



June 14, 2016

Mr. Erik Viel  
Director, Radio Services  
Milwaukee County Office of Emergency Management  
Milwaukee County Courthouse, Room 308  
901 N 9th St, Milwaukee, WI 53233

RE: Amendment No. 1 to Project Scope and Quotation for Milwaukee County OASIS Public Safety Radio System (Project WO614) Project Management Services

Director Viel,

As the individual authorized to contractually obligate and negotiate for CDX Wireless, I am pleased to present this Amendment No. 1 to our previously contracted project scope and quotation for project management services for the OASIS Public Safety Radio System (Project WO614).

If you have any questions please feel free to contact me through the contact information listed below.

Respectfully,

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## 1 Project Staffing

There are no changes to the previously agreed-to Staffing Plan for this project.

## 2 Place of Performance

There are no changes to the previously agreed-to Place of Performance for this project.

## 3 Scope of Work

### 3.1 Background

The implementation of OASIS and the transition of user agencies to it has been delayed due to unforeseen events outside the control of Milwaukee County and CDX Wireless and CDX Wireless has assumed additional project-related responsibilities beyond those included in the original Scope of Work and Professional Services Contract. The accompanying term of the Professional Services Contract to which this Scope of Work is appended will be changed to end on December 31, 2016.

Therefore, CDX Wireless offers this amended Scope of Work to accommodate a prolonged project implementation schedule of 5 months and to define responsibilities for tasks that were not covered by the original Scope of Work.

Additional labor hours will be added to the previously agreed-to quantities for the following tasks. The original and additional quantities of labor hours for these tasks are listed in Section 4.1, below, and the justification for the additional hours are included directly below.

- Project Administration
  - Additional hours are needed to accommodate additional 5 months of contract term, however, there is no change in the expected activities and responsibilities of CDX Wireless.
- Governance Development and Maintenance
  - Additional hours are needed to accommodate additional 5 months of contract term, however, there is no change in the expected activities and responsibilities of CDX Wireless.
- Outreach Development and Delivery
  - Additional hours are needed to accommodate additional 5 months of contract term, however, there is no change in the expected activities and responsibilities of CDX Wireless.
- Fleetmap
  - Additional hours needed to accommodate CDX Wireless' leadership, not support, role in completing this task.
- Civil Work Site Development
  - Additional hours needed to accommodate change orders that were executed between Milwaukee County and the system vendor, Motorola Solutions, Inc., which therefore increased the overall scope of civil work at sites. There is no change in the expected activities and responsibilities of CDX Wireless.
- Cutover



- o Additional hours are needed to accommodate additional 5 months of contract term, however, there is no change in the expected activities and responsibilities of CDX Wireless.

The following tasks new tasks will be added to the Scope of Work. The quantities of labor hours for these tasks are also listed in Section 4.1, below, and descriptions of the activities and responsibilities of CDX Wireless along with the expected activities and responsibilities of Milwaukee County and Motorola are included in the table that immediately follows the list of new tasks.

- Project Financial Tracking
- MCTS Project Management (previously listed as "Optional")
- In-Building Coverage Enhancements
- ISSI Planning and Implementation
- User Agency Programming Template Review

Project Task	Activities & Responsibilities of CDX Wireless	Activities & Responsibilities of Motorola	Activities & Responsibilities of Milwaukee County
<b>Project Financial Tracking</b>	Prepare and provide monthly project financial reports to include details and summaries of project funds spent and encumbered as well as a spend-plan for the remaining available funds.	n/a	Provide financial data ("CapFin") to support tracking. Arrange for monthly review meetings. Identify cash and bond expenditures. Open Purchase Orders and pay invoices to vendors.

Project Task	Activities & Responsibilities of CDX Wireless	Activities & Responsibilities of Motorola	Activities & Responsibilities of Milwaukee County
<b>Fleetmap</b>	<p>Gather required contents for a fleetmap from Motorola.</p> <p>Assemble draft of fleetmap to include:</p> <ul style="list-style-type: none"> <li>• List of talkgroups</li> <li>• Naming conventions</li> <li>• Talkgroup ID plan</li> <li>• Talkgroup system parameters</li> <li>• Radio ID plan</li> <li>• Subscriber talkgroup layout</li> <li>• Subscriber programming parameters</li> <li>• Other items necessary to configure system and subscribers</li> </ul> <p>Assist the County in arranging meetings with user agencies to review and edit the contracts of the draft fleetmap. Participate in those meetings.</p> <p>Finalized fleetmap contents and share with Motorola and subscriber-programming organizations (shops).</p>	<p>Identify the required contents of a fleetmap.</p> <p>Provide technical information to Milwaukee County and CDX Wireless, in order to assemble draft of fleetmap to include:</p> <ul style="list-style-type: none"> <li>• List of talkgroups</li> <li>• Naming conventions</li> <li>• Talkgroup ID plan</li> <li>• Talkgroup system parameters</li> <li>• Radio ID plan</li> <li>• Subscriber talkgroup layout</li> <li>• Subscriber programming parameters</li> <li>• Other items necessary to configure system and subscribers</li> </ul> <p>Review final fleetmap contents.</p> <p>Use fleetmap results to program system.</p>	<p>Provide assistance to assemble draft of fleetmap to include:</p> <ul style="list-style-type: none"> <li>• List of talkgroups</li> <li>• Naming conventions</li> <li>• Talkgroup ID plan</li> <li>• Talkgroup system parameters</li> <li>• Radio ID plan</li> <li>• Subscriber talkgroup layout</li> <li>• Subscriber programming parameters</li> <li>• Other items necessary to configure system and subscribers</li> </ul> <p>Arrange for meetings with user agencies to review and edit the contracts of the draft fleetmap.</p> <p>Review finalized fleetmap contents</p>
<b>Installation: Antennas/Line</b>	<p>As necessary, observe installation of antennas and lines.</p> <p>Review completion of Motorola’s tasks regarding Antenna and Line Installation and provide comments to Milwaukee County.</p>	<p>Install antennas and lines as contracted (see Statement of Work from Contract for Service #1332 for site-by-site details).</p>	<p>Ensure Motorola has access to sites.</p> <p>Observe installation of antennas and lines.</p> <p>Approve completion of Motorola’s tasks regarding Antenna and Line Installation.</p>

Project Task	Activities & Responsibilities of CDX Wireless	Activities & Responsibilities of Motorola	Activities & Responsibilities of Milwaukee County
<b>MCTS Deployment Coordination</b>	<p>Assist MCTS in the integration of MCTS' computer aided dispatch (CAD), new dispatch consoles, and in-bus integrated vehicle logic unit (IVLU) equipment to the new OASIS radio system.</p> <p>Assist MCTS with the logistics and provision of buses for programming, upgrades, and installations of software or hardware to operate on the new OASIS radio system.</p>	<p>Provide technical assistance as needed to integrate MCTS' computer aided dispatch (CAD) and in-bus integrated vehicle logic unit (IVLU) equipment to the new OASIS radio system.</p> <p>Deliver voice logging system, dispatch consoles, and radio upgrades as contracted.</p>	<p>Contract with the vendors of MCTS' computer aided dispatch (CAD) and in-bus integrated vehicle logic unit (IVLU) equipment for the necessary hardware, software, and services to interface to the new OASIS radio system.</p> <p>Manage the integration of those vendors and coordinate the logistics regarding the deployment of new equipment and software.</p>
<b>In Building Coverage Enhancements</b>	<p>Assist County in the evaluation of coverage issues in buildings, in the development of solutions for those issues, and in the oversight of the implementation of those solutions</p>	<p>Provide quotations and, if approved and executed, solutions for identified in-building coverage issues.</p>	<p>Cooperate with CDX Wireless and Motorola on these activities to jointly identify issues, develop solutions, and oversee implementation.</p>
<b>ISSI Planning and Implementation</b>	<p>Work with representatives of County, other user agencies of OASIS, and agencies that own/operate radio systems to which OASIS will interconnect via Inter RF SubSystem Interface. Assist the County in the preparation of ISSI interconnections plans and agreements to establish technical and operational plans for intersystem connections.</p>	<p>Provide guidance on ISSI technical and operational issues. Deliver ISSI functionality as contracted.</p>	<p>Cooperate with CDX Wireless and Motorola on these activities to prepare and execute ISSI Implementation Plans.</p>
<b>User Agency Programming Template Review</b>	<p>Work with representatives of OASIS user agencies and with the organizations that create and program their user-radio templates. Help all parties identify and resolve programming issues.</p>	<p>Provide guidance on subscriber programming options and related technical details to CDX Wireless, programming organizations, and Milwaukee County.</p>	<p>Cooperate with CDX Wireless to help agencies and programming organizations identify and resolve such issues.</p>

### 3.2 Term and Schedule of Work

The work to be completed as described in this Addendum will be completed by March 31, 2017. The following graphic summarizes the expected schedule for the OASIS public safety radio system project.

Task	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017
Configure & Optimize Subsystem & Shared Core	█	█									
Test Subsystem & Shared Core	█	█	█								
Train Users (Radio & Dispatch Console Users)			█	█							
Prepare Dispatch Centers for Transition	█	█	█	█							
Transition County & Municipal Dispatch Centers				█							
Program and Prepare User Radios for Migration			█								
Begin OASIS Operation for Users				★							
User Radio Migration				█							
Evaluate In-Building Coverage Enhancements						█					
Configure and Test ISSI						█					
Decommission and Remove Existing System									█	█	█

## 4 Price Quotation

### 4.1 Quotation Basis

The following Amended price quotation is based on the provision of staffing according to the Project Staffing, Place of Performance, and Scope of Work (including Schedule of Work) as described above. Work Breakdown and Labor Quotation

CDX Wireless has developed the following work breakdown to list the total number of hours of labor required to complete the Scope of Work described above. These quantities of hours of labor, and the corresponding labor costs, are quoted as not-to-exceed amounts. CDX Wireless shall invoice Milwaukee County, and Milwaukee County shall pay CDX Wireless, only for those hours actually expended by CDX Wireless. CDX Wireless shall not invoice Milwaukee County, and Milwaukee County shall not pay CDX Wireless, for hours of labor beyond those listed in the following work breakdown unless both parties agree to revise the work breakdown based on a change to the required level of staffing, the scope of project tasks, or the duration of the project schedule that has occurred for reasons outside of the control of CDX Wireless. CDX Wireless shall not invoice Milwaukee County, and Milwaukee County shall not pay CDX Wireless, for hours of labor not expended by CDX Wireless.

The following work breakdown and price quotation is exclusive of those tasks identified as "Optional".

Project Task	# of Labor Hours in Original SoW	# of Labor Hours in This Amendment	Total Number of Labor Hours	Cost Per Hour	Total Cost for All Labor (Original and Additional)
<b>Project Administration</b>	224 hours	80 hours	304 hours	\$135.00	\$41,040
<b>Governance Development &amp; Maintenance</b>	112 hours	40 hours	152 hours	\$135.00	\$20,520
<b>Outreach Development &amp; Delivery</b>	112 hours	40 hours	152 hours	\$135.00	\$20,520
<b>Site Acquisition</b>	24 hours	0 hours	24 hours	\$135.00	\$3,240
<b>Licensing</b>	n/a	n/a	n/a	\$135.00	\$0
<b>Fleetmap</b>	40 hours	40 hours	80 hours	\$135.00	\$10,800
<b>Subscriber Flash Inventory</b>	40 hours	0 hours	40 hours	\$135.00	\$5,400
<b>Civil Work Site Development</b>	16 hours	16 hours	32 hours	\$135.00	\$4,320



Project Task	# of Labor Hours in Original SoW	# of Labor Hours in This Amendment	Total Number of Labor Hours	Cost Per Hour	Total Cost for All Labor (Original and Additional)
<b>Installation: Antennas/Line</b>	16 hours	0 hours	16 hours	\$135.00	\$2,160
<b>Installation: Fixed Network Equipment</b>	16 hours	0 hours	16 hours	\$135.00	\$2,160
<b>Console Installation – For County Departments <sup>1</sup></b>	64 hours	0 hours	64 hours	\$135.00	\$8,640
<b>Console Installation – For Municipal Agencies</b>	40 hours	0 hours	40 hours	\$135.00	\$5,400
<b>Control Station Installation</b>	8 hours	0 hours	8 hours	\$135.00	\$1,080
<b>System Optimization</b>	32 hours	0 hours	32 hours	\$135.00	\$4,320
<b>Training</b>	64 hours	0 hours	64 hours	\$135.00	\$8,640
<b>Site Audit</b>	16 hours	0 hours	16 hours	\$135.00	\$2,160
<b>Acceptance Testing: Functional</b>	64 hours	0 hours	64 hours	\$135.00	\$8,640
<b>Acceptance Testing: Coverage</b>	80 hours	0 hours	80 hours	\$135.00	\$10,800
<b>Cutover</b>	96 hours	90 hours	186 hours	\$135.00	\$25,110
<b>Finalize</b>	16 hours	0 hours	16 hours	\$135.00	\$2,160
<b>Project Financial Tracking</b>	0 hours	40 hours	40 hours	\$135.00	\$5,400
<b>In-Building Coverage Enhancements</b>	0 hours	24 hours	24 hours	\$135.00	\$3,240
<b>MCTS Implementation Assistance</b>	0 hours	64 hours	64 hours	\$135.00	\$8,640
<b>ISSI Planning and Implementation</b>	0 hours	24 hours	24 hours	\$135.00	\$3,240

<sup>1</sup> This scope of work is only inclusive of Motorola-provided voice dispatch consoles to the Milwaukee County 9-1-1 Center, the Milwaukee County Emergency Medical Service Telecommunicator's Center, and the Milwaukee County Transit System's (MCTS') Dispatch Center.



Project Task	# of Labor Hours in Original SoW	# of Labor Hours in This Amendment	Total Number of Labor Hours	Cost Per Hour	Total Cost for All Labor (Original and Additional)
User Agency Programming Template Review	00 Hours	20 Hours	20 Hours	\$135.00	\$2,700
<b>Labor Total</b>	1,080 hours	478 hours	1,558 hours	\$135.00	\$210,330

## 4.2 Travel and Other Expenses

The original not-to-exceed amount of \$22,400 for out-of-pocket expenses, including travel and other approved costs, shall be increased by an amount of \$8,000 to a total not-to-exceed amount of \$30,400.

## 4.3 Amendment Price Total

As shown in the following table, the increase in labor costs of \$64,530.00 (for 478 hours at rate of \$135.00 per hour) and not-to-exceed expense costs of \$8,000 equate to an Amendment total price of \$72,530.00 and bring the total contract value to a not-to-exceed amount of \$240,730.00.

	Hours	Rate	Labor Total	Expenses	Contract/Amendment Total (NTE)	
<b>Original Contract</b>						
Labor	1080	\$135	\$145,800		\$168,200	
Expenses				\$22,400		
<b>Amendment #1 to Contract</b>						
Labor	478	\$135	\$64,530		\$72,530	
Expenses				\$8,000		
<b>Total of Original and Amendment #1</b>						
			Totals	\$210,330	\$30,400	\$240,730