person on the basis of race, color, religion, national origin, sex, age, disability, genetic information or veteran status. Contractor will also not discriminate against any person on the basis of sexual orientation or gender identity and expression. Contractor affirms that it is an equal opportunity and affirmative action employer and that it will comply with all applicable federal, state and local laws and regulations. The parties hereby incorporate the equal employment opportunity and affirmative action requirements, if applicable, of 41 C.F.R. 60-1.4(a) and 29 C.F.R. Part 471, Appendix A to Subpart A. **Contractor and all subcontractors shall abide by the requirements of 41 CFR 60-300.5(a) and 60-741.5(a). These regulations prohibit discrimination against qualified protected veterans and qualified individuals on the basis of disability, and require affirmative action by covered prime contractors and subcontractors to employ and advance in employment qualified protected veterans and qualified individuals with disabilities.**

6.7 No waiver of any breach of any provision of this Contract shall operate as a waiver of any other or subsequent breach thereof or of the provision itself, or of any other provision. No provision of this Contract shall be deemed to have been waived unless such waiver is in writing and is signed by the party waiving the same.

6.8 Contractor shall not disclose the terms of this Contract without the express written consent of the President or a Vice President of SMU, unless such disclosure is required by law or court order.

6.9 Nothing contained herein allows Contractor to use the name "SMU" or "Southern Methodist University", or any of its logos or images, except for the purposes set forth in this Contract, unless prior written permission of SMU's President or Vice President for Development and External Affairs or their respective designees is obtained. Contractor shall take no action that states or implies or allows another to infer that SMU has approved or endorsed Contractor's products or services.

6.10 Contractor shall not report or release information concerning SMU or its trustees, officers, employees, students, volunteers, donors, guests, tenants, agents or alumni or others affiliated with SMU to third parties without SMU's prior written approval. Without limiting the foregoing, any such report or release of information shall, at a minimum, comply with those requirements enumerated in the Gramm-Leach Bliley Act (15 U.S.C. §6801 et seq.; 16 CFR §314 et seq.) and all other applicable laws regarding privacy or protection of personally identifiable information.

6.11 This Contract shall be governed by and construed under the laws of the State of Texas. Each party to this Contract hereby irrevocably submits to the exclusive jurisdiction of the federal or state courts in Dallas County, Texas, and consents to venue in Dallas County, Texas, for any action arising out of this Contract.

6.12 It is agreed with respect to any legal limitations now or hereafter in effect and affecting the validity or enforceability of the indemnification obligations or any additional insured requirements under this Contract, such legal limitations are made a part of the contractual obligations and shall operate to amend the obligations to the minimum extent necessary to bring the provision into conformity with the requirements of such limitations, and as so modified, the obligations shall continue in full force and effect. Should any provision of this Contract be held invalid, unenforceable or contrary to public policy, law, statute or ordinance, then the remainder of the provision, paragraph, section and/or Contract shall not be affected thereby and shall remain valid and fully enforceable.

6.13 This Contract, including its exhibits (as set forth specifically in this Contract), and each Directive constitutes the entire agreement of the parties and supersedes any previous oral or written agreements regarding the subject of this Contract. Article and section headings are inserted for convenience of reference only and shall in no way alter, modify, or define, or be used in construing the text of such articles or sections. Terms and conditions submitted by Contractor with a proposal, a Directive, an invoice or otherwise are not incorporated in this Contract. This Contract shall not be modified or altered, including without limitation, making changes to the scope or cost of the work, except by mutual agreement, confirmed in writing and signed by the parties, with the signature on behalf of SMU being that of the President, a Vice President or the Director of Purchasing.

6.14 The obligations contained in Sections 5.2, 5.4, 5.8, 5.13, 5.15, 5.16, [5.17, 5.18,], 6.1, 6.2, 6.7, 6.8, 6.9, 6.10, 6.11, 6.12, 6.13 and 6.14 of this Contract shall survive the expiration, completion, abandonment and/or termination of the Contract and final completion of the Services.

6.15 Either party may terminate this Contract for convenience upon ninety (90) days' written notice to the other party. Each party shall remain responsible for all obligations accruing prior to the termination date.

This Contract is hereby executed and effective on the date on which it is signed and initialed by the last of those required to sign and initial this Contract. This Contract may be executed in multiple counterparts, including facsimile counterparts, each of which shall be deemed an original, and all of which together shall constitute one and the same instrument

**SOUTHERN METHODIST UNIVERSITY**

BY: \_\_\_\_\_  
SMU Signatory  
Title

DATE: \_\_\_\_\_

**CONTRACTOR**

BY: \_\_\_\_\_

NAME: \_\_\_\_\_

TITLE: \_\_\_\_\_

DATE: \_\_\_\_\_

**EXHIBIT A**  
**Southern Methodist University**  
**Office of Risk Management**  
**Insurance Requirements of the Agreement**  
**(Third Party Doing Business with SMU) as of 2/15/22**

A valid Certificate of Insurance, along with copies of policy provisions and the required endorsements, must be provided to SMU's Office of Risk Management by any person or entity who is (i) providing goods or services to or for SMU, (ii) using SMU property for events, programs or other purposes or (iii) otherwise doing business with SMU (each a "Contractor"). Insurance must be in place prior to commencement or provision of goods or services or the use of property or other business engagement and must be maintained throughout the term of the contract or other agreement or engagement between SMU and the Contractor (the "Contract"), and thereafter. Contractor, at its sole cost and expense including payment of any premiums, deductibles, and/or self-insured retentions, will provide the insurance required pursuant to this **Exhibit A** sufficient to insure all of the Contractor's duties and responsibilities under the Contract, as required below:

1. These requirements apply to Contractor, and to Contractor's sub-subcontractors, consultants, selected contractors and others fulfilling Contractor's obligations under the Contract, whether individuals or entities and including international providers (collectively, "Subcontractors"). Contractor must require all Subcontractors to comply with the insurance requirements applicable to Contractor.
2. The Contractor must be licensed or otherwise authorized to do business in the State of Texas.
3. Insurance must be issued by insurance companies with not less than an AM Best A-III rating.
4. Contractor and its insurers must waive subrogation against SMU, its trustees, officers, employees, students, volunteers and agents for claims or any other loss arising out of Contractor's negligence, willful misconduct, or omission.
5. Contractor will provide coverage for broad-form indemnification if such indemnification is required by the Contract.
6. Contractor will maintain all insurance required by this **Exhibit A** throughout the term of the Contract. For any "claims-made" coverage, such as insurance for any professional liability or directors and officers coverage, each policy must have a retroactive date prior to the date of project or Contract commencement which must be stated on the certificate of insurance and must be maintained by the Contractor until completion of the project and for at least three years thereafter either through policies in force or through "tail coverage."
7. Additional insured status will be written as noted for commercial general liability, automobile liability and excess liability or as noted on the P.2 of this form using ISO additional insured endorsements for ongoing and completed operations. For purposes of this additional insured requirement, "equivalent coverage" means coverage for liability caused by Contractor's actions and omissions in connection with the Contract, including coverage for the negligence or fault of Contractor and/or SMU or other parties indemnified under the Contract as to third-party bodily injury or death, of an employee or agent of the Contractor or of Subcontractors, including products-completed operations.
8. If any of Contractor's employees will at any time be working under the direction or control of SMU, then SMU must be named as alternate employer on the Workers' Compensation/Employer's Liability insurance and a copy of such endorsement will be attached to Contractor's certificate of insurance.
9. Contractor agrees to allow SMU to review all applicable insurance policies upon request.
10. Contractor is responsible for maintaining its own insurance coverage on its personal property.  
Contractor and its insurer will provide at least 30 days' prior written notice to SMU of cancellation, changes in coverage which no longer satisfy these requirements, or nonrenewal of any policy.

The Certificate of Insurance must be completed using the following Description and Certificate Holder language, and will be acceptable to SMU:

1. **DESCRIPTION:** SMU must be included as additional insured unless noted otherwise on the attached form and must include the following language:

***Southern Methodist University, its trustees, officers, employees, students, volunteers and agents are included as additional insureds (as the interest of each insured may appear) as to all insurance coverage required.***

2. **CERTIFICATE HOLDER:** listed as follows and address to send Certificate of Insurance to:

*Southern Methodist University  
Office of Risk Management  
P.O. Box 750231  
Dallas, Texas 75275-0231 [by courier: 3050 Dyer Ct., Dallas, TX 75205]  
riskmanagement@smu.edu*

3. **CONTACT FOR QUESTIONS:** Associate Director, Risk Operations  
Your prompt attention in this matter is greatly appreciated. If you have any questions, **please contact (214) 768-2486 or riskmanagement@smu.edu; Fax: (214) 768-4138**

## **SOUTHERN METHODIST UNIVERSITY**

### **Standard Minimum Limits of Liability and Certificate of Insurance Requirements**

The following Standard Limits are the minimum requirements for all Contractors. There are specific requirements that supersede the Standard Minimum Limits for Contractors providing high-risk services or for other high-risk projects and events. Please consult with the Office of Risk Management.

**All Coverages and Minimum Limits of Liability listed below are required.**

| <b>Line of Coverage</b>                                  | <b>Description of Coverage and minimum Limits of Liability</b>  | <b>SMU Included as Additional Insured Required</b> |
|--|---|--|
| General Liability<br>CG 00 01                            | Premises Liability \$1,000,000 per occurrence<br>Personal Injury \$1,000,000<br>Products Liability \$1,000,000<br>Medical Payments \$10,000<br>Sexual Molestation/Assault \$50,000<br>General Aggregate \$2,000,000 | Yes  |
| Automobile Liability<br>CG 00 01<br>CA 00 05, ..12, ..20 | Combined Single Limit \$1,000,000 (any auto)  | Yes  |
| Workers' Compensation                                    | Injury/Illness Statutorily required limits<br>Employer's Liability \$1,000,000  | N/A  |

**EXHIBIT B**  
**PRIMARY LOCATION OF BUSINESS TO RECEIVE NOTICES,**  
**PRIMARY LOCATION OF BUSINESS TO RECEIVE INVOICES AND PAYMENTS**  
**DESIGNATED PERSONS TO RECEIVE NOTICES**  
**OPERATIONAL POINTS OF CONTACT**  
**AND AUTHORIZED TO SIGN**

PRIMARY LOCATION OF BUSINESS TO RECEIVE NOTICES:

Any notice required or permitted to be delivered must be in writing and may be given by certified or registered mail, facsimile, hand delivery or by overnight courier and shall be deemed to be received (a) if given by certified or registered mail, three days after deposited in the United States mail, postage prepaid, certified mail, return receipt requested; or, (b) if given by facsimile or hand delivery, when such notice is received by the party to whom it is addressed or, if given by an overnight courier or delivery service when deposited with such courier.

The following are the designated Primary Locations of Business to Receive Notices:

For Contractor:

For SMU:

Southern Methodist University  
Shannon S. Brown  
Director of Purchasing  
6116 North Central Expressway, Suite 205A  
Dallas, TX 75206  
Telephone: (214) 768-4909  
[shannonbrown@smu.edu](mailto:shannonbrown@smu.edu)

With a copy to:

Vice President for Legal Affairs and Government Relations  
Southern Methodist University  
P.O. Box 750132  
Dallas, TX 75275-0132  
Fax: (214) 768-1281

PRIMARY LOCATION OF BUSINESS TO RECEIVE INVOICES AND PAYMENTS:

Invoices shall be sent to SMU via email to [invoices@smu.edu](mailto:invoices@smu.edu) as a PDF attachment only. For timely invoice processing and payment, invoices should include the following information:

- Supplier ID
- Department requester or name of primary point of contact
- SMU School, Division or Area
- SMU Department #/Org # (a 6-digit number which identifies the department)
- Purchase order #

Payments shall be sent to Contractor by United States mail, postage prepaid, to the following location:

DESIGNATED PERSONS TO RECEIVE NOTICES AND COMMUNICATIONS:

The parties hereby designate and appoint the following persons, whose addresses are designated above, as their representatives respectively, to receive all notices and communications and, to the extent of their obligations, to act for them in all respects.

For Contractor:

For SMU:

Southern Methodist University  
Shannon S. Brown  
Director of Purchasing  
6116 North Central Expressway, Suite 205A  
Dallas, TX 75206  
Telephone: (214) 768-4909  
[shannonbrown@smu.edu](mailto:shannonbrown@smu.edu)

(See "Designated Persons Authorized to Sign", below, for authority to bind the University to expend funds)

Contractor shall not take direction from persons in academic, administrative or operating units of SMU not specifically named herein. It is agreed, if Contractor takes direction from persons not named herein and proceeds to perform additional services, modifies established programming or changes the scope of basic services, SMU shall not reimburse Contractor for any such expenses, shall not extend the schedule of performance of Services, and shall not compensate Contractor for any services or expenses to bring the Services into compliance with the Contract.

## OPERATIONAL POINTS OF CONTACT

The parties hereby designate and appoint the following persons to be the operational points of contacts.

For Contractor:

For SMU:

## DESIGNATED PERSONS AUTHORIZED TO SIGN:

Unless specifically stated otherwise in the Contract, the following are the designated persons authorized to sign written authorizations or agreements, including but not limited to Change Orders and Directives required by the Contract:

For Contractor:

For SMU:

Directives:

Shannon S. Brown, Director of Purchasing

Authorizations, Contracts, Change Orders:

Shannon S. Brown, Director of Purchasing, or  
Chris Regis, Vice President for Business and Finance, or  
Dr. R. Gerald Turner, President

Should it become necessary to change the Primary Location of Business to Receive Notices and Payments or the Designated Persons to Receive Notices and Authorized to Sign, any party may do so by giving written notice to the other representatives as provided in the above within seven (7) days of such change.