

***Statement of Work***  
***for***  
***Phase III Implementation***  
***Services***

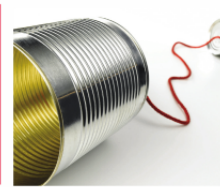


***Norman, Oklahoma***  
***2/19/17***

***Submitted by***

***TUSA CONSULTING SERVICES II, LLC***





Tusa Consulting Services (TUSA) has developed a Statement of Work specifically for the City of Norman, Oklahoma. These proposed task elements are designed to meet the needs of the City to implement a P25 radio system.

TUSA will provide the necessary manpower, materials and work products as required, to provide a high level of satisfaction. A general description of each task in the TUSA Project Statement of Work is provided for reference.

## Phase III: Implementation

Implementation of any type of Public Safety communications network can take into account a variety of tasks according to the size and/or complexity of the proposed network. This phase shows the many tasks that are associated with an implementation phase.

This is not to say all tasks need to be supported by the consultant but are necessary tasks that should be considered by the customer to support either by themselves, or supplement the additional support needed with a consultant team, as the customer already has a fulltime job with their current radio network.

### Design Review and Weekly & Monthly Project Meetings

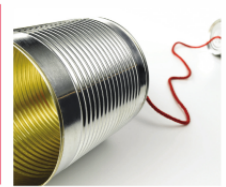
The purpose of Design Review and project meetings is to set forth a structure within which the project team can operate in an efficient manner and with an open exchange of information in order to meet the goals of this project.

It is here that the TUSA team will address the project schedule, scheduling regular conference calls, bi-weekly project management reports, protocols for addressing action items along with document distributions.

### Staging

TUSA will participate with the City in the vendor staging of the proposed radio network. Staging is typically done at the vendor factory location and presents a unique opportunity for the customer to witness and complete a planned testing procedure for the entire system.

This also allows for the City to plan system operation for demonstration of anticipated radio and system features.



## Site Construction and System Installation

It is during this task that TUSA will provide continuous monitoring of vendor progress in the installation of all the infrastructure sites and dispatch equipment, reporting as needed on completed activities and any deviations from the project time line. TUSA will take responsibility to insure that tasks falling within the City's responsibility are completed in accordance with schedule.

This Task also includes participation in progress review meetings with vendor/City. We will provide resolution action to vendor-flagged technical or installation issues that require decisions by the City. In addition, TUSA will review all vendor technical submittals and prepare action recommendation for City approval/execution, review all vendor invoices and provide inspection services to verify that claimed materials and/or services had been received and/or completed.

Finally TUSA will conduct inspections of all worksites to monitor vendor progress. Punch lists would be developed throughout the implementation process and reconciled with vendor.

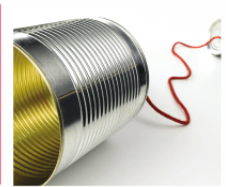
## Fleetmap & Radio Programming

TUSA will assist the City with establishing the Fleetmap and operational parameters for programming the radio network and radio subscribers. TUSA will also assist with regional and state planning for interoperability planning.

## RF Coverage Acceptance Testing (CATP)

Coverage Testing/Acceptance Testing is critical in ensuring that the City has received the level of performance as specified in the RFP. This includes testing of the City coverage areas, system simulcast performance, backhaul networks performance, resistance to RF interference, levels of failure modes along with interoperability performance.

TUSA will monitor and participate in radio system coverage testing and audio quality verification, participate in acceptance testing of the microwave/fiber subsystem and radio infrastructure. In addition, TUSA will review and comment on vendor's proposed user migration plans, monitor and assist, where needed in user/dispatcher training, support the City during migration period, develop a final project punch list and reconcile with vendor; and review and comment on vendor-submitted as-built documentation.



## Functional Acceptance Testing (FATP)

TUSA will participate in the Functional Acceptance Testing during the staging event and after completion of the system optimization is completed in the field.

## Final Acceptance

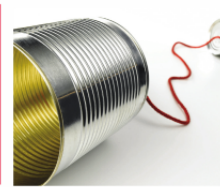
TUSA will verify that all permits and licenses are completed and have been submitted to the City; TUSA will verify resolution of all punchlist items to the satisfaction of the City; TUSA will verify all functional ATP and coverage ATP issues have been completed; TUSA will verify that all required reports and documentation have been submitted and the appropriate number of hard and soft copies provided by the vendor and vendor sub-contractors.

TUSA will also verify with the City that all warranty services active upon final acceptance are indeed in effect and in compliance with contractual warranty.

These are typical tasks involved in an implementation of a radio project. TUSA is flexible and can add to these tasks based on the City's need to have professional resources available for the implementation of the radio network. As stated, the City staff already has a full time job and it is the goal of TUSA to properly supplement the staff.

## System Documentation

TUSA will review and report on the system documentation provided by the vendor for the system technical documents and the system civil construction documents.



## Phase III Consultant Service Fees

### Phase 3 Implementation Services for City of Norman, OK. Based on 24 month project schedule

Task	Description	Total Hours	Hourly Rate	Total Cost	Travel Expenses Invoice Actuals	
<b>Implementation</b>						
	Estimated Weekly & Monthly Project Meetings (26 total trips)	416	\$150	\$62,400.00	\$46,150.00	
	Staging (2 person/one week)	80	\$150	\$18,850.00	\$6,850.00	
	Construction and System Installation	192	\$150	\$28,800.00	incl. w/weekly or monthly meetings	
	Fleetmapping & Radio Programming	200	\$150	\$30,000.00	incl. w/weekly or monthly meetings	
<b>Implementation</b>						
	System Functional Acceptance (FATP)	40	\$150	\$8,175.00	\$2,175.00	
	System Coverage Acceptance (CATP) (Estimated 4 person for one week)	160	\$150	\$34,500.00	\$10,500.00	
	Final Acceptance	40	\$150	\$8,175.00	\$2,175.00	
<b>System Documentation</b>						
	Technical	16	\$150	\$2,400.00		
	Civil	16	\$150	\$2,400.00		
<b>Administration</b>						
	Phase 3 Administration	96	\$60	\$5,760.00		
				<b>Phase 3 Total</b>	<b>\$201,460.00</b>	<b>\$67,850.00</b>
<b>Rate of Services</b>						
	Description	Consultant		Hourly		
	Project Principal	Nick Tusa		\$180.00		
	Project Manager	Dean Hart		\$150.00		
	Technical Advisor	Todd Mechler		\$150.00		
	Administrator			\$60.00		