## CONSOLIDATED AND RESTATED MASTER CUSTOMER AGREEMENT

1. Parties. This Consolidated and Restated Master Customer Agreement ("Contract") is made and entered into by and between (a) TeleCommunication Systems, Inc., as successor-in-interest to microDATA GIS, Inc. ("microDATA"), on the one hand (hereinafter, "Contractor" or "TCS"), and (b) the Metropolitan Emergency Communications Consortium (hereinafter, "MECC"), for itself and on behalf of each of (i) Plain Township, Ohio ("Plain Township"), (ii) the City of Whitehall, Ohio ("Whitehall"), (iii) the City of Gahanna Division of Police ("Gahanna"), and (iv) such other municipalities (or other forms of jurisdictions) in MECC's region as may be added to this Contract in the future ("Additional Jurisdictions"), on the other hand. Each of MECC, Plain Township, Whitehall, Gahanna and any Additional Jurisdictions are sometimes referred to herein as a "Customer" and collectively, as the "Customers".

## 2. Background.

- (a) MECC generally manages 911 call-taking and dispatch operations for the greater Columbus, Ohio area, including for Plain Township, Whitehall, Gahanna and the Additional Jurisdictions (if any).
- Plain Township (on behalf of MECC) and microDATA are parties to an End User Agreement for Enhanced 911 System dated December 11, 2008 (as may have been previously amended, restated, supplemented and/or otherwise modified, the "MECC Agreement") pursuant to which microDATA engineered and delivered a dual host site xSwitch<sup>TM</sup> and xT911<sup>TM</sup> solution for MECC (the "System"). This solution included an Emergency Call Data Center ("ECDC") located at the MECC Public Safety Answering Point ("PSAP") and a second ECDC located at the Gahanna Police Department PSAP. This solution also included a total of five (5) seats of the xT911<sup>TM</sup> call taking application software (four (4) call taker seats and one (1) training/administrative seat) and twelve (12) Power over Ethernet (POE) SIP phones.
- Whitehall and microDATA are parties to an End User Agreement for Enhanced 911 System dated June 2, 2009 (as may have been previously amended, restated, supplemented and/or otherwise modified, the "Whitehall Agreement") pursuant to which microDATA engineered and delivered a single-site xT911<sup>TM</sup>, xTPhone<sup>TM</sup> solution for the Whitehall PSAP that connected to and was made a part of the System. This add-on to the System included a total of two (2) additional seats of xT911<sup>TM</sup>, with two (2) xTPhone<sup>TM</sup> connections.
- (d) Gahanna and microDATA are parties to an End User Agreement for Enhanced 911 System dated July 14, 2009 (as may have been previously amended, restated, supplemented and/or otherwise modified, the "Gahanna Agreement") pursuant to which microDATA engineered and delivered a single-site xT911<sup>TM</sup>, xTPhone<sup>TM</sup> solution for Gahanna located at the Gahanna Police Department PSAP that also connected to and was made a part of the System. This add-on to the System included a total of three (3) seats of xT911<sup>TM</sup>, with three (3) xTPhone<sup>TM</sup> connections.
- (e) On July 6, 2012, TCS acquired microDATA through the purchase of all of the issued and outstanding stock of microDATA. Since that time, microDATA has continued to exist and operate as a wholly-owned subsidiary of TCS. TCS is in the process of consolidating certain microDATA operations at the TCS parent company level and the parties wish to document that TCS is being substituted for and replacing microDATA for all purposes and all matters arising, occurring or transpiring on or after the effective date of this Contract.
- (f) In order to facilitate management of the System, including annual technical support and maintenance as well as any possible expansion of the System for inclusion of and use by Additional Jurisdictions, the parties wish to enter into this Contract as a consolidation and restatement of the MECC Agreement, Whitehall Agreement and Gahanna Agreement and so that such management of the System, including annual technical support and maintenance as well as any possible expansion of the System for inclusion of and use by Additional Jurisdictions, is administered by and through MECC (for itself and on behalf of the other Customers).
- 3. Subject Matter. This Contract consolidates, restates, supersedes and replaces the MECC Agreement,

Whitehall Agreement and Gahanna Agreement. A detailed description of the products and services provided by Contractor pursuant to this Contract is set forth in Attachment A hereto.

4.	Attachments. The following	attachments and	their associated exhibits are hereby incorporated into this
	Contract (collectively, the "Cor		
	Attachment A Attachment B Attachment C Attachment D		
		e first two pages	anguage of the Contract Documents, the following order of of this Contract; (2) Attachment C; (3) Attachment A; (4)
	NDERSIGNED PARTIES AGR DATE SPECIFIED BELOW.	EE TO BE BOU	ND BY THE TERMS OF THIS CONTRACT AS OF THE
Metrop Consor	oolitan Emergency Communica tium	tions	TeleCommunication Systems, Inc.
Ву:			By:
Name:			Name:
Title: _			Title:
Date: _			Date:
<u>ACKN</u>	OWLEDGED AND ACCEPTE	E <b>D:</b>	
Plain T	ownship, Ohio		microDATA GIS, Inc.
By:		_	Ву:
Name:			Name:
Title:		<del></del>	Title:
Date:			Date:
City of	Whitehall, Ohio		
By:		_	
Name:			
Title:			
Date:			
City of	Gahanna Division of Police		
By:		_	
Name:			
Title:			

Date:

# ATTACHMENT A SPECIFICATION OF WORK

## 1. General Overview.

As described herein, Contractor has provided certain products and shall continue to provide certain services for supporting the System for MECC (for itself and on behalf of the other Customers).

## 2. Specific Deliverables.

- (a) Hardware and Software Components.
  - (i) **Technical Description.** Contractor has provided hardware and software components for the System in all material respects as described in the general narrative description attached hereto as Exhibit 2(a)(i) to this Attachment A (the "Technical Description").
  - (ii) **Illustrative Diagrams.** Illustrative diagrams of the System are attached hereto as <u>Exhibit</u> <u>2(a)(ii)</u> to this Attachment A.
- (b) **Annual Support Services.** 
  - (i) General. Certain technical support for the System is made available by Contractor for purchase by MECC (for itself and on behalf of the other Customers) in all material respects as described in the TCS guide(s) attached hereto as <a href="Exhibit 2(b)">Exhibit 2(b)</a> to this Attachment A. Technical support for the System is only available for the latest version of TCS Software made available by Contractor to the Customers and the Customers are required to install and use the latest version of TCS Software made available by Contractor to the Customers in order for the Customers to continue to receive any technical support for such TCS Software. All requests from the Customers for technical support with respect to the System must be made directly to Contractor and additional charges may apply for any fees Contractor incurs as a result of any specific requests for technical support having been made by the Customers to any local service provider that Contractor may engage to assist with providing on-site technical support to the Customers.
  - (ii) **Customer Specific Details.** The following technical support details are specific for the System:
    - (1) MECC (for itself and on behalf of the other Customers) has requested that all of the Customers receive an email when a support ticket has been generated for the System. In order to accomplish this, TCS' support ticketing system requires that MECC (for itself and on behalf of the other Customers) provide a single email alias distribution list for such purposes. Subject to TCS receiving such an email alias distribution list, TCS' support ticketing system will be modified so that any support ticket or xSwitch alarm generated with respect to the System will be sent to email alias distribution list.
    - (2) MECC (for itself and on behalf of the other Customers) shall specify to TCS a single point of contact to serve as the local smart hands at each Customer site.

## 3. Certain Clarifications to Deliverables.

(a) **Other Equipment.** MECC (for itself and on behalf of the other Customers) acknowledges and agrees that the installation or incorporation into the System of hardware or software not expressly described in the Technical Description to be provided by Contractor ("Other Equipment") could affect the operation of the System. Accordingly, MECC (for itself and on behalf of the other Customers) acknowledges and agrees that it shall not (nor permit others to) install or incorporate

into the System any Other Equipment without Contractor's prior written consent. MECC (for itself and on behalf of the other Customers) furthermore acknowledges and agrees that obtaining any such consent from Contractor for the installation or incorporation into the System of any Other Equipment may require Contractor to conduct certain evaluation and/or testing of such Other Equipment. In such event, the parties shall negotiate additional compensation for Contractor for such evaluation and/or testing. Furthermore, in the event MECC (for itself and on behalf of the other Customers) wishes Contractor to install or incorporate any such Other Equipment into the System, the parties shall negotiate additional compensation for Contractor to provide such work.

- (b) Customer Provided Facility(ies). As between Contractor and the Customers, MECC (for itself and on behalf of the other Customers) shall be responsible for procuring any facility(ies) for use as an ECDC (including, without limitation, all utility and other costs associated with using and continuing to have the right to use such facility(ies) as an ECDC throughout the term of this Contract) and all costs associated with the implementation and maintenance of any preparation features that may be required (and any changes and/or enhancements thereto) in connection with the installation of the ECDC at such location(s). As between Contractor and the Customers, MECC (for itself and on behalf of the other Customers) also shall be responsible for procuring any facility(ies) for use as PSAPs (including, without limitation, all utility and other costs associated with using and continuing to have the right to use such facility(ies) as PSAPs throughout the term of this Contract) and all costs associated with the implementation and maintenance of any preparation features that may be required (and any changes and/or enhancements thereto) in connection with the use of such facility(ies) as PSAPs. In no event shall Contractor be deemed to have made any representation with respect to, or to otherwise be responsible in any manner for, the suitability of such Customer-provided facility(ies) to serve as an ECDC or PSAP. Notwithstanding any of the foregoing or anything else to the contrary in the Contract, in the event the use of any Customer-provided facility(ies) as an ECDC or a PSAP at any time affects Contractor's costs or ability to comply with any of the terms of the Contract, the parties shall in good faith negotiate and agree (by addenda to this Contract) upon any necessary changes to the Contract (including, without limitation, appropriate mutually agreed upon adjustments in any milestone dates and compensation to be provided to Contractor) in accordance with Section 7 of this Attachment A.
- (c) Cooperation of ECDC and PSAP Personnel. As between Contractor and the Customers, MECC (for itself and on behalf of the other Customers) shall be responsible for assuring that all personnel at ECDC and PSAP locations cooperate with Contractor's installation, testing and support and maintenance of any equipment at such locations.
- (d) **Network.** As between Contractor and the Customers, MECC (for itself and on behalf of the other Customers) shall be responsible for procuring, supporting and maintaining the wide area network for IP connectivity of the System between and among, as applicable, the ECDC(s), any Customer IT facility, the PSAP(s) and all call-taking positions (including, without limitation, high-speed Internet connectivity, all edge routers, firewalls and other appliances for such wide area network) (collectively, the "WAN") based on Contractor's minimum specifications (as set forth on Exhibit 3(d) to this Attachment A). MECC (for itself and on behalf of the other Customers) agrees to adhere to all WAN-oriented and related security and performance processes as specified by Contractor, including but not limited to: firewall configurations, encryption, password utilization and IP traffic related QoS optimization. The minimal transport performance characteristics of the WAN must meet those specified by Contractor, but other technologies that exceed such characteristics may be mutually agreed upon by the parties during initial WAN implementation. Any changes or re-engineering of the WAN requested by a Customer (or required because of changes to the System requested by a Customer) may be subject to additional fees charged by Contractor to MECC (for itself and on behalf of the other Customers) (for applicable materials, professional, travel and any other related costs, fees and expenses).

- (e) **Domain Controllers.** MECC (for itself and on behalf of the other Customers) agrees that in no event shall it make (or permit to be made) any changes to the domain controllers for the System without first obtaining Contractor's prior written consent.
- (f) Anti-Virus Protections. MECC (for itself and on behalf of the other Customers) shall be responsible for procuring and maintaining (and requiring each PSAP covered by the System as described in the Technical Narrative (or as otherwise agreed to by Contractor in writing) to procure and maintain) appropriate and up-to-date industry standard anti-virus protections (with applicable patches and new releases as they are reasonably made available) for the System (including at individual call-taking workstations).
- 4. <u>Certain Restrictions on Internet Access By Call-Taking Workstations.</u> MECC (for itself and on behalf of the other Customers) acknowledges and agrees that certain access to the internet by call-taking workstations in a PSAP potentially could negatively impact the operation of the System. Accordingly, unless otherwise mutually agreed to in writing by the parties, MECC (for itself and on behalf of the other Customers) acknowledges and agrees that in no event shall it permit any call-taking workstations in any PSAP to access the internet with any of the following protocols: HTTP, HTTPS, SMTP, ICMP, Streaming video or audio (except for SIP and RTP/RTCP). It is permissible to use these protocols at call-taking workstations for intranet uses only.

## 5. Service Provider Cooperation.

- As between Contractor and the Customers, it shall be the responsibility of MECC (for itself and on (a) behalf of the other Customers) to obtain and maintain the agreement of all applicable local exchange carriers, competitive local exchange carriers and other telecommunication service providers (including, without limitation, wireless and VoIP service providers) operating in MECC's or the applicable Customer's region that (a) their networks and services are capable of originating an E9-1-1 call to the VoIP gateways to be provided by Contractor at the ECDCs without charge to the calling station; (b) their networks and services route E9-1-1 calls to the VoIP gateways to be provided by Contractor at the ECDCs; (c) their networks and services route E9-1-1 calls in a balanced manner to the VoIP gateways to be provided by Contractor at the ECDCs so as not to overload any one trunk coming into such VoIP gateways (for purposes of certain clarity, this means, without limitation, that, at a minimum, trunk sizing configuration from service provider end office origination points should be engineered to a P.01 grade of service into the ECDC gateway facilities); and (d) they will cooperate with Contractor as necessary (including, without limitation, as applicable, (i) providing appropriate trunking from their networks to the VoIP gateways to be provided by Contractor at the ECDCs and (ii) timely delivering any other necessary information to Contractor about their networks or otherwise in order to enable Contractor to fulfill its obligations in implementing and maintaining the System for MECC (for itself and on behalf of the other Customers) in accordance with the terms of the Contract.
- (b) For purposes of and during installation of the System (or any expansion thereof ordered by MECC (for itself and on behalf of the other Customers)), Contractor will provide technical configuration and provisioning information reasonably detailed for MECC (for itself and on behalf of the other Customers) to deliver to the telecommunication service providers for them to establish the necessary telecommunications infrastructure and to otherwise provide such other information and cooperation as may be necessary. In addition, Contractor agrees to be available to reasonably support and assist MECC (for itself and on behalf of the other Customers) with managing and coordinating the telecommunication service providers (subject to MECC (for itself and on behalf of the other Customers) providing any signed letter of agency or other form of written authorization that may be necessary for Contractor to work with the telecommunications service providers on behalf of the Customers).
- (c) If necessary, as between Contractor and the Customers, it shall be the responsibility of MECC (for itself and on behalf of the other Customers) to pursue any legal action before the Public Service Board or other applicable forum necessary to secure any of the foregoing compliance or cooperation from any local exchange carriers, competitive local exchange carriers or other

telecommunication providers operating in MECC's or the applicable Customer's region. Contractor agrees (1) to promptly notify MECC of any issues relating to a lack of compliance or cooperation on the part of any local exchange carriers, competitive local exchange carriers or other telecommunication providers operating in MECC's or the applicable Customer's region with respect to any of the foregoing of which Contractor actually becomes aware, and (2) to reasonably cooperate with and assist (including providing reasonable supporting information and/or documentation) MECC (for itself and on behalf of the other Customers) in any action it may take to secure any of the foregoing compliance or cooperation from any local exchange carriers, competitive local exchange carriers or other telecommunication providers operating in MECC's region. MECC (for itself and on behalf of the other Customers) shall be responsible for and/or will promptly reimburse Contractor for (i.e., in no event shall Contractor be responsible for) any costs or expenses associated with any of the foregoing (including, without limitation, any tariffs or other fees any local exchange carriers, competitive local exchange carriers or other telecommunication providers operating in MECC's or the applicable Customer's region might charge for such compliance or cooperation or any actual costs or expenses Contractor may incur in connection with cooperating with and assisting MECC (for itself and on behalf of the other Customers) in securing any such compliance and cooperation).

# 6. <u>Other Responsibilities of the Customer.</u>

- (a) As between Contractor and the Customers, it shall be the responsibility of MECC (for itself and on behalf of the other Customers) to obtain and maintain the agreement of all applicable municipalities (or other forms of jurisdictions) in MECC's or the applicable Customer's region and any third party database providers for the System (e.g., Intrado or others) to cooperate with Contractor as necessary (including, without limitation, as applicable, (a) with respect to the municipalities (or other forms of jurisdictions), having the municipalities (or other forms of jurisdictions) (i) timely review the MSAG for completeness and accuracy, (ii) timely provide changed Emergency Service Zone and Emergency Service Number information and (iii) reasonably cooperate with Contractor to resolve any addressing fallout issues identified by Contractor in connection with operation of the System, and (b) with respect to both the municipalities (or other forms of jurisdictions) and the third party database providers for the System, otherwise timely providing any other necessary information to Contractor in order to enable Contractor to fulfill its obligations in implementing and maintaining the System for MECC (for itself and on behalf of the other Customers) in accordance with the terms of the Contract.
- (b) If necessary, as between Contractor and the Customers, it shall be the responsibility of MECC (for itself and on behalf of the other Customers) to pursue any legal action to secure any of the foregoing compliance or cooperation from any municipalities (or other forms of jurisdictions) in MECC's or the applicable Customer's region or any third party database providers for the System. Contractor agrees (1) to promptly notify MECC of any issues relating to a lack of compliance or cooperation on the part of any municipalities (or other forms of jurisdictions) in MECC's or the applicable Customer's region or any third party database providers for the System with respect to any of the foregoing of which Contractor actually becomes aware, and (2) to reasonably cooperate with and assist (including providing reasonable supporting information and/or documentation) MECC (for itself and on behalf of the other Customers) in any action it may take to secure any of the foregoing compliance or cooperation from any municipality (or other form of jurisdiction) in MECC's or the applicable Customer's region or any third party database providers for the System. MECC (for itself and on behalf of the other Customers) shall be responsible for and/or will promptly reimburse Contractor for (i.e., in no event shall Contractor be responsible for) any costs or expenses associated with any of the foregoing (including, without limitation, any fees any municipalities (or other forms of jurisdictions) in MECC's or the applicable Customer's region or any third party database providers for the System might charge for such compliance or cooperation or any actual costs or expenses Contractor may incur in connection with cooperating with and assisting MECC (for itself and on behalf of the other Customers) in securing any such compliance and cooperation).
- 7. Adjustments. In the event MECC (for itself and on behalf of the other Customers) requests any change to

the terms and conditions of the Contract (including, without limitation, (a) any change to the ECDC, PSAP and/or call-taking position configuration (including, without limitation, number, size and location), (b) the design of the System, or (c) any other aspect of the project contemplated by the Contract that affects Contractor's responsibilities under the Contract), and such change materially affects Contractor's costs or ability to comply with any of the terms of the Contract, Contractor shall comply with such request; provided, however, that Contractor and MECC (for itself and on behalf of the other Customers) first shall negotiate and agree (by addenda to this Contract) upon any necessary changes to the Contract (including, without limitation, appropriate mutually agreed upon adjustments in the milestone dates and compensation to be provided to Contractor). For greater certainty and without limiting the foregoing, with respect to adding additional licenses at existing Customers or adding Additional Jurisdictions, the parties shall use the guidelines set forth in Exhibit 7 to this Attachment A.

# Exhibit 2(a)(i) Technical Description

## **System Overview**

Contractor engineered and deployed a dual host site xSwitch<sup>TM</sup> and xT911<sup>TM</sup> solution. This solution as currently deployed includes:

- A total of five (5) seats of the xT911<sup>™</sup> call taking application software (four (4) call taker seats and one (1) training/administrative seat) and twelve (12) Power over Ethernet (POE) SIP phones for Plain Township installed at the MECC PSAP:
- A total of four (4) seats of xT911<sup>TM</sup>, with two (2) xTPhone<sup>TM</sup> connections, and two (2) xTrakker licenses for Whitehall installed at the Whitehall PSAP; and
- A total of three (3) seats of xT911<sup>TM</sup>, with three (3) xTPhone<sup>TM</sup> connections, for Gahanna installed at the Gahanna Police Department PSAP. Three (3) xTrakker licenses installed on the three (3) xT911 workstations.

At the core of this solution are the Emergency Calling Data Centers (ECDCs) located at the Blue Mile Data Center and the Gahanna Police Department, respectively. An ECDC performs the functions of a 9-1-1 controller plus an IP telephony soft switch, ACD, and TDD/TTY functions. It houses and manages the centralized system and user permissions, plus call history, systems data, and other centralized features of the proposed system.

The data centers support two (2) remote PSAPs—MECC PSAP and Whitehall PSAP (which houses the Whitehall City Police Department and Fire Department).

# xT911™ Call-Taking Positions with Backup xTPhone™ [PSAPs only]

Each call-taking position consists of a PC workstation running TCS xT911 application software, with one 22-inch monitor. Additionally each xT911<sup>TM</sup> intelligent workstation includes an xTPhone<sup>TM</sup> device, configured in place as a handset to answer incoming calls in the event there is an interruption of the functions of the workstation.

## xTrakker<sup>TM</sup> Integrated Mapped-ALI display [Gahanna and Whitehall only]

xTrakker<sup>™</sup> is a Next Generation mapped-ALI application that enables call takers to properly locate 9-1-1 callers while also taking advantage of spatial data and extensive search functionality. xTrakker<sup>™</sup> is built on the ESRI ArcEngine 10.x platform.

xTrakker<sup>TM</sup> is installed on an xT911<sup>TM</sup> workstation and includes its own 22-inch monitor. Gahanna has three xTrakker positions and Whitehall has two xTrakker positions.

Gahanna and Whitehall are responsible for ongoing GIS data management using their own provided maintenance tools.

# $xAdmin^{TM}$

The solution includes xAdmin<sup>TM</sup>, a centralized administrative software for managing users and systems settings. Single instances (i.e., one seat) of xAdmin<sup>TM</sup> licenses are installed at MECC, Gahanna and Whitehall, respectively.

# **xMISTM**

The solution includes xMIS<sup>TM</sup>, a Web-based interface that enables authenticated administrators to access and analyze system activity from anywhere along the network. Information pertaining to circuit connectivity, call volume, call types, calls in queue, queue duration, abandoned calls, total number of calls between shifts, etc., is

centrally stored in SQL Server databases and accessible from anywhere on the network. Reports can be generated upon demand or slated for routine processing and delivery via e-mail on a pre-determined schedule.

## **Blue Mile Data Center ECDC**

This ECDC houses the following X-Solution hardware components:

- One (1) xSwitch application server
- One (1) xStore DB/Control and Communications/MIS servers, with storage
- One (1) WAN router

## **Gahanna Police Department ECDC/PSAP**

Four CAMA trunks and two POTS lines are installed at this ECDC. The location houses the following X-Solution hardware components:

- One (1) xSwitch application server
- One (1) xStore DB/Control and Communications/MIS servers, with storage
- One (1) WAN router
- Two (2) Mediant 1000 IP gateways, each equipped with one (1) four port FXS card and one gateway equipped with one (1) four port FXO card
- Two (2) 24 port non PoE Gb Ethernet managed switches
- One (1) IP-to-serial media converter to connect to such Customer's CAD server

## MECC PSAP

Four CAMA trunks and six POTS lines are installed at this PSAP. The location houses the following X-Solution hardware components:

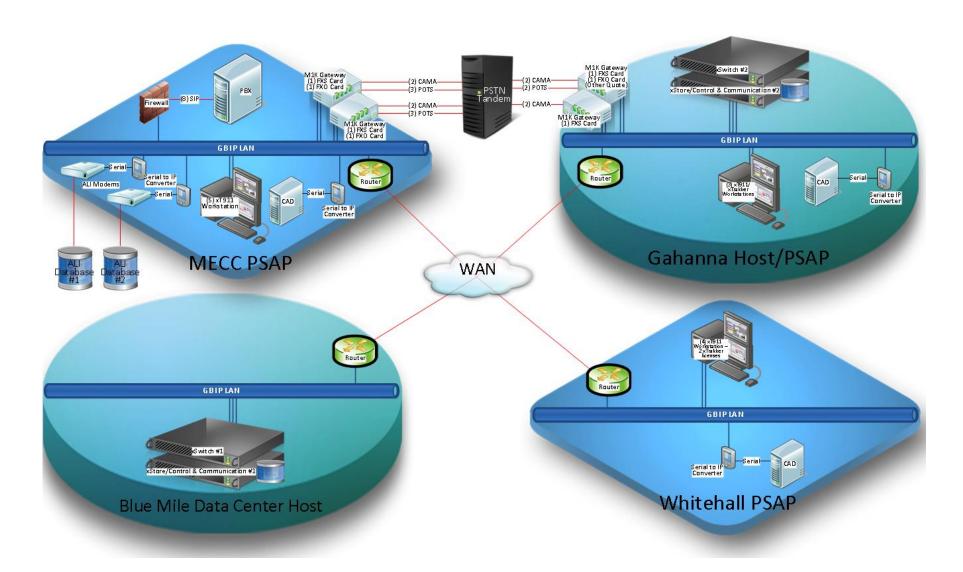
- One (1) WAN router
- Two (2) Mediant 1000 IP gateways, each equipped with one (1) four port FXS card and one (1) four port FXO card
- Two (2) 24 port non PoE Gb Ethernet managed switches
- One (1) IP-to-serial media converter to connect to such Customer's CAD server
- Two (2) IP-to-serial media converters to connect to such Customer's ALI databases
- One (1) Internet firewall for TCS remote support

# Whitehall PSAP

The location houses the following X-Solution hardware components:

- One (1) WAN router
- One (1) IP-to-serial media converter to connect to such Customer's CAD server

# Exhibit 2(a)(ii) Illustrative Diagrams



# Exhibit 2(b) Support Guide for Call Handling Silver Technical Support

# I. Introduction

TCS is committed to providing technical support services reasonably needed to help its customers maximize the benefits of use of TCS's products.

This Exhibit 2(b) is intended to help customers understand what is covered by the level of technical support services they may have subscribed for, how to make appropriate requests for technical support services, how technical support services will be provided by TCS, as well as some of the other terms and conditions applicable to TCS's technical support services generally.

The provision of any technical support services described in this Exhibit 2(b) is subject to the terms of the definitive agreement that the customer and TCS must enter into for the project to which such technical support services relate.

# II. Silver Technical Support

#### A. Covered Products

Under this program ("TCS Call Handling Software Silver Technical Support") certain technical support is available and provided for TCS core software and subordinate extensions only. Core software is defined as TCS xSwitch<sup>TM</sup> and xT911<sup>TM</sup>. TCS Software Silver Technical Support does not cover any third party hardware, software, equipment or other materials.

## B. Technical Support Provided

TCS Software Silver Technical Support consists of TCS diagnosing and/or correcting defects or non-conformities in the operation of the covered products. Customers are required to report any defects or non-conformities in the operation of the covered products on forms provided by TCS. All trouble reports must be submitted to TCS's technical support group substantially in accordance with the reporting procedures described herein.

## C. Reporting Procedures

Any of the following procedures should be used to submit a help request for TCS Software Silver Technical Support:

# a. <u>E-Mail Support</u>

Email help request to <u>Support-NG9-1-1@telecomsys.com</u>. If possible, put "*Help Request*" in the subject line of email. An incident number shall be assigned by TCS to each email help request submission for tracking purposes and sent by return e-mail to the individual submitting the help request. All follow-up email subject lines should include this incident number.

## b. <u>Telephone Support</u>

Call **1-800-722-6663 x811** at any time 24 hours per day, 7 days per week, 365 days a year. In the unlikely event a call is not answered because a TCS support technician is unavailable, the customer should leave a message with name and contact information and a TCS support technician will promptly return the call.

# D. Help Request Resolution

Once a help request has been submitted, problem resolution occurs through a series of possible tiers of support, as needed:

## Tier I Support

Tier I support provides a customer with initial trouble triage and analysis. The support technician assigned to provide Tier I support typically is a system generalist, but not necessarily an application specialist. Responsibilities of Tier I support technicians include:

- Systematic problem analysis based on internal procedures and protocols for checking system reporting activity logs and historical records and posting them in an organized manner for Tier II problem resolution.
- Minor troubleshooting, fault verification and, where reasonably possible, problem resolution.
- Use of existing documentation to assist with problem resolution.
- Collection of necessary information that Tier II support technicians may need if Tier I problem resolution is not possible.

## Tier II Support

Tier II support provides a customer with more extensive problem resolution expertise when resolution of an issue by a Tier I support technician is not possible. Tier II support technicians are technical IT specialists possessing more extensive knowledge of TCS's specific applications, as well as NG9-1-1 systems and networks generally. Responsibilities of Tier II support technicians include:

- Review information collected by Tier I support technician and continuation of problem resolution cycle.
- Follow up with customer to report the status of a pending problem resolution, update customer expectations or get more information about a pending issue.
- Pursue problem resolution by identifying what changes at customer site may have occurred resulting in problem, and identifying immediate work-arounds until a deeper analysis can be attained and resolution identified.
- In situations where an application is not operating as documented/expected, identify whether there are configuration issues or report the problem to a Tier III support technician.
- Escalation of unresolved support requests to Tier III. Work closely with Tier III engineers to analyze, understand, and resolve difficult issues.
- Verify that a pending issue can be 'closed' when a satisfactory resolution has been provided to the customer and document ticket information in customer account.
- If applicable, develop possible prevention plans to streamline problem resolution in the event the issue occurs again (i.e., problem management as opposed to incident management) by documenting lessons in knowledge base for future reference.

## Tier III Support

If resolution of problems is not achieved by Tier I or II support technicians, problems may be escalated for resolution by a Tier III support technician. Tier III support technicians are quality assurance analysts, application developers or system designers. Responsibilities of Tier III support technicians include:

- Review information collected by Tier I and II support technicians and verify that problem resolution requires change/correction/update in application, application design or system implementation.
- Make required core application or system repairs and provide change/correction/update to Tier II support technician for implementation with customer.

## E. Response Times

TCS prioritizes help requests according to the severity levels set forth in Table A.1 below. TCS will use commercially reasonable efforts to respond according to the response specifications set forth in Table A.1 below with respect to the severity level reasonably assigned to the problem.

Table A.1

Table A.1			
Severity Level	<u>Description</u>	<u>Response</u>	Target Resolution
1 - CRITICAL	Mission critical functionality is lost rendering the entire system inoperable.  Involves critical impacts on the system, such as a loss of 50% or more of calltaking capacity of the system or complete loss of a critical functionality of the system (for example, no delivery of either ANI or ALI)	Initial Response to PSAP occurs, via phone, as soon as possible but no longer than one hour after incident identification  Subsequent updates occur hourly via phone and/or email	Code correction or patch by TCS, or a procedure for customer to bypass or workaround the anomaly in order to continue operations- not to exceed 4 hours  If bypass or work-around is provided, TCS shall continue good faith resolution efforts to create a code correction or patch for customer.  Code Correction or Patch details will be shared with customer
2 - HIGH	Major failure or loss of functionality of components or features of the system, but the system itself remains operable.  Involves substantial impact to call-taking or other major system functionality (For example, no delivery of either ANI or ALI, for a particular class of service).	Initial Response to PSAP occurs, via phone, as soon as possible but no long than two hours after incident identification.  Subsequent updates occur at least every 12 hours via phone and/or email	Code correction or patch by TCS, or a procedure for customer to bypass or workaround the anomaly in order to continue operations- not to exceed 24 hours  If bypass or work-around is provided, TCS shall continue good faith resolution efforts to create a code correction or patch for customer.  Code Correction or Patch details will be shared with customer
3 - MEDIUM	Non-critical system failure that causes performance degradation or system components to malfunction.  Reported problems disabling specific non-essential functions; error condition is not critical to continuing operations and/or work-around has been determined for the error condition	Initial Response to PSAP, via email, within eight (8) business hours.  Service during normal business hours (M-F, 8AM - 5PM EST).	Workaround or Temporary fix within less than 10 business days  Code Correction in a next regular update or maintenance release  If bypass or work-around is provided, TCS shall continue good faith resolution efforts to create a code correction or patch for customer.  Maintenance release details will be shared with customer
4 - LOW	Minor or cosmetic issue to the system, but the core functionality of the system is not significantly affected.  Involves a loss of a minor functionality of the system or incorrect operation of a minor functionality of the system.	Initial Response to PSAP, via email, within two (2) business days.  Service during normal business hours (M-F, 8AM - 5PM EST).	Code correction in a next regular update or maintenance release.  If TCS is unable to provide a code correction in a future update or maintenance release using commercially reasonable efforts, TCS will use commercially reasonable efforts to provide a workaround solution to customer.

TCS continues working on Severity Level 1 and 2 problems until a resolution or acceptable work-around is provided. The "acceptability" of any work-around is determined by providing sufficient relief from the problem situation to reduce the Severity Impairment Level below Severity Level 2.

Problems that cannot be resolved within the times targeted for resolution may be reviewed on a case-by-case basis by TCS and the customer to consider whether an appropriate, alternative target resolution date can be mutually agreed upon.

## F. Support Case Escalation Procedure

For one reason or another, there may be times when a customer feels that a help request needs to be escalated by TCS. If a customer is not satisfied with the progress of resolution of any help request, the customer may communicate its concerns to the TCS help desk and TCS's help desk will page and/or connect appropriate escalation personnel or other supervisors upon request.

TCS's escalation procedure (in order of escalation) is as follows:

TCS Escalation Contact List				
Support Tier	Contact Name	Phone and E-mail Information		
Network Operations Center 1st Escalation	Pat Margherio Manager, NOC Services Network Operations Center	206-792-2464 office 215-995-1013 mobile pmargherio@telecomsys.com		
Network Operations Center 2ndEscalation	Patrick Malone Manager, ATAC Network Operations Center	800-722-6663, x345 office 720-442-1736 mobile pmalone@telecomsys.com		
Network Operations Center 3rd Escalation	Ruobo Lu Director, NOC Services Network Operations Center	206-792-2366 office 206-849-4945 mobile rlu@telecomsys.com		
Network Operations Center 4th Escalation	Joe Hannan Vice President, Operations and Engineering Service Bureau	206-792-2840 office 206-276-9909 mobile jhannan@telecomsys.com		
Final Escalation Point	Lynne Seitz Senior Vice President and General Manager, Safety & Security Group	206-792-2082 office 206-437-7611 mobile <u>lseitz@telecomsys.com</u>		

This escalation chart may be changed from time-to-time by TCS upon delivery of an updated chart to customer.

## G. TCS Software Patches and Updates for Core Products

For optimum performance, TCS's software continues to be improved to meet new technological developments and to address potential bugs or defects that may be identified. Accordingly, from time to time, TCS provides patches¹ and updates² to its software in order to keep systems running efficiently and effectively. For this reason, TCS requires that customers keep up to date with the latest TCS releases made available to them. Patches and updates will be delivered by disk or electronically to customers that are current in subscribing for TCS Software Silver Technical Support.

For purposes of TCS Software Silver Technical Support Call Handling, "patches" mean interim or emergency fixes to one or more problems identified in any TCS core software. Patches are produced on an as-needed basis, as determined by TCS, if TCS discovers a problem.

For purposes TCS Software Silver Technical Support Call Handling, "**updates**" means a subsequent release of any TCS core software that, at TCS's sole discretion, may be made available at no additional charge (other than possible applicable hardware, media and handling charges) that consists of technical or functional additions or modifications to such products. Updates do not include any release, option, or future product that TCS licenses or sells separately, or any upgrade in features, functionality or performance of any products that TCS licenses or sells separately.

When TCS software is patched or updated, the Operating System (OS) and any other third party patches and updates that were used during the QA cycle for the TCS release (as identified by TCS in its release notes or as TCS otherwise may inform the customer) must also be installed. Patches and updates of TCS's software and the latest OS or other third party patches and updates go hand-in-hand and need to be installed together to ensure full compatibility.

Providing and/or installing OS or third party patches and updates is <u>not</u> included under TCS Software Silver Technical Support, and additional fees (including applicable hourly professional or other fees at TCS's thenapplicable standard rates and any travel and other out-of-pocket expenses) may be charged by TCS for any such requested services.

## H. Remote Installation Assistance for TCS Software Patches and Updates

If re-installation of any TCS software is required in connection with installing any TCS patch or update, only technicians or users certified by TCS may perform the re-installation. Any customer personnel wishing to become a certified user must complete one or more TCS training session(s) (at separate additional cost to customer) for the TCS product(s) for which certification is sought.

With TCS Software Silver Technical Support for Call Handling, TCS is available to provide remote coordination of and/or assistance to certified users with installing patches or updates for TCS software.

Actual on-site installation coordination or assistance by TCS in connection with installing any TCS patch or update is <u>not</u> covered by any TCS Software Silver Technical Support, and additional fees (including applicable hourly professional or other fees at TCS's then-applicable standard rates and any travel and other out-of-pocket expenses) may be charged by TCS for any such requested services.

# I. Certain Customer Responsibilities

In order to ensure that a customer's experience with receiving TCS Software Silver Technical Support is as effective and efficient as possible, customers are expected to be aware of and comply with the following non-exclusive list of requirements:

- TCS Software Silver Technical Support requires that the customer provide a high speed/broadband connection for TCS remote access from its technical support facility(ies).
- TCS Software Silver Technical Support requires an on-site customer-appointed administrator to assist TCS's remote technicians with hands-on support as needed (e.g., rebooting machines, resetting routers or switches, etc.).
- Timely, accurate and complete information must always be provided by the customer.
- The customer must always comply with all other terms and conditions of the applicable definitive
  agreement that the customer and TCS must enter into for the project to which any TCS Software Silver
  Technical Support relates.

# J. Future Proof

As an option, customers may select TCS's future proof upgrade package (the "**Future Proof Option**") as an add-on to TCS Software Silver Technical Support. TCS's Future Proof Option enables a customer to take advantage of platform evolution for the TCS software as the operating environment for the TCS software evolves. Specifically, if elected, the customer will be provided future major releases<sup>3</sup> of covered TCS software during the annual period of time for which the Future Proof Option has been paid for by the customer. To be eligible to elect the Future Proof Option with any particular TCS software, a customer must be enrolled in and current on any level of TCS Software

For purposes of TCS's Future Proof Option, a "**major release**" means an upgrade in features, functionality or performance of the covered TCS software that TCS licenses or sells separately but which is made available to the customer pursuant to and in accordance with the terms of the Future Proof Option.

Silver Technical Support for such TCS software and the customer must have maintained the Future Proof Option for such TCS software each prior year since installation.

Under TCS's standard Future Proof Option, customers remain responsible for any third party software or hardware equipment requirements for any new platform for the TCS software as well as the costs of TCS's professional services associated with implementing any upgrade for covered TCS software (i.e., installation, training, and travel expenses).

#### K. General Limitations

TCS may limit TCS Software Silver Technical Support to any customer that makes requests in an irregular, excessive, abusive or fraudulent manner.

Additional fees (including applicable hourly professional or other fees at TCS's then-applicable standard rates and any other out-of-pocket expenses) also may be charged by TCS for any technical support or other requests submitted to TCS that are determined by TCS not to directly relate to (or have been directly caused by) an actual defect or non-conformity in the covered products.

By way of example and not limitation, such matters may include:

- (i) correcting defects or non-conformities in the operation of covered products caused by (A) the customer's or any end user's intentional act or omission, negligence, misuse, or accident; (B) any alteration or repair by the customer or any end user not approved by TCS in writing; (C) any operation outside of environmental specifications for the products; or (D) software, materials, services or other actions not provided by TCS or not covered by TCS Software Silver Technical Support;
- (ii) diagnosing and/or removing software viruses introduced to the system by end users and/or as a result of the installation or incorporation into the system of any hardware or software components not approved by TCS in writing;
- (iii) providing training or repeated general information or assistance to the customer or any end users in the general operation of the system or any products; or
- (iv) providing any other form of general GIS, 9-1-1, network, addressing or other consultation services.

For purposes of additional clarity, reinstallation (except as otherwise expressly provided herein), reconfiguration, restructuring, relocation or other similar services with respect to any products and/or the system are not covered by TCS Software Silver Technical Support and additional fees (including applicable hourly professional or other fees at TCS's then-applicable standard rates and any travel or other out-of-pocket expenses) may be charged by TCS for any such requested services.

TCS's current standard hourly labor rates are as follows:

Hourly Support Fee Description	Rate	
During Business Hours, 8am-5pm Eastern (M-F)	\$120/hr	
Outside of Business Hours (M-F)	\$180/hr	
Holidays/Weekends	\$180/hr	

Such standard hourly labor rates may be updated by TCS from time to time.

## III. Miscellaneous

## A. Product Enhancement Requests

To the extent a customer submits any suggestions or requests for product enhancements, new features or new functionalities, TCS may consider such suggestions or requests but does not provide any assurance or commitment with respect to making any such suggested or requested changes.

#### B. Other Services

Except for the specific technical support services described in this Exhibit 2(b), no other services are included or covered. The provision of any such other services may be available upon request to TCS subject to other terms, conditions and pricing (including applicable hourly professional or other fees at TCS's then-applicable standard rates and any travel or other out-of-pocket expenses).

# C. Changes to Terms

This Exhibit 2(b) and TCS's technical support service terms, conditions, features, policies and procedures may be subject to certain changes from time-to-time at TCS's reasonable discretion. In such event, however, any such changes are not expected to materially affect the nature or scope of existing technical support services provided to an existing customer.

## D. Disclaimer

This Exhibit 2(b), in and of itself, is not a binding obligation or commitment on the part of TCS. The information contained in this Exhibit 2(b) is provided for informational purposes only. While reasonable efforts were made to verify the completeness and accuracy of the information contained in this Exhibit 2(b), all such information is provided "AS IS" without warranty of any kind, express or implied. Furthermore, nothing contained in this Exhibit 2(b) is intended to, nor shall have the effect of, creating any warranties or representations from TCS or its suppliers or licensors, or altering the terms and conditions of the applicable definitive agreement that the customer and TCS must enter into for the project to which any such technical support relates.

# Exhibit 3(d) TCS Network Specification

# **NETWORK SPECIFICATIONS**

## NETWORK WAN CONNECTIVITY:

The customer must have a stable high-speed connection in place prior to remote certification. The minimum data speed requirements of this link are 2Mbps up/down. Ideally each datacenter should have a separate high-speed WAN connection for redundancy or similar in the case that a data center becomes isolated from the primary data center. The connectivity method can be accommodated in the following ways (NOTE: Eacha' method must allow for bi-directional file transfer capabilities and Microsoft Remote Desktop Protocol access at a minimum):

- For large enterprise or partner solutions our recommendation is for redundant dedicated circuits terminated at geographically diverse TCS facilities.
- For other solutions our recommendation is for site-to-site IPSEC VPN tunnel terminating to TCS's Security Appliance. This
  method is required for clients with the "Remote Network Monitoring" package. Dual-NAT translation is preferred on a
  point-to-point VPN. Other methods can be used but must be reviewed and accepted by TCS before the network can be
  certified.
- Other accepted connectivity methods for other than large enterprise, partner solutions, or clients with Remote Network
  Monitoring is IPSEC VPN tunnel or client SSL/IPSEC VPN terminating on the clients VPN device. TCS will need to be able to
  use up to 10 simultaneous connections using this method.
- If customer does not have remote connectivity at all currently, TCS can establish this for added hardware/setup costs. This
  would be accomplished by the setup of a static connection that passes TCS minimum data speed requirements and the
  installation of an enterprise class firewall. Remote access would then be configured by one of the methods listed above.
- For GIS clients only: The primary method for connectivity can be a commercially available hosted connection method such
  as logmein.com, gotomyPC.com, teamviewer.com, etc.

Note: The commercially available solutions come with their own setup and/or monthly connection fees and are not acceptable as the primary means of remote connectivity for call handling applications.

## NETWORK WAN BANDWIDTH:

The WAN should be configured to provide a minimum of 128 Kbps per voice call. All calls use the G.711 codec. This is double the bandwidth that "carrier" grade voice calls are provided. It is necessary to double this bandwidth to ensure utmost reliability and accurate voice retransmission. For calls terminating at TCS PSAPs a minimum of 1024 Kbps should be applied with a maximum of 4 positions. An additional 50% maximum should be applied per position over 4 positions to accommodate xSR/xSwitch messaging for a total of 192 Kbps per additional station.

Running additional xSolution applications such as xAdmin at each PSAP would require additional bandwidth equal to an xT911 position. Also, this assumes that the mapping data is local to the PSAP (SDE Server) or file geodatabase. If the customer wishes to run a central SDE server on the WAN or replicate GIS data to the PSAPs there may be additional bandwidth needed (this is dependent on the size of the GIS database and frequency of updates and type transactional or full copy).

Third party applications would need to be evaluated separately on a case-by-case basis.

## **NETWORK PRIORITIZATION:**

Network traffic destined between endpoints should receive the following prioritization:

- Routing Information: Routing information/messaging should be prioritized on all layer 3 devices using a weighted fair
  queuing (WFQ) method as it relates to application oriented traffic. This will be engineered such that it allows a guaranteed
  data rate for all routing related traffic.
- Traffic marking: All priority traffic will be marked with <u>DiffServ</u> code points (DSCP) to ensure that all layer 3 devices
  understand this traffic and prioritize it over lesser important traffic. This is necessary as most real time traffic can use a
  variety of UDP ports and therefore it is not easy to establish layer 3 prioritization based on known port ranges. DSCP allows
  the router to simply be configured to prioritize based on the DSCP associated with RTP traffic.
- Real-time Transport Protocol: Real-time transport protocol (RTP) will be marked EF and should be prioritized on all layer 3
  devices.
- Session Initiated Protocol: Session initiated protocol (SIP) messaging will be marked AF31/CS3 or CS4 and should be prioritized on all layer 3 devices.
- xRouter Traffic: TCS's underlying communication protocol, xRouter utilizes UDP unicast, broadcast, and multicast
  messaging over a port range of 9400-9500. xRouter traffic will be marked CS4 and should be prioritized on all layer 3
  devices.
- Database transactions (SQL): A good deal of interaction with the systems database servers relies on unimpeded database transactions occurring over the wide area point to point links. Therefore, database transactions conducted on TCP/UDP ports 1433 and 1434 will be marked AF22 should be prioritized on all layer 3 devices.
- All other traffic: All other traffic should be treated as Best Effort and marked as Default Forwarding (DF) on all layer 3
  devices.

## VOIP QUALITY:

- Jitter (with a target of less than 60ms): Jitter is statistical variance of the RTP data packet inter-arrival time measured by the
  transmission rate of the RTP audio signal. For example, audio is being sent at 16000 Hz then the jitter measurement is done
  in 1/16000 of a second.
- Packet Loss (with a target of less than 0.5%): A measure of the percentage of dropped voice packets. High packet loss
  results in dropped conversations, a delay in receiving the voice communication, or extraneous noise on the call.
- Delay (with a target of less than 80ms round trip): The total cumulative delay on all network segments between the VOIP
  endpoints. A high delay may result in degraded voice quality

## UDP BROADCAST/MULTICAST:

Layer 3 devices need to be configured to pass UDP broadcasts or UDP multicast across distributed links. This needs to be configured to allow these broadcasts to pass on UDP ports 9400-9500 from xSolution servers and endpoints (xSR, xSwitch, xRR) to other xSolution servers and endpoints.

IGMP should be enabled to assist with conserving bandwidth across the WAN. In some instances it has been discovered that multicast will not function properly when IGMP is enabled within the carrier network. In this instance IGMP should be disabled.

For example these issues can include the in-ability to take a call off of Park, and/or after the Dispatcher and caller are released the call still shows connected. It was discovered that IGMP Snooping was turned on in the router causing the multicast packets to be dropped. IGMP Snooping was disabled and the multicast traffic returned to normal, clearing up the two issues.

## COMMON IP PORTS

The following is a list of the IP ports most commonly in use by the xSolution and their description.

Port (Range)/Service Protocol/Description 53 DNS UDP/ TCP 80 HTTP used for connecting to DIGI devices TCP NTP/SNTP UDP 123 135 RPC TCP 137 NetBIOS Name Resolution 138 NetBIOS Datagram Service UDP 139 NetBIOS Session Service TCP 161 SNMP UDP 162 SNMP Trap UDP 389 LDAP UDP/TCP 443 HTTPS used for connecting to Mediant 1000 Gateways TCP 445 SMB TCP 500 JPSec ISAKMP UDP LDAP SSL UDP/TCP 636 1433/1434 SQL TCP Global Catalog Server TCP 3268 Global Catalog Server TCP 3269 3389 Terminal Services TCP 4500 NAT-T UDP SIP UDP/ TCP 5060 8000 RTP port used for calls to/from xT911™. UDP/ TCP 8002 RTCP port used for calls to/from xT911™. UDP/ TCP 49152 -> 49152 + (< number of Base port for RTP on xSwitch™ servers. The number of ports depends on the number of HMP HMP ports> \* 2) ports on the xSwitch™ Server, multiplied by 2 UDP/TCP 6000 -> 6000 + (<number of Base port for RTP on Mediant 1000 Gateways. On a 24 analog port M1K, this would be 6000 -> gateway channels> \* 10) 6240. UDP/ TCP 9400 -> 9500 Base port for xRouter™ messaging (TCS's inter-application communication protocol). The number of ports used depends on the number of TCS applications installed on the server/workstation. UDP

## **NETWORK CAPACITY PLANNING:**

Network capacity planning can save time and money if you anticipate additional PSAPs or expansion of existing ones in the future. If you plan on adding additional ECDCs, PSAPs, and/or xT911 positions then there should be sufficient WAN Bandwidth, WAN expansion capacity, open switch ports, and voice trunks to support them in the future.

If there is an anticipated increase in call-handling capacity, then there should be sufficient voice gateways or room on existing gateways to support more trunks.

Capacity planning will vary for each client and should be discussed with TCS to determine your exact needs.

TCS recommends this proactive approach to capacity to help alleviate the need for major infrastructure changes after system go-live.

# Exhibit 7 System Expansion Installation Roles and Responsibilities

The following are guidelines with respect to System expansion and will be used by the parties in preparing any quotation, change order or other form of addendum to this Contract that must be agreed upon by the parties in writing reflecting the pricing and other details for an expansion to the System. For greater certainty, the expectation is that MECC (itself or through a contractor certified by TCS) shall provide personnel to perform certain onsite installation and configuration activities as needed for any mutually agreed upon expansion of the System.

## 1. Prerequisites

In order for MECC or MECC contractor personnel to take over onsite installation and configuration, technicians are required to be certified by TCS. Certification consists of the following:

- (i) Advanced Tier 1 and 2 Call Handling Course: Instruction consists of four (4) days of lecture, exercises and lab activities. This training is intended for on-site technicians maintaining TCS systems as well as anyone conducting Tier 2 support. The first part of the class covers solution architecture and common troubleshooting steps to solve issues, such as proper rebooting/restarting systems and other related dependencies to assist in the ongoing support. The second part of the class covers administrator topics such as how to use xAdmin, xT911, xBannerBoard, and reports via xMIS. At the conclusion of the course, students will have covered the following topics to efficiently conduct the installation, maintenance, and advanced support of the solution:
  - Understanding the X-Solution applications and roles.
  - TCS hardware architecture and system dependencies.
  - Call flow variations through the X-Solution.
  - Next Generation call routing and PSTN connectivity.
  - Installing and troubleshooting new customer installations.
  - Managing and supporting X-Solution applications.
  - Configuring the X-Solution for administrative and maintenance needs.
  - Strategies for software installation and backup.
  - Interpreting X-Solution logs for troubleshooting and other support needs.
  - Analyzing system error symptoms and diagnostics.
  - This includes common alarm diagnosis and initial triage support for escalation to Tier 2 support.

In addition, individuals who successfully complete this training course are required to adhere to a TCS Code of Conduct (attached below as Attachment 1 to this Exhibit 7) as applicable to Certified Techs (described therein) in order to maintain such certification.

Much of the material covered in this training requires domain access and specific administrator access. It is important to note that with heightened levels of access such as domain access, access to xSwitch Config and/or administrative privilege (system admin permission), the user will have the ability to make any and all changes at the system level (gateways, routers, switches, servers, dial plan, etc.) and on the configuration (users, contacts, reporting, user interface, etc.). TCS cannot be responsible for system outages or other issues to the System or any of its parts resulting from changes not expressly authorized or made by TCS.

- (ii) **Shadowing:** With respect to installation at the first PSAP to be added to the System, the MECC/MECC contractor personnel must shadow a TCS lead technician.
- (iii) **Initial Lead Install:** With respect to installation at the second PSAP to be added to the System, the MECC/MECC contractor personnel must lead installation with a TCS technician present to provide support as needed.

It is MECC's responsibility to ensure that any personnel working on the System have been certified by TCS in writing as having met the above requirements.

# 2. General Change Order Process

A quotation, change order or other form of addendum to this Contract must be mutually agreed upon by the parties in writing reflecting the pricing and other details for an expansion to the System. The following generally is expected to be addressed in any such quotation, change order or other form of addendum to this Contract:

- (a) TCS Operations will provide a list of tasks, data flow diagrams, process flow diagrams, and other materials to serve as a guideline for the processes of provisioning to installation.
- (b) Each PSAP project design will change based on the specific design and any variations such as PBX, radio, or other integrated systems.
- (c) The documentation provided by TCS will function as a foundation for the project but each new project (new single PSAP or multiple site installation) will require engineering to ensure consistency and performance. This process will also manage the overall system capacity.
- (d) TCS responsibilities will include providing:
  - o Pricing
  - TCS software
  - Third party software
  - Hardware specifications, including part numbers (routers, gateways, switches, firewalls, cabling, workstations, external keypads, etc.)
  - Methods Of Procedure (MOP)
  - Remote Staging
    - Staging of all hardware at TCS facilities prior to shipment to the designated site to include:
      - Load all third party software and TCS software
      - Configure xSwitch
      - TCS will provide a "baseline configuration" for System rights, settings, and privileges that will translate across the various PSAP projects
  - o Remote installation and cutover support
    - When MECC/MECC contractor certified technician performs work independent of TCS personnel, TCS will provide up to 8 total hours of remote support in a maximum of two support sessions. This includes a remotely performed quality check of the MECC/MECC contractor certified technician settings. Remote installation and cutover support beyond 8 hours will be billed at TCS current applicable hourly rate. <a href="MECC understands that project timeline and costs may be affected if significant rework of MECC/MECC">MECC understands that project timeline and costs may be affected if significant rework of MECC/MECC contractor certified technician settings is required.</a>
  - Training
    - On-site training classes for all PSAP personnel for any new installation
    - Refresher PSAP training via instructor-led webinar as ordered

# (e) MECC/MECC contractor responsibilities will include providing:

- Payment
- o Project management
- o Receipt of staged equipment
- o Network
- o Onsite installation
- o Final TCS software provisioning and equipment configuration
- o On-site pre-cutover testing
- o On-site cutover support
- o On-site support

# Attachment 1 to Exhibit 7 TCS Code of Conduct

## I. Background and Purpose of the Code of Conduct

TCS makes certain training programs for its products available to customers. Individuals who successfully pass program requirements for a particular TCS product may be designated by TCS as a Certified Tech or Certified Trainer for such product. In order to support general product training competency and quality assurance, certain minimum qualification standards have been developed by TCS for individuals seeking Certified Tech or Certified Trainer status. The basic requirements are that Certified Techs and Certified Trainers have undergone detailed product training, and subsequently passed written and oral tests covering a breadth of knowledge, skills and abilities at a certain grade level. Certified Techs and Certified Trainers are also required to have demonstrated continuing competency through a series of observed classroom training exercises or interviews. The purpose of the competency component of certification is to help ensure that Certified Techs and Certified Trainers reliably deliver effective TCS product support and/or training.

All individuals who successfully complete a program should recognize that certification by TCS is a privilege that must be both earned and maintained. In support of this principle, Certified Techs and Certified Trainers also are required to commit to adhere to a Code of Conduct. The Code of Conduct establishes basic standards that support TCS's statement of competency with respect to a Certified Tech and a Certified Trainer and identifies the types of circumstances that may compromise the reliability of TCS's certification process to establish, or certify, an individual's ability to perform essential Certified Tech or Certified trainer duties with appropriate professionalism. Violations of the Code of Conduct will result in the immediate revocation of a Certified Tech's or Certified Trainer's certification.

## II. Code of Conduct

The following standards of conduct provide basic principles in the practice of TCS Certified Tech and Certified Trainer quality assurance. Without limitation, Certified Techs and Certified Trainers shall:

- (1) Deliver capable service that is consistent with the expectations of their certification and position.
- (2) Protect confidential and proprietary information with which they come into contact.
- (3) Not misuse any information or privileges they are afforded as part of their responsibilities.
- (4) Not make false or exaggerated statements as to the state of affairs existing or expected regarding TCS, its employees or its products.
- (5) Obtain appropriate technical support or make appropriate referrals when an end-user's question or problem is beyond their area of training, expertise, competence, or scope of practice.
- (6) Exercise honesty, objectivity, and diligence in the performance of their duties and responsibilities.
- (7) Maintain high professional standards of moral responsibility, character, and business integrity.

Certified Techs and Certified Trainers should realize that their individual judgment is required in the application of these and any other principles or standards of conduct. TCS may amend the Code of Conduct at any time in its reasonable discretion and Certified Techs and Certified Trainers are expected to abide by the terms of any such amendments.

## III. Denial or Revocation of Certification

As described above, the Code of Conduct is designed to support the validity of the TCS certification process and continuing competency requirements for Certified Techs and Certified Trainers. TCS expressly retains the right to deny or revoke any certification provided by it. By way of example, and not limitation, the following are grounds for any denial or revocation of certification:

Accountability: The degree of professional effectiveness for product training may be gauged upon the occurrence of excessive end user helpdesk requests specifically associated to previously trained product functionality.

Integrity: TCS may refuse to issue a credential to any applicant, or may suspend or revoke the credential of any certified individual who is found to have been in violation of the Code of Conduct.

In general, any action of a certificate holder or applicant that compromises the reliability of the certification process, or is deemed by TCS to be incompetent, negligent, dishonest, fraudulent or deceptive while performing essential end-user training, support or maintenance duties as a Certified Tech or a Certified Trainer, as applicable, or does not meet the general standards of competency or conduct prescribed by TCS, subjects the certificate holder or applicant to denial or immediate revocation of certification.

#### ATTACHMENT B

## **Payment Provisions**

**1. Annual Support Fees.** Certain technical support for certain of the Products (as such term is defined in the End User Terms and Conditions (Attachment D)) is available for purchase by MECC (for itself and on behalf of the other Customers) in one year blocks as follows:

Payment Schedule for Annual Support for Years 1-5 [September 1 through August 31 of each year commencing on September 1, 2015]:

Location	Annual Support Type	Covered Software Product	Annual Support Unit Cost	Quantity/Units	Total	
Mifflin	Silver / Future Proof	xSwitch Port license	\$12.45	58	\$722.10	
Mifflin	Silver / Future Proof	xSwitch Base 5-14 positions	\$6,400.00	1	\$6,400.00	
Mifflin	Silver / Future Proof	xT911 client license	\$720.00	5	\$3,600.00	
Mifflin	Silver / Future Proof	xSwitch Secondary 5- 14 positions	\$3,200.00	1	\$3,200.00	
Gahanna	Silver / Future Proof	xT911 client license	\$640.00	3	\$1,920.00	
Gahanna	Silver / Future Proof	xTrakker client license	\$989.00	3	\$2,967.00	
Whitehall	Silver / Future Proof	xAdmin client license	\$325.50	1	\$325.50	
Whitehall	Silver / Future Proof	xT911 client license	\$640.00	4	\$2,560.00	
Whitehall	Silver / Future Proof	xTrakker client license	\$989.00	2	\$1,978.00	
	YEARS 1-5 SUB-TOTAL (each year) \$23,672.60					

Year 1 of technical support commenced on September 1, 2015 and is due and payable in full upon execution of this Contract. The anniversary date for technical support renewal is based on the September 1, 2015 start date for Year 1. The annual fee for renewing technical support for any year after Year 1 is due and payable on or before the beginning of such renewal year.

In the event MECC (for itself and on behalf of the other Customers) fails or elects not to order (or renew) technical support for any year and thereafter wishes to order (or reinstate) such technical support, MECC (for itself and on behalf of the other Customers) may do so upon payment to Contractor of an applicable administrative reinstatement fee for the requested technical support. Unless otherwise agreed to by Contractor in writing, the administrative reinstatement fee for requested technical support will be an amount equal to (i) the total additional technical support fees MECC (for itself and on behalf of the other Customers) would have had to pay to Contractor through the date of such requested (re)instatement had MECC (for itself and on behalf of the other Customers) originally ordered or continued the requested technical support for each year from the installation date of the Products through such date, plus (ii) a reinstatement fee equal to ten percent (10%) of such amount. Upon payment of the applicable administrative reinstatement fee, the requested technical support will be (re)instated and will be provided until the end of the then-current annual period (based on the original Year 1 start date referred to above) prior to such (re)instatement so that the annual technical support fees for each year that technical support thereafter is renewed following such (re)instatement shall continue to be due and payable on or before the same anniversary date of what was (or would have been) the annual technical support term prior to such (re)instatement.

- 2. Form of Request for Payments. Requests for payment by Contractor may be made by invoice(s) to be delivered by Contractor to MECC (for itself and on behalf of the other Customers). Within five (5) business days of receipt of any request for payment, MECC (for itself and on behalf of the other Customers) shall notify Contractor whether the request has been accepted or rejected in whole or in part. Accepted amounts shall be processed by MECC (for itself and on behalf of the other Customers) for immediate payment. Any amounts in any request for which no objection has been raised within such five (5) business day period shall be deemed accepted. In no event shall objection to any part of any invoice be cause to delay acceptance and/or payment on any undisputed portion of any invoice. In the event MECC (for itself and on behalf of the other Customers) disputes any portion of any invoice, the parties agree to work together in good faith to resolve the issue(s) relating to the disputed amount as promptly as reasonably possible.
- 3. Late Payments. Unless otherwise indicated in any applicable invoice, payment on all invoices shall be due upon receipt of the invoice. Any accepted (or, as the case may be, deemed accepted) amount payable by MECC (for itself and on behalf of the other Customers) hereunder that remains unpaid more than thirty (30) days following the date such payment is due shall be subject to a late charge equal to one and one-half percent (1.5%) per month, or the highest amount allowed under applicable law, whichever is lower, on such overdue balance from the original due date until such balance is paid in full. MECC (for itself and on behalf of the other Customers) shall also be responsible to Contractor for any costs Contractor incurs in collecting overdue amounts hereunder. Without limiting any other right or remedy available to Contractor, failure of MECC (for itself and on behalf of the other Customers) to pay any amounts under the Contract when due shall entitle Contractor, in its discretion, to withhold and suspend its performance and obligations under the Contract.
- **4. Taxes.** Any and all fees specified in this Contract do not include sales, use, property, value-added, withholding or other taxes, duties or fees, associated with the licenses granted or Products or Services provided in this Contract ("**Taxes**"). To the extent applicable, any such Taxes shall be the sole responsibility of MECC (for itself and on behalf of the other Customers) and will be billed to and paid by MECC (for itself and on behalf of the other Customers) and MECC (for itself and on behalf of the other Customers) shall hold Contractor harmless from the same. This Section shall not apply to Taxes based on Contractor's net income or payroll.

## ATTACHMENT C

## OTHER CONTRACT PROVISIONS

- **Liability.** No provisions of this Contract shall be construed as affecting or negating the standards or limitations for liability set forth in any applicable law limiting the liability of any party providing or assisting in providing any 911-related products or services.
- **2. Governing Law.** The laws of the State of Maryland, excluding its conflict of law provisions, shall govern this Contract and all matters arising out of or relating to this Contract.
- **Jurisdiction.** Any legal action or proceeding relating to this Contract brought by either party shall be instituted in a state or federal court in the State of Maryland. Each party hereby expressly agrees to submit to the jurisdiction of, and agrees that venue is proper in, these courts in any such legal action or proceeding.
- **Notices.** All notices required to be sent hereunder or in connection herewith shall be in writing sent to the other party's address as specified below and shall be deemed to have been given (i) on the date sent by confirmed facsimile, (ii) on the date delivered by reputable overnight courier, or (iii) three (3) days following the date such notice was mailed by first class mail.
  - (a) Notices to the Customers shall be sent to MECC (for itself and on behalf of the other Customers) at the following address (or to such other address as MECC may specify from time to time by written notice to Contractor):

Metropolitan Emergency Communications Center 911 Creekside Plaza Building C Gahanna, OH 43230

Attn: Chief Fred Kauser Tel.: 614-536-0058 Fax: 614-478-6726

(b) Notices to Contractor shall be sent to Contractor at the following address (or to such other address as Contractor may specify from time to time by written notice to the Customer):

TeleCommunication Systems, Inc. 275 West Street Annapolis, MD 21401 Attn.: Contracts Department

Tel.: 410-263-7616 Fax: 410-280-4903

# 5. <u>Term and Termination</u>

- (a) **Term.** The Contract may be terminated as provided below:
  - i. Either party may terminate the Contract upon written notice to the other party if such other party materially breaches any term or condition of the Contract and such other party (a) fails to cure such breach within thirty (30) days following receipt of written notice specifying the breach in detail, or (b) if such breach cannot be cured within such thirty (30) day period, fails to begin a reasonable good faith cure of such breach within such thirty (30) day period and continues to pursue such cure in good faith such that the non-breaching party is not materially prejudiced in any way.
  - ii. Either party may terminate the Contract immediately upon written notice to the other party if the other party (a) becomes the subject of a voluntary petition in bankruptcy or

any voluntary proceeding relating to insolvency, receivership, liquidation, or composition for the benefit of creditors; or (b) becomes the subject of an involuntary petition in bankruptcy or involuntary proceeding relating to insolvency, and such involuntary petition or proceeding is not dismissed within thirty (30) days of the earlier of its filing or commencement.

- (b) Effect of Termination. Termination of the Contract shall not limit either party from pursuing other remedies available to it, including injunctive relief, nor shall such termination relieve MECC (for itself and on behalf of the other Customers) of its obligation to pay all fees that have accrued or are otherwise owed by MECC (for itself and on behalf of the other Customers) under or related to the Contract prior to termination of the Contract. Furthermore, provided that, prior to termination, MECC (for itself and on behalf of the other Customers) pays all fees that have accrued or are otherwise owed (or will accrue or be owed) by it under or related to the Contract through acceptance of the Products following installation, termination of the Contract shall not affect the Customers' rights to continue to use the TCS Software in accordance with the terms of Sections 1(a). (b) and (c) of the End User Terms and Conditions (Attachment D). In all other cases, upon termination of the Contract (i) each Customer's right to use any of the TCS Software shall immediately terminate; and (ii) upon Contractor's request, MECC (for itself and on behalf of the other Customers), at MECC's or such other Customer's sole cost expense, shall return the Products to Contractor. In addition to any other provisions of the Contract that expressly survive termination of the Contract, the parties' rights and obligations under Sections 2, 3, 4, 5 and 7 of the End User Terms and Conditions (Attachment D) shall survive termination of the Contract. Upon termination of the Contract, MECC (for itself and on behalf of the other Customers) furthermore, at the request of Contractor, shall promptly certify that it has destroyed or returned to Contractor all Confidential Information, and all copies or derivatives in any form thereof, whether or not modified or merged into other materials. The foregoing requirement to destroy or return Confidential Information shall not apply to Confidential Information to the extent that a Customer has the right to otherwise maintain a copy of such Confidential Information in accordance with the terms hereof. For example, a Customer shall be permitted to retain and use Confidential Information necessary solely for purposes of enabling the Customer to exercise any right the Customer may have hereunder to continue to use the TCS Software after termination as described above.
- **Severability.** In the event any provision of this Contract, or part thereof, is held by a court of competent jurisdiction to be invalid or unenforceable, such offending provision, or part thereof, shall be deemed to be modified to the extent necessary to allow it to be enforced to the extent permitted by applicable law, or if it cannot be so modified, the offending provision, or part thereof, shall be deemed severed from the Contract. In any event, the remaining provisions of this Contract shall remain in full force and effect.
- **Waiver.** The waiver by either party of any default or breach of this Contract shall not constitute a waiver of any other or subsequent default or breach.
- **8. Force Majeure**. Neither party shall be liable hereunder by reason of any failure or delay in the performance of its obligations hereunder on account of strikes, shortages, riots, insurrection, fires, flood, storm, explosions, acts of God, acts of terrorism, war, governmental action, labor conditions, earthquakes, material shortages or any other cause which is beyond the reasonable control of such party. Notwithstanding the foregoing, such cause or condition shall not include a party's lack of funds, lack of credit, or other financial inability to perform. If a party intends to rely on the foregoing force majeure protection, it shall timely notify the other party in order to permit the other party, in its sole discretion, to suspend or curtail its own performance under the Contract for such time as the failure, delay or default continues.
- **9. Export Administration.** MECC (for itself and on behalf of the other Customers) agrees to comply fully with all relevant export laws and regulations of the United States ("Export Laws") to ensure that no Products (as such term is defined in the End User Terms and Conditions (Attachment D), nor any direct product thereof, is (i) exported, directly or indirectly, in violation of any Export Laws; or (ii) intended to be

used for any purposes prohibited by any Export Laws, including, without limitation, nuclear, chemical or biological weapons proliferation.

- 10. Successors and Assigns. All provisions of the Contract shall be binding upon, inure to the benefit of and be enforceable by and against each party and their respective successors and permitted assigns. Notwithstanding the foregoing, neither this Contract nor any rights granted hereunder may be sold, leased, assigned, or otherwise transferred, in whole or in part, by MECC or any Customer without the prior written consent of Contractor and any such attempted assignment shall be void and of no effect.
- **Relationship Between the Parties.** Each party is an independent contractor of the other and nothing in this Contract shall be construed to create a partnership, joint venture or agency relationship between the parties.

## ATTACHMENT D

## END USER TERMS AND CONDITIONS

These End User Terms and Conditions apply to (a) the hardware products ordered by MECC (for itself and on behalf of the other Customers) through TCS for the System (the "Hardware"); (b) the TCS computer software (in object code format only) ordered by MECC (for itself and on behalf of the other Customers) through TCS for the System and the media upon which such computer software is delivered to the Customer (the "TCS Software"); and (c) the third party computer software (in object code format only) ordered by MECC (for itself and on behalf of the other Customers) through TCS for the System and the media upon which such third party software is delivered to the Customers (the "Third Party Software"); and (d) the TCS guides, manuals and other written, viewable and/or printable materials provided to the Customers or otherwise generally made available by TCS to the Customers for use of the TCS Software from time to time (the "Documentation"). These End User Terms and Conditions also apply to the Customer Acquired Components (if any). The Hardware, TCS Software and Third Party Software are collectively referred to herein as the "Products". These End User Terms and Conditions also apply to the installation, support and any managed services provided by TCS with respect to the Products and, if applicable, the Customer Acquired Components (collectively, "Services"). Without limitation, MECC (for itself and on behalf of the other Customers) must provide TCS with, and hereby grants to TCS, authority and access to contact any third parties, on behalf of MECC (for itself and on behalf of the other Customers), in order to obtain any information necessary to facilitate the Services.

## 1. Rights Granted

- (a) License. Subject to the terms and conditions of the Contract (including, without limitation, timely payment by MECC (for itself and on behalf of the other Customers) of all amounts due to TCS hereunder), TCS hereby grants to MECC (for itself and on behalf of the other Customers) a nontransferable, nonexclusive license ("License") as follows:
  - (i) Each Customer may use the applicable TCS Software solely for the Customer's internal purposes and may permit its employees or other third party individuals otherwise authorized by the Customer ("Designated Users") to use such TCS Software for such purposes. Each Designated User's use of the TCS Software shall be subject to all of the terms of the Contract. Upon TCS's request, MECC (for itself and on behalf of the other Customers) agrees to provide TCS with a written list of all Designated Users.
  - (ii) Each Customer may use copies of the Documentation in support of the Customer's authorized use of the TCS Software, and may reproduce the Documentation, at no additional charge to the Customer; <u>provided</u>, that all titles, trademarks and copyright and restricted notices shall be reproduced in all such copies.
  - (iii) MECC (for itself and on behalf of the other Customers) may make one (1) copy of the TCS Software solely for archival, backup purposes; <u>provided</u>, that (a) no other copies shall be made without TCS's prior written consent; (b) all titles, trademarks, and copyright and restricted rights notices shall be reproduced in all permitted copies; and (c) such archival and backup copy of the TCS Software shall be subject to the terms of the Contract.
- (b) No Reverse Engineering. Each Customer shall not modify, enhance, translate, reverse engineer, disassemble or decompile the Products, nor cause, permit, or attempt any of the foregoing. Each Customer shall not create derivative works based upon the Products.
- (c) **Use by Designated Users.** Each Designated User's use of the Products shall be subject to all of the terms of the Contract. At no time shall the total number Designated Users using the Products (including, without limitation, logging into the TCS Software) at any one time from any device(s) exceed the number of Designated Users (or, as the case may be, units of licenses) identified on <u>Attachment B (Payment Provisions</u>).
- (d) **Updates.** The terms of these End User Terms and Conditions shall apply to any Updates that TCS may provide to the Customers. For purposes hereof, "**Update(s)**" means a subsequent release of any TCS Software (and, if the Customer has elected and paid for the appropriate TCS managed services option, covered Third Party Products) that, at TCS's sole discretion, may be made available at no additional charge (other than possible applicable hardware, media and handling charges) that consists of minor technical or functional additions or modifications to such products. Updates do not include any release, option, or future product that TCS (or, as the case may be, any applicable third party manufacturer) licenses or sells separately.
- (e) Upgrades. If MECC (for itself and on behalf of the other Customers) subscribes and pays for TCS's "Future Proof" managed services option, the terms of these End User Terms and Conditions also shall apply to any Upgrade(s) that TCS may provide to the Customers. For purposes hereof, "Upgrade(s)" means an upgrade in features, functionality or performance of the covered TCS Software that TCS licenses or sells separately but which is made available to the Customers pursuant to and in accordance with the terms of TCS's "Future Proof" option.

(f) Third Party Products. The Hardware and Third Party Software (collectively, "Third Party Products") may be provided to the Customers subject to or under the terms of applicable separate license, end user or other agreement (each, a "Vendor Agreement") between the Customer and the actual original manufacturer of such Third Party Product(s). With respect to Third Party Software, unless other terms of use are expressly specified in a Vendor Agreement covering such Third Party Software, a Customer's right to use such Third Party Software otherwise is subject and limited to the same rights and restrictions applicable to the Customer's use of the TCS Software. TCS shall not be deemed a party to any Vendor Agreement and in no event shall TCS be deemed to have any obligations, responsibilities or liabilities with respect to any Vendor Agreement. In the event that any Third Party Products requires acceptance of a "shrink wrap", "click-through" or similar type of license or agreement for the access, opening, unpacking, installation, configuration or use thereof, MECC (for itself and on behalf of the other Customers) acknowledges and agrees that TCS may act as an agent on the Customer's behalf in accepting and executing any such license or agreement on behalf of the Customer. As applicable. TCS will use reasonable efforts to ensure that the applicable Customer has or is promptly provided with a copy of the Vendor Agreement(s) for the applicable Third Party Product(s) when such Third Party Product(s) are installed for the Customer in the System.

## 2. Ownership

As between Contractor and the Customers, upon TCS's receipt of applicable payment therefor from MECC (for itself and on behalf of the other Customers), MECC (for itself and on behalf of the other Customers) shall own and retain all right, title and interest in and to the Hardware and any applicable license rights to use the Third Party Software. As between Contractor and the Customers, TCS shall own and retain all right, title and interest in and to the TCS Software (including, without limitation, any Updates to the TCS Software and any Upgrades), the Documentation and all developments arising from any development work and/or other services performed by TCS in connection with the Contract ("Developments"), including, without limitation, all patent rights, copyrights, mask work rights, trademarks, service marks, trade secrets, moral rights and all other intellectual property rights relating thereto. The Customers do not acquire any rights, express or implied, in the Products, the Documentation or any Developments, other than those specified in the Contract. MECC (for itself and on behalf of the other Customers) hereby irrevocably transfers, conveys and assigns to TCS any and all rights it may acquire in any Developments and, at TCS's request and expense, shall take any and all action and execute any and all documents necessary to effectuate and perfect such assignment. In the event that any Customer makes suggestions to TCS regarding new features, functionality or performance that TCS adopts for any TCS Software for general commercial release, or suggests any changes to the Documentation, such new features, functionality, performance and changes shall become the sole and exclusive property of TCS. Without limiting any of the foregoing, nothing in the Contract shall be construed or interpreted as preventing or limiting TCS from in any way designing, implementing or otherwise providing, supporting or servicing any similar 9-1-1 or other systems for any other customers.

## 3. <u>Limited Warranties; Remedy for Breach of Warranty; Disclaimers</u>

- (a) Limited Products Warranty. The Products delivered by TCS pursuant to the Contract shall, at the time of delivery and for a period of one (1) year thereafter, be free from defects in materials or workmanship and shall conform in all material respects to the Documentation. For greater certainty, for purposes of this warranty the date the System is available to go live shall be considered the date of delivery for all the Products. This warranty shall be void to the extent that defects or failures of the Products to perform in accordance with the Documentation are caused by (i) a Customer's or any end user's negligence, misuse, or accident; (ii) any alteration or repair by a Customer or any end user not approved by TCS; (iii) any operation outside of environmental specifications for the Products provided by TCS; or (iv) problems relating to or caused by software, materials or services (including, without limitation, any installation services) not provided or approved by TCS. Additional fees (including, without limitation, applicable hourly professional or other fees at TCS's then-applicable standard rates and any other out-of-pocket expenses) may be charged by TCS for any repairs to the Products made by TCS resulting from defects or failures not covered by this warranty.
- (b) Limited Services Warranty. Services shall be performed by TCS in a manner consistent with generally accepted professional standards and will be warranted for ninety (90) days from the performance of the applicable Services.
- (c) Remedy for Breach of Warranty. For any breach of the warranties contained in this Section 3, the exclusive remedy and TCS's entire liability shall be, at TCS's option, to (i) repair, revise or replace the defective or non-conforming Products or Services to bring the same into compliance with warranties above; or (ii) refund to MECC (for itself and on behalf of the other Customers) the pro-rated amount actually paid by MECC (for itself and on behalf of the other Customers) to TCS for the relevant defective or non-conforming Products or Services, provided, however, that with respect to any defective Hardware or Third Party Software, any such refund shall be subject to return of such defective Hardware and Third Party Software (and all copies thereof) to TCS and, with respect to any defective TCS Software, any such refund shall be subject to certification to TCS that MECC (for itself and on behalf of the other Customers) has destroyed or has returned to TCS such defective TCS Software and all copies thereof. Any replacement Products or Services provided will be warranted from the date of replacement until the later of (x) the end of the original warranty period or (y) thirty (30) days.
- (d) **Disclaimers**. Except as provided in <u>Sections 3(a)</u> and <u>(b)</u> above, TCS does not warrant that (i) the Products or Services will meet any Customer's requirements, (ii) the Products or Services will operate in combination with

other hardware, software, systems or data not provided or validated by TCS that a Customer or any Designated User may select for use, (iii) the operation of the Products and Services will be uninterrupted or error-free, or (iv) that data will be accurate or uncorrupted when generated by or transmitted through the Products or Services. Without limiting any of the foregoing, TCS shall not be responsible for the quality or accuracy of any data not originally developed by it, nor shall TCS be responsible for any errors or other issues in the operation of the Products resulting from, in whole or in part, any data not originally developed by it.

(e) MECC (FOR ITSELF AND ON BEHALF OF THE OTHER CUSTOMERS) EXPRESSLY AGREES THAT USE OF THE PRODUCTS, DOCUMENTATION AND ANY SERVICES IS AT EACH CUSTOMER'S SOLE RISK. EXCEPT AS OTHERWISE EXPRESSLY SET FORTH HEREIN, TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, THE PRODUCTS, DOCUMENTATION AND SERVICES (INCLUDING ALL CONTENT, SOFTWARE, FUNCTIONS, MATERIALS, INFORMATION AND EQUIPMENT INCLUDED OR PROVIDED BY TCS OR ANY OTHER THIRD PARTY IN CONNECTION THEREWITH) ARE PROVIDED AS IS, WITHOUT WARRANTIES OF ANY KIND, EITHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING, BUT NOT LIMITED TO, WARRANTIES OF TITLE, IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WARRANTIES OF NON-INFRINGEMENT OR WARRANTIES OF QUALITY OF SERVICE. ANY WARRANTIES IMPLIED OR REQUIRED BY LAW THAT CANNOT BE DISCLAIMED ARE LIMITED IN DURATION TO THE WARRANTY PERIOD SET FORTH IN SECTION 3(a) ABOVE. NOTWITHSTANDING ANYTHING TO THE CONTRARY CONTAINED HEREIN, TCS DISCLAIMS ANY AND ALL LIABILITY ARISING FROM ANY MISUSE OR UNAUTHORIZED DISCLOSURE OF DATA FROM THE PRODUCTS BY A CUSTOMER, ANY DESIGNATED USERS OR ANY OTHER THIRD PARTY.

WITH RESPECT TO ANY THIRD PARTY PRODUCTS, THE RESPECTIVE ACTUAL ORIGINAL MANUFACTURERS OF THE THIRD PARTY PRODUCTS MAY WARRANT SUCH THIRD PARTY PRODUCTS AS PROVIDED IN THE APPLICABLE VENDOR AGREEMENT FOR SUCH THIRD PARTY PRODUCTS. SUCH THIRD PARTY WARRANTIES, IF ANY, WILL BE THE APPLICABLE CUSTOMER'S SOLE REMEDY RELATING TO SUCH THIRD PARTY PRODUCTS. TO THE EXTENT REASONABLY POSSIBLE, TCS SHALL PASS-THROUGH ANY SUCH WARRANTIES TO THE PPLICABLE CUSTOMER, BUT IN NO EVENT SHALL TCS BE RESPONSIBLE FOR ANY WARRANTY CLAIMS FOR ANY THIRD PARTY PRODUCTS.

#### 4. <u>Limitation of Liability</u>

IN NO EVENT SHALL TCS'S AGGREGATE LIABILITY TO THE CUSTOMERS UNDER THE TERMS OF THE CONTRACT EXCEED THE TOTAL PAYMENTS ACTUALLY RECEIVED BY TCS FROM AND SPECIFIC TO SUCH CUSTOMER PURSUANT TO OR IN CONNECTION WITH THE CONTRACT IN THE PRECEDING TWELVE-MONTH PERIOD. IN NO EVENT SHALL TCS BE LIABLE FOR ANY INDIRECT, INCIDENTAL OR SPECIAL DAMAGES, INCLUDING WITHOUT LIMITATION DAMAGES FOR LOSS OF PROFITS, REVENUE, DATA OR USE, INCURRED BY ANY CUSTOMER OR ANY THIRD PARTY, WHETHER IN AN ACTION IN CONTRACT OR TORT, EVEN IF TCS HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. WITHOUT LIMITING THE FOREGOING, TO THE EXTENT PERMITTED BY APPLICABLE LAW, IN NO EVENT SHALL ANY OF TCS'S LICENSORS BE LIABLE FOR ANY DAMAGES OR LOSS OF ANY KIND, INCLUDING, WITHOUT LIMITATION, ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES, INCLUDING WITHOUT LIMITATION DAMAGES FOR LOSS OF PROFITS, REVENUE, DATA OR USE, INCURRED BY ANY CUSTOMER OR ANY THIRD PARTY, WHETHER IN AN ACTION IN CONTRACT OR TORT, EVEN IF SUCH TCS LICENSOR HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. The provisions of the Contract allocate the risks between TCS and the Customers. MECC (for itself and on behalf of the other Customers) acknowledges and agrees that the pricing it received for the Products and Services reflects this allocation of risk and the limitation of liability specified herein.

## 5. <u>Indemnification</u>

MECC (for itself and on behalf of the other Customers) hereby agrees to indemnify, defend and hold harmless TCS and each of its officers, directors, shareholders, employees, affiliates, licensors, contractors and agents (each, a "TCS Indemnitee") from and against any and all liability and costs (including reasonable attorneys' fees) incurred by any TCS Indemnitee in connection with any claim, whether or not successfully asserted, arising out of (a) any breach by a Customer of the terms of the Contract; or (b) each Customer's and/or any Designated User's use of the System.

## 6. <u>Verification and Audit Rights</u>

At TCS's written request, MECC (for itself and on behalf of the other Customers) shall furnish TCS with a certificate executed by an authorized agent of the Customers verifying that the Products are being used pursuant to and in accordance with the terms and conditions of the Contract. At its expense and upon reasonable prior notice to the MECC (for itself and on behalf of the other Customers), TCS may audit each Customer's use of the Products. Any such audit shall be conducted during regular business hours at the Customer's facilities and shall not unreasonably interfere with the Customer's business activities. If an audit reveals that MECC (for itself and on behalf of the other Customers) has underpaid fees for use of the Products as a result of unauthorized use or copying of the Products, or any portion thereof, MECC (for itself and on behalf of the other Customers) shall be invoiced for such underpaid fees based on the price list for the Products in effect at the time the audit is completed plus interest thereon at the prevailing U.S. dollar prime rate from the initial date of the unauthorized use. If the amount of the underpayment exceeds 5% of the total fees paid by MECC (for itself and on behalf of the other Customers) in the year of such audit, then MECC (for itself and on

behalf of the other Customers) shall also pay TCS's reasonable costs of conducting the audit. TCS's right to conduct any audit pursuant to this <u>Section 6</u> shall survive any termination of the Contract.

## 7. Other Terms

(a) Non-Disclosure. By virtue of the Contract, the Customers may have access to information that is confidential to TCS ("Confidential Information"). Confidential Information may include but not be limited to the Products, source code, algorithms, formulas, methods, know-how, processes, designs, new products, developmental work, marketing requirements, marketing plans, customer names, prospective customer names and other proprietary information relating to TCS and/or its business generally.

Confidential Information shall not include information that (i) is or becomes a part of the public domain through no act or omission of a Customer; (ii) was in a Customer's lawful possession prior to the disclosure and had not been obtained by the Customer either directly or indirectly from TCS; (iii) is lawfully disclosed to a Customer by a third party without restriction on disclosure; or (iv) is independently developed by a Customer without use of or reference to the Confidential Information. In addition, this <a href="Section 7(a)">Section 7(a)</a> will not be construed to prohibit disclosure of Confidential Information by a Customer to the extent that such disclosure is required by law or valid order of a court or other governmental authority; <a href="provided">provided</a>, <a href="however">however</a>, that MECC (for itself and on behalf of the other Customers) shall first have given notice to TCS and shall have made a reasonable effort to obtain a protective order limiting the disclosure of any Confidential Information and requiring that the Confidential Information so disclosed be used only for the purposes for which the order was issued. Such information so disclosed shall be deemed Confidential Information for all other purposes.

MECC (for itself and on behalf of the other Customers) agrees, unless required by law or valid order as described above, not to make the Confidential Information available in any form to any third party (other than the Customers and Designated Users on a need-to-know basis) or to use the Confidential Information for any purpose other than in the performance of the Contract. MECC (for itself and on behalf of the other Customers) agrees not to disclose the results or other details of any performance tests or other evaluations of any of the Products or Services to any third party without TCS's prior written approval. MECC (for itself and on behalf of the other Customers) agrees to take all reasonable steps to ensure that TCS's Confidential Information is not disclosed or distributed by any Customers or Designated Users in breach of the Contract, and that all Customers and Designated Users have agreed to confidentiality terms at least as strict as those set forth herein. MECC (for itself and on behalf of the other Customers) agrees that it will be liable to TCS for any failure by any Customers or Designated Users to abide by the terms of this Contract. This Section 7(a) constitutes the entire understanding of the parties and supersedes all prior or contemporaneous agreements, representations or negotiations, whether oral or written, with respect to TCS's Confidential Information.

- (b) **Non-Solicitation.** During the term of the Contract, and for a period of one (1) year thereafter, MECC (for itself and on behalf of the other Customers) shall not, directly or indirectly, (a) solicit, hire or attempt to hire any TCS employee or former employee of TCS whose employment with TCS ended less than one (1) year prior to the date of such solicitation, hiring or attempt to hire, nor (b) induce or recruit any TCS employee to terminate his/her employment with TCS or to apply for or to accept employment with any other person or entity; <u>provided, however,</u> that the foregoing provisions shall not prevent a Customer from (i) hiring any employee or former employee of TCS who initiates contact with the Customer prior to solicitation by the Customer or (ii) soliciting or employing any such employee or former employee as a result of advertisements in trade journals, newspapers or similar publications of general circulation placed by the Customer. MECC (for itself and on behalf of the other Customers) acknowledges that, in the event of a breach of this <u>Section 7(b)</u>, actual damages would be difficult or impossible to ascertain. Accordingly, in the event of any breach of this <u>Section 7(b)</u>, in addition to any other remedy to which TCS may be entitled, at law or in equity, MECC (for itself and on behalf of the other Customers) agrees to pay to TCS the sum of \$100,000, as liquidated damages that fairly represent a reasonable forecast of the costs TCS will have incurred to recruit and train any such former employee. Such amount shall in no event be construed to be a penalty of any kind.
- (c) Injunctive Relief. MECC (for itself and on behalf of the other Customers) acknowledges and agrees that TCS may be damaged irreparably in the event any of the provisions of Sections 7(a) or 7(b) of these End User Terms and Conditions are not performed in accordance with their specific terms or otherwise are breached. Accordingly, MECC (for itself and on behalf of the other Customers) agrees that, in addition to any other remedy to which TCS may be entitled, at law or in equity, TCS shall be entitled to seek an injunction or injunctions to prevent breaches or threatened breaches of the provisions of Sections 7(a) or 7(b) of these End User Terms and Conditions and to enforce specifically such provisions in any action instituted in any court of the United States or any state thereof having jurisdiction over the parties and the matter.
- (d) Government Restricted Rights. To the extent a Customer is any unit or agency of the United States Government (the "Federal Government"), or if a Customer is using funds provided by the Federal Government for this Contract, it is understood and acknowledged that the Products are classified, as applicable, as "Commercial Computer Software" and/or "Software Documentation" and/or "Technical Data" related to "Commercial Items", as such terms or their equivalents are defined in the applicable provisions of the Federal Acquisition Regulations ("FARs") and supplements thereto, including the Department of Defense FAR Supplement ("DFARS"), and are provided with RESTRICTED RIGHTS. For greater certainty, it is understood and acknowledged that all such Products were developed entirely at private expense and no part of such Products were first produced in the performance of a

Federal Government contract. As such, to the extent applicable, consistent with FAR 12.211 and 12.212 (and any other applicable equivalent FAR or DFARS provision) any such Products provided to or used by or for the Federal Government may be done so only under and subject to the commercial license terms included in these End User Terms and Conditions and the Federal Government's rights therein are to be RESTRICTED and/or LIMITED pursuant to such terms.

(e) **Product Reference, Marketing Materials and Press Release.** No press releases or other public disclosures of or relating to this Contract shall be made by any party without the prior mutual written consent of the parties, unless required by law or regulatory authority. MECC (for itself and on behalf of the other Customers) consents to the use of MECC's and each Customer's commercial name in Contractor's customer and/or partner lists.

[End of End User Terms and Conditions]