



STATE OF MICHIGAN
CENTRAL PROCUREMENT SERVICES
 Department of Technology, Management, and Budget
 320 S. WALNUT ST., LANSING, MICHIGAN 48933
 P.O. BOX 30026 LANSING, MICHIGAN 48909

CONTRACT CHANGE NOTICE

Change Notice Number **5**
 to
 Contract Number **071B6600085**

CONTRACTOR	UNICATION USA, INC.
	1901 E. Lamar Blvd.
	Arlington, TX 76006
	Kelly Hooper
	817-346-2886
	kelly@unication.com
	CV0003571

STATE	Program Manager	Kate Jannereth	DTMB
		517-881-1031	
	JannerethK@Michigan.gov		
	Contract Administrator	Lauren Stempek	DTMB
(517) 243-4008			
stempekl@michigan.gov			

CONTRACT SUMMARY

PAGER ACQUISITION AND SERVICE

INITIAL EFFECTIVE DATE	INITIAL EXPIRATION DATE	INITIAL AVAILABLE OPTIONS	EXPIRATION DATE BEFORE
June 7, 2016	June 7, 2021	5 - 1 Year	June 7, 2023

PAYMENT TERMS	DELIVERY TIMEFRAME

ALTERNATE PAYMENT OPTIONS	EXTENDED PURCHASING
P-Card PRC <input checked="" type="checkbox"/> Other	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

MINIMUM DELIVERY REQUIREMENTS

DESCRIPTION OF CHANGE NOTICE

OPTION	LENGTH OF OPTION	EXTENSION	LENGTH OF EXTENSION	REVISED EXP. DATE
<input checked="" type="checkbox"/>	1 year	<input type="checkbox"/>		June 7, 2024
CURRENT VALUE	VALUE OF CHANGE NOTICE	ESTIMATED AGGREGATE CONTRACT VALUE		
\$249,995.00	\$0.00	\$249,995.00		

DESCRIPTION

Effective May 28th, 2023, The State is exercising the third of five available option years. The revised contract expiration date is June 7th, 2024.

All other terms, conditions, specifications and pricing remain the same. Per Contractor and Agency agreement, and DTMB Procurement approval.



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CENTRAL PROCUREMENT SERVICES
 Department of Technology, Management, and Budget
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CONTRACT CHANGE NOTICE

Change Notice Number **4**
 to
 Contract Number **071B6600085**

CONTRACTOR	UNICATION USA, INC.
	1901 E. Lamar Blvd.
	Arlington, TX 76006
	Kelly Hooper
	817-346-2886
	kelly@unication.com
	CV0003571

STATE	Program Manager	Kate Jannereth	DTMB
		517-881-1031	
		JannerethK@Michigan.gov	
	Contract Administrator	Lauren Stempek	DTMB
		517-284-7000	
		stempekl@michigan.gov	

CONTRACT SUMMARY

PAGER ACQUISITION AND SERVICE

INITIAL EFFECTIVE DATE	INITIAL EXPIRATION DATE	INITIAL AVAILABLE OPTIONS	EXPIRATION DATE BEFORE
June 7, 2016	June 7, 2021	5 - 1 Year	June 7, 2022

PAYMENT TERMS	DELIVERY TIMEFRAME

ALTERNATE PAYMENT OPTIONS	EXTENDED PURCHASING
P-Card PRC <input checked="" type="checkbox"/> Other	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

MINIMUM DELIVERY REQUIREMENTS

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DESCRIPTION OF CHANGE NOTICE

OPTION	LENGTH OF OPTION	EXTENSION	LENGTH OF EXTENSION	REVISED EXP. DATE
<input checked="" type="checkbox"/>	1 year	<input type="checkbox"/>		June 7, 2023
CURRENT VALUE	VALUE OF CHANGE NOTICE	ESTIMATED AGGREGATE CONTRACT VALUE		
\$249,995.00	\$0.00	\$249,995.00		

DESCRIPTION

Effective June 15, 2022, the State is exercising the second option year. The revised contract expiration date is June 7, 2023.

Please note the Contract Administrator has been changed to Lauren Stempek.

All other terms, conditions, specifications and pricing remain the same. Per Contractor and Agency agreement, and DTMB Procurement approval.



STATE OF MICHIGAN
CENTRAL PROCUREMENT SERVICES
 Department of Technology, Management, and Budget
 525 W. ALLEGAN ST., LANSING, MICHIGAN 48913
 P.O. BOX 30026 LANSING, MICHIGAN 48909

CONTRACT CHANGE NOTICE

Change Notice Number **3**
 to
 Contract Number **071B6600085**

CONTRACTOR	UNICATION USA, INC.
	1901 E. Lamar Blvd.
	Arlington, TX 76006
	Kirk Alland
	817-926-6771
	kirk@unication.com
	CV0003571

STATE	Program Manager	Gerald Leach	DTMB
		517-284-7002	
		LeachG@Michigan.gov	
	Contract Administrator	Jordan Sherlock	DTMB
		517-243-5556	
		sherlockj@michigan.gov	

CONTRACT SUMMARY

PAGER ACQUISITION AND SERVICE

INITIAL EFFECTIVE DATE	INITIAL EXPIRATION DATE	INITIAL AVAILABLE OPTIONS	EXPIRATION DATE BEFORE
June 7, 2016	June 7, 2021	5 - 1 Year	June 7, 2021

PAYMENT TERMS	DELIVERY TIMEFRAME

ALTERNATE PAYMENT OPTIONS	EXTENDED PURCHASING
P-Card PRC <input checked="" type="checkbox"/> Other	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

MINIMUM DELIVERY REQUIREMENTS

DESCRIPTION OF CHANGE NOTICE

OPTION	LENGTH OF OPTION	EXTENSION	LENGTH OF EXTENSION	REVISED EXP. DATE
<input checked="" type="checkbox"/>	12 Months	<input type="checkbox"/>		June 7, 2022
CURRENT VALUE	VALUE OF CHANGE NOTICE	ESTIMATED AGGREGATE CONTRACT VALUE		
\$249,995.00	\$0.00	\$249,995.00		

DESCRIPTION

Effective 6/7/2021, this contract is exercising 1 option year, and is updating the following authorized dealer list. The revised expiration date is 6/7/2022.

All other terms, conditions, specifications and pricing remain the same. Per contractor and agency agreement, an DTMB Procurement approval.



Unication
AUTHORIZED DEALER
SALES | SERVICE | SUPPORT

Authorized Unication Dealerships

State of Michigan 2021

The main location of each Authorized Unication Dealer in Michigan is listed below. Visit each Dealer's website for a full list of all storefront locations.

Anderson Radio

6149 West Side Saginaw Rd
Bay City, MI 48706
Phone: 989-684-9969
Email: m.brecht@andersonradio.com
URL: www.andersonradio.com

Grand Traverse Mobile Communications

1670 Barlow St. Suite 1
Traverse City, MI 49696
Phone: 231-947-9851
Email: sales@fireradios.com
URL: www.fireradios.com

Chrouch Communications, Inc.

6655 9 Mile Road
Mecosta, MI 49332
Phone: 231-972-0339
Email: kevinc@chrouch.com
URL: www.chrouch.com

Herkimer, Inc.

2708 N. Telegraph Road
Monroe, MI 48162
Phone: 734-242-0806
Email: lehr@herkimer.com
URL: www.herkimerradio.com

ComSource Inc.

41271 Concept Dr
Plymouth, MI 48170
Phone: 517-899-9098
Email: mikewriggelsworth@comsourceemi.com
URL: www.comsourceemi.com

Pro Comm, Inc.

2099 Independence Drive
Mt Pleasant, MI 48858
Phone: 989-772-3751
Email: hstegman@procomminc.net
URL: www.procomminc.net

Digicom Global, Inc.

3911 Rochester Road
Troy, MI 48083
Phone: 248-866-6000
Email: thoerner@digicomglobal911.com
URL: www.digicomglobal911.com

ROE Communications

1400 Ramona Avenue
Portage, MI 49002
Phone: 269-327-1045
Email: rhochedler@roecomm.com
URL: www.roecomm.com

Elcom Systems/Caliber, LLC

3150 Wright St
Marquette, MI 49855
Phone: 906-228-5255
Email: elcomgsp@elcomup.net
URL: www.elcomup.net

TELE-Rad

511 E 8th St
Holland, MI 49423
Phone: 616-396-3541
Email: micah_kooyers@tele-rad.com
URL: www.tele-rad.com



STATE OF MICHIGAN
ENTERPRISE PROCUREMENT
 Department of Technology, Management, and Budget
 525 W. ALLEGAN ST., LANSING, MICHIGAN 48913
 P.O. BOX 30026 LANSING, MICHIGAN 48909

CONTRACT CHANGE NOTICE

Change Notice Number **2**

to

Contract Number **071B6600085**

CONTRACTOR	Unication USA Inc.
	1901 E. Lamar Blvd.
	Arlington, TX 76006
	Kirk Alland
	817-926-6771
	kirk@unication.com
*****0826	

STATE	Program Manager	Gerald Leach	DTMB-IT
		517-284-7002	
		LeachG@Michigan.gov	
	Contract Administrator	Mike Breen	DTMB
		(517) 284-7002	
		breenm@michigan.gov	

CONTRACT SUMMARY

PAGER ACQUISITION AND SERVICE

INITIAL EFFECTIVE DATE	INITIAL EXPIRATION DATE	INITIAL AVAILABLE OPTIONS	EXPIRATION DATE BEFORE CHANGE(S) NOTED BELOW
June 7, 2016	June 7, 2021	5 - 1 Year	June 7, 2021

PAYMENT TERMS	DELIVERY TIMEFRAME

ALTERNATE PAYMENT OPTIONS	EXTENDED PURCHASING
<input type="checkbox"/> P-Card <input type="checkbox"/> Direct Voucher (DV) <input type="checkbox"/> Other	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

MINIMUM DELIVERY REQUIREMENTS

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DESCRIPTION OF CHANGE NOTICE

OPTION	LENGTH OF OPTION	EXTENSION	LENGTH OF EXTENSION	REVISED EXP. DATE
<input type="checkbox"/>		<input type="checkbox"/>		June 7, 2021
CURRENT VALUE	VALUE OF CHANGE NOTICE	ESTIMATED AGGREGATE CONTRACT VALUE		
\$249,995.00	\$0.00	\$249,995.00		

DESCRIPTION

Effective with mutual signature warranty information is updated. All other terms and conditions remain the same.



STATE OF MICHIGAN ENTERPRISE PROCUREMENT

Department of Technology, Management, and Budget
525 W. ALLEGAN ST., LANSING, MICHIGAN 48913
P.O. BOX 30026 LANSING, MICHIGAN 48909

CONTRACT CHANGE NOTICE

Change Notice Number 001
to
Contract Number 071B6600085

CONTRACTOR	Unication USA Inc.
	1901 E. Lamar Blvd.
	Arlington, TX 76006
	Kirk Alland
	817-926-6771
	kirk@unication.com
	*****0826

STATE	Program Manager	Gerald Leach	DTMB
		517-284-7002	
	LeachG@Michigan.gov		
	Contract Administrator	Mike Breen	DTMB
(517) 284-7002			
breenm@michigan.gov			

CONTRACT SUMMARY				
DESCRIPTION: Pager Acquisition and Service				
INITIAL EFFECTIVE DATE	INITIAL EXPIRATION DATE	INITIAL AVAILABLE OPTIONS	EXPIRATION DATE BEFORE CHANGE(S) NOTED BELOW	
June 7, 2016	June 7, 2021	5 - 1 Year	June 7, 2021	
PAYMENT TERMS		DELIVERY TIMEFRAME		
ALTERNATE PAYMENT OPTIONS			EXTENDED PURCHASING	
<input checked="" type="checkbox"/> P-card <input type="checkbox"/> Direct Voucher (DV) <input type="checkbox"/> Other			<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
MINIMUM DELIVERY REQUIREMENTS				
DESCRIPTION OF CHANGE NOTICE				
OPTION	LENGTH OF OPTION	EXTENSION	LENGTH OF EXTENSION	REVISED EXP. DATE
<input type="checkbox"/>		<input type="checkbox"/>		Click here to enter a date.
CURRENT VALUE		VALUE OF CHANGE NOTICE	ESTIMATED AGGREGATE CONTRACT VALUE	
\$ 249,995.00		\$ 0.00	\$ 249,995.00001	
DESCRIPTION: Add additional available distributors for this product. All other terms and conditions remain the same.				

Authorized G4/G5 Unication Dealers- Michigan

Updated 9/2016

Anderson Communications

1009 W Bluff St
Marquette, MI 49855
906-228-6006
www.andercomm.com

Anderson Radio

6149 Westside Saginaw Rd
Bay City, MI 48706
989-684-9969
www.andersonradio.com

Elcom Systems

3150 Wright St
Marquette, MI 49855
906-228-5255
www.elcomup.net

Chrouch Communications

7860 Morrison Lake Road
Saranac, MI 48881
616-642-3881
www.chrouch.com

ComSource, Inc.

41271 Concept Dr
Plymouth, MI 48170
734-738-0800
www.comsourcemi.com

Digicom Global, Inc.

3911 Rochester Road
Troy, MI 48083
248-866-6000
www.digicomglobal911.com

Grand Traverse Mobile Communications

1670 Barlow St. Suite 1
Traverse City, MI 49696
231-947-9851
www.fireradios.com

Herkimer Radio

2708 N. Telegraph Road
Monroe, MI 48162
734-242-0806
www.herkimerradio.com

Roe Comm, Inc.

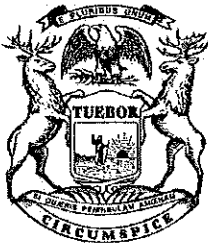
1400 Ramona Avenue
Portage, MI 49002
269-327-1045
www.roecomm.com

State Systems Radio

5066 S Sprinkle Rd
Portage, MI 49002
269-349-1935
www.statesystems.com

TELE-Rad, Inc.

511 E 8th St
Holland, MI 49423
616-396-3541
www.tele-rad.com



**STATE OF MICHIGAN
ENTERPRISE PROCUREMENT**

Department of Technology, Management, and Budget
525 W. Allegan, Lansing MI 48913
P.O. Box 30026, Lansing, MI 48909

NOTICE OF CONTRACT

NOTICE OF CONTRACT NO. **071B6600085**

between

THE STATE OF MICHIGAN

and

CONTRACTOR	Unication USA Inc.
	1901 E. Lamar Blvd.
	Arlington, TX 76006
	Kirk Alland
	817-926-6771
	kirk@unication.com
	0826

STATE	Contract Administrator	Gerald Leach	DTMB
		517-490-4148	
		LeachG@michigan.gov	
	Project Manager	Michael Breen	DTMB
		517-284-7002	
		breenm@michigan.gov	

CONTRACT SUMMARY			
DESCRIPTION: pager acquisition and service			
INITIAL EFFECTIVE DATE	INITIAL EXPIRATION DATE	INITIAL AVAILABLE OPTIONS	EXPIRATION DATE BEFORE CHANGE(S) NOTED BELOW
6-7-2016	6/7/2021	Five one year options	6/7/2021
PAYMENT TERMS		DELIVERY TIMEFRAME	
N45		NA	
ALTERNATE PAYMENT OPTIONS			EXTENDED PURCHASING
<input checked="" type="checkbox"/> P-card <input type="checkbox"/> Direct Voucher (DV) <input type="checkbox"/> Other			<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
MINIMUM DELIVERY REQUIREMENTS			
NA			
MISCELLANEOUS INFORMATION			
NA			
ESTIMATED CONTRACT VALUE AT TIME OF EXECUTION			\$249,995.00

FOR THE CONTRACTOR:

Unicection USA, Inc
Company Name

[Handwritten Signature]
Authorized Agent Signature

Kirk Allard
Authorized Agent (Print or Type)

7/11/16
Date

FOR THE STATE:

[Handwritten Signature]
Signature

Bill Remble
Name & Title

DTMB Procurement
Agency

7/13/16
Date

Schedule A

1.000 Project Identification

1.001 PROJECT REQUEST

This contract provides the ability to purchase 800MHz trunked pagers, , software, accessories and related services for the Michigan Department of Technology, Management and Budget – Information Technology (DTMB - IT), Michigan's Public Safety Communications System (MPSCS). Additionally, the Contractor will provide professional services, to include but not limited to: extended warranty, installation, maintenance, repair, and training services.

Exact quantities to be purchased are unknown, however the Contractor will be required to furnish all such materials and services as may be ordered during the contract period. Quantities specified if any, are estimates based on prior purchases, and the State is not obligated to purchase in these or any other quantities. Orders for delivery will be issued directly to the Contractor by various State Agencies.

1.002 BACKGROUND

Michigan's Public Safety Communications System (MPSCS) is requesting a statewide contract for state and local agencies to purchase 800 MHz/700 MHz public safety Unication pagers. Though pagers have been around for years, Unication is the only vendor that offers a trunked public safety 800 MHz/700 MHz pager that works on the MPSCS radio system. If another vendor produced a pager that works on the MPSCS, we would request a statewide contract for that product along with the Unication product.

The Unication pager offers the following features:

- MPSCS Approved
- Receive Only, Unication product does not initiate loading on the MPSCS radio system
- In Range / Out of Range Indication
- Look and feel of a conventional pager
- Tone alerting
- Voice messaging
- Text messaging
- Message storage and playback
- Trunked Project 25 700MHz 800MHz functionality
- Industry standard programming cable (non-proprietary)
- Industry standard charger (non-proprietary)
- Functions using existing Public Safety dispatch equipment
- Functions on existing MPSCS multicast and simulcast infrastructure



1.100 Scope of Work and Deliverables

1.101 IN SCOPE

The scope consists of the following:

PAGERS

PAGING ENCODERS

INTEGRATED SOLUTIONS (SOFTWARE)

PARTS & ACCESSORIES

PROFESSIONAL SERVICES

- Extended Warranty
- Installation
- Maintenance
- Repair
- Training services

- Business Requirements
 - Facilitated Sessions
 - Validation and Verification
- Hardware
- Software
- Application Design
- Application Development
- Implementation
 - Data Conversion
 - Data Migration
 - Configuration
 - Customization (COTS)
 - Interfaces/Integration
 - Testing
- Training
 - End user
 - Web training
- Documentation
- Operation Services
- Maintenance and Support
 - Help Desk
 - Onsite Technical Support
- Knowledge Transfer/Transition
- Other
 - Reserve bank of hours for future enhancements and/or legislative mandates

1.102 OUT OF SCOPE



Items out of scope are those not related to the pager and nor staff augmentation.

1.103 ENVIRONMENT

The links below provide information on the State's Enterprise information technology (IT) policies, standards and procedures which includes security policy and procedures, eMichigan web development, and the State Unified Information Technology Environment (SUITE).

Contractors are advised that the State has methods, policies, standards and procedures that have been developed over the years. Contractors are expected to provide proposals that conform to State IT policies and standards. All services and products provided as a result of this RFP must comply with all applicable State IT policies and standards. Contractor is required to review all applicable links provided below and state compliance in their response.

Enterprise IT Policies, Standards and Procedures:

http://michigan.gov/dtmb/0,4568,7-150-56355_56579_56755---,00.html

All software and hardware items provided by the Contractor must run on and be compatible with the MDTMB Standard Information Technology Environment. Additionally, the State must be able to maintain software and other items produced as the result of the Contract. Therefore, non-standard development tools may not be used unless approved by MDTMB. The Contractor must request, in writing, approval to use non-standard software development tools, providing justification for the requested change and all costs associated with any change. The MDTMB Project Manager must approve any tools, in writing, before use on any information technology project.

It is recognized that technology changes rapidly. The Contractor may request, in writing, a change in the standard environment, providing justification for the requested change and all costs associated with any change. The State's Project Manager must approve any changes, in writing, and MDTMB, before work may proceed based on the changed environment.

Enterprise IT Security Policy and Procedures:

- <http://www.michigan.gov/documents/dmb/1210.32.pdf>
- http://www.michigan.gov/documents/dmb/1325_193160_7.pdf
- http://www.michigan.gov/documents/dmb/1335_193161_7.pdf
- http://www.michigan.gov/documents/dmb/1340_193162_7.pdf

The State's security environment includes:

- MDTMB Single Login.
- MDTMB provided SQL security database.
- Secured Socket Layers.
- SecureID (State Security Standard for external network access and high risk Web systems)

MDTMB requires that its single - login security environment be used for all new client-server software development. Where software is being converted from an existing package, or a client-server application is being purchased, the security mechanism must be approved in writing by the State's Project Manager and MDTMB Office of Enterprise Security.

Look and Feel Standard

All software items provided by the Contractor must be ADA complaint and adhere to the Look and Feel Standards www.michigan.gov/somlookandfeelstandards.

The State Unified Information Technology Environment (SUITE):

Includes standards for project management, systems engineering, and associated forms and templates – must be followed: <http://www.michigan.gov/suite>

Agency Specific Technical Environment



Using the information below (add or delete as necessary), list your Agency's current technical environment (including entities responsible for administration, maintenance and support), as it relates to the services requested in this RFP. If available, Agency should provide web link(s) to their specific technical environment and related interfaces. If more detailed information such as a diagram, chart or process flow is needed provide it as an attachment.

See C20150220-085752_Pager Test Script

- Hardware Listing
- Operating Systems (NA)
- Desktop Workstations (Pager Programming Software must operate on industry standard Windows operating systems.
- Software Listing (NA)
- Database (NA)
- Network (NA)
- Firewall (NA)
- Locations (NA)
- Capacity Projections (NA)
- Current Workload Profile (NA)
- Disaster Recovery Requirements and Priorities (NA)
- Development tools (Provided by vendor.)
- Browser (NA)
- Reporting tools (NA)
- Interfaces (NA)
- Current enhancements under way (NA)
- Classes of users (NA)
- Other systems/applications requiring integration (NA)

1.104 WORK AND DELIVERABLES

Agency to identify the services and deliverables required for the successful completion of this project (technical/general system and functional).

I. Services and Deliverables To Be Provided

A. Business Requirements

Overall agency requirements summary

Deliverable(s)

Line Number, Part Number, Description, List Price, State Discount, Software and warranty if applicable. The quote shall only apply to Unication public safety radios and associated products approved by MPSCS for use on the MPSCS Radio System.

Acceptance Criteria

- the acceptance criteria for each pager.

B. Hardware

Deliverable(s)

- Technical support is required to assist with the following tasks:
- Pager Programming



- Equipment repair
- Equipment upgrades, new releases
- Problem mitigation
- The Unication pager offers the following unique features:
 - Receive Only, Unication product does not initiate loading on the MPSCS radio system
 - In Range / Out of Range Indication
 - Look and feel of a conventional pager
 - Tone alerting
 - Voice messaging
 - Text messaging
 - Message storage and playback
 - Trunked Project 25 700MHz 800MHz functionality
 - Industry standard programming cable (non-proprietary)
 - Industry standard charger (non-proprietary)
 - Functions using existing Public Safety dispatch equipment
 - Functions on existing MPSCS multicast and simulcast infrastructure

C. Software

Deliverable(s)

Line Number, Part Number, Description, List Price, State Discount, Software version and warranty if applicable. The quote shall only apply to Unication public safety radios and associated products approved by MPSCS for use on the MPSCS Radio System

INTEGRATED SOLUTIONS (SOFTWARE)
 PROFESSIONAL SERVICES
 WARRANTY SUPPORT
 MAINTENANCE

D. RESERVED

E. RESERVED

F. Implementation

Deliverable(s)

Line Number, Part Number, Description, List Price, State Discount, Software version and warranty if applicable. The quote shall only apply to Unication public safety radios and associated products approved by MPSCS for use on the MPSCS Radio System

PAGERS
 PAGING ENCODERS
 INTEGRATED SOLUTIONS (SOFTWARE)



PARTS & ACCESSORIES
PROFESSIONAL SERVICES
WARRANTY SUPPORT
MAINTENANCE

G. Training IS THIS APPLICABLE TO THIS PAGER

I don't believe training is applicable to the manufacturer in this case as the device operation is controlled by the programming and configuration choices of the local agencies or departments.

Deliverable(s)

- Train the trainer (See G. above)
- End user (See G. above)

Upgrades and new versions to the product that affect end-user functionality include training at no additional cost (e.g. classroom or online training, training flier, release features, etc.)

Training is provided in a variety of formats for product installation, use, and administration for a variety of levels (e.g. basic, advanced, refresher, etc.)

All training manuals, training plans and other documentation provided become the property of the State.

H. Documentation

Deliverable(s) DOES ANY BELOW RELATE TO THE PAGER

- *User manuals*
- *Technical manuals*
 1. A minimum of two (2) copies of the following documentation in an electronic format, online and in hard copy will be provided:
 - a. *User and Technical Manuals - On-line and Hard Copy*
 - b. *Data Element Dictionary (NA)*
 - c. *Operations Manual I believe a brief operator manual or quick start guide is appropriate to explain common features not unique to the local configuration choices made.*
 - d. *All updates of documentation during the term of the Contract, software license and maintenance agreement*
 2. The following documentation is provided for all modules and program development:
 - a. System-wide documentation and specifications (NA)
 - b. Baseline End-User training manuals to be used as a basis for "User Manuals" and online help I believe a brief operator manual or quick start guide is appropriate to explain common features not unique to the local configuration choices made.
 - c. Installation procedure (NA)
 - d. Module configuration documents sufficient for configuration maintenance purposes (NA)
 - e. Testing scripts Must meet and continue to meet the requirements of MPSCS C20150220-085752_Pager Test Script
 - f. Specification documentation
 - g. Production migration (NA)
 3. The documentation of components, features, and use of the hardware/software shall be detailed such that resolution of most problems can be determined from the documentation, and most questions can be answered. (I do not believe that this is required of any other MPSCS radio vendors.)
 4. All system, operational, user, change, and issue documentation must be available in electronic format, published to an intranet website, accessible to State users, updated regularly, with unique numerical identifiers for each section and be consistent with the most current version of the application(s) and three (3) previous versions. This would be heavily dependent on the choices made in programming the pagers by local agencies.



5. All system, operations, user, change and issue documentation is to be organized in a format, which is approved by the State and facilitates updating and allows for revisions to the documentation to be clearly identified including the three (3) previous versions.
6. The Contractor must develop and submit for State approval complete, accurate, and timely system, operations, and user documentation. (NA the device does not interact with MPSCS network. It is only a receiver only.)
7. The Contractor must notify the State of any discrepancies or errors outlined in the system, operations, and user documentation. (NA)

Acceptance Criteria

Equipment must comply with MPSCS acceptance processes and policies. The State reserves the right to test products which have been received to verify compliance with specifications prior to acceptance in accordance with Section 15 of the Standard Terms and Conditions. It is agreed and acknowledged that once the State has tested a particular product(s) to verify compliance with the Contractor’s published technical specifications and such verification occurs, the State has effectively accepted that product for purposes of compliance with specifications. A verified product shall then be subject to inspection only in accordance with Section 16 of the Standard Contract Terms. If after testing an unverified product, laboratory analysis shows that the product does not meet specifications, the State shall notify Contractor and provide detailed information regarding such analysis. The Contractor shall then conduct its own analysis and, if necessary, provide a mutually-agreeable plan to cure any verified non-compliance

J. Maintenance and Support

What are your expectations here? (Describe in narrative form) The manufacturer will provide a fixed warranty period during which pager product failures due to workmanship including pager hardware, programming software and device firmware will be remedied upon return to the vendor at no charge.

The vendor may provide firmware update tools and instructions in lieu or requiring the pager to be returned to the vendor for firmware updates.

The vendor may provide extended warranty based on negotiated terms with the purchasing agency.

After the warranty or extended warranty, the vendor will provide pager repair service for negotiated terms with the purchasing agency. (It could be beneficial to state a length in years that the product must continue to be supported based on normal and usual terms given to other radio manufacturers.)

Deliverable(s) ARE ANY OF THESE STATED BELOW SPECIFIC TO THIS PAGER

This aspect of the contract should be similar to the State’s expectations of cell phone vendors with the understanding that Unication provides the subscriber device the MPSCS provides the radio network.)

- Maintenance of hardware
- Existing hardware
- Purchased hardware
- Leased hardware
- Maintenance of software
 - Existing software
 - Purchased software
- Leased software
- Support
 - Help Desk
 - Technical
 - a. Maintenance programs commence at the end of the warranty period. (Yes if purchased by local agencies)
 - b. All maintenance is performed by qualified personnel familiar with the hardware. (YES)
 - c. Remote diagnostic capabilities are provided. (Not possible)
 - d. Maintenance is available on an annually renewable contract. (YES At local option.)



- e. *The software maintenance program includes all future software updates and system enhancements applicable to system modules licensed without further charge to all licensed users maintaining an annually renewable software support contract. (Can we link this to item J above?)*
- f. *Help desk support is available 24 x 7 x 365, with escalation as necessary to senior technical/engineering staff, and then to higher management and/or senior management. (Not economically practical for individual subscriber units.)*
- g. *Maintenance service options are provided including 24 x 7 x 365 service, onsite service, 2- (emergency), 4-, and 8-hour and next day response times. (This could be an option purchased by local agencies with their Unication representative, but not economically practical for a pager.)*
- h. *Calls for service will be returned within 2 hours. (Too short. Some number of business days similar to terms granted to other MPSCS radio manufacturers.)*
- i. *Guaranteed parts availability within the service response window at all times. (or replacement units made available at no cost.)*
- j. *Emergency assistance is available 24 hours a day, seven days a week, at no additional cost to the State. (NA.)*
- k. *A Web-enabled help desk interface is provided at no additional cost. (NA.)*
- l. *The State will be provided with information on software problems encountered at other locations, along with the solution to those problems, when such information is relevant to State software. (NA.)*
- m. *Support is provided for superseded releases and back releases still in use by the State. (Users should be encouraged to upgrade to current firmware versions / changes.)*
- n. *For the first year and all subsequent Contract years, the following services are provided for the current version and one previous version of any Software provided with the deliverables, commencing upon installation of the deliverables or delivery of the Software:*
 - 1. **Error Correction.** *Upon notice by State of a problem with the Software (which problem can be verified), reasonable efforts to correct or provide a working solution for the problem. (YES)*
 - 2. **Material Defects.** *The State will be notified of any material errors or defects in the deliverables known, or made known to Contractor from any source during the Contract term that could cause the production of inaccurate, or otherwise materially incorrect, results and shall initiate actions as may be commercially necessary or proper to effect corrections of any such errors or defects. (YES)*
 - 3. **Updates.** *All new releases and bug fixes (collectively referred to as "Changes") for any software deliverable developed or published by Contractor and made generally available to its other customers at no additional charge will be provided to the State at no additional charge. (YES)*

K. Knowledge Transfer/Transition

DOES THIS RELATE TO THE PAGER (Describe in narrative form) This aspect of the contract should reflect the State's expectations of cell phone vendors with the understanding that Unication provides the subscriber device the MPSCS provides the radio network.)

L. Other Services (Agency to add any additional services to be required)

DOES THIS RELATE TO THE PAGER (Describe in narrative form) (NA) If Unication wishes to add additional services those products must be approved by the appropriate MPSCS product test script process.

II. Requirements

A. Technical/General System Requirements

As per identified specifications.

B. Functional Requirements

As per identified specifications.



1.200 Roles and Responsibilities

1.201 CONTRACTOR STAFF, ROLES, AND RESPONSIBILITIES

A. Contractor Staff

The Contractor will identify a Single Point of Contact (SPOC). The duties of the SPOC shall include, but not be limited to:

- Supporting the management of the Contract,
- Facilitating dispute resolution, and
- Advising the State of performance under the terms and conditions of the Contract.

The State reserves the right to require a change in the current SPOC if the assigned SPOC is not, in the opinion of the State, adequately serving the needs of the State.

B. RESERVED

1.202 STATE STAFF, ROLES, AND RESPONSIBILITIES

State Project Manager- (MDTMB and Agency)

MDTMB will provide a Project Manager who will be responsible for the State's infrastructure and coordinate with the Contractor in determining the system configuration.

The State's Project Manager will provide the following services:

- Facilitate communication between different State departments/divisions
- Provide acceptance and sign-off of deliverable
- Resolve process issues
- Escalate outstanding/high priority issues
- Utilize change control procedures
- Conduct regular and ongoing review of the deliverable

Name	Agency/Division	Title
Gerald Leach	MDTMB	Agency Manager

MDTMB shall provide a Contract Administrator whose duties shall include, but not be limited to, supporting the management of the Contract.

Name	Agency/Division	Title
Michael Breen	MDTMB	Contract Administrator

1.203 RESERVED

1.300 Project Plan

1.301 RESERVED

1.302 RESERVED

1.400 Procurement Management

1.401 ISSUE MANAGEMENT

An issue is an identified event that if not addressed may affect schedule, scope, quality, or budget.



The Contractor shall maintain an issue log for issues relating to the provision of services under this Contract. The issue management log must be communicated to the State's Project Manager on an agreed upon schedule, with email notifications and updates. The issue log must be updated and must contain the following minimum elements:

- Description of issue
- Issue identification date
- Responsibility for resolving issue.
- Priority for issue resolution (to be mutually agreed upon by the State and the Contractor)
- Resources assigned responsibility for resolution
- Resolution date
- Resolution description

Issues shall be escalated for resolution from level 1 through level 3, as defined below:

- Level 1 – Agency Director
- Level 2 – Agency Manager
- Level 3 – Executive Subject Matter Experts (SME's)

1.402 RESERVED

1.403 CHANGE MANAGEMENT

Change management is defined as the process to communicate, assess, monitor, and control all changes to system resources and processes. The State also employs change management in its administration of the Contract.

If a proposed contract change is approved by the Agency, the Contract Administrator will submit a request for change to the Department of Technology, Management and Budget, Procurement Buyer, who will make recommendations to the Director of DTMB-Procurement regarding ultimate approval/disapproval of change request. If the DTMB Procurement Director agrees with the proposed modification, and all required approvals are obtained (including State Administrative Board), the DTMB-Procurement Buyer will issue an addendum to the Contract, via a Contract Change Notice. **Contractors who provide products or services prior to the issuance of a Contract Change Notice by the DTMB-Procurement, risk non-payment for the out-of-scope/pricing products and/or services.**

The Contractor must employ change management procedures to handle such things as "out-of-scope" requests or changing business needs of the State.

The Contractor will employ the change control methodologies to justify changes in the processing environment, and to ensure those changes will not adversely affect performance or availability.

1.500 Acceptance

1.501 CRITERIA

As identified within the work and deliverables.

1.502 FINAL ACCEPTANCE

See acceptance criteria for approved pager specification and by approved invoice by the SOM agency representative.



1.600 Compensation and Payment

1.601 COMPENSATION AND PAYMENT

Method of Payment

The pager will be paid by State of Michigan approved invoice and net 45. The Costs Table(s) attached must be used as the format for submitting pricing information.

The selected Contractor will be required to submit an Administrative Fee (see Section 2.031) on all payments remitted under the Contract. The Bidder should consider Administrative Fee requirements when developing its price proposal.

Travel

The State will not pay for any travel expenses, including hotel, mileage, meals, parking, etc. Travel time will not be reimbursed.

Out-of-Pocket Expenses

Contractor out-of-pocket expenses are not separately reimbursable by the State unless, on a case-by-case basis for unusual expenses, the State has agreed in advance and in writing to reimburse Contractor for such an expense at the State's current travel reimbursement rates.

If Contractor reduces its prices for any of the software or pager during the term of this Contract, the State shall have the immediate benefit of such lower prices for new purchases. Contractor shall send notice to the State's MDTMB Contract Administrator with the reduced prices within fifteen (15) Business Days [or other appropriate time period] of the reduction taking effect. – OR – Contractor shall send updated prices to the State [quarterly/semi-annually].

Invoicing

Contractor will submit properly itemized invoices to

DTMB – Financial Services
Accounts Payable
P.O. Box 30026
Lansing, MI 48909
or
DTMB-Accounts-Payable@michigan.gov

. Invoices must provide and itemize, as applicable:

- Purchase Order number
- Contractor name, address, phone number, and Federal Tax Identification Number;
- Description of any commodities/hardware, including quantity ordered;
- Date(s) of delivery and/or date(s) of installation and set up;
- Price for each item, or Contractor's list price for each item and applicable discounts;
- Maintenance charges;
- Net invoice price for each item;
- Shipping costs;
- Other applicable charges;
- Total invoice price; and
- Payment terms, including any available prompt payment discount.

The State may pay maintenance and support charges on a monthly basis, in arrears. Payment of maintenance service/support of less than one (1) month's duration shall be prorated at 1/30th of the basic monthly maintenance charges for each calendar day.

Incorrect or incomplete invoices will be returned to Contractor for correction and reissue.



1.602 HOLDBACK

Reserved

Schedule B



STATE OF MICHIGAN

STANDARD CONTRACT TERMS

This STANDARD CONTRACT ("Contract") is agreed to between the State of Michigan (the "State") and Unication USA, Inc. ("Contractor"), a Texas company. This Contract is effective on June 7, 2016 ("Effective Date"), and unless terminated, expires on June 7, 2021.

This Contract may be renewed for up to five one year of Renewal Options. Renewal is at the sole discretion of the State and will automatically extend the Term of this Contract. The State will document its exercise of renewal options via Contract Change Notice.

The parties agree as follows:

- Duties of Contractor.** Contractor must perform the services and provide the deliverables described in **Exhibit A – Statement of Work** (the "Contract Activities"). An obligation to provide delivery of any commodity is considered a service and is a Contract Activity.

Contractor must furnish all labor, equipment, materials, and supplies necessary for the performance of the Contract Activities, and meet operational standards, unless otherwise specified in Exhibit A.

Contractor must: (a) perform the Contract Activities in a timely, professional, safe, and workmanlike manner consistent with standards in the trade, profession, or industry; (b) meet or exceed the performance and operational standards, and specifications of the Contract; (c) provide all Contract Activities in good quality, with no material defects; (d) not interfere with the State's operations; (e) obtain and maintain all necessary licenses, permits or other authorizations necessary for the performance of the Contract; (f) cooperate with the State, including the State's quality assurance personnel, and any third party to achieve the objectives of the Contract; (g) return to the State any State-furnished equipment or other resources in the same condition as when provided when no longer required for the Contract; (h) not make any media releases without prior written authorization from the State; (i) assign to the State any claims resulting from state or federal antitrust violations to the extent that those violations concern materials or services supplied by third parties toward fulfillment of the Contract; (j) comply with all State physical and IT security policies and standards which will be made available upon request; and (k) provide the State priority in performance of the Contract except as mandated by federal disaster response requirements. Any breach under this paragraph is considered a material breach.

Contractor must also be clearly identifiable while on State property by wearing identification issued by the State, and clearly identify themselves whenever making contact with the State.

- Notices.** All notices and other communications required or permitted under this Contract must be in writing and will be considered given and received: (a) when verified by written receipt if sent by courier; (b) when actually received if sent by mail without verification of receipt; or (c) when verified by automated receipt or electronic logs if sent by facsimile or email.

If to State: [Name] Michael Breen [Street Address] 525 W. Allegan [City, State, Zip]Lansing, Michigan 48913 [Email]breenm@michigan.gov [Phone]517-284-7002	If to Contractor: [Name] Kirk Alland [Street Address]1901 E. Lamar Blvd [City, State, Zip]Arlington, TX 76006 [Email]817-926-6771 [Phone]kirk@unication.com
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Schedule B

3. **Contract Administrator.** The Contract Administrator for each party is the only person authorized to modify any terms of this Contract, and approve and execute any change under this Contract (each a "Contract Administrator"):

State:	Contractor:
[Name] Michael Breen [Street Address] 525 West Allegan [City, State, Zip] Lansing, Michigan 48913 [Email]breenm@michigan.gov [Phone]517-284-7002	Name] Kirk Alland [Street Address]1901 E. Lamar Blvd [City, State, Zip]Arlington, TX 76006 [Email]817-926-6771 [Phone]kirk@unication.com

4. **Program Manager.** The Program Manager for each party will monitor and coordinate the day-to-day activities of the Contract (each a "Program Manager"):

State:	
[Name] Gerald Leach [Street Address]2 nd floor Wing A 7150 Harris Drive [City, State, Zip]Dimondale, MI 48821 [Email]517-490-4148 [Phone]leachG@michigan.gov	

5. **Performance Guarantee.** Contractor must at all times have financial resources sufficient, in the opinion of the State, to ensure performance of the Contract and must provide proof upon request. The State may require a performance bond (as specified in Exhibit A) if, in the opinion of the State, it will ensure performance of the Contract.
6. **Insurance Requirements.** Contractor must maintain the insurances identified below and is responsible for all deductibles. All required insurance must: (a) protect the State from claims that may arise out of, are alleged to arise out of, or result from Contractor's or a subcontractor's performance; (b) be primary and non-contributing to any comparable liability insurance (including self-insurance) carried by the State; and (c) be provided by a company with an A.M. Best rating of "A" or better, and a financial size of VII or better

Required Limits	Additional Requirements
Commercial General Liability Insurance	
<u>Minimal Limits:</u> \$1,000,000 Each Occurrence Limit \$1,000,000 Personal & Advertising Injury Limit \$2,000,000 General Aggregate Limit \$2,000,000 Products/Completed Operations <u>Deductible Maximum:</u> \$50,000 Each Occurrence	Contractor must have their policy endorsed to add "the State of Michigan, its departments, divisions, agencies, offices, commissions, officers, employees, and agents" as additional insureds using endorsement CG 20 10 11 85, or both CG 2010 07 04 and CG 2037 07 0.
<u>Minimal Limits:</u> \$1,000,000 Each Occurrence \$1,000,000 Annual Aggregate	Contractor must have their policy: (1) endorsed to add "the State of Michigan, its departments, divisions, agencies, offices, commissions, officers, employees, and agents" as additional insureds; and (2) cover information security and privacy liability, privacy notification costs, regulatory defense

and penalties, and website media content liability.

If any of the required policies provide **claims-made** coverage, the Contractor must: (a) provide coverage with a retroactive date before the effective date of the contract or the beginning of Contract Activities; (b) maintain coverage and provide evidence of coverage for at least three (3) years after completion of the Contract Activities; and (c) if coverage is canceled or not renewed, and not replaced with another claims-made policy form with a retroactive date prior to the contract effective date, Contractor must purchase extended reporting coverage for a minimum of three (3) years after completion of work.

Contractor must: (a) provide insurance certificates to the Contract Administrator, containing the agreement or purchase order number, at Contract formation and within 20 calendar days of the expiration date of the applicable policies; (b) require that subcontractors maintain the required insurances contained in this Section; (c) notify the Contract Administrator within 5 business days if any insurance is cancelled; and (d) waive all rights against the State for damages covered by insurance. Failure to maintain the required insurance does not limit this waiver.

This Section is not intended to and is not be construed in any manner as waiving, restricting or limiting the liability of either party for any obligations under this Contract (including any provisions hereof requiring Contractor to indemnify, defend and hold harmless the State).

7. **Administrative Fee and Reporting** Contractor must pay an administrative fee of 1% on all payments made to Contractor under the Contract including transactions with the State (including its departments, divisions, agencies, offices, and commissions), MiDEAL members, and other states (including governmental subdivisions and authorized entities). Administrative fee payments must be made by check payable to the State of Michigan and mailed to:

Department of Technology, Management and Budget
Cashiering
P.O. Box 30681
Lansing, MI 48909

Contractor must submit an itemized purchasing activity report, which includes at a minimum, the name of the purchasing entity and the total dollar volume in sales. Reports should be mailed to DTMB-Procurement.

The administrative fee and purchasing activity report are due within 30 calendar days from the last day of each calendar quarter.

8. **Extended Purchasing Program.** This contract is extended to MiDEAL members. MiDEAL members include local units of government, school districts, universities, community colleges, and nonprofit hospitals. A current list of MiDEAL members is available at www.michigan.gov/mideal. Upon written agreement between the State and Contractor, this contract may also be extended to: (a) State of Michigan employees and (b) other states (including governmental subdivisions and authorized entities).

If extended, Contractor must supply all Contract Activities at the established Contract prices and terms. The State reserves the right to impose an administrative fee and negotiate additional discounts based on any increased volume generated by such extensions.

Contractor must submit invoices to, and receive payment from, extended purchasing program members on a direct and individual basis.

9. **Independent Contractor.** Contractor is an independent contractor and assumes all rights, obligations and liabilities set forth in this Contract. Contractor, its employees, and agents will not be considered employees of the State. No partnership or joint venture relationship is created by virtue of this Contract. Contractor, and not the State, is responsible for the payment of wages, benefits and taxes of Contractor's employees and any subcontractors. Prior performance does not modify Contractor's status as an independent contractor.

10. **Subcontracting.** Contractor may not delegate any of its obligations under the Contract without the prior written approval of the State. Contractor must notify the State at least 90 calendar days before the proposed delegation, and provide the State any information it requests to determine whether the delegation is in its best interest. If approved, Contractor must: (a) be the sole point of contact regarding all contractual matters, including payment and charges for all Contract Activities; (b) make all payments to the subcontractor; and (c) incorporate the terms and conditions contained in this Contract in any subcontract with a subcontractor. Contractor remains responsible for the completion of the Contract Activities, compliance with the terms of this Contract, and the acts and omissions of the subcontractor. The State, in its sole discretion, may require the replacement of any subcontractor.
11. **Reserved**
12. **Background Checks.** Upon request, Contractor must perform background checks on all employees and subcontractors and its employees prior to their assignment. The scope is at the discretion of the State and documentation must be provided as requested. Contractor is responsible for all costs associated with the requested background checks. The State, in its sole discretion, may also perform background checks.
13. **Assignment.** Contractor may not assign this Contract to any other party without the prior approval of the State. Upon notice to Contractor, the State, in its sole discretion, may assign in whole or in part, its rights or responsibilities under this Contract to any other party. If the State determines that a novation of the Contract to a third party is necessary, Contractor will agree to the novation and provide all necessary documentation and signatures.
14. **Change of Control.** Contractor will notify, at least 90 calendar days before the effective date, the State of a change in Contractor's organizational structure or ownership. For purposes of this Contract, a change in control means any of the following: (a) a sale of more than 50% of Contractor's stock; (b) a sale of substantially all of Contractor's assets; (c) a change in a majority of Contractor's board members; (d) consummation of a merger or consolidation of Contractor with any other entity; (e) a change in ownership through a transaction or series of transactions; (f) or the board (or the stockholders) approves a plan of complete liquidation. A change of control does not include any consolidation or merger effected exclusively to change the domicile of Contractor, or any transaction or series of transactions principally for bona fide equity financing purposes.

In the event of a change of control, Contractor must require the successor to assume this Contract and all of its obligations under this Contract.

15. **Ordering.** Contractor is not authorized to begin performance until receipt of authorization as identified in Purchase Order.
16. **Acceptance.** Contract Activities are subject to inspection and testing by the State within 30 calendar days of the State's receipt of them ("**State Review Period**"), unless otherwise provided in Exhibit A. If the Contract Activities are not fully accepted by the State, the State will notify Contractor by the end of the State Review Period that either: (a) the Contract Activities are accepted, but noted deficiencies must be corrected; or (b) the Contract Activities are rejected. If the State finds material deficiencies, it may: (i) reject the Contract Activities without performing any further inspections; (ii) demand performance at no additional cost; or (iii) terminate this Contract in accordance with Section 23, Termination for Cause.

Within 10 business days from the date of Contractor's receipt of notification of acceptance with deficiencies or rejection of any Contract Activities, Contractor must cure, at no additional cost, the deficiency and deliver unequivocally acceptable Contract Activities to the State. If acceptance with deficiencies or rejection of the Contract Activities impacts the content or delivery of other non-completed Contract Activities, the parties' respective Program Managers must determine an agreed to number of days for re-submission that minimizes the overall impact to the Contract. However, nothing herein affects, alters, or relieves Contractor of its obligations to correct deficiencies in accordance with the time response standards set forth in this Contract.

If Contractor is unable or refuses to correct the deficiency within the time response standards set forth in this Contract, the State may cancel the order in whole or in part. The State, or a third party identified by the State, may perform the Contract Activities and recover the difference between the cost to cure and

the Contract price plus an additional 10% administrative fee.

17. **Delivery.** Contractor must deliver all Contract Activities F.O.B. destination, within the State premises with transportation and handling charges paid by Contractor, unless otherwise specified in Exhibit A. All containers and packaging becomes the State's exclusive property upon acceptance.
18. **Risk of Loss and Title.** Until final acceptance, title and risk of loss or damage to Contract Activities remains with Contractor. Contractor is responsible for filing, processing, and collecting all damage claims. The State will record and report to Contractor any evidence of visible damage. If the State rejects the Contract Activities, Contractor must remove them from the premises within 10 calendar days after notification of rejection. The risk of loss of rejected or non-conforming Contract Activities remains with Contractor. Rejected Contract Activities not removed by Contractor within 10 calendar days will be deemed abandoned by Contractor, and the State will have the right to dispose of it as its own property. Contractor must reimburse the State for costs and expenses incurred in storing or effecting removal or disposition of rejected Contract Activities.
19. **Warranty Period.** The warranty period, if applicable, for Contract Activities is a fixed period commencing on the date specified in Purchase Order. If the Contract Activities do not function as warranted during the warranty period the State may return such non-conforming Contract Activities to the Contractor for a full refund.
20. **Terms of Payment.** Invoices must conform to the requirements communicated from time-to-time by the State. All undisputed amounts are payable within 45 days of the State's receipt. Contractor may only charge for Contract Activities performed as specified in Exhibit A. Invoices must include an itemized statement of all charges. The State is exempt from State sales tax for direct purchases and may be exempt from federal excise tax, if Services purchased under this Agreement are for the State's exclusive use. Notwithstanding the foregoing, all prices are inclusive of taxes, and Contractor is responsible for all sales, use and excise taxes, and any other similar taxes, duties and charges of any kind imposed by any federal, state, or local governmental entity on any amounts payable by the State under this Contract.

The State has the right to withhold payment of any disputed amounts until the parties agree as to the validity of the disputed amount. The State will notify Contractor of any dispute within a reasonable time. Payment by the State will not constitute a waiver of any rights as to Contractor's continuing obligations, including claims for deficiencies or substandard Contract Activities. Contractor's acceptance of final payment by the State constitutes a waiver of all claims by Contractor against the State for payment under this Contract, other than those claims previously filed in writing on a timely basis and still disputed.

The State will only disburse payments under this Contract through Electronic Funds Transfer (EFT). Contractor must register with the State at <http://www.michigan.gov/cpexpress> to receive electronic fund transfer payments. If Contractor does not register, the State is not liable for failure to provide payment. Without prejudice to any other right or remedy it may have, the State reserves the right to set off at any time any amount then due and owing to it by Contractor against any amount payable by the State to Contractor under this Contract.

21. **Liquidated Damages.** Liquidated damages, if applicable, will be assessed as described in Purchase Order.
22. **Stop Work Order.** The State may suspend any or all activities under the Contract at any time. The State will provide Contractor a written stop work order detailing the suspension. Contractor must comply with the stop work order upon receipt. Within 90 calendar days, or any longer period agreed to by Contractor, the State will either: (a) issue a notice authorizing Contractor to resume work, or (b) terminate the Contract or purchase order. The State will not pay for Contract Activities, Contractor's lost profits, or any additional compensation during a stop work period.
23. **Termination for Cause.** The State may terminate this Contract for cause, in whole or in part, if Contractor, as determined by the State: (a) endangers the value, integrity, or security of any location, data, or personnel; (b) becomes insolvent, petitions for bankruptcy court proceedings, or has an involuntary bankruptcy proceeding filed against it by any creditor; (c) engages in any conduct that may expose the State to liability; (d) breaches any of its material duties or obligations; or (e) fails to cure a

breach within the time stated in a notice of breach. Any reference to specific breaches being material breaches within this Contract will not be construed to mean that other breaches are not material.

If the State terminates this Contract under this Section, the State will issue a termination notice specifying whether Contractor must: (a) cease performance immediately, or (b) continue to perform for a specified period. If it is later determined that Contractor was not in breach of the Contract, the termination will be deemed to have been a Termination for Convenience, effective as of the same date, and the rights and obligations of the parties will be limited to those provided in Section 24, Termination for Convenience.

The State will only pay for amounts due to Contractor for Contract Activities accepted by the State on or before the date of termination, subject to the State's right to set off any amounts owed by the Contractor for the State's reasonable costs in terminating this Contract. The Contractor must pay all reasonable costs incurred by the State in terminating this Contract for cause, including administrative costs, attorneys' fees, court costs, transition costs, and any costs the State incurs to procure the Contract Activities from other sources.

24. **Termination for Convenience.** The State may immediately terminate this Contract in whole or in part without penalty and for any reason, including but not limited to, appropriation or budget shortfalls. The termination notice will specify whether Contractor must: (a) cease performance of the Contract Activities immediately, or (b) continue to perform the Contract Activities in accordance with Section 25, Transition Responsibilities. If the State terminates this Contract for convenience, the State will pay all reasonable costs, as determined by the State, for State approved Transition Responsibilities.
25. **Transition Responsibilities.** Upon termination or expiration of this Contract for any reason, Contractor must, for a period of time specified by the State (not to exceed 90 calendar days), provide all reasonable transition assistance requested by the State, to allow for the expired or terminated portion of the Contract Activities to continue without interruption or adverse effect, and to facilitate the orderly transfer of such Contract Activities to the State or its designees. Such transition assistance may include, but is not limited to: (a) continuing to perform the Contract Activities at the established Contract rates; (b) taking all reasonable and necessary measures to transition performance of the work, including all applicable Contract Activities, training, equipment, software, leases, reports and other documentation, to the State or the State's designee; (c) taking all necessary and appropriate steps, or such other action as the State may direct, to preserve, maintain, protect, or return to the State all materials, data, property, and confidential information provided directly or indirectly to Contractor by any entity, agent, vendor, or employee of the State; (d) transferring title in and delivering to the State, at the State's discretion, all completed or partially completed deliverables prepared under this Contract as of the Contract termination date; and (e) preparing an accurate accounting from which the State and Contractor may reconcile all outstanding accounts (collectively, "**Transition Responsibilities**"). This Contract will automatically be extended through the end of the transition period.
26. **General Indemnification.** Contractor must defend, indemnify and hold the State, its departments, divisions, agencies, offices, commissions, officers, and employees harmless, without limitation, from and against any and all actions, claims, losses, liabilities, damages, costs, attorney fees, and expenses (including those required to establish the right to indemnification), arising out of or relating to: (a) any breach by Contractor (or any of Contractor's employees, agents, subcontractors, or by anyone else for whose acts any of them may be liable) of any of the promises, agreements, representations, warranties, or insurance requirements contained in this Contract; (b) any infringement, misappropriation, or other violation of any intellectual property right or other right of any third party; (c) any bodily injury, death, or damage to real or tangible personal property occurring wholly or in part due to action or inaction by Contractor (or any of Contractor's employees, agents, subcontractors, or by anyone else for whose acts any of them may be liable); and (d) any acts or omissions of Contractor (or any of Contractor's employees, agents, subcontractors, or by anyone else for whose acts any of them may be liable).

The State will notify Contractor in writing if indemnification is sought; however, failure to do so will not relieve Contractor, except to the extent that Contractor is materially prejudiced. Contractor must, to the satisfaction of the State, demonstrate its financial ability to carry out these obligations.

The State is entitled to: (i) regular updates on proceeding status; (ii) participate in the defense of the proceeding; (iii) employ its own counsel; and to (iv) retain control of the defense if the State deems necessary. Contractor will not, without the State's written consent (not to be unreasonably withheld),

settle, compromise, or consent to the entry of any judgment in or otherwise seek to terminate any claim, action, or proceeding. To the extent that any State employee, official, or law may be involved or challenged, the State may, at its own expense, control the defense of that portion of the claim.

Any litigation activity on behalf of the State, or any of its subdivisions under this Section, must be coordinated with the Department of Attorney General. An attorney designated to represent the State may not do so until approved by the Michigan Attorney General and appointed as a Special Assistant Attorney General.

27. **Infringement Remedies.** If, in either party's opinion, any piece of equipment, software, commodity, or service supplied by Contractor or its subcontractors, or its operation, use or reproduction, is likely to become the subject of a copyright, patent, trademark, or trade secret infringement claim, Contractor must, at its expense: (a) procure for the State the right to continue using the equipment, software, commodity, or service, or if this option is not reasonably available to Contractor, (b) replace or modify the same so that it becomes non-infringing; or (c) accept its return by the State with appropriate credits to the State against Contractor's charges and reimburse the State for any losses or costs incurred as a consequence of the State ceasing its use and returning it.
28. **Limitation of Liability.** The State is not liable for consequential, incidental, indirect, or special damages, regardless of the nature of the action.
29. **Disclosure of Litigation, or Other Proceeding.** Contractor must notify the State within 14 calendar days of receiving notice of any litigation, investigation, arbitration, or other proceeding (collectively, "**Proceeding**") involving Contractor, a subcontractor, or an officer or director of Contractor or subcontractor, that arises during the term of the Contract, including: (a) a criminal Proceeding; (b) a parole or probation Proceeding; (c) a Proceeding under the Sarbanes-Oxley Act; (d) a civil Proceeding involving: (1) a claim that might reasonably be expected to adversely affect Contractor's viability or financial stability; or (2) a governmental or public entity's claim or written allegation of fraud; or (e) a Proceeding involving any license that Contractor is required to possess in order to perform under this Contract.
30. **State Data. Reserved.**
31. **State Data. Reserved**
32. **Non-Disclosure of Confidential Information.** The parties acknowledge that each party may be exposed to or acquire communication or data of the other party that is confidential, privileged communication not intended to be disclosed to third parties. The provisions of this Section survive the termination of this Contract.
 - a. **Meaning of Confidential Information.** For the purposes of this Contract, the term "**Confidential Information**" means all information and documentation of a party that: (a) has been marked "confidential" or with words of similar meaning, at the time of disclosure by such party; (b) if disclosed orally or not marked "confidential" or with words of similar meaning, was subsequently summarized in writing by the disclosing party and marked "confidential" or with words of similar meaning; and, (c) should reasonably be recognized as confidential information of the disclosing party. The term "Confidential Information" does not include any information or documentation that was: (a) subject to disclosure under the Michigan Freedom of Information Act (FOIA); (b) already in the possession of the receiving party without an obligation of confidentiality; (c) developed independently by the receiving party, as demonstrated by the receiving party, without violating the disclosing party's proprietary rights; (d) obtained from a source other than the disclosing party without an obligation of confidentiality; or, (e) publicly available when received, or thereafter became publicly available (other than through any unauthorized disclosure by, through, or on behalf of, the receiving party). For purposes of this Contract, in all cases and for all matters, State Data is deemed to be Confidential Information.
 - b. **Obligation of Confidentiality.** The parties agree to hold all Confidential Information in strict confidence and not to copy, reproduce, sell, transfer, or otherwise dispose of, give or disclose such Confidential Information to third parties other than employees, agents, or subcontractors of a party who have a need to know in connection with this Contract or to use such Confidential Information for any purposes whatsoever other than the performance of this Contract. The

parties agree to advise and require their respective employees, agents, and subcontractors of their obligations to keep all Confidential Information confidential. Disclosure to a subcontractor is permissible where: (a) use of a subcontractor is authorized under this Contract; (b) the disclosure is necessary or otherwise naturally occurs in connection with work that is within the subcontractor's responsibilities; and (c) Contractor obligates the subcontractor in a written contract to maintain the State's Confidential Information in confidence. At the State's request, any employee of Contractor or any subcontractor may be required to execute a separate agreement to be bound by the provisions of this Section.

- c. Cooperation to Prevent Disclosure of Confidential Information. Each party must use its best efforts to assist the other party in identifying and preventing any unauthorized use or disclosure of any Confidential Information. Without limiting the foregoing, each party must advise the other party immediately in the event either party learns or has reason to believe that any person who has had access to Confidential Information has violated or intends to violate the terms of this Contract and each party will cooperate with the other party in seeking injunctive or other equitable relief against any such person.
- d. Remedies for Breach of Obligation of Confidentiality. Each party acknowledges that breach of its obligation of confidentiality may give rise to irreparable injury to the other party, which damage may be inadequately compensable in the form of monetary damages. Accordingly, a party may seek and obtain injunctive relief against the breach or threatened breach of the foregoing undertakings, in addition to any other legal remedies which may be available, to include, in the case of the State, at the sole election of the State, the immediate termination, without liability to the State, of this Contract or any Statement of Work corresponding to the breach or threatened breach.
- e. Surrender of Confidential Information upon Termination. Upon termination of this Contract or a Statement of Work, in whole or in part, each party must, within 5 calendar days from the date of termination, return to the other party any and all Confidential Information received from the other party, or created or received by a party on behalf of the other party, which are in such party's possession, custody, or control; provided, however, that Contractor must return State Data to the State following the timeframe and procedure described further in this Contract. Should Contractor or the State determine that the return of any Confidential Information is not feasible, such party must destroy the Confidential Information and must certify the same in writing within 5 calendar days from the date of termination to the other party. However, the State's legal ability to destroy Contractor data may be restricted by its retention and disposal schedule, in which case Contractor's Confidential Information will be destroyed after the retention period expires.

33. Data Privacy and Information Security. Reserved

34. Payment Card Industry Data Security Standard. Reserved

35. CEPAS Electronic Receipt Processing Standard. Reserved

36. Records Maintenance, Inspection, Examination, and Audit. The State or its designee may audit Contractor to verify compliance with this Contract. Contractor must retain, and provide to the State or its designee and the auditor general upon request, all financial and accounting records related to the Contract through the term of the Contract and for 4 years after the latter of termination, expiration, or final payment under this Contract or any extension ("Audit Period"). If an audit, litigation, or other action involving the records is initiated before the end of the Audit Period, Contractor must retain the records until all issues are resolved.

Within 10 calendar days of providing notice, the State and its authorized representatives or designees have the right to enter and inspect Contractor's premises or any other places where Contract Activities are being performed, and examine, copy, and audit all records related to this Contract. Contractor must cooperate and provide reasonable assistance. If any financial errors are revealed, the amount in error must be reflected as a credit or debit on subsequent invoices until the amount is paid or refunded. Any remaining balance at the end of the Contract must be paid or refunded within 45 calendar days.

This Section applies to Contractor, any parent, affiliate, or subsidiary organization of Contractor, and any subcontractor that performs Contract Activities in connection with this Contract.

37. **Warranties and Representations.** Contractor represents and warrants: (a) Contractor is the owner or licensee of any Contract Activities that it licenses, sells, or develops and Contractor has the rights necessary to convey title, ownership rights, or licensed use; (b) all Contract Activities are delivered free from any security interest, lien, or encumbrance and will continue in that respect; (c) the Contract Activities will not infringe the patent, trademark, copyright, trade secret, or other proprietary rights of any third party; (d) Contractor must assign or otherwise transfer to the State or its designee any manufacturer's warranty for the Contract Activities; (e) the Contract Activities are merchantable and fit for the specific purposes identified in the Contract; (f) the Contract signatory has the authority to enter into this Contract; (g) all information furnished by Contractor in connection with the Contract fairly and accurately represents Contractor's business, properties, finances, and operations as of the dates covered by the information, and Contractor will inform the State of any material adverse changes; and (h) all information furnished and representations made in connection with the award of this Contract is true, accurate, and complete, and contains no false statements or omits any fact that would make the information misleading. A breach of this Section is considered a material breach of this Contract, which entitles the State to terminate this Contract under Section 23, Termination for Cause.
38. **Conflicts and Ethics.** Contractor will uphold high ethical standards and is prohibited from: (a) holding or acquiring an interest that would conflict with this Contract; (b) doing anything that creates an appearance of impropriety with respect to the award or performance of the Contract; (c) attempting to influence or appearing to influence any State employee by the direct or indirect offer of anything of value; or (d) paying or agreeing to pay any person, other than employees and consultants working for Contractor, any consideration contingent upon the award of the Contract. Contractor must immediately notify the State of any violation or potential violation of these standards. This Section applies to Contractor, any parent, affiliate, or subsidiary organization of Contractor, and any subcontractor that performs Contract Activities in connection with this Contract.
39. **Compliance with Laws.** Contractor must comply with all federal, state and local laws, rules and regulations.
40. **Prevailing Wage. Reserved**
41. **State Printing. Reserved**
42. **Nondiscrimination.** Under the Elliott-Larsen Civil Rights Act, 1976 PA 453, MCL 37.2101, *et seq.*, and the Persons with Disabilities Civil Rights Act, 1976 PA 220, MCL 37.1101, *et seq.*, Contractor and its subcontractors agree not to discriminate against an employee or applicant for employment with respect to hire, tenure, terms, conditions, or privileges of employment, or a matter directly or indirectly related to employment, because of race, color, religion, national origin, age, sex, height, weight, marital status, or mental or physical disability. Breach of this covenant is a material breach of this Contract.
43. **Unfair Labor Practice.** Under MCL 423.324, the State may void any Contract with a Contractor or subcontractor who appears on the Unfair Labor Practice register compiled under MCL 423.322.
44. **Governing Law.** This Contract is governed, construed, and enforced in accordance with Michigan law, excluding choice-of-law principles, and all claims relating to or arising out of this Contract are governed by Michigan law, excluding choice-of-law principles. Any dispute arising from this Contract must be resolved in Michigan Court of Claims. Contractor consents to venue in Ingham County, and waives any objections, such as lack of personal jurisdiction or *forum non conveniens*. Contractor must appoint agents in Michigan to receive service of process.
45. **Non-Exclusivity.** Nothing contained in this Contract is intended nor will be construed as creating any requirements contract with Contractor. This Contract does not restrict the State or its agencies from acquiring similar, equal, or like Contract Activities from other sources.
46. **Force Majeure.** Neither party will be in breach of this Contract because of any failure arising from any disaster or acts of god that are beyond their control and without their fault or negligence. Each party will use commercially reasonable efforts to resume performance. Contractor will not be relieved of a breach or delay caused by its subcontractors. If immediate performance is necessary to ensure public health and safety, the State may immediately contract with a third party.

47. **Dispute Resolution.** The parties will endeavor to resolve any Contract dispute in accordance with this provision. The dispute will be referred to the parties' respective Contract Administrators or Program Managers. Such referral must include a description of the issues and all supporting documentation. The parties must submit the dispute to a senior executive if unable to resolve the dispute within 15 business days. The parties will continue performing while a dispute is being resolved, unless the dispute precludes performance. A dispute involving payment does not preclude performance.

Litigation to resolve the dispute will not be instituted until after the dispute has been elevated to the parties' senior executive and either concludes that resolution is unlikely, or fails to respond within 15 business days. The parties are not prohibited from instituting formal proceedings: (a) to avoid the expiration of statute of limitations period; (b) to preserve a superior position with respect to creditors; or (c) where a party makes a determination that a temporary restraining order or other injunctive relief is the only adequate remedy. This Section does not limit the State's right to terminate the Contract.

48. **Media Releases.** News releases (including promotional literature and commercial advertisements) pertaining to the Contract or project to which it relates must not be made without prior written State approval, and then only in accordance with the explicit written instructions of the State.
49. **Website Incorporation.** The State is not bound by any content on Contractor's website unless expressly incorporated directly into this Contract.
50. **Entire Agreement and Order of Precedence.** This Contract, which includes Exhibit A – Statement of Work, and expressly incorporated schedules and exhibits, is the entire agreement of the parties related to the Contract Activities. This Contract supersedes and replaces all previous understandings and agreements between the parties for the Contract Activities. If there is a conflict between documents, the order of precedence is: (a) first, this Contract, excluding its schedules, exhibits, and Exhibit A – Statement of Work; (b) second, Exhibit A – Statement of Work as of the Effective Date; and (c) third, exhibits and schedules expressly incorporated into this Contract as of the Effective Date. NO TERMS ON CONTRACTOR'S INVOICES, ORDERING DOCUMENTS, WEBSITE, BROWSE-WRAP, SHRINK-WRAP, CLICK-WRAP, CLICK-THROUGH OR OTHER NON-NEGOTIATED TERMS AND CONDITIONS PROVIDED WITH ANY OF THE CONTRACT ACTIVITIES WILL CONSTITUTE A PART OR AMENDMENT OF THIS CONTRACT OR IS BINDING ON THE STATE FOR ANY PURPOSE. ALL SUCH OTHER TERMS AND CONDITIONS HAVE NO FORCE AND EFFECT AND ARE DEEMED REJECTED BY THE STATE, EVEN IF ACCESS TO OR USE OF THE CONTRACT ACTIVITIES REQUIRES AFFIRMATIVE ACCEPTANCE OF SUCH TERMS AND CONDITIONS.
51. **Severability.** If any part of this Contract is held invalid or unenforceable, by any court of competent jurisdiction, that part will be deemed deleted from this Contract and the severed part will be replaced by agreed upon language that achieves the same or similar objectives. The remaining Contract will continue in full force and effect.
52. **Waiver.** Failure to enforce any provision of this Contract will not constitute a waiver.
53. **Survival.** The provisions of this Contract that impose continuing obligations, including warranties and representations, termination, transition, insurance coverage, indemnification, and confidentiality, will survive the expiration or termination of this Contract.
54. **Contract Modification.** This Contract may not be amended except by signed agreement between the parties (a "Contract Change Notice"). Notwithstanding the foregoing, no subsequent Statement of Work or Contract Change Notice executed after the Effective Date will be construed to amend this Contract unless it specifically states its intent to do so and cites the section or sections amended.

MPSCS Pager Acceptance Test Script

07/23/2015
Revision 1



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1: Test Information

General Test Information

Tester/s Name _____

Test Talkgroups Used _____

Test Start Date _____

Test End Date _____

Test Pager Information

Pager Manufacturer _____

Pager Model _____

Firmware Version _____

Pager Serial Number _____

MPSCS Radio Information

Pager Manufacturer _____

Pager Model/s _____

Pager Serial Number _____

Notes:

2: Informational Tests

The following items are for information only and do not have an MPSCS requirement.

Talkgroup Capacity	_____
Number of Display Characters	_____
700 MHz Capable	_____
Multi-Trunked System Capable	_____
Site Preference Setting Capable	_____
P25 Conventional (digital) TX and RX	_____
Encryption of Voice – AES Capable	_____
Encryption of Voice - DES-OFB Capable	_____
Encryption of Voice - Proprietary/Other Capable	_____

Notes:

3: Pager Specification Verification

The following tests are to verify and document technical specifications of the pager.

3.1 Specification Verification

The purpose of this section is to verify that the basic specifications of the voice pager are reasonable before other testing is performed. Each of the following specifications should be obtained from the manufacturer's documentation and recorded below. The tester should then confirm that these values are reasonable and comparable to other previously accepted radios.

Receiver Sensitivity

Notes:

4: Tests Required by MPSCS for Pager Acceptance

The following tests are required for pager acceptance on the MPSCS.

4.1 Talkgroup Voice Page on Multicast Site

Test Description

This is to demonstrate that the TEST PAGER will receive a talkgroup voice page on a multicast (non-simulcast) site.

Test Setup

TEST PAGER – Test Talkgroup

DISPATCH CONSOLE – Test Talkgroup

Test Procedure

- Step 1. Ensure that the multicast site used for this test is included in the critical sites assigned to the Test Talkgroup via Talkgroup Access Profile. This can be done using the Using the Radio System Provisioning Manager.
- Step 2. On the TEST PAGER, switch to the Test Talkgroup position. If the TEST PAGER provides site information, ensure the TEST PAGER is receiving from the multicast site assigned as a critical site to the Test Talkgroup.
- Step 3. On MPSCS DISPATCH CONSOLE initiate a wide area voice page on the Test Talkgroup.
- Step 4. Verify that the TEST PAGER receives and did not miss any part of the audio during the talkgroup voice page.

Pass _____ Fail _____

Initials _____ Date _____

Notes:

4.2 Talkgroup Voice Page on Simulcast

Test Description

This is to demonstrate that the TEST PAGER will receive a talkgroup voice page on a simulcast site.

Test Setup

TEST PAGER – Test Talkgroup

DISPATCH CONSOLE – Test Talkgroup

Test Procedure

- Step 1. Ensure that the simulcast site for this test is included in the critical sites assigned to the Test Talkgroup via Talkgroup Access Profile. This can be done using the Using the Radio System Provisioning Manager.
- Step 2. On the TEST PAGER, switch to the Test Talkgroup position. If the TEST PAGER provides site information, ensure the TEST PAGER is receiving from the simulcast site assigned as a critical site to the Test Talkgroup.
- Step 3. With the MPSCS DISPATCH CONSOLE initiate a wide area voice page on the Test Talkgroup.
- Step 4. Verify that the TEST PAGER receives and did not miss any of the audio during the talkgroup voice page.

Pass _____ Fail _____

Initials _____ Date _____

Notes:

4.3 Multi-Select Talkgroup Voice Page

Test Description

This test demonstrates the TEST PAGER will receive a talkgroup voice page when the page is a multi-select talkgroup voice page. This can be done on multicast or simulcast site.

Test Setup

TEST PAGER – Test Talkgroup 1

DISPATCH CONSOLE – Test Talkgroup 1 and Test Talkgroup 2

Test Procedure

- Step 1. Ensure the site use for the test is included in the critical sites assigned to Test Talkgroup 1 and Test Talkgroup 2 via Talkgroup Access Profile. Both talkgroup may have the same or different critical site. This can be done using the radio system Provisioning Manager.
- Step 2. On the TEST PAGER, switch to the Test Talkgroup 1 position. If the TEST PAGER provides site information, ensure the TEST PAGER is receiving from the site assigned as acritical site to the Test Talkgroup 1.
- Step 3. On MPSCS DISPATCH CONSOLE, multi-select Test Talkgroup 1 and Test Talkgroup 2 and initiate a wide area voice page.
- Step 4. Verify that the TEST PAGER receives and did not miss any of the audio during the talkgroup voice page.
- Step 5. Switch the TEST PAGER to the Test Talkgroup 2 position. If the TEST PAGER provides site information, ensure the TEST PAGER is receiving from the site assigned as acritical site to the Test Talkgroup 2.
- Step 6. Repeat Steps 3 and 4.

Pass _____ Fail _____

Initials _____ Date _____

Notes:

4.4 Announcement Group Voice Page

Test Description

This test demonstrates the TEST PAGER will receive a talkgroup voice page when it is an Announcement group voice page. This can be done on multicast or simulcast site.

Test Setup

TEST PAGER – Test Talkgroup

DISPATCH CONSOLE –Test Announcement Group (should include
Test Talkgroup)

Test Procedure

- Step 1. Ensure the site being used for the test is included in the critical sites assigned to Test Talkgroup via Talkgroup Access Profile. These can be using the radio system Provisioning Manager.
- Step 2. On the TEST PAGER, switch to Test Talkgroup position. If the TEST PAGER provides site information, ensure the TEST PAGER is receiving from the site assigned as acritical site to the Test Talkgroup.
- Step 3. On MPSCS DISPATCH CONSOLE, initiate a wide area voice page on Test Announcement Talkgroup.
- Step 4. Verify that the TEST PAGER receives and did not miss any of the audio during the talkgroup voice page.

Pass _____ Fail _____

Initials _____ Date _____

Notes:

4.5 Base Station Hang Time

Test Description

This test demonstrates that the TEST PAGER will receive a talkgroup voice page if the page is initiated during the base station hang time. This test can be performed on simulcast or multicast site. The base station hang time is approximately 0.9 seconds.

Test Setup

TEST PAGER – Test Talkgroup

MPSCS RADIO/DISPATCH CONSOLE – Test Talkgroup

Test Procedure

- Step 1. Ensure that the site for this test is included in the critical site assigned to the Test Talkgroup via Talkgroup Access Profile. This is done using the radio system Provision Manager.
- Step 2. On the TEST PAGER, switch to Test Talkgroup position. If the TEST PAGER provides site information, ensure the TEST PAGER is receiving from the site assigned as a critical site to the Test Talkgroup.
- Step 3. Initiate a wide area talkgroup voice page with MPSCS DISPATCH CONSOLE/RADIO on the Test Talkgroup.
- Step 4. Verify that the TEST PAGER receives and did not miss any of the audio during the talkgroup voice page.
- Step 5. Within 0.9seconds of the last talkgroup voice page, repeat steps 3 and 4

Pass _____ Fail _____

Initials _____ Date _____

Notes:

4.6 System Roaming

Test Description

This test demonstrates that the TEST PAGER will roam freely from site to site and switches sites in a reasonable manner. Due to the variety of techniques to handle system roaming, this test will be subjective and requires the tester to compare how the TEST PAGER performs compared to the MPSCS radio. The test will be performed while driving through coverage areas of different sites, including both multicast and simulcast. This test will require a second person that will drive the vehicle. It can also be beneficial to have a third stationary person in good coverage that monitors the testing and provides input. The tester is encouraged to take extensive notes during drive test. Specific things to be looking for while testing include, but are not limited to, the TEST PAGER cannot receive the voice page, misses audio, or experiences excessive site switching.

Test Setup

TEST PAGER – Test Talkgroup

MPSCS RADIO – Test Talkgroup

Test Procedure

- Step 1. Confirm that TEST PAGER is programmed with all the correct settings for optimal roaming on the MPSCS. It is recommended that the manufacturer is contacted to verify this.
- Step 2. Ensure that the sites for this test are included in the critical site assigned to the Test Talkgroup via Talkgroup Access Profile. This is done using the radio system Provision Manager.
- Step 3. Verify TEST PAGER and MPSCS RADIO has a comparable antenna type and positioning in the vehicle.
- Step 4. Verify TEST PAGER is able to receive talkgroup voice pages from MPSCS RADIO on the Test Talkgroup.
- Step 5. While driving between two multicast sites, performs talkgroup voice page with the MPSCS RADIO. Note when the TEST PAGER switches sites and if there is any difference in voice quality.
- Step 6. Repeat step 3 and 4 while driving between a multicast and simulcast site.
- Step 7. Review notes and determine if TEST PAGER's roaming behavior is acceptable.

Pass _____ Fail _____

Initials _____ Date _____

(Addition pages for notes are recommended for this test)

Notes:

4.7 Site Trunking Operation

Test Description

If a site goes into site trunking, the site loses its link to the radio system and therefore, will not repeat any wide area voice page. This implies that if a pager sticks to a site in site trunking, the pager will not receive any voice page except the voice page is emanating from that site. This test verifies the TEST PAGER will give a visual or audible notification when site goes into a Site Trunking condition.

Test Setup

TEST PAGER – Test Talkgroup

MPSCS RADIO– Test Talkgroup

Test Procedure

- Step 1. Using the Provision Manager, verify the lab site is included in the critical site list of the Test Talkgroup Access Profile
- Step 2. On the TEST PAGER, switch to the Test Talkgroup position. If the pager provides site information, ensure the TEST PAGER is receiving from the Lab site.
- Step 3. Place the Lab site into a Site Trunking condition. This can be done through the NCC or pulling out the site link cable from the site router, or a laptop with the CSS software.
- Step 4. Ensure both the MPSCS RADIO and TEST PAGER radios are affiliated to the Lab site and site locks each radio if capable.
- Step 5. Observe that TEST PAGER gives a visual and/or audible notification to signify site trunking.
- Step 6. Initiate a Talkgroup Call with MSPSCS RADIO on Test Talkgroup.
- Step 7. Verify that TEST PAGER receives the audio from the talkgroup call.

Site Trunking Notification: **Pass** ____ **Fail** ____

Site Trunking Talkgroup Call: **Pass** ____ **Fail** ____

Initials ____ **Date** ____

Notes:

4.8 Control Channel List

Test Description

The pager uses three lists of frequencies to find valid control channels on the MPSCS. The pager first uses adjacent site information provided by the system itself. If adjacent site information is not available, it then uses a preprogrammed list of frequencies. If no valid control channels are found on the preprogrammed list, the pager then performs a full spectrum scan which scans all frequencies in the band. The triggering mechanisms for these lists vary from pager to pager. This test verifies the TEST PAGER is able to find a valid control channel via the preprogrammed list of frequencies.

Test Setup

TEST PAGER – Test Talkgroup

MPSCS RADIO/DISPATCH CONSOLE – Test Talkgroup

Test Procedure

- Step 1. On the TEST PAGER programming, disable the full spectrum scan option. For the control channel list programming, enter valid control channel frequencies of the critical site assigned to the Test Talkgroup.
- Step 2. Program the TEST PAGER.
- Step 3. Turn TEST PAGER on for normal operation and switch to the Test talkgroup position.
- Step 4. If the TEST PAGER provides site information, verify the TEST PAGER is receiving from the desired site.
- Step 5. Using MPSCS RADIO/DISPATCH CONSOLE, initiate a talkgroup voice page on Test Talkgroup
- Step 6. Verify TEST PAGER receives and did not miss any of the audio from the talkgroup voice page.

Pass _____ Fail _____

Initials _____ Date _____

Notes:

4.9 Full Spectrum Scan

Test Description

The pager uses three lists of frequencies to find valid control channels on the MPSCS. The pager first uses adjacent site information provided by the system itself. If adjacent site information is not available, it then uses a preprogrammed list of frequencies. If no valid control channels are found on the preprogrammed list, the pager then performs a full spectrum scan which scans all frequencies in the band. The triggering mechanisms for these lists vary from pager to pager. This test verifies the TEST PAGER is able to find a valid control channel via the full spectrum scan.

Test Setup

TEST PAGER – Test Talkgroup

MPSCS RADIO/DISPATCH CONSOLE – Test Talkgroup

Test Procedure

- Step 1. Ensure the full spectrum scan option is enabled in the TEST PAGER programming. Remove all control channel frequencies from the preprogrammed list. If the programming software requires a frequency in the control channel frequency list, enter an invalid frequency.
- Step 2. Program the TEST PAGER.
- Step 3. Turn on TEST PAGER for normal operation and switch to the Test talkgroup position.
- Step 4. Verify the TEST PAGER finds a valid critical site within a reasonable time.
- Step 5. Using MPSCS DISPATCH CONSOLE/RADIO, initiate a talkgroup voice page on the Test Talkgroup
- Step 6. Verify the TEST PAGER receives and did not miss any of the audio from the talkgroup voice page.

Pass _____ Fail _____

Initials _____ Date _____

Notes:

4.10 Out of Range Indication

Test Description

When a pager is outside of its defined coverage footprint, the pager should issue a visual and/or audible notification to the user to indicate “Out of Range”. This test verifies that the TEST PAGER is capable of issuing this visual and/or audible notification to the user.

Test Setup

TEST PAGER – Test Talkgroup

Test Procedure

- Step 1. Ensure TEST PAGER has Out of Range Indication options enable in its programming.
- Step 2. On the TEST PAGER, switch to Test Talkgroup position. If the TEST PAGER provides site information, ensure the TEST PAGER is receiving from the site assigned as acritical site to the Test Talkgroup.
- Step 3. Unscrew the antenna from TEST PAGER. This causes the TEST PAGER to lose its connection to the system.
- Step 4. Verify TEST PAGER gives an indication that it has lost its connection to the system.

Pass _____ Fail _____

Initials _____ Date _____

Notes:

5: MPSCS Optional/Informational Radio Acceptance Tests

The following tests are not required for pager acceptance on the MPSCS but need to be performed for documentation and informational reasons.

5.1 Priority Scan/Monitor

Test Description

This test verifies that a Pager can scan a pre-programmed list of talkgroup (in the pager) based on their priority in the list. The talkgroups are assigned priority on the list. If the pager is in a scanning mode and listening on a talkgroup and there is a transmission on talkgroup with higher priority than the talkgroup the pager is listening, the pager scans to the talkgroup with higher priority and listens on that talkgroup. To accomplish this, a voice page will be initiated from a portable at a remote site on a talkgroup monitored by a portable at the same site as the pager. The pager will scan from its selected talkgroup to higher priority talkgroup. The test will be repeated with an additional radio transmitting on the higher Priority Talkgroup while the pager is scanning. This third radio will be on a remote site.

Test Setup

TEST PAGER - SCANNING

MPSCS RADIO 1 – Test Talkgroup 1

MPSCS RADIO 2 – Test Talkgroup 2

MPSCS RADIO 3 – Test Talkgroup 2

Test Procedure

- Step 1. Ensure that TEST PAGER is set to the scan mode of operation and is programed to scan Test Talkgroup 1(highest priority) and Test Talkgroup 2 (2nd highest priority).
- Step 2. Ensure that the sites for this test are included in the critical site assigned to each of the talkgroups used for this test
- Step 3. Switch MPSCS RADIO 1 to Test Talkgroup 1, MPSCS RADIO2 to Test Talkgroup 2 and MPSCS RADIO 3 to Test Talkgroup 2.
- Step 4. Initiate a talkgroup voice page on Test Talkgroup 1 with MPSCS RADIO 1
- Step 5. Verify that TEST PAGER scans to the Test Talkgroup 1 and receives the talkgroup 1 voice page. Verify that MPSCS RADIO 2 did not receive the audio.
- Step 6. Keep the call in progress.
- Step 7. Initiate a Talkgroup voice page on Test Talkgroup 2 with MPSCS RADIO 3.
- Step 8. Verify the TEST PAGER did not receive the voice page on Talkgroup 2 since it is still listening Test Talkgroup 1. Verify that MPSCS RADIO 2 receives the audio.
- Step 9. Keep the MPSCS RADIO 3 call in progress and end the call on MPSCS RADIO 1.
- Step 10. Verify that TEST PAGER scans to the Test Talkgroup 2 and receives the talkgroup 2 voice page

MPSCS Informational Test

Step 11. Initiate a talkgroup voice page on Test Talkgroup 1 with MPSCS RADIO 1.

Step 12. Verify that TEST PAGER is no longer listening on Test Talkgroup 2 and scans to the Test Talkgroup 1 and receives the talkgroup 1 voice page.

Pass _____ Fail _____

Initials _____ Date _____

Notes:

5.2 Conventional Analog Call

Test Description

This test demonstrates that the TEST PAGER will receive a conventional analog call directly from a radio. This test may also be done through a repeater at the tester's discretion.

Test Setup

TEST PAGER – 8CALL90 (851.0125/806.0125)

MPSCS RADIO – 8CALL90 (851.0125/806.0125)

Test Procedure

- Step 1. Initiate a conventional call with MPSCS RADIO on 8CALL90D (direct mode) transmitting on 851.0125. If done through a repeater, the radio should transmit on 806.0125.
- Step 2. Verify that the MPSCS TEST PAGER is able to receive the call from the MPSCS RADIO.

Pass _____ Fail _____

Initials _____ Date _____

Notes:

5.3 Conventional P25 Digital Call

Test Description

This test demonstrates the TEST PAGER will receive a conventional P25 digital call directly from a radio.

Test Setup

TEST PAGER – 7CALL70D (773.25625)

MPSCS RADIO – 7CALL70D (773.25625)

Test Procedure

Step 1. Program the TEST PAGER with the information using the TEST PAGER programming Software:
Mode P25 FDMA Common Air Interface
NAC \$293
Talkgroup \$00001
No Encryption

Step 1. Initiate a conventional call with MPSCS RADIO on 7CALL70D (direct mode) transmitting on 773.25625.

Step 2. Observe that the TEST PAGER is able to receive the call from the MPSCS RADIO.

Pass _____ Fail _____

Initials _____ Date _____

Notes:

5.4 Emergency Call

Test Description

An Emergency Call is initiated when a user places their radio in emergency mode and transmits on a system talkgroup. This demonstrates that the TEST PAGER will receive an emergency call when a user places their radio in an emergency mode and transmits on the same talkgroup as the TEST PAGER.

Test Setup

TEST PAGER – Test Talkgroup

MPSCS RADIO – Test Talkgroup

Test Procedure

- Step 1. Ensure that the site for this test is included in the critical site assigned to the Test Talkgroup.
- Step 2. If the TEST PAGER provides site information, ensure the TEST PAGER is receiving from the site assigned as a critical site to the Test Talkgroup
- Step 3. With the MPSCS RADIO send an Emergency Call by depressing the emergency switch and then the PTT switch.
- Step 4. Verify that the TEST PAGER display denotes an emergency and the unit ID of MPSCS RADIO and also receives the audio from the Emergency Call.
- Step 5. Dekey MPSCS RADIO and end the Emergency Call by holding down the Emergency button until an alert tone sounds.
- Step 6. Verify TEST PAGER returns to normal operation and can receive voice page from MPSCS RADIO.

Pass _____ Fail _____

Initials _____ Date _____

Notes:

5.5 Encrypted Talkgroup Voice Page

Test Description

This test demonstrates that the TEST PAGER will receive a voice page on an encrypted talkgroup. TEST PAGER must be encrypted with the same encryption and key on the talkgroup for TEST PAGER to be able to decrypt the encryption.

Test Setup

TEST PAGER – Encrypted Talkgroup 1 without Encryption

MPSCS RADIO – Encrypted Talkgroup 1 with Encryption Key

Test Procedure

- Step 1. Ensure that the site for this test is included in the critical site assigned to the Encrypted Talkgroup 1.
- Step 2. If the TEST PAGER provides site information, ensure the TEST PAGER is receiving from the site assigned as a critical site to the Encrypted Talkgroup 1.
- Step 3. Disable the encryption on MPSCS RADIO and verify the TEST PAGER can receive a talkgroup page from the MPSCS RADIO.
- Step 4. Enable the encryption on MPSCS RADIO and initiate an encrypted talkgroup page.
- Step 5. Verify the TEST PAGER cannot receive a talkgroup page from the MPSCS RADIO or the talkgroup page received by TEST PAGER is gabbled.
- Step 6. On TEST PAGER load the encryption key for the Encrypted Talkgroup 1. Follow the manufacture procedure for loading encryption on talkgroup.
- Step 7. With the MPSCS RADIO, initiate an encrypted talkgroup voice page.
- Step 8. Verify the TEST PAGER receives and did not miss any of the encrypted talkgroup voice page.

Pass _____ Fail _____

Initials _____ Date _____

Notes:

6: MPSCS New Radio Field Testing

The following section describes the field testing process.

6.1 Field Test Description

The purpose of the field test is to use the radio in a day to day environment to reveal potential issues that are not seen in brief defined tests. The field tester will be required to use good judgment and knowledge to determine how the radio performs from an end user perspective. The field tester will document these findings in the following form.

The field tester is required to use the radio in a variety of radio environments for a minimum of five working days that require regular use of the radio. Environments may include but are not limited to multicast and simulcast, intra and inter-zone, radio to dispatch and vice versa, in-building, interference intense areas, etc. The field tester is encouraged to take extensive notes detailing the radios behavior during this time. This will help track down any issues the radio may have and assist in filling out the required documentation.

Before starting the testing, the field tester is required to read through the following form so as to understand the desired information purpose of the test. Once the field testing is complete, the form should be completed and submitted to the project lead

6.2 Field Test 1

Unit Tested: [*Model Radio*]

Field Tester Name: _____

Test Date Range: _____

Test Radio Model & Manufacturer: _____

Test Radio ID: _____

Pager physical design and General User Operation:

Comment on the physical design of the pager in terms of its appearance, weight, quality, features and how ease to use the User Interface. You can compare it with other MPSCS radios.

Audio Quality:

Describe the quality of the receive audio especially in a moderate noise environment and the clarity of the receive audio in general. You can compare it with other MPSCS radios.

Trunking Operation:

Describe the pager's behavior in a trunking environment including but not limited to its performance in a multicast and simulcast site environment, system roaming including inter and intra zone roaming, channel hunt, talkgroup pages, etc.

Empty response area for describing pager behavior in a trunking environment.

Battery Usage:

Describe the battery performance in terms of, but not limited to, its physical size, charging, runtime and timing of the low battery indicator and any other information about the battery usage.

Tester General likes/dislikes of the Pager:

Comment on any of general likes and/or dislikes about the pager.

Overall Conclusion:

Comment on any issues that need to be resolved before the pager is approved for use on the MPSCS System.

[Empty box for overall conclusion comments]

7: Additional Notes and Tests

This section is for documenting any additional notes and/or tests for the pager.

Additional Note and Test

Name:

Date:

Description:

Notes/Test Results:

Name:

Date:

Description:

Notes/Test Results:

Name:

Date:

Description:

Notes/Test Results:

8: Test Summary

Tests Required by MPSCS for Pager Acceptance

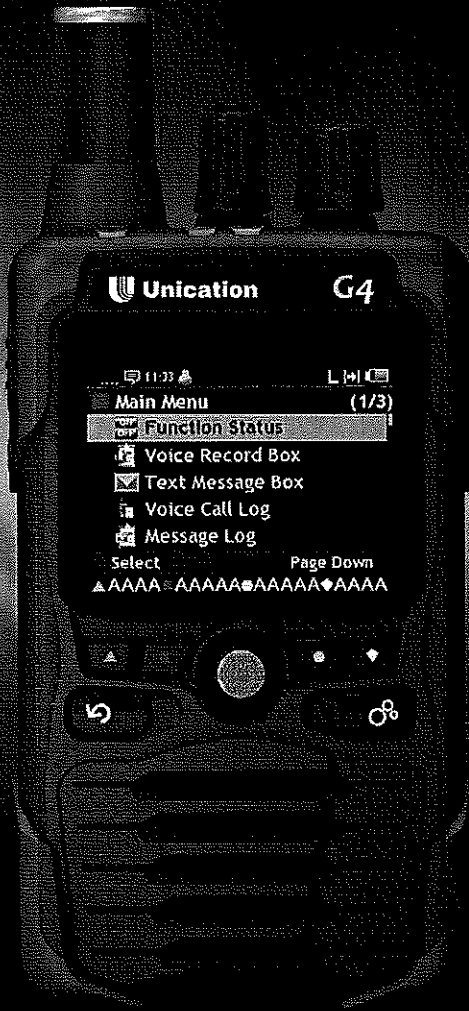
		Pass	Fail
4.1	Talkgroup Voice Page on Multicast Site		
4.2	Talkgroup Voice Page on Simulcast		
4.3	Multi-Select Talkgroup Voice Page		
4.4	Announcement Group Voice Page		
4.5	Base Station Hang Time		
4.6	System Roaming		
4.7	Site Trunking Operation		
4.8	Control Channel List		
4.9	Full Spectrum Scan		
4.10	Out of Range Indication		

MPSCS Optional/Informational Pager Acceptance Tests

		Pass	Fail
5.1	Priority Scan/Monitor		
5.2	Conventional Analog Call		
5.3	Conventional P25 Call		
5.4	Emergency Alert/Call		
5.5	Encrypted Talkgroup Voice Page		

Product Name	Part Number	Description	State Price	List Price	Other Info
G1 Single Band Voice Pager 700-800MHz	GS44RE-SXXEN1500UH1001	G1 Single Band Voice Pager 700-800MHz	\$895.00	\$895.00	G1 Voice Pager includes 2800mAh Battery, Charging/Programming Cable w/ Power Adapter and 2 Year (24 month) Manufacturer's Warranty
G5 Dual Band Voice Pager VHF 136-174MHz and 700-800MHz	GS984BF-SXXEN1400UH1001	G5 Dual Band Voice Pager VHF 136-174MHz and 700-800MHz	\$895.50	\$895.50	G5 Voice Pager includes 2800mAh Battery, Charging/Programming Cable w/ Power Adapter and 2 Year (24 month) Manufacturer's Warranty
G5 Dual Band Voice Pager UHF 400-470MHz and 700-800MHz	GS984BF-SXXEN1400UH1001	G5 Dual Band Voice Pager UHF 400-470MHz and 700-800MHz	\$895.50	\$895.50	G5 Voice Pager includes 2800mAh Battery, Charging/Programming Cable w/ Power Adapter and 2 Year (24 month) Manufacturer's Warranty
G4/G5 Charging/Programming Cable	TS95V1317ZR-R	G4/G5 Charging/Programming Cable	\$22.46	\$22.46	For Charging Cable
G4/G5 Power Adapter	TS93A10A00S-R	G4/G5 Power Adapter (For Charging Cable)	\$26.96	\$26.96	Includes Antenna
G4/G5 Charger Amplifier	GS993CA-SXXENX	G4/G5 Charger Amplifier (Includes Antenna)	\$194.00	\$194.00	
G4/G5 Bluetooth Headset	TE163DQ3P-R	G4/G5 Bluetooth Headset	\$28.98	\$28.98	
G4/G5 Leather Holster	LC-G4	G4/G5 Leather Holster	\$44.98	\$44.98	
G4/G5 Battery Cover (Includes screws)	FW19400214A-R	G4/G5 Battery Cover (Includes screws)	\$8.98	\$8.98	Includes Screws
G4/G5 Replacement Belt Clip	PQZ5X4X00	G4/G5 Replacement Belt Clip	\$31.46	\$31.46	
G4/G5 2800mAh Lithium Ion Battery	GS00UN14E01B	G4/G5 2800mAh Lithium Ion Battery	\$26.98	\$26.98	
G4/G5 3 Year Extended Warranty	EXTWARRANTY-54	G4/G5 3 Year Extended Warranty	\$116.00	\$116.00	
G1 Voice Pager, Black, VHF 137-148MHz	AG185AX1-XE6BU000	G1 Voice Pager, Black, VHF 137-148MHz	\$445.50	\$445.50	G1 Voice Pager includes 2 Rechargeable AAA NiMH Batteries, Charger w/ Power Adapter and 2 Year Manufacturer's Warranty
G1 Voice Pager, Black, VHF 148-164MHz	AG185AX1-XE6BU000	G1 Voice Pager, Black, VHF 148-164MHz	\$445.50	\$445.50	G1 Voice Pager includes 2 Rechargeable AAA NiMH Batteries, Charger w/ Power Adapter and 2 Year Manufacturer's Warranty
G1 Voice Pager, Black, UHF 450-470MHz	AG185DX1-XE6BU000	G1 Voice Pager, Black, UHF 450-470MHz	\$445.50	\$445.50	G1 Voice Pager includes 2 Rechargeable AAA NiMH Batteries, Charger w/ Power Adapter and 2 Year Manufacturer's Warranty
G1 Voice Pager, Black, UHF 465-485MHz	AG185DX1-XE6BU000	G1 Voice Pager, Black, UHF 465-485MHz	\$445.50	\$445.50	G1 Voice Pager includes 2 Rechargeable AAA NiMH Batteries, Charger w/ Power Adapter and 2 Year Manufacturer's Warranty
G1 Voice Pager, Black, Lowband 33-39MHz	AG185AX1-XE6BU000	G1 Voice Pager, Black, Lowband 33-39MHz	\$445.50	\$445.50	G1 Voice Pager includes 2 Rechargeable AAA NiMH Batteries, Charger w/ Power Adapter and 2 Year Manufacturer's Warranty
G1 Voice Pager, Black, Lowband 48-49MHz	AG185AX1-XE6BU000	G1 Voice Pager, Black, Lowband 48-49MHz	\$445.50	\$445.50	G1 Voice Pager includes 2 Rechargeable AAA NiMH Batteries, Charger w/ Power Adapter and 2 Year Manufacturer's Warranty
G1 Voice Pager, Yellow, VHF 137-148MHz	AG185AX1-XE6BU000	G1 Voice Pager, Yellow, VHF 137-148MHz	\$445.50	\$445.50	G1 Voice Pager includes 2 Rechargeable AAA NiMH Batteries, Charger w/ Power Adapter and 2 Year Manufacturer's Warranty
G1 Voice Pager, Yellow, UHF 450-470MHz	AG185DX1-XE6BU000	G1 Voice Pager, Yellow, UHF 450-470MHz	\$445.50	\$445.50	G1 Voice Pager includes 2 Rechargeable AAA NiMH Batteries, Charger w/ Power Adapter and 2 Year Manufacturer's Warranty
G1 Voice Pager, Yellow, UHF 465-485MHz	AG185DX1-XE6BU000	G1 Voice Pager, Yellow, UHF 465-485MHz	\$445.50	\$445.50	G1 Voice Pager includes 2 Rechargeable AAA NiMH Batteries, Charger w/ Power Adapter and 2 Year Manufacturer's Warranty
G1 Voice Pager, Yellow, Lowband 33-39MHz	AG185AX1-XE6BU000	G1 Voice Pager, Yellow, Lowband 33-39MHz	\$445.50	\$445.50	G1 Voice Pager includes 2 Rechargeable AAA NiMH Batteries, Charger w/ Power Adapter and 2 Year Manufacturer's Warranty
G1 Voice Pager, Yellow, Lowband 48-49MHz	AG185AX1-XE6BU000	G1 Voice Pager, Yellow, Lowband 48-49MHz	\$445.50	\$445.50	G1 Voice Pager includes 2 Rechargeable AAA NiMH Batteries, Charger w/ Power Adapter and 2 Year Manufacturer's Warranty
G1 Voice Pager, Red, VHF 148-164MHz	AG185AX1-XE6BU000	G1 Voice Pager, Red, VHF 148-164MHz	\$445.50	\$445.50	G1 Voice Pager includes 2 Rechargeable AAA NiMH Batteries, Charger w/ Power Adapter and 2 Year Manufacturer's Warranty
G1 Voice Pager, Red, UHF 450-470MHz	AG185DX1-XE6BU000	G1 Voice Pager, Red, UHF 450-470MHz	\$445.50	\$445.50	G1 Voice Pager includes 2 Rechargeable AAA NiMH Batteries, Charger w/ Power Adapter and 2 Year Manufacturer's Warranty
G1 Voice Pager, Red, UHF 465-485MHz	AG185DX1-XE6BU000	G1 Voice Pager, Red, UHF 465-485MHz	\$445.50	\$445.50	G1 Voice Pager includes 2 Rechargeable AAA NiMH Batteries, Charger w/ Power Adapter and 2 Year Manufacturer's Warranty
G1 Voice Pager, Red, UHF 495-512MHz	AG185DX1-XE6BU000	G1 Voice Pager, Red, UHF 495-512MHz	\$445.50	\$445.50	G1 Voice Pager includes 2 Rechargeable AAA NiMH Batteries, Charger w/ Power Adapter and 2 Year Manufacturer's Warranty
G1 Voice Pager, Red, Lowband 33-39MHz	AG185AX1-XE6BU000	G1 Voice Pager, Red, Lowband 33-39MHz	\$445.50	\$445.50	G1 Voice Pager includes 2 Rechargeable AAA NiMH Batteries, Charger w/ Power Adapter and 2 Year Manufacturer's Warranty
G1 Voice Pager, Red, Lowband 48-49MHz	AG185AX1-XE6BU000	G1 Voice Pager, Red, Lowband 48-49MHz	\$445.50	\$445.50	G1 Voice Pager includes 2 Rechargeable AAA NiMH Batteries, Charger w/ Power Adapter and 2 Year Manufacturer's Warranty
G1 Voice Pager, Pink, VHF 137-148MHz	AG185AX1-XE6BU000	G1 Voice Pager, Pink, VHF 137-148MHz	\$445.50	\$445.50	G1 Voice Pager includes 2 Rechargeable AAA NiMH Batteries, Charger w/ Power Adapter and 2 Year Manufacturer's Warranty
G1 Voice Pager, Pink, VHF 148-164MHz	AG185AX1-XE6BU000	G1 Voice Pager, Pink, VHF 148-164MHz	\$445.50	\$445.50	G1 Voice Pager includes 2 Rechargeable AAA NiMH Batteries, Charger w/ Power Adapter and 2 Year Manufacturer's Warranty
G1 Voice Pager, Pink, UHF 450-470MHz	AG185DX1-XE6BU000	G1 Voice Pager, Pink, UHF 450-470MHz	\$445.50	\$445.50	G1 Voice Pager includes 2 Rechargeable AAA NiMH Batteries, Charger w/ Power Adapter and 2 Year Manufacturer's Warranty
G1 Voice Pager, Pink, UHF 465-485MHz	AG185DX1-XE6BU000	G1 Voice Pager, Pink, UHF 465-485MHz	\$445.50	\$445.50	G1 Voice Pager includes 2 Rechargeable AAA NiMH Batteries, Charger w/ Power Adapter and 2 Year Manufacturer's Warranty
G1 Voice Pager, Pink, Lowband 33-39MHz	AG185AX1-XE6BU000	G1 Voice Pager, Pink, Lowband 33-39MHz	\$445.50	\$445.50	G1 Voice Pager includes 2 Rechargeable AAA NiMH Batteries, Charger w/ Power Adapter and 2 Year Manufacturer's Warranty
G1 Voice Pager, Pink, Lowband 48-49MHz	AG185AX1-XE6BU000	G1 Voice Pager, Pink, Lowband 48-49MHz	\$445.50	\$445.50	G1 Voice Pager includes 2 Rechargeable AAA NiMH Batteries, Charger w/ Power Adapter and 2 Year Manufacturer's Warranty
G1 Standard Charger	CS1300X1	G1 Standard Charger	\$73.00	\$73.00	
G1 Charger Amplifier	CS1300X1	G1 Charger Amplifier	\$116.00	\$116.00	
G1 Programmer	CS1300X1	G1 Programmer	\$59.00	\$59.00	
G1 3 Year Extended Warranty	EXTWARRANTY-61	G1 3 Year Extended Warranty	\$79.00	\$79.00	
G1 Bluetooth Headset	TE163DQ3P-R	G1 Bluetooth Headset	\$28.98	\$28.98	
G1 Nylon Case w/ Loop	NC-G1L	G1 Nylon Case w/ Loop	\$17.96	\$17.96	
G1 Nylon Case w/ Clip	NC-G1C	G1 Nylon Case w/ Clip	\$17.96	\$17.96	
G1 Battery Cover & Screw- Black	HUBBAGBAT02L	G1 Battery Cover & Screw- Black	\$6.26	\$6.26	
G1 Battery Cover & Screw- Yellow	HUBBAGBAT01L	G1 Battery Cover & Screw- Yellow	\$6.26	\$6.26	
G1 Battery Cover & Screw- Red	HUBBAGBAT03L	G1 Battery Cover & Screw- Red	\$6.26	\$6.26	
G1 Battery Cover & Screw- Pink	HUBBAGBAT04L	G1 Battery Cover & Screw- Pink	\$6.26	\$6.26	
G1 Charger Amplifier Antenna (Low Band)	40X06G1AX001	G1 Charger Amplifier Antenna (Low Band)	\$22.46	\$22.46	
G1 Charger Amplifier Antenna (VHF/UHF)	7ZRUGS001-R	G1 Charger Amplifier Antenna (VHF/UHF)	\$33.46	\$33.46	
G1 Belt Clip (Black)	HUBBAGCLIP00	G1 Belt Clip (Black)	\$7.16	\$7.16	
G1 AAA 1000mAh Rechargeable Battery (Package of 4)	TS65LPH144L-R	G1 AAA 1000mAh Rechargeable Battery (4)	\$17.96	\$17.96	

G4 Industry First P25 Voice Pager



Available in 700-800 Mhz
Supports Multiple P25 Systems
Text Messaging Capability
IP67 RATING Waterproof & Dustproof
High Impact Resistant Color Screen
Custom Wav File Alerts

P25 Trunking
P25 Conventional
Conventional
Out of Range Alert
Location of Incident GPS
32 Minutes Voice Storage
32 Minutes Voice Memo
Image Transfer
Bluetooth
Ruggedized Housing
2 Year Standard Warranty/ 3 Year Addition Available

Unication USA is proud to introduce our newest innovation, the ground-breaking G4 P25 Voice Pager. This cutting edge device is the first voice pager capable of supporting multiple P25 systems.

The G4 is built to be as tough as the heroes it serves. Featuring an IP67 rating, the G4 is waterproof, dustproof and fully submersible at up to 3 feet/30 minutes. The rugged housing and high impact resistant color screen is designed to endure the punishing environments of first responders. The G4 is a software-defined pager that allows you to access software updates to add the latest features and capabilities to your device.

www.UnicationUSA.com
www.Facebook.com/UnicationUSAInc




G4 Features

Digital Support Protocol:
 P25 Conventional, P25 Trunking, Conventional
 Selective Call & Monitor
Lithium Ion Battery
32 Minutes Voice Storage
32 Minutes Voice Memo
High Impact Resistant Color Screen
64 Channels
Rejects Cellphone Interference
Message Lock
Duty and Auto On/Off feature
Bluetooth (compatible with most phones and headsets)
Memory Storage: Text, Voice, Timestamp

Additional Information

Best in Class Message Reception
Submersible (3 ft./30 minutes)
Software-defined Technology
Carry Style: Belt Clip
Temperature Range:
 -30 C ~ +60 C
Special Rubberized Housing
Weight without battery: <220g
Size (mm): 102 x 61 x 31.5
8 Position Selector Knob
Characters and Length:
9 Lines x 22 Characters
Display Length: 30.6x40.8/mm

Technical Specifications

RF Perf/Band	700/800 MHz	
Sensitivity	>-116dBm	
Sensitivity/12dB SINAD (uV/M)	>6 uV/M	
Frequency Stability (ppm)	+/-1	
Adjacent Channel Selectivity	>60dB	
Spurious	>70dB	
Image Rejection	>70dB	
Audio Output Linear	>300mw	
Audio Distortion	<3%	
Speech Output (From 12 inches)	94dB +/- 2 dB SPL	
Alert Output (From 12 inches)	96 +/- dB SPL	
Dust/Water Proof Level	IP67	
UL	Class I, Div. II	
FCC	FCC Part 15	
MIL-STD	810E, Procedures 1 for Driving Rain	
Channel Spacing	10/12.5/20/25 kHz	
Frequency Band	700/800 MHz: 764 MHz-870 MHz	



Reliable. Rugged. Built to Last.

I appreciate your time today. Please find the requested information for our authorized dealers in Michigan included below. Let me know if you have any questions at all. Thank you!

TELE-Rad, Inc.

511 E 8th St
Holland, MI 49423
Micah Kooyers
616-396-3541 Ext. 102
micah_kooyers@tele-rad.com

Anderson Radio, Inc.

1009 W Bluff St
Marquette, MI 49855
Dale Schroeder
989-684-9969 Office
989-239-0210 Mobile
d.schroeder@andersonradio.com

Digicom Global, Inc.

3911 Rochester Rd.
Troy, MI 48083
Tim Hoerner
248-866-6000
thoerner@digicomglobal911.com

Grand Traverse Mobile Communications, Inc.

716 Boon Street
Traverse City, MI 49686
Harold Carlton
231-947-9851
sales@fireradios.com

Anderson Communications, Inc.

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State Systems Radio Inc.
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Best Regards,

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