**EIGHTH AMENDMENT TO BROWARD COUNTY P25 SYSTEM AND SERVICES MASTER AGREEMENT WITH MOTOROLA SERVICES, INC.**

This Eighth Amendment ("Amendment") is entered into between Broward County, a political subdivision of the State of Florida ("County"), and Motorola Services, Inc., a Delaware corporation ("Motorola Solutions" or "Contractor") (each a "Party" and collectively referred to as the "Parties").

**RECITALS**

A. The Parties entered into Broward County P25 System and Services Master Agreement with Motorola Solutions, Inc., dated May 23, 2017 (the "Original Agreement"), to provide a new 700 MHz, P25 Phase II system to replace the County's existing 800 MHz SmartNet System, a new IP-based microwave system to replace the existing Tadiran 6 GHz system and providing backward compatibility for legacy circuits, and for related civil work, software, equipment, and support and maintenance.

B. The Original Agreement was amended by a First Amendment, dated June 28, 2018, which among other things, change the master Site and add new shelters to multiple Sites; a Second Amendment, dated October 23, 2018, to provide for the purchase of additional Subscriber Equipment by other County agencies; a Third Amendment, dated November 7, 2018, to provide for the discounted purchase of additional Subscriber Equipment; a Fourth Amendment, dated June 5, 2019, to modify certain equipment and include certain additional work; a Fifth Amendment dated February 9, 2022, to modify certain equipment, include additional work, and modify the payment schedule; a Sixth Amendment, dated October 11, 2022, to update the not-to-exceed amounts; and a Seventh Amendment, dated August 18, 2023, to include additional scope and increase the not-to-exceed amounts. The Original Agreement, as amended by the First, Second, Third, Fourth, Fifth, Sixth, and Seventh Amendments, is referred to herein as the "Agreement."

C. The Parties now desire to amend the Agreement to include additional scope, increase the not-to-exceed amounts, and add certain other provisions.

Now, therefore, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

1. The above Recitals are true and correct and are incorporated herein by reference. All capitalized terms not expressly defined within this Amendment shall retain the meaning ascribed to such terms in the Agreement.

2. Except as modified herein, all remaining terms and conditions of the Agreement shall remain in full force and effect.

3. Console Equipment Work Authorizations. By this Amendment, County elects to procure as Optional Services certain console equipment for the North public safety answering points ("PSAPs") and the related implementation services as set forth in Work Authorization No. 11, attached hereto. In addition, the County expects to procure similar equipment and services for the Central and South PSAPs; the Purchasing Director is authorized to execute a Work Authorization to effectuate that procurement. The Contract Administrator may approve in writing modifications to the equipment schedule set forth in the applicable work authorization at any time prior to Final Acceptance of the goods and services under that Work Authorization, provided that the modification provides equal or greater functionality, as determined by the Contract Administrator, and provided there is no additional cost to County.

4. Support and Maintenance. The new consoles procured under these Work Authorizations will replace certain equipment currently supported under the Agreement. Therefore, upon cutover to the new equipment, the then-current Support and Maintenance fees will be reduced by a designated credit amount to account for the decommissioned equipment. The Work Authorizations shall detail the applicable Support and Maintenance Services costs for the new equipment, and the applicable reductions in the Support and Maintenance Services costs for the decommissioned equipment. The additional Support and Maintenance Services fees due after application of the reduction (the "incremental increase") will be accounted for under the line item in Section 5.1 (as amended below) for Consoles, with the remainder of the fee continuing to be accounted for under the original Support and Maintenance Services line item in Section 5.1.

5. Section 5.1 of the Agreement is amended as follows (strikethrough text indicates deletions and bold/underlining indicates additions):

5.1 For the duration of the Agreement, County will pay Contractor in accordance with Exhibit B up to the following maximum amount(s):

| **Services/Goods** | **Term** | **Not-To-Exceed Amount** |
|---|---|---|
| P25 System Implementation (including Radio System, Microwave System, and Facilities and Infrastructure System) | Initial Term | $39,500,000 |
| Additional Training | Initial Term | $200,000 |
| Support and Maintenance Services | Initial Term | $18,000,000 |
| Optional renewal terms ($100,000 in additional training included in each renewal term) | First 5 year renewal term<br>Second 5 year renewal term | $7,100,000<br>$8,300,000 |
| **Subtotal** | | **$73,100,000** |
| **CONSOLES** | | |
| **Equipment & Services** | | **$10,000,000** |
| **Support and Maintenance Services (incremental increase)** | | **$1,000,000** |
| **Subtotal** | | **$11,000,000** |

| Services/Goods | Term | Not-To-Exceed Amount |
|---|---|---|
| **OPTIONAL SERVICES:** | | |
| County purchases of Subscriber Equipment | | $10,097,000 |
| Microware System for WWS | Duration of the Agreement | $500,000 |
| Logging Recorder Solution | Duration of the Agreement | $1,200,000 |
| Other Optional Services | Duration of the Agreement | $6,000,000 |
| **Optional Services Subtotal** | | **$17,797,000** |
| **TOTAL NOT TO EXCEED** | | ~~**$90,897,000**~~ **$101,897,000** |

6. Entities of Foreign Concern. The provisions of this section apply only if the Agreement provides access to an individual's personal identifying information. By execution of this Amendment, the undersigned authorized representative of Contractor hereby attests under penalty of perjury as follows: Contractor is not owned by the government of a foreign country of concern, is not organized under the laws of nor has its principal place of business in a foreign country of concern, and the government of a foreign country of concern does not have a controlling interest in the entity; and the undersigned authorized representative of Contractor declares that they have read the foregoing statement and that the facts stated in it are true. Terms used in this section that are not otherwise defined in the Agreement shall have the meanings ascribed to such terms in Section 287.138, Florida Statutes.

7. Anti-Human Trafficking. By execution of this Amendment by an authorized representative of Contractor, Contractor hereby attests under penalty of perjury that Contractor does not use coercion for labor or services, as such terms are defined in Section 787.06, Florida Statutes. Under penalties of perjury, the undersigned authorized representative of Contractor declares that they have read the foregoing statement and that the facts stated in it are true.

8. In the event of any conflict or ambiguity between this Amendment and the Agreement, the Parties agree that this Amendment shall control. The Agreement, as amended herein by this Amendment, incorporates and includes all prior negotiations, correspondence, conversations, agreements, and understandings applicable to the matters contained herein, and the Parties agree that there are no commitments, agreements, or understandings concerning the subject matter hereof that are not contained in the Agreement as amended in this Amendment. Accordingly, the Parties agree that no deviation from the terms hereof shall be predicated upon any prior representations or agreements, whether oral or written.

9. Preparation of this Amendment has been a joint effort of the Parties and the resulting document shall not, solely as a matter of judicial construction, be construed more severely against one of the Parties than any other.

10. Contractor acknowledges that through the date this Amendment is executed by Contractor, Contractor has no claims or disputes against County with respect to any of the matters covered by the Agreement.

11. The effective date of this Amendment shall be the date of complete execution by the Parties.

12. This Amendment may be executed in multiple originals or in counterparts, whether signed physically or electronically; each of which shall be deemed to be an original, and all of which, taken together, shall constitute one and the same agreement.

*(The remainder of this page is blank.)*

IN WITNESS WHEREOF, the Parties hereto have made and executed this Amendment: BROWARD COUNTY through its BOARD OF COUNTY COMMISSIONERS, signing by and through its Mayor or Vice-Mayor, authorized to execute same by Board action on the _____ day of _____, 2024, and Motorola Services, Inc., signing by and through its _____, duly authorized to execute same.

COUNTY

ATTEST:

BROWARD COUNTY, by and through its Board of County Commissioners

By: _____
Broward County Administrator, as ex officio Clerk of the Broward County Board of County Commissioners

By: _____
Mayor

____ day of _____, 2024

Approved as to form by
Andrew J. Meyers
Broward County Attorney
115 South Andrews Avenue, Suite 423
Fort Lauderdale, Florida 33301
Telephone: (954) 357-7600

Brandon Butterworth
Digitally signed by Brandon Butterworth
Date: 2024.05.30 18:37:30 -04'00'

By_____
Brandon R. Butterworth (Date)
Assistant County Attorney

Digitally signed by Rene D. Harrod
Reason: Approved as to form
Location: Broward County Attorney's Office
Date: 2024.05.30 17:32:15 -04'00'

By_____
René D. Harrod (Date)
Chief Deputy County Attorney

RDH/BRB
5/30/2024
P25 Eighth Amendment
#1107575.4

**EIGHTH AMENDMENT TO BROWARD COUNTY P25 SYSTEM AND SERVICES MASTER AGREEMENT WITH MOTOROLA SERVICES, INC.**

**CONTRACTOR**

By: _____
Authorized Signer

Daniel Sanchez, Territory VP
Print Name and Title

30th day of May, 2024

**WORK AUTHORIZATION FOR P25 SYSTEM AND SERVICES**
**MASTER AGREEMENT WITH MOTOROLA SOLUTIONS, INC.**

Contract Number: RFPR1422515R1/P1
Work Authorization No. P25-WA-11

This Work Authorization is between Broward County ("County") and Motorola Solutions, Inc. ("Provider" or "Motorola") pursuant to the P25 System and Services Master Agreement with Motorola Solutions, Inc., dated May 23, 2017 (as amended, the "Agreement"). In the event of any inconsistency between this Work Authorization and the Agreement, the provisions of the Agreement shall govern and control for the work described herein.

**Services to be provided:**
All equipment, software, and services necessary to implement 41 new AXS Consoles at the North PSAP, as further detailed in Exhibit A hereto.

The time period for this Work Authorization will be for a period from execution until 365 days after the County's Notice to Proceed for implementation at the North PSAP, which shall occur when construction at the North PSAP is sufficiently advanced to allow installation of the equipment, unless otherwise terminated or extended by the Contract Administrator.

**Fee Determination:** The following amounts will be invoiced in accordance with the Milestone Payment Schedule set forth in Exhibit A:

| | |
|---|---|
| Equipment | $4,074,742 |
| Services | $1,702,561 |
| Discount: | ($813,081) |
| **Total Amount of this Work Authorization:** | **$4,964,222** |

**Support and Maintenance**: Support and Maintenance for the first year after Final Acceptance is provided at no cost to County under the Agreement; in addition, commencing upon cutover to the new equipment and continuing for each year of the Agreement for so long as the North PSAP consoles are maintained under the Agreement, County will receive a credit in the applicable amounts described in the Pricing Summary in Section 7 against Support and Maintenance Services otherwise due under the Agreement to account for the support no longer needed for the decommissioned consoles and related equipment at the North PSAP. Commencing on the one-year anniversary of Final Acceptance, Support and Maintenance will be due for the North PSAP consoles and related equipment at the annual rate indicated in the Support and Maintenance Fees Table in the Pricing Summary of Section 7, with the first invoice adjusted pro rate to maintain the then-current invoicing schedule.

**County**

Project Manager Date

Contract Administrator Date

Approved s t o form y
the Office of the County At orney:

Digitally signed by Rene D. Harrod
Reason: Approved as to form
Location: Broward County
Attorney's Office
Date: 2024.05.30 17:32:31 -04'00'

Purchasing Director Date

**Provider**

Signed 5/30/24
Date

Daniel Sanchez
Typed Name

Territory VP
itle

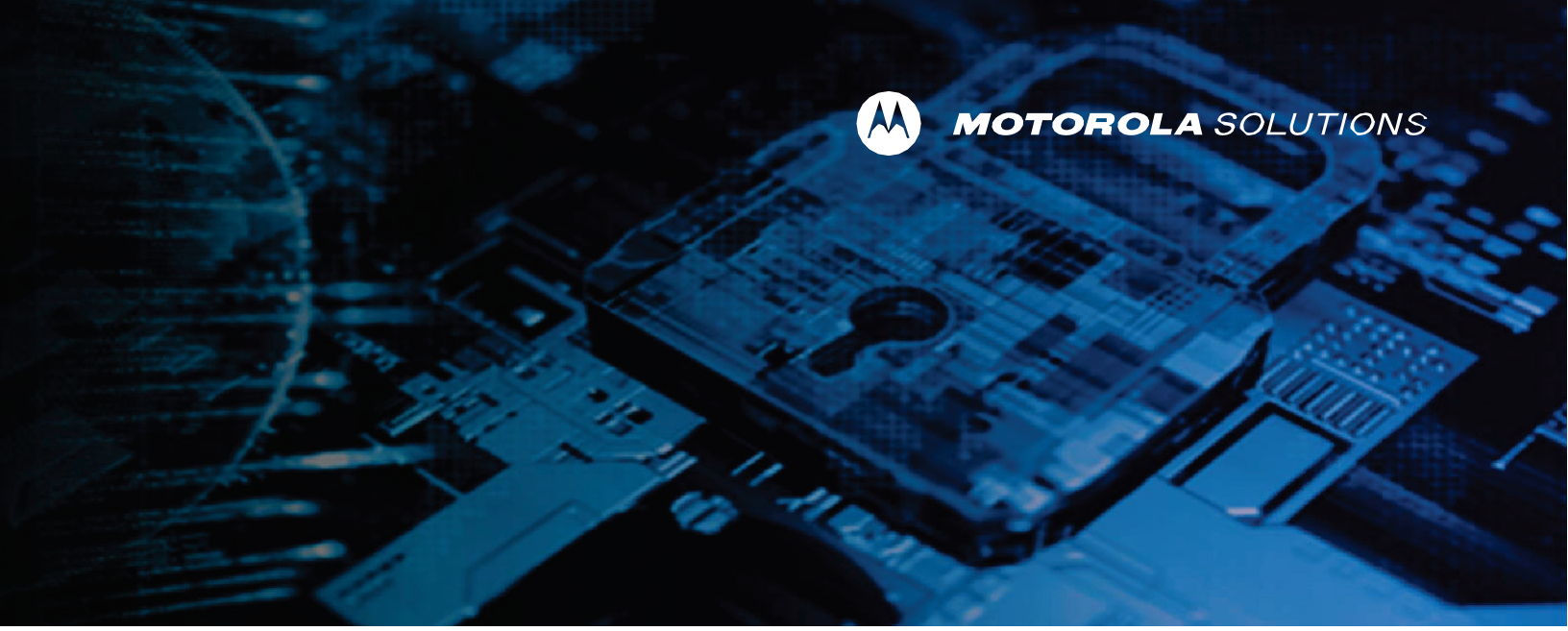



**Exhibit A**

# CommandCentral AXS Dispatch Console Solution at New North PSAP Location

May 27th, 2024

Section 1

# CommandCentral AXS Dispatch Console Solution Description

## 1.1 A New Dispatch Solution for Broward County

This Statement of Work will provide Broward County CommandCentral AXS dispatch consoles as replacements for the MCC 7500. This next generation console will enable Broward County's dispatchers to work faster and more accurately, even in the most stressful situations. A completely re-engineered interface responds to touch, type or click and surfaces important information when and where a dispatcher needs it – streamlining workflows that result in more immediate and more informed responses.

The AXS console will offer the following distinct benefits to Broward County:

- A seamless migration from the MCC 7500
- A new human-machine interface designed specifically to make the work of dispatchers more manageable and more efficient
- Simplified upgrades that ensure the County's system is always current with new features, fixes and security updates

The new dispatch consoles and related goods and services provided under this Statement of Work will provide the functionality and benefits stated in this Statement of Work.

## 1.2 Migrating from the MCC 7500

As the replacement console for the MCC 7500, AXS will improve how Broward County's dispatchers work today, and also carry the County into the future as technology makes new enhancements and integrations possible.

Motorola will work closely with the County to ensure a smooth migration to the new system.

## Consoles Designed with Dispatchers in Mind

CommandCentral AXS is Motorola's next generation radio/voice dispatch console, that was built around the voices behind the microphone. The AXS dispatch console provides a highly intuitive user interface and configurable on-screen tools, all designed to ease cognitive overload. Its intuitive graphical user interface (GUI) is highly configurable based on agency protocols, roles, and locations, helping dispatchers speed responses and work more accurately, even during the most stressful situations.

## One Console, Multiple Configuration Options

CommandCentral AXS provides a modern, intuitive user interface that was designed to address dispatcher needs. While the technology and tools are sophisticated, accessing and using them is simple. Critical tasks and frequently used functions are right where they need to be, so dispatchers can focus on what matters, even in pressure-packed moments, without worrying about complicated menus or misplaced features.

To simplify protocols even further, AXS provides the capacity for multiple scenarios, with just one console – including diverse dispatching roles and workflows, whether on main or backup sites, and supporting everyday operations, mutual aid scenarios or one-time special events.

One benefit of the flexible configuration options is the seamless “look and feel” it can provide to a dispatcher that needs to relocate to an alternate dispatch position. If necessary to evacuate a dispatch center to a different center, dispatchers can relocate and continue dispatching operations as if they never left their normal dispatch location.

## Configurability for a Console that Fits Broward County’s Needs

The AXS dispatch console will be configured by Motorola to look and feel the way that works best for the County’s agencies and dispatchers, subject to the County Contract Administrator’s approval.

CommandCentral AXS features a highly configurable graphical user interface (GUI) that provides quick, single-view access to important information and functionalities. The browser-based GUI’s versatile folders, tabs, and scalable resources allow users to organize and configure their dispatch experience and make engagement more familiar and intuitive from shift to shift. Folders and tabs can be relocated, exposed, or overlapped as needed, giving dispatchers more control of what information they see and how they interact with those resources.

Configurability means that dispatchers will have the tools they need, organized in a way that makes sense to them. Ultimately, this results in fewer distractions and greater capacity to manage incidents.

Configuration tools will permit the County to tailor the console screen by agency, discipline or individual dispatcher. These tools include:

- **Configurable colors** – Users can create a unique visual experience with the colors of their choice or choose a predefined color theme. Color elements include resources, folder groups, buttons and more.
- **Configurable iconography** – Choose from a wide array of icons from our library.
- **Configurable tones and alerts** – Choose from a wide array of alerts and tones from our library.
- **Configurable folder and tab organization** – Take control of the layout with the ability to quickly and easily organize it however the user sees fit. With the availability of dynamic and fixed folders, dispatchers can always have important resources front and center.
- **Configurable for individual roles, teams, and agencies** – Configure the console’s look and feel for an individual user, or create an agency-wide look and feel.

CommandCentral AXS also offers multiple options for routing audio to speakers and controlling volume levels. This functionality will be available to County upon implementation at no additional cost to County.

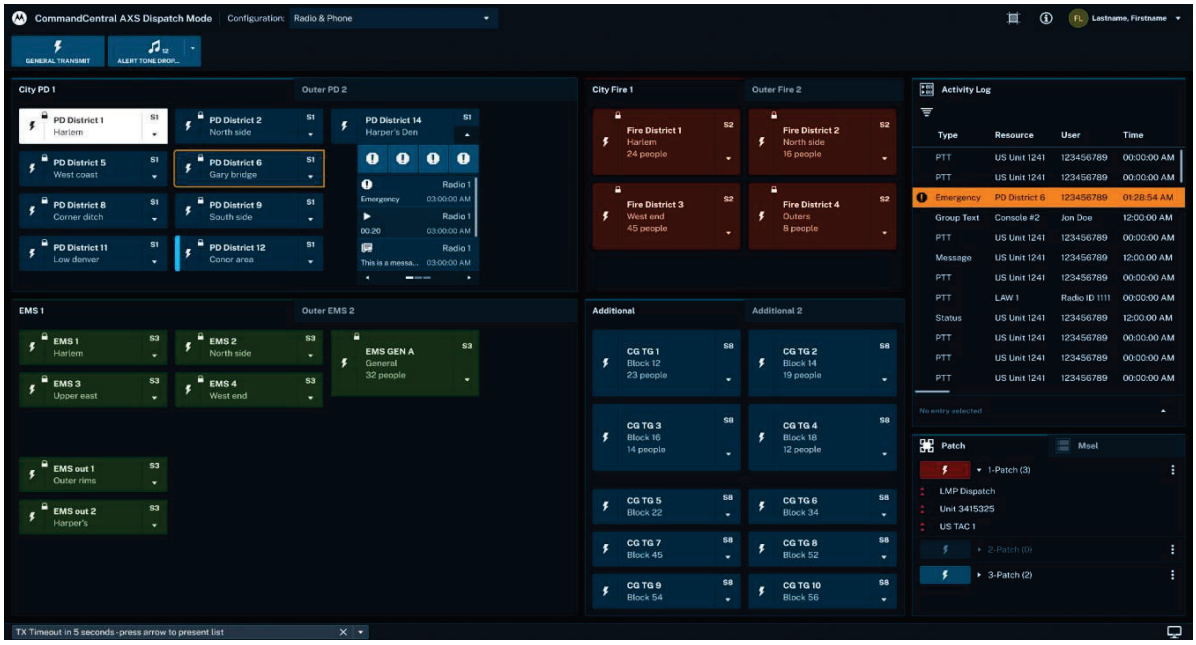



**Figure 1: Typical CommandCentral AXS Dispatch GUI Display**

## Assist Panels for Thinking and Working Faster

AXS provides built-in services to help dispatchers work faster while providing greater support to users in the field. With a wide array of available assist panel services, such as patching, paging, multi-select and an activity log, dispatchers have the right tools at their fingertips to get accurate information where it needs to be, when it needs to be there.

## Simplified Software Updates

### More Frequent, Less Disruptive

CommandCentral AXS gives the County more control of the update process, providing more enhancements with less hassle. AXS software updates are released independently from the ASTRO radio system, so the County's personnel can choose when and how new capabilities, integrations and security patches are implemented and installed. The County can download releases from the ASTRO NEXT Download Server (ANDS) without interrupting the console, and further, can minimize operational impact by testing on a single console or a limited subset of consoles based on comfort level.

The new update protocols deliver greater flexibility and reliability:

- Customers can take advantage of new console features and functionality as soon as they are developed and available. The AXS console provides software updates frequently, including new capabilities and bug fixes. Customers can now deploy upgrades when most convenient for their operations, for example, in between shifts, Sunday evenings, etc.

- Regular updates increase security. Cyberattacks and ransomware are becoming increasingly

frequent and can put an entire system at risk. To make sure the AXS console is protected against cyberattacks, security patches are made available more frequently.

- The ANDS is deployed at a Zone Core site and only one ANDS is required per ASTRO 25 system, regardless of how many AXS dispatch sites are deployed within the system.

## Retaining our time-tested capabilities

While AXS brings new and exciting capabilities, it also retains those foundational aspects of Motorola's dispatch portfolio that have stood the test of time and are relied upon by the agencies that use its products.

The sophisticated and numerous capabilities of the MCC 7500 consoles are carried forward into the CommandCentral AXS platform, so those capabilities will not be described in depth herein. As with the consoles that preceded it, AXS enables critical features that help dispatchers work effectively in moments when every second counts, including such familiar capabilities as:

- **Priority** - Dispatchers can have elevated priority on the radio system. This means the capacity to deliver critical messages in emergency situations without having to wait.
- **Capacity** - In incidents when other agencies are assisting Broward County, multi-channel patches generally only consume one channel. This protects critical capacity and prevents busy signals so first responders can communicate more efficiently.
- **Emergency Alerts** - Dispatchers are guaranteed to receive emergency alarms, making sure that if a first responder triggers an emergency, dispatchers will never miss it.
- **Aliases** - First responder names appear on the console so dispatchers know immediately which first responder is calling for help or activated their emergency button.
- **Purpose-Built Dispatch Console Accessories** – Enhances the dispatch experience with accessories, such as gooseneck microphone, speakers, headset jack, and footswitch, designed and tested for industry-leading performance and reliability.
- **Tone Paging** – Allows users to send user configured paging tones on radio resources. This flexible paging feature is integrated with CommandCentral AXS for both conventional and trunked radio resources, while an external paging encoder port on the CommandCentral Hub enables compatible third-party paging encoders to send paging tones on the selected radio resources.
- **Patch Capabilities** – Enables dispatchers to set up a communication path between two or more resources that are normally unable to communicate with each other, such as trunked resources and conventional resources.
- **Alert Tones** – Allows dispatchers to send one of fifteen user-configurable alert tones on selected radio resources. Fifteen default .wav files are provided with the dispatch console software, but these default files may be replaced with user configured.wav files to meet specific needs.
- **Channel Marker** – Enables dispatchers to send a periodically repeating piece of audio on radio resources to meet the specific needs.
- **Activity Log** – Provides an efficient point of reference for all incoming calls into a dispatch

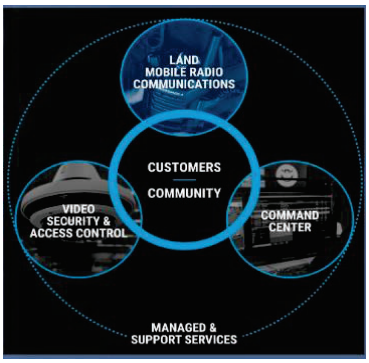
console, showing dispatchers detailed, searchable call information (radio resource name and call time) to enable faster and more informed response.

- **Advanced Conventional** – This option provides the dispatcher with the ability to control ASTRO® 25 conventional channels and/or MDC 1200 channels.
- **Headset Sharing** – CommandCentral AXS supports Headset Sharing, which enables a dispatcher to use a common headset for both radio and 911 communications and to quickly access basic 911 call taking functionality from CommandCentral AXS. This improves the dispatcher's efficiency and accuracy while concentrating on the radio dispatch GUI during 911 calls.
- **Auxiliary Inputs/Outputs** – Auxiliary Inputs/Outputs (Aux I/Os) allow for remote status indications or remote control through dispatch positions,

… and many other well-established dispatch capabilities.

## Investing in the Future with a Safety & Security Ecosystem

The AXS Dispatch Console has an architecture that will enable future integrations with other command center applications and radio networks. As technology enables further simplification of workflows and ever- more efficient management of information, AXS will continue to transform the dispatch experience.



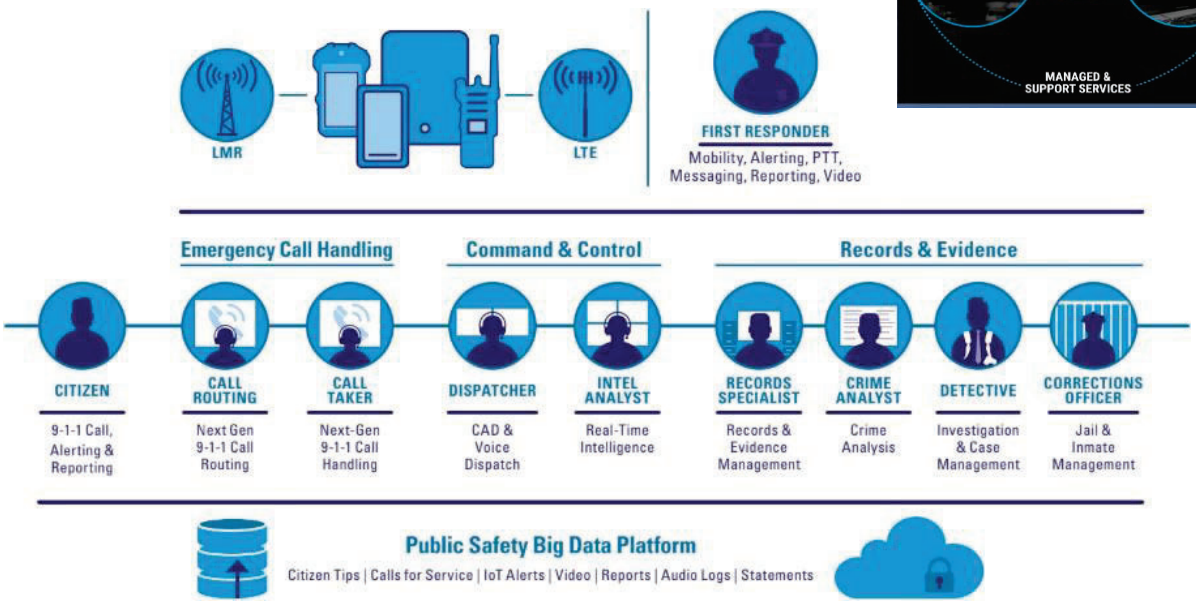




**Figure 2: Motorola's End-to-End Portfolio**

Section 2

# Configuration for Broward County

This section details the specifics of the CommandCentral AXS solution for the New North PSAP location. Any modifications to this configuration require the prior written approval of the County Contract Administrator.

## 2.1 Number of Dispatch Consoles and Locations

The solution provides Broward County with the following dispatch consoles at the indicated locations:

| Number of Dispatch Consoles | Location Name |
|---|---|
| 41 | "New North PSAP" 1801 Spectrum Blvd., Fort Lauderdale, FL 33309 |

## 2.2 Block Diagram

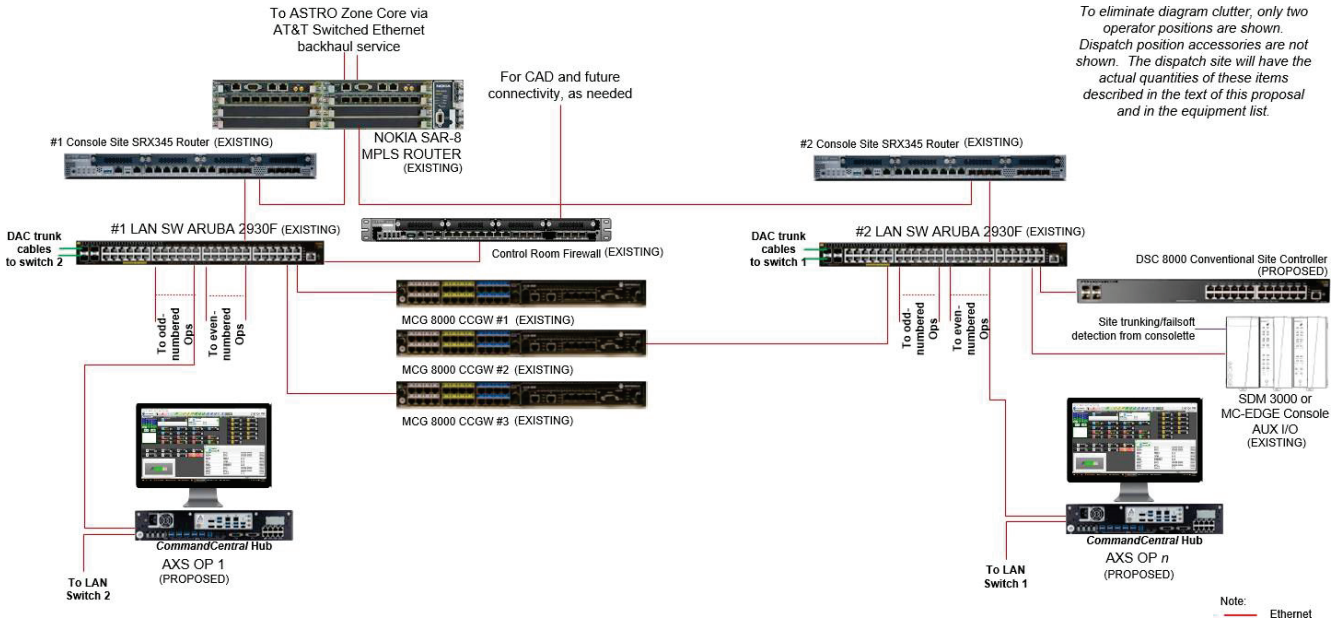



**Figure 3: Console Site Block Diagram (excluding control stations and desk sets)**

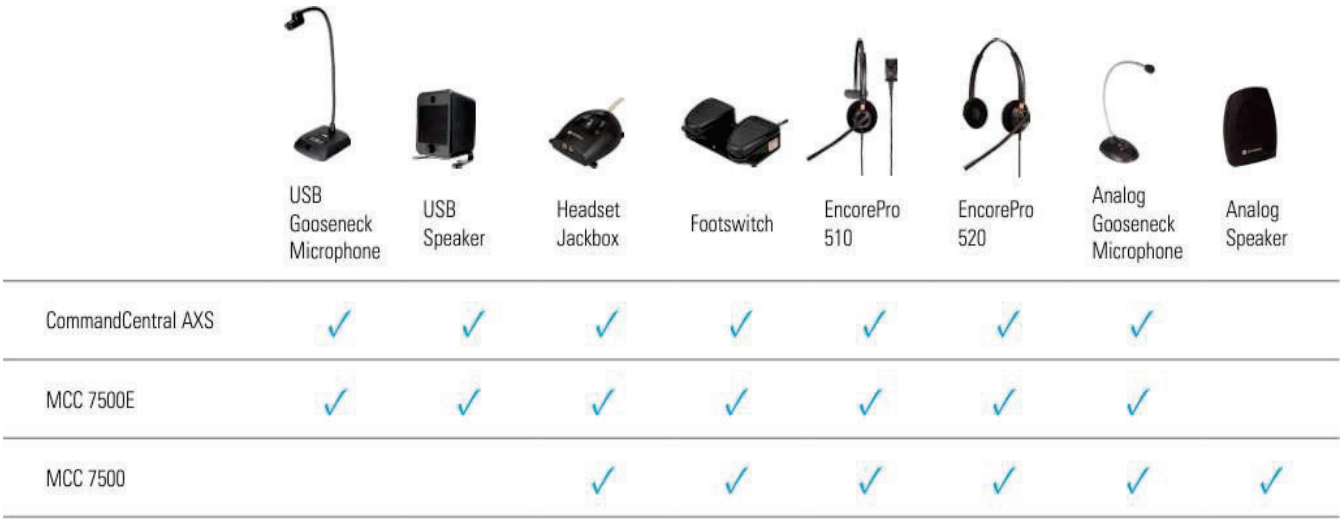
## 2.3 Dispatch Console Hardware

The components are connected together and to the rest of the ASTRO® 25 system on an IP network through console site routers and switches. The console functions as an integrated component of the total radio system and fully participates in system-level features, such as end-to-end encryption.

The console connects directly to the radio system's IP transport network. Audio processing, encryption, and switching intelligence for dispatch are performed within each software-based dispatch position without additional centralized electronics.

The CommandCentral AXS dispatch console solution is enhanced through dispatch peripherals, such

as listed below. These peripherals are designed for 24/7 usage without degradation in performance or reliability.



| | USB Gooseneck Microphone | USB Speaker | Headset Jackbox | Footswitch | EncorePro 510 | EncorePro 520 | Analog Gooseneck Microphone | Analog Speaker |
|---|---|---|---|---|---|---|---|---|
| CommandCentral AXS | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| MCC 7500E | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| MCC 7500 | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

**Figure 4: Peripherals Compatibility Chart**

Console components are diagrammed and identified below.

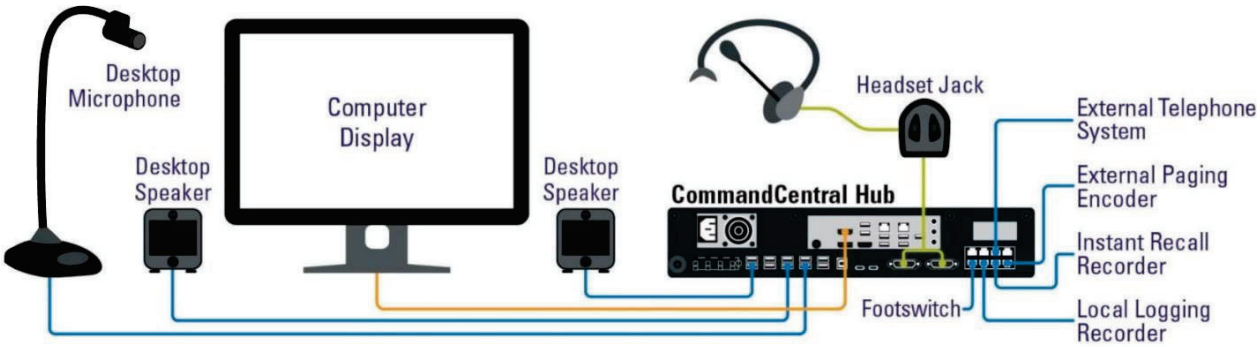



**Figure 5: CommandCentral AXS Dispatch Console and Peripherals Example**

## 2.3.1 CommandCentral Hub (CC Hub)

The CommandCentral Hub (CC Hub) is the platform on which the CommandCentral AXS Dispatch Console operates. The CC Hub contains a number of analog inputs and outputs for connecting various peripheral devices as well as a workstation class computer motherboard. The PC that is internal to the CC Hub will be programmed with a Microsoft Windows based operating system (OS) image developed for the dispatch application.

The CommandCentral AXS dispatch console consists of the CommandCentral Hub running a Windows Operating System, while the GUI is displayed on a Microsoft Edge web browser.

Redundant Ethernet connections increase console availability by protecting all dispatch positions

against the loss of a LAN switch. In the event of a LAN switch failure, the system will automatically detect and switchover with no manual intervention required. Dispatching operations will not be interrupted.

#### 2.3.1.1 Telephone/Headset Interface Port

The telephone/headset port provides a connection for an external telephone to the dispatch position. This allows the operator to use a single headset to communicate on both the radio system and an external telephone system.

#### 2.3.1.2 External Paging Encoder Port

The external paging encoder port provides a connection for an optional external tone paging encoder to provide tone paging services via the dispatch console. Analog paging tones generated by the encoder are transmitted by the dispatch console on the selected trunked and/or conventional radio resource(s).

#### 2.3.1.3 Local Logging Recorder Port

As an alternative or supplemental approach to an IP-based audio logging subsystem, the analog output port on the CommandCentral Hub allows an optionally available external logging recorder to be connected to a dispatch console. Long-term audio recording is used to record a portion of the inbound and outbound audio present on a specific dispatch position. These recordings are typically archived for long-term storage, and provide a historical record of the radio communications made at a given dispatch position.

The analog output port can be configured to carry any combination of these audio sources, such as:

- Audio received from a currently selected radio.
- Microphone audio being transmitted by this dispatcher to the currently selected or unselected radio resources.
- Any tones generated by the dispatch position that appear in its speakers or headset (trunking tones, emergency tones, etc.) or tones generated by an external paging encoder.

#### 2.3.1.4 Private Aux I/O Port

The dispatch console supports four Private Aux I/O relays located on the CommandCentral Hub. Each relay will be configured as selected by the County Contract Administrator to support any one of the five functions (or, if elected by County, it can be configured to be unused).

- Call on Selected Channel
- Operator PTT
- Emergency Beacon
- Activate Private Relay when Public Aux I/O is Active
- Select Phone Off Hook Relay

### 2.3.2 Computer Display

Each dispatch position will be equipped with a 27-inch Computer Display with touch screen.

### 2.3.3 External DVD Drive

The external DVD drive is typically only used during initial software loading and set-up of the consoles. A total of five (5) external DVD drives are included for this PSAP, as it is unnecessary for each position to have its own dedicated DVD drive.

### 2.3.4 Desktop Speakers

At the County's request, three (3) audio speakers have been included with each dispatch position and can be configured to monitor transmit audio from a specific talk group or set of talk groups, or from the Instant Recall Recorder. Each speaker is a self-contained unit, with individual volume control, and can be placed on a desktop or mounted on a rack or computer display.

### 2.3.5 Headset Jack-box

The dispatch position supports up to two headset jack-boxes, both push-to-talk (PTT) and non-PTT-enabled, for simultaneous use by the dispatcher and a supervisor. The headset jack-box contains two volume controls for the separate adjustment of received radio and telephone audio. Two (2) headset jack-boxes per position have been included.

### 2.3.6 Headset

The headset consists of two elements. The headset base includes an audio amplifier, a Push-to-Talk switch, and a long cord that connects to the dispatch position. The headset top consists of the earpiece and microphone as well as a short cable that connects to the headset base. One (1) headset base and one (1) monaural noise-canceling headset top is included per position.

### 2.3.7 Gooseneck Microphone

The microphone controls the dispatch position's general transmit and monitor features through two buttons on its base. The microphone can be fastened down or left loose. It can be used alone or in conjunction with a headset. One (1) microphone per position is included.

### 2.3.8 Footswitch

Each dispatch position includes one (1) dual pedal footswitch that controls general transmit and monitor functions.

### 2.3.9 Numbers and Types of Radio Resources

The CommandCentral AXS dispatch console solution for Broward County makes the following radio resources available to dispatchers.

| Type of Radio Resource | Quantity |
|---|---|
| Trunked or conventional | 160 |

### 2.3.10 Conventional Interfaces

The consoles will be able to access and control Broward County's analog and digital conventional base stations through the use of Conventional Channel Gateways (CCGW). The console processes audio received from the station and controls various features on the stations, such as frequency selection, private line selection, and repeater on/off.

Additionally, the CCGWs allow for recognition of MDC 1200 and digital signaling, such as unit ID and emergency alarm.

The CommandCentral AXS solution for Broward County provides three (3) MCG 8000 Conventional Channel Gateways (CCGW) for the New North PSAP, matching the quantity that is provisioned at the current North PSAP facility (although those are the older GGM 8000 model of CCGW). Each MCG 8000 CCGW will be licensed to accommodate up to eight ACIM or 4-wire analog conventional interfaces. Optional alternative port licenses are available for other interface types if required. Thus, 24 CCGW ports will be available at the site, under the configuration, with supported expansion to a maximum of 40 ports by the addition of further CCGW modules.

The APX Consolette backup control stations deployed at New North PSAP will connect directly to MCD 5000 Desk Sets and will not generally be required to have CCGW connections. (Although some of the consolettes could be so connected, there will be insufficient CCGW ports to accomplish this for the entirety of the consolettes slated for this facility.) Any control stations not connected to a CCGW port will not be accessible from the AXS consoles.

### 2.3.11 Conventional Site Controller

The Conventional Site Controller (CSC) is based on Motorola's recently introduced DSC 8000 platform. The CSC allows local consoles to continue to access conventional and control station resources that are connected to the local CCGW's, in the event of the console site becoming isolated from the Zone Core sites during certain outage scenarios.

### 2.3.12 Aux I/O Capability

The console supports Global Auxiliary Inputs/Outputs (Aux I/Os) for remote status indications or remote control through dispatch consoles. Global Aux I/Os are implemented by hardware that is independent of the dispatch console (and is included in this Work Authorization) and may be accessible to multiple dispatch consoles. The MC-EDGE product (replacing our former SDM 3000 product) provides the Aux I/O feature for the dispatch site. The proposed MC-EDGE will be equipped to support up to 24 dry-contact digital inputs and 48 digital outputs, connected via three punch blocks.

As with the County's current deployment, Aux I/Os will be able to detect a Site Trunking or Failsoft status indication from a consolette and display that status on dispatchers' screens.

### 2.3.13 Site Gateways supporting Dual Site Links

The console site for Broward County is remote from the Zone Core sites and allows for redundant site links to provide path diversity. The console site has two logical connections to the core sites, with each connection using a different core router.

Each console site gateway provides an interface that handles the following IP traffic between the console center and Broward County's ASTRO® 25 core site:

- Network management traffic.
- Call control and audio traffic for all the calls being handled by the dispatch positions.
- Aux I/O traffic for the Aux I/Os being handled by the dispatch positions.

The site gateways fragment and prioritize large IP packets according to industry standards and convert Ethernet data to the desired transport medium.

### 2.3.14 MPLS Router

The console Site Gateways will interface with the AT&T Switched Ethernet backhaul facilities, leased by the County, via a Nokia SAR-8 MPLS Router. Per the County's request, this router will be populated with the same modules as those deployed at the Sunrise "Central PSAP" location.

### 2.3.15 LAN Switches

LAN switches provide LAN interfaces for console site equipment and a LAN port for the link to the core site. Service technicians can access the system's configuration manager and service the equipment through the switch.

Four 48-port LAN switches are included (excluding the spare).

Each AXS Console supports dual network interfaces and will connect to two LAN switches. Therefore, the failure of any single LAN switch will not remove any consoles from operation.

### 2.3.16 Enhanced Integrated Instant Recall Recorder (IRR)

The Enhanced IRR is seamlessly integrated with the dispatch position's software, allowing audio and call data from any radio or telephony resource to be recorded and easily played back. Call data includes PTT IDs, name of resource, start time and date, and stop time and date. Two analog inputs are available for use with recording audio from external devices.

### 2.3.17 Audio Logging Subsystem

The console system does not include any new logging recorder subsystem, as the County recently purchased new NICE Radio IP Logging Recorders that are being centralized at the Zone Core and DSR sites.

### 2.3.18 Protecting Consoles and Communications

The console enables end-to-end encryption from the dispatcher to the ASTRO® 25 network, so that Broward County's communications will not be undermined by unencrypted transmissions. Each dispatcher is able to fully participate in secure communications while being confident that sensitive, vital information is not heard by unauthorized individuals.

#### 2.3.18.1 Secure Access to the Console

To use the dispatch position, a dispatcher must enter a valid Windows PC user name and password and then the radio system user account name and password. The dispatch position validates that information with the radio system's network manager and allows the dispatcher to access only the

resources for which the user has access rights. This also applies to third-party applications that use the dispatch console's API.

#### 2.3.18.2 Secure Communications at the Console

The console encrypts and decrypts radio voice messages. Thus, radio voice messages are encrypted from end-to- end between the radio user to the dispatch position. The dispatcher can choose whether to encrypt their transmissions on a particular trunked resource. Dispatchers can interface with agencies that have different encryption configurations without any manual intervention or delay.

The AXS Console supports multiple encryption algorithms (AES, DES-OFB, and/or ADP) and multiple secure keys.

The dispatchers may talk and listen on radio resources which have different encryption algorithms without any manual intervention or delay.

The key material for performing audio encryption and decryption is stored locally on the console. This key material is also associated with a Common Key Reference (CKR), so that the appropriate key can be selected for a given talk group or a special call type.

It should be noted that only software-based encryption is currently available for the AXS console. Software-based encryption does not meet the FIPS 140 standard. However, Motorola plans to release a FIPS 140-3 Level 3 compliant hardware-based encryption solution for AXS, which will be in place prior to Final Acceptance of the work under this Work Authorization; if for any reason the planned solution that meets the FIPS 140 standard is not available by the time Milestone 4 testing commences, Motorola will provide an alternate FIPS 140 compliant solution that has been approved in advance by the County Contract Administrator. Hardware encryption has been included in anticipation of this feature being available by the date of deployment; if the final solution requires additional or different equipment for hardware encryption, such will be provided by Motorola at no additional cost to County.

#### 2.3.18.3 Key Management via Key Variable Loader (KVL)

Key management via a key variable loader (KVL) feature provides the ability to manage all the keys for an AXS Console using only a KVL. For the purpose of clarity, since the County already owns some KVL 5000 units, no KVL is included.

#### 2.3.18.4 Key Management via Over-the-Ethernet Keying (OTEK)

Key management through OTEK provides the ability to manage the keys for a dispatch console using only a Key Management Facility (KMF). In OTEK, the management and distribution aspects of key management are all performed by the KMF. Distribution of the key management information is done across the radio system’s IP network from the KMF to the dispatch console. The consoles include licenses for OTEK capability. For the purpose of clarity, since the County already owns a KMF capability, no KMF is included. Motorola’s service delivery team will perform the initial AXS-related data entry at the KMF to ensure that the deployed AXS consoles are ready to receive OTEK updates.

### 2.3.19 Backup Control Stations and RF Distribution System

This includes nineteen (19) new APX Consolettes. These consolettes will supplement an additional twenty-two (22) APX consolettes earmarked for the North PSAP location from a recent purchase by Broward County, yielding a total of 41 consolettes at the facility (1 per proposed operator position).

While this only includes 19 new consolettes, it nonetheless covers the installation and commissioning services for all 41 consolettes, and the removal/deinstallation and relocation of 22 of these consolettes from the current North PSAP location.

The 41 total APX Consolettes will be connected to two repurposed 700/800 MHz 32-channel dbSpectra model BCH11032 Control Station Combiners (already owned by Broward County) that will be relocated by Motorola from the current North PSAP and South PSAP, respectively. To make this possible, all consolettes that currently use the second Control Station Combiner at these two locations, will first be ported across to the first Control Station Combiner at each location, thus freeing up the second combiner for re-use at New North PSAP. One the current North PSAP goes completely offline, its one remaining Control Station Combiner will be relocated to South PSAP to backfill the combiner that was removed, and the South PSAP consolettes will be redistributed across both combiners to restore the original configuration.

This scope includes the following RF hardware to support the installation of the Control Station Combiners referenced in the previous paragraph:

- (41) ¼" hi-flex jumpers between consolettes and diplexer inputs. These will be fabricated on site to the needed length from bulk cable spools, with an average jumper length not to exceed 20 ft.
- (4) coaxial lines to the rooftop, with grounding and surge arrestors per Motorola R56 standard.
- (4) 700/800 MHz rooftop control station antennas.
- Installation-related materials for coaxial cable to include connectors, cable hangers, hoist grips, grounding kits and weatherproofing of outdoor connectors.

Although APX All-Band Consolettes are potentially also capable of UHF and VHF operation, the proposed RFDS design makes no provision for use of the UHF or VHF bands. Should UHF or VHF operation be desired in the future, a more extensive and customized RFDS (Radio Frequency Distribution System) design would need to be developed.

Neither the exact antenna locations on the roof nor the cabling path thereto are finalized at this time; the final locations and path must be approved in writing by the County Contract Administrator. This scope includes 250 ft of coaxial cable per antenna, which is expected to be adequate but may need to be adjusted once building plans are finalized. Steel poles for antenna mounting, roof penetrations and roof entry weather-head, "dog house" or similar, and any conduit through which the coaxial lines must pass, will be furnished and installed by the building contractor and not by Motorola. Motorola recommends that antenna mounting poles be separated by at least 10 feet to the extent this is feasible under the architectural design.

Motorola will relocate one (1) PSIC control station from the current North PSAP to the new North PSAP, connect it to a control station combiner port as well as a CCGW, and configure the network to support this CCGW-connected resource.

### 2.3.20 Desksets for Backup Control Stations

This includes nineteen (19) new MCD 5000 Desk Sets and power supply units. These desksets will supplement an additional twenty-two (22) MCD 5000 Desk Sets to be relocated from the current North PSAP location, yielding a total of 41 desksets at the facility (1 per proposed operator position). While this only includes 19 new desksets, it nonetheless covers the installation and commissioning services for all 41 desksets.

Ethernet cabling (Cat.5 or better), between the equipment room housing the consolettes and the dispatcher desk positions, will be preinstalled by the County's building contractor. Each deskset requires one Ethernet cable connection to its associated consolette.

Each deskset will have a one-to-one connection to a dedicated consolette. Consequently, the available/optional Radio Gateway Unit (RGU) accessory for the MCD 5000 Desk Set (which can facilitate a one-to-many or many-to-many association between desksets and consolettes) is not included.

### 2.3.21 Equipment Housing and Power Distribution

Equipment racks are not included. Broward County will furnish 7.5 ft 19" equipment racks in the 3rd floor server room for radio system use.

All equipment included in this scope is designed to be AC powered.

This scope does include a total of (24) Transtector AC Edge Power Distribution Units (PDU's) to be fitted into the top of the County-furnished racks and cabinets. Each PDU supports 12 AC breakers split between "A" and "B" feeds. Each PDU will be supplied with a full complement of (12) breakers. All PDU breakers are rated at 10 amps; breakers may be substituted with alternate ampere ratings for optimal protection of the equipment being fed, without cost impact to the County, during the post-sale detailed engineering phase of the project upon prior written approval of the County Contract Administrator. The quantity of PDU's was based on engineering drawings furnished by Broward County and exceeds the quantity needed to power the equipment.

Broward County's electrical contractor will cable each Transtector PDU using drop cables from an AC distribution point located directly above each equipment rack or cabinet that has been preinstalled by the County's electrical contractor. Motorola will not be responsible for supply-side cabling to the PDU's, or for furnishing or upgrading any wall breakers or electrical service into the building.

Preliminary rack drawings are provided as Exhibit 1. These will be subject to further refinement and revision during future pre- or post-contract design reviews, which refinements and revisions will be subject to written approval by the County Contract Administrator.

### 2.3.22 Spare Parts

The 41st AXS Console position at this facility is understood to be designated as a ready-to-deploy spare console. Likewise for the 41st APX Consolette and 41st MCD 5000 Desk Set. Unless the County Contract Administrator approves otherwise, the 41st consolette will be preinstalled into a rack and pre-connected to the Control Station Combiners.

In addition, this scope includes a full set of spare parts in the form of field replaceable units. The included spares are itemized in the equipment list in Section 5.

### 2.3.23 Zone Core Licensing

This scope includes one (1) additional 5-packs of operator position licenses at the Zone Core. This, along with unused operator position licenses noted above, will cover the net increase of twenty (20) consoles that will exist within the Broward County system once New North PSAP is in service and the current North PSAP has been removed from service. There may be a short period of overlap (i.e. concurrent operation at both locations) during the set-up phase and the transition of operations to the new facility, during which

the purchased license count may be exceeded and flagged as such in the license manager; this temporary condition will not prevent the new consoles from being commissioned and brought into service.

| Location | Existing Consoles and AIS's | Future Consoles and AIS's |
|---|---|---|
| Current North PSAP | 21 | |
| New North PSAP | | 41 |
| Central PSAP | 24 | 24 |
| South PSAP | 23 | 23 |
| ORCAT Office | 1 | 1 |
| Davie - console | 1 | 1 |
| Davie - AIS | 2 | 2 |
| Coco - console | 1 | 1 |
| Coco - AIS | 2 | 2 |
| BSO SEOC | 2 | 2 |
| **TOTAL** | **77** | **97** |

### 2.3.24 Interfacing with Computer-Aided Dispatch (CAD)

Broward County's Premier One CAD system does not currently make use of any Console Application Programming Interface (API) integration, as all ASTRO information is conveyed to the Premier One CAD system via ATIA stream. The introduction of AXS consoles into the Broward County system will therefore have no impact on the Premier One CAD functionality that is currently operational in Broward County. In the future, this Work Authorization includes full integration with Premier One CAD integration with the AXS Dispatch Console API's, which is expected to be available prior to Final Acceptance testing of the scope of this Work Authorization.

#### 2.3.24.1 Third-Party Software

To aid in the integration of the console system with various third party applications, Motorola may license a Software Developer Kit (SDK) that contains all information necessary to enable access and use the APIs described above. The SDK's manuals document the supported dispatch APIs, including access to various dispatch features, configuration information, and aliasing information.

The SDK also includes various files needed by software developers as they create applications that use the APIs.

Any and all SDK licensing fees and software development costs for SDK or other third-party software licensed by Motorola to complete the Services under this Work Authorization are the responsibility of Motorola.

## 2.4 Assumptions

This Statement of Work is premised upon the following assumptions:

- Equipment locations will have sufficient space available for the system described as required/specified by R56.
- Equipment locations will have adequate electrical power in the proper phase and voltage, and

site grounding to support the requirements of the system described and as required by R56.

- Any site/location upgrades or modifications are the responsibility of Broward County.
- Approved local, State, or Federal permits as may be required for the operation of the equipment are the responsibility of Broward County.
- Any required system interconnections between the subject site and other ASTRO system sites (specifically the Davie Zone Core and Coconut Creek Backup Core) will be provided and/or leased by Broward County, which may include connectivity provided by AT&T Switched Ethernet Service in similar fashion to the existing PSAP sites.
- ASTRO NEXT Download Server (ANDS) will be installed at either the Davie Zone Core, or the Coconut Creek Backup Zone Core according to the County's preference.
- IP-based or analog localized logging equipment at the PSAP site is not included in this Work Authorization. Analog audio feeds are available from the equipment, however, and can be cabled by Motorola to a punch block in the server room at no additional cost to County, should the County desire this.
- The current North PSAP site houses a resilient NICE Inform server, residing on the County's "PSI" IT network. County will be responsible for its relocation to the new North PSAP facility.
- At the New North PSAP, Motorola will replicate and test the IP connectivity between the MPLS router and PSI network that exists at the current North PSAP, that supports IP communications between the NICE IP Radio Loggers and the Inform servers that reside inside the PSI network
- No KVL or KMF is included as Broward County already owns this equipment.
- Console API capability for AXS will be available (and is included in this scope) by year-end 2024. This capability will be instrumental in allowing Premier One integration to AXS.
- Coaxial cable length for the control station antennas will not exceed 250 ft per antenna.
- County Provided Ethernet wiring between each dispatch position and the server room will include sufficient Cat. 5e or better
- Each deskset will have a one-to-one connection to a dedicated consolette. Consequently, the available/optional Radio Gateway Unit (RGU) accessory for the MCD 5000 Desk Set is not included in the scope of this proposal.
- MC-EDGE Remote Terminal Unit will be equipped to support up to 24 dry-contact digital inputs and 48 digital outputs
- Equipment racks or cabinets are not included in this proposal, except for two 4-post racks to house the RFDS equipment.
- All equipment will use AC power.
- Motorola will furnish a total of (24) Transtector AC Edge Power Distribution Units (PDU's) to be fitted into the tops of the County-furnished racks and cabinets per engineering rack drawings furnished by Broward County.
- Programming of consolettes is not included.

- No new or incremental PremierOne CAD workstations or the relocation of existing PremierOne equipment from the current North PSAP.
- VHF operation is not required from the proposed Control Station Combiner and antenna design.
- UHF operation is not required from the proposed Control Station Combiner and antenna design.
- All site documentation will be updated per the work performed in this scope and provided to the County prior to Final Acceptance.
- Detailed project schedule and other common Project Management documentation, i.e. communication plan, risk management plan, will be provided 10 business days prior to the scheduled Kick Off meeting.
- Provide County required Change Management Request notifications, CMR, per established County procedure.

## Statement of Work

Motorola Solutions will install and configure the equipment. The following table describes the tasks involved with installation and configuration.

| Tasks | Motorola Solutions | Customer |
|---|---|---|
| **PROJECT INITIATION** | | |
| **Contract Finalization and Team Creation** | | |
| Furnish a performance bond in the full amount of the contract price as security for the faithful performance of Motorola Solutions' contractual obligations. | X | |
| Purchase the required performance bond. | | X |
| Assign a Project Manager as a single point of contact. | X | X |
| Assign resources. | X | X |
| Schedule project kickoff meeting. | X | X |
| Deliverable: Signed contract, defined project team, and scheduled project kickoff meeting. | | |
| **Project Administration** | | |
| Ensure that project team members attend all meetings relevant to their role on the project. | X | X |
| Set up the project in the Motorola Solutions information system. | X | |
| Provide a project charter. | X | |
| Provide and maintain a detail project management schedule. | X | |
| Provide and maintain a detail action item register. | X | |
| Provide and maintain a change order log. | X | |
| Provide and maintain a risk management register. | X | |
| Record and distribute project status meeting minutes. | X | |
| Maintain responsibility for third-party services contracted by Motorola Solutions. | X | |
| Complete assigned project tasks according to the project schedule. | X | X |
| Submit project milestone completion documents. | X | |
| Upon completion of tasks, approve project milestone completion documents. | | X |
| Conduct all project work Monday thru Friday, 7:30 a.m. to 5:00 p.m.). | X | |
| Deliverable: Completed and approved project milestones throughout the project. | | |

| Tasks | Motorola Solutions | Customer |
|---|---|---|
| **Project Kickoff** | | |
| Introduce team, review roles, and decision authority. Update communication plan.. | X | X |
| Review the risk management plan. Finalize the risk management plan. | X | X |
| Present project scope and objectives. Finalize project charter. | X | X |
| Review SOW responsibilities and project schedule. Establish a baseline project schedule. | X | X |
| Review County's Change Management procedure and expectations. | X | X |
| Review Change Order Management procedure. Establish a Change Order log. | X | X |
| Review Action Item Register. Establish Action Item Register log. | X | X |
| Review Risk Management Plan. | X | X |
| Schedule Design Review. | X | X |
| Deliverable: Completed project kickoff and scheduled Design Review. | | |
| **Design Review** | | |
| Review the Customer's operational requirements. | X | X |
| Present the system design and operational requirements for the solution and obtain County written approval. | X | |
| Present installation plan and obtain County written approval. | X | |
| Present preliminary cutover plan and methods to document final cutover process and obtain County written approval. | X | |
| Present configuration and details of sites required by system design and obtain County written approval. | X | |
| Validate that Customer sites can accommodate equipment. | X | X |
| Provide approvals required to add equipment to existing sites. | | X |
| Review safety, security, and site access procedures. | X | X |
| Finalize site acquisition and development plan. | X | |
| Present equipment layout plans and system design drawings and obtain County written approval. | X | |
| Provide backhaul performance specifications and demarcation points and obtain County written approval. | X | |
| Provide heat load and power requirements for new equipment. | X | |
| Provide information on existing system interfaces. | X | |

| | | |
|---|---|---|
| Provide frequency and radio information for each site. | | X |
| Complete the required forms required for frequency coordination and licensing. | X | |

| Tasks | Motorola Solutions | Customer |
|---|---|---|
| Review and update design documents, including System Description, Statement of Work, Project Schedule, and Acceptance Test Plan, based on Design Review agreements and obtain County approval. | X | |
| Provide minimum acceptable performance specifications for customer provided hardware, software, LAN, WAN and internet connectivity. | X | |
| Conduct an interactive workshop with the customer designed to provide understanding of operational needs, workflow, environment, and industry best practices, including the following:<br>▪ Workflow requirements.<br>▪ County to authorize expected operational requirements, workflows, and configurations in writing by the Contract Administrator. | X | X |
| Optimal initial configuration of CommandCentral Vault Store and Manage, based on workshop discussions and results of the aforementioned items. | X | |
| Create default views for customer focused workflows. | X | |
| End to end testing to ensure workflow and operational requirements are met. | X | |
| Check for browser compatibility on customer used workstations. | X | |
| Deliverable: The default views based on workflow requirements will be defined, presented, and approved. | | |
| A section in the interactive workshop designed to understand operational needs, workflow, content and industry best practices to including the following:<br>Workflow requirements.<br>Establishing search criteria to quickly locate evidentiary segments for cases.<br>Securely sharing information.<br>Automated redaction practices. | X | |
| Deliverable: Finalized design documentation based upon “frozen” design, along with any relevant Change Order documentation. | | |
| **SYSTEM INSTALLATION** | | |
| **Equipment Order and Manufacturing** | | |
| Manufacture Motorola Solutions-provided equipment necessary for system based on equipment order. | X | |

| Tasks | Motorola Solutions | Customer |
|---|---|---|
| Procure non-Motorola Solutions equipment necessary for the system. | X | |
| Deliverable: Equipment procured and ready for shipment. | | |
| **System Staging** | | |
| Ship all equipment needed for staging to Motorola Solutions' Customer Center for Solutions Integration (CCSi). | X | |
| Provide information on existing system interfaces, room layouts, or other information necessary for the assembly to meet field conditions. | | X |
| Set up and rack the solution equipment on a site-by-site basis, as it will be configured in the field at each of the sites. | X | |
| Cut and label the cables with to/from information to specify interconnection for field installation and future servicing needs. | X | |
| Complete the cabling/connecting of the subsystems to each other ("connectorization" of the subsystems). | X | |
| Assemble required subsystems to assure system functionality. | X | |
| Power up, load application parameters, program, and test all staged equipment. | X | |
| Confirm system configuration and software compatibility with the existing system. | X | |
| Inventory the equipment with serial numbers and installation references. | X | |
| Review and approve Factory Acceptance Test Plan. | | X |
| Any travel, lodging, meals, or all incidental expenses for County personnel and representatives to witness the Factory Acceptance Testing, if elected by County, are County responsibility. | | X |
| Perform factory functional acceptance tests of system features | X | |
| Perform system burn-in 24 hours a day during staging to isolate and capture any defects. | X | |
| Deliverable: System staged and ready for shipment. | | |
| **Equipment Shipment and Storage** | | |
| Provide secure location for solution equipment (County) and transport equipment to designated location (Motorola). | X | X |
| Pack and ship solution equipment to the identified, or site locations. | X | |
| Receive solution equipment. | X | X |

| Tasks | Motorola Solutions | Customer |
|---|---|---|
| Inventory solution equipment. | X | X |
| Deliverable: Solution equipment received and ready for installation | | |
| **General Installation** | | |
| Deliver solution equipment to installation location. | X | |
| Coordinate receipt of and inventory solution equipment with designated contact. | X | |
| Perform the installation and commissioning of the Motorola Solutions-supplied equipment described in this document. | X | |
| Relocate (22) Desk Sets from the current North PSAP location. | X | |
| Relocate existing Florida Interoperability Network (FIN) equipment from the current North PSAP location and install at the new North PSAP including the necessary CCGW connection. | X | |
| Schedule the implementation in agreement with Broward County. | X | |
| Coordinate the activities of all Motorola Solutions subcontractors under this contract. | X | |
| Administer safe work procedures for installation. | X | X |
| Provide Broward County with the appropriate system interconnect specifications. | X | |
| Ensure communications site meets the space, grounding, power, and connectivity requirements prior to the installation of the equipment. | | X |
| Obtain all licensing, site access, or permitting required for project implementation (Motorola) and system operation (County). | X | X |
| Provide required system interconnections and backhaul facilities between the PSAP site and the ASTRO 25 Zone Core and DSR Backup Zone Core. | | X |
| Provide required system interconnections and backhaul facilities for the Florida Interoperability Network (FIN). | | X |
| Coordinate the activities of all Broward County vendors or other contractors. | | X |
| Furnish and install steel poles for rooftop antenna mounting, separated by at least 10 feet horizontally. | | X |

| Tasks | Motorola Solutions | Customer |
|---|---|---|
| Provide roof penetrations and roof entry weatherhead, “dog house” or similar, and any conduit or pipework through which the coaxial lines must pass in order to traverse from the antenna locations to the server room. | | X |
| Provide AC service to the server room and dispatcher desk positions, including wall breakers for the necessary number of circuits. | | X |
| Provide and energize the AC wiring system between wall breaker panels and the space above the equipment racks and cabinets. | | X |
| Provide any required Uninterruptible Power Supply (UPS) systems and/or generator backup, both for the server room and desk positions if required. | | X |
| Provide Motorola’s electrician with (48) drop cables that are connectorized at one end so as to be compatible with the overhead power system, and unterminated at the other end, that Motorola will use to bring dual-fed power to the AC Edge PDU’s in each rack or cabinet. | | X |
| Connect dual AC power feeds from the overhead system directly above the rack and cabinet locations, into (22) rack-mounted AC Edge Power Distribution Units. | X | |
| Provide and install Ethernet wiring between each dispatch position and the server room with sufficient Cat. 5e or better cables to support the following connectivity:<br>– Two (2) connections for the dual-NIC CommandCentral Hub.<br>– One (1) connection for the MCD 5000 Desk Set.<br>– One (1) connection for an analog logging feed, if audio is desired to be captured from the CommandCentral Hub.<br>– One (1) connection for Premier One. | | X |
| Provide Ethernet jumper cabling from the patch panel(s) that terminate the Ethernet cables coming from the dispatch positions, over to:<br>the Dispatch Site LAN switches.<br>the County-provided analog logging recorder patch panel. | X | |
| Programming of consolettes | | X |
| Provide system interconnections that are not specifically outlined in the system design, including dedicated phone circuits, or other types of connectivity. | X | |
| Install and terminate all network cables between site routers and network demarcation points, including leased lines and Ethernet. | X | |
| Ensure that Type 1 (County) and Type 2 (Motorola) AC suppression is installed to protect installed equipment. | X | X |
| Connect installed equipment to the provided building ground system. | X | |
| Label equipment, racks, and cables. | X | |
| Perform preliminary audit of installed equipment to ensure compliance with requirements and R56 standards. | X | |

| Tasks | Motorola Solutions | Customer |
|---|---|---|
| Note any required changes to the installation for inclusion in the “as- built” system documentation. | X | |
| Remove, transport, and dispose of old equipment at current North PSAP location. | X | |
| Deliverable: Equipment installed. | | |
| **Antenna and Transmission Line Installation** | | |
| Install control station antennas. | X | |
| Install required grounding and lightning suppression per R56. Record grounding test measurements and provide to County for review and acceptance. | X | |
| Install transmission lines required for system. | X | |
| Perform sweep tests on transmission lines. Record all findings and provide to County for review and acceptance. | X | |
| Provide and install attachment hardware for supporting transmission lines on antenna support structure. | X | |
| Supply and install ground buss bar for control station antennas. | X | |
| Deliverable: Antenna and Transmission Line installed. | | |
| **SYSTEM OPTIMIZATION AND TESTING** | | |
| **R56 Site Audit** | | |
| Perform R56 site-installation quality-audits, verifying proper physical installation and operational configurations. | X | |
| Create site evaluation report to verify site meets or exceeds requirements, as defined in Motorola Solutions’ R56 Standards and Guidelines for Communication Sites and provide to County for review and acceptance prior to the scheduled ATP. | X | |
| Conduct site and system level testing. | X | |
| Deliverable: R56 Standards and Guidelines for Communication Sites audits completed successfully. | | |
| **Electromagnetic Interference (EMI) Analysis** | | |
| Perform EMI analysis for the Motorola Solutions-supplied equipment. Note: Motorola Solutions is only responsible for interference caused by Motorola Solutions-provided transmitters to the Motorola Solutions- provided receivers. Should the equipment experience interference, Motorola Solutions can be contracted to investigate the source and recommend solutions to mitigate the issue. Provide EMI analysis report to County for review and acceptance. | X | |
| Resolve any interference caused by equipment not supplied by Motorola Solutions. | | X |

| Tasks | Motorola Solutions | Customer |
|---|---|---|
| Deliverable: EMI analysis completed. | | |
| **Solution Optimization** | | |
| Verify that all equipment is operating properly and that all electrical and signal levels are set accurately. | X | |
| Verify that all audio and data levels are at factory settings. | X | |
| Verify communication interfaces between devices for proper operation. | X | |
| Ensure that functionality meets manufacturers' specifications and complies with the final configuration established during design review or system staging. | X | |
| Deliverable: Completion of System Optimization. | | |
| **Functional Acceptance Testing** | | |
| Verify the operational functionality and features of the solution supplied by Motorola Solutions, as contracted. | X | |
| Witness the functional testing. | | X |
| Document and assign issue owner to all issues that arise during the acceptance tests. | X | |
| Resolve any test or task failures before Final System Acceptance. | X | |
| Document the results of the acceptance tests and present for review. | X | |
| Provide all updated site documentation, i.e. rack face diagrams, power consumption calculations, for County review and acceptance. | X | |
| Review and approve final acceptance test results. | | X |
| Evaluate wear-ability of Si device. Provide Feedback to customer on options | X | |
| Verify the operational functionality and features of the Si500 supplied by Motorola Solutions, as contracted. | X | |
| If any test or task fails, repeat that particular task after Motorola Solutions determines that corrective action has been taken. | X | |
| Document all issues that arise during the acceptance tests. | X | |
| Document the results of the acceptance tests and present to the Customer for review. | X | |
| Resolve any documented punch list task failures before Final System Acceptance. | X | |

| Tasks | Motorola Solutions | Customer |
|---|---|---|
| Deliverable: Completion of functional testing and approval by Customer. | | |
| **PROJECT TRANSITION** | | |
| **Training** | | |
| Finalize schedule for training coursework. | X | X |
| Provide training facility. | X | |
| Provide all course material 15 business days prior to scheduled training. | X | |
| Ensure that the training participants fulfill course prerequisites. | | X |
| Conduct the training classes outlined in the Training Plan. | X | |
| Attend training classes. | | X |
| Deliverable: Training coursework completed. | | |
| **Cutover** | | |
| Finalize Cutover Plan and obtain County written approval. | X | X |
| Calibrate and tune existing mobile and portable radios to ensure good working order. | | X |
| Provide programming and related services (i.e. template building, re-tuning, testing and installations), for new consolettes, as needed, during cutover period. | | X |
| Conduct cutover meeting with relevant personnel to address both how to mitigate technical and communication problem impacts to the users during cutover and during the general operation of the system. | X | |
| Motorola is to provide Change Management documentation to County for review and acceptance. Notify the personnel affected by the cutover of the date and time planned for cutover. | X | X |
| Provide ongoing communication with users regarding the project and schedule. Motorola will not be communicating with end users unless explicitly requested by County in writing. | X | X |
| Cut over users and ensure that the AXS consoles and backup consolettes are operating, address any anomalies or issues with performance. | X | |
| Resolve punchlist items, documented during the Acceptance Testing phase, in order to meet all the criteria for final system acceptance. | X | |
| Assist Motorola Solutions with resolution of identified punchlist items by providing support, such as access to the sites, equipment and system, and approval of the resolved punchlist items. | | X |
| Deliverable: Migration to new system completed, and punchlist items resolved. | | |

| Tasks | Motorola Solutions | Customer |
|---|---|---|
| **Transition to Warranty** | | |
| Review the items necessary for transitioning the project to warranty support and service. | X | |
| Motorola Solutions to provide Support and Maintenance services during year 1 warranty at no additional cost to County. | X | |
| Provide a Customer Support Plan detailing the warranty support associated with the contract equipment. | X | |
| Participate in the Transition Service/Project Transition Certificate (PTC) process. | | X |
| Deliverable: Service information delivered and approved by Customer | | |
| **Finalize Documentation and System Acceptance** | | |
| Provide manufacturer's installation material, part list and other related material to Customer upon project completion. | X | |
| Provide an electronic as-built system manual via a temporary Google Drive share folder, or other Customer preferred electronic media. Coordinate a meeting for the review of all applicable documentation. This will include, but is not limited to the following:<br>▪ Site Block Diagrams.<br>▪ Site Floor Plans.<br>▪ Site Equipment Rack Configurations.<br>▪ Site power calculations (DC and AC)<br>▪ Site HVAC requirements and calculations.<br>▪ Antenna Network Drawings for RF Sites (where applicable).<br>▪ ATP Test Checklists.<br>▪ Functional Acceptance Test Plan Test Sheets and Results.<br>▪ Equipment Inventory List.<br>▪ Console Programming Template (where applicable).<br>▪ Maintenance Manuals (where applicable).<br>▪ Technical Service Manuals (where applicable).<br>▪ Drawings will be delivered in its native and iAdobe PDF format. | X | |
| Receive and approve documentation. | | X |
| Execute Final Project Acceptance. | X | X |
| Deliverable: All required documents are provided and approved. Final Project Acceptance. | | |

Section 4

## Preliminary Project Schedule

The following is a preliminary schedule. An updated schedule will be discussed at project kickoff; any modifications to the schedule require written approval by both parties. As seen below, Equipment lead time will be one of the key determining factor for a more accurate timeline, as some equipment could have a lead time of several months.

| Task Name | Duration | Start | Finish |
|---|---|---|---|
| **AXS Install at Broward New North Preliminary Schedule** | **332 d** | **Thu 1/2/25** | **Fri 4/24/26** |
| **Project Initiation** | **11 d** | **Thu 1/2/25** | **Thu 1/16/25** |
| Award (Project Set Up) | 5 d | Thu 1/2/25 | Wed 1/8/25 |
| Internal Project Plan/Design Review | 5 d | Thu 1/9/25 | Wed 1/15/25 |
| Post Sale Transition Meeting Completed | 1 d | Thu 1/16/25 | Thu 1/16/25 |
| **Project Planning** | **15 d** | **Fri 1/17/25** | **Fri 2/7/25** |
| Customer Design Review (CDR) | 5 d | Fri 1/17/25 | Fri 1/24/25 |
| Contract Change Order Process | 5 d | Mon 1/27/25 | Fri 1/31/25 |
| Update Project Plans (Post CDR) | 5 d | Mon 2/3/25 | Fri 2/7/25 |
| **Project Execution** | **291 d** | **Mon 2/10/25** | **Fri 4/3/26** |
| Make Order and SI Procurement | 5 d | Mon 2/10/25 | Fri 2/14/25 |
| Equipment Lead Times | 160 d | Mon 2/17/25 | Wed 10/1/25 |
| Receive Equipment to Staging | 1 d | Thu 10/2/25 | Thu 10/2/25 |
| Receive Field Equipment (To be stored until Staging is complete) | 1 d | Thu 10/2/25 | Thu 10/2/25 |
| System Staging | 10 d | Fri 10/3/25 | Thu 10/16/25 |
| Ship Staged Equipment to Field and Inventory check | 10 d | Fri 10/17/25 | Thu 10/30/25 |
| Install new and relocated equipment, configuration, decommissioning | 70 d | Fri 10/31/25 | Fri 2/13/26 |
| System Optimization | 10 d | Mon 2/16/26 | Fri 2/27/26 |
| System Acceptance Test | 20 d | Mon 3/2/26 | Fri 3/27/26 |
| System Cutover | 5 d | Mon 3/30/26 | Fri 4/3/26 |
| **Project Close** | **15 d** | **Mon 4/6/26** | **Fri 4/24/26** |
| Finalize System Documentation | 15 d | Mon 4/6/26 | Fri 4/24/26 |
| Punchlist Resolution | 10 d | Mon 4/6/26 | Fri 4/17/26 |
| Final Acceptance | 0 d | Fri 4/24/26 | Fri 4/24/26 |

**Figure 6: Preliminary schedule**

Section 6

# Training Plan

## 6.1 Training Overview

Effective training ensures successful implementation and use of your communications system by all personnel for the life of the system. The training to be furnished consists of targeted coursework developed and delivered by our expert instructors. This plan will effectively provide Broward County's personnel with a comprehensive understanding of the proposed system and user equipment.

We will collaborate with Broward County to tailor a final training plan to enable Broward County's organization to operate, configure, and manage the proposed solution effectively and efficiently.

## 6.1 Training Overview for Broward County Commissioners

In order to achieve the training goals identified by Broward County Commissioners, we propose the following courses.

### 6.1.1 Console Operator and Supervisor Training Plan

| Course Title | Target Audience | Sessions | Duration | Location | Date | Participants |
|---|---|---|---|---|---|---|
| **CommandCentral AXS Dispatch Console ADMIN and CommandCentral AXS Dispatch Console Operator Up to** 10 training consoles<br>Ratio: 2 per training console (Instructor-led) | Console Supervisors | 1 (8-hour Session) | 1 day | Ft. Lauderdale, FL | Prior to Cutover | 10 (max) |

| Course Title | Target Audience | Sessions | Duration | Location | Date | Participants |
|---|---|---|---|---|---|---|
| **CommandCentral AXS Dispatch Console Operator Up to** 10 training consoles<br>Ratio: 2 per training console<br>(Instructor-led) | Console Operators | 10 (4-hour Sessions) | 5 days | Ft. Lauderdale, FL | Prior to Cutover | 100 (10 per Session max) |

## 6.1.2 Course Descriptions for Broward County Commissioners

Course descriptions for Broward County Commissioners are included on the following pages.

### 6.1.2.1 CommandCentral AXS Dispatch Console Administrator

| | |
|---|---|
| Course Synopsis and Objectives: | This course provides students with an introduction to the Command Central AXS dispatch console, its basic operation and tailored job aids which will be available for assistance in administration. Through facilitation and hands-on activities, the user learns how to perform common tasks associated with the console administration.<br><br>By the end of this course, the student will be able to:<br>▪ Operate, administer and configure a CommandCentral AXS Dispatch position for daily use within an organization<br>▪ Identify the hardware components that make up the dispatcher position<br>▪ Describe the Purpose of the CommandCentral AXS Dispatch application<br>▪ Identify elements that make up the menu and toolbar structure within the Dispatch software<br>▪ Perform dispatcher operations:<br>○ Communicating with radios: transmitting and receiving calls within group and individual communications categories<br>○ Perform advanced signaling features i.e. Quicklists, Emergency call and alarms, Ambience Listening calls<br>○ Perform basic procedures within screen configurations i.e. expanding and compressing resources, adjusting volume<br>○ Perform basic procedures within resource groups i.e. multiselect or patch group, APB and patch transmit |
| Delivery Method: | ILT – Instructor-led training |
| Duration: | 4 hours – CommandCentral AXS Dispatch Console Operator plus<br>4 hours – CommandCentral AXS Dispatch Console Administrator |
| Participants: | Dispatch Console Administrators |
| Class Size: | Based on number of Training Consoles available (2 students per Console) |
| Prerequisite: | None |

| | |
|---|---|
| Curriculum: | Course Modules:<br>▪ Course Introduction<br>▪ CommandCentral AXS Console Overview<br>▪ CommandCentral AXS Software Administrator Reference User Guide<br>▪ Course Summary<br>▪ Final Assessment |

### 6.1.2.2 CommandCentral AXS Dispatch Console Operator

| | |
|---|---|
| Course Synopsis and Objectives: | This course provides students with an introduction to the Command Central AXS dispatch console, its basic operation and tailored job aids which will be available for assistance in operation. Through facilitation and hands-on activities, the user learns how to perform common tasks associated with the console operation.<br><br>By the end of this course, the student will be able to:<br>▪ Operate and configure a CommandCentral AXS Dispatch position for daily operational use within an organization<br>▪ Identify the hardware components that make up the dispatcher position<br>▪ Describe the Purpose of the CommandCentral AXS Dispatch application<br>▪ Identify elements that make up the menu and toolbar structure within the Dispatch software<br>▪ Perform dispatcher operations:<br>o Communicating with radios: transmitting and receiving calls within group and individual communications categories<br>o Perform advanced signaling features i.e. Quicklists, Emergency call and alarms, Ambience Listening calls<br>o Perform basic procedures within screen configurations i.e. expanding and compressing resources, adjusting volume<br>o Perform basic procedures within resource groups i.e. multiselect or patch group, APB and patch transmit |
| Delivery Method: | ILT – Instructor-led training |
| Duration: | 4 hours |
| Participants: | Dispatch Console Operators |
| Class Size: | Based on number of Training Consoles available (2 students per Console) |
| Prerequisite: | None |
| Curriculum: | Course Modules:<br>▪ Course Introduction<br>▪ CommandCentral AXS Console Overview<br>▪ CommandCentral AXS Software Operator Reference User Guide<br>▪ Course Summary<br>▪ Final Assessment |

## Equipment List

This section lists the equipment necessary for the solution.

| APC | QTY | Part # | Description | Unit List | Ext List | Disc | Unit Disc | Ext Disc |
|---|---|---|---|---|---|---|---|---|
| **DISPATCH CONSOLES EQUIPMENT** | | | | | | | | |
| 877 | 1 | SQM01SUM0323 | ASTRO MASTER SITE | $0 | $0 | 20% | $0 | $0 |
| 877 | 1 | CA03517AE | ADD: CORE EXPANSION | $0 | $0 | 20% | $0 | $0 |
| 877 | 1 | UA00156AA | ADD: 5 CONSOLE OPS: AXS, MCC7500/E AND AIS | $5,000 | $5,000 | 20% | $4,000 | $4,000 |
| 877 | 4 | CA01316AA | ADD: UNC ADDTL DEVICE LIC (QTY 10) | $1,500 | $6,000 | 20% | $1,200 | $4,800 |
| 708 | 1 | TT4084A | COMPUTER, DL160 G10 | $6,000 | $6,000 | 8% | $5,520 | $5,520 |
| 504 | 41 | HKVN4729 | AXS DISPATCH CONSOLE LICENSE | $7,900 | $323,900 | 20% | $6,320 | $259,120 |
| 504 | 41 | HKVN4730 | LICENSE,AXS TRUNKING SERVICES | $6,600 | $270,600 | 20% | $5,280 | $216,480 |
| 504 | 41 | HKVN4731 | LICENSE,AXS ADVANCED CONVENTION | $3,960 | $162,360 | 20% | $3,168 | $129,888 |
| 504 | 41 | HKVN4732 | LICENSE,AXS SECURE VOICE SERVICES | $6,340 | $259,940 | 20% | $5,072 | $207,952 |
| 504 | 41 | HKVN4739 | LICENSE,AXS SECURE OTEK SERVICE | $4,420 | $181,220 | 20% | $3,536 | $144,976 |
| 504 | 41 | HKVN4733 | LICENSE,AXS INTEGRATED IRR | $3,200 | $131,200 | 20% | $2,560 | $104,960 |
| 504 | 41 | HKVN4736 | LICENSE,AXS AMBE+2 VOCODER ROY | $50 | $2,050 | 20% | $40 | $1,640 |
| 504 | 41 | HKVN4737 | LICENSE,AXS STANDARD LEVEL RADIO | $20,700 | $848,700 | 20% | $16,560 | $678,960 |
| 754 | 41 | B1956 | COMMANDCENTRAL HUB, W/CLIENT PC | $5,250 | $215,250 | 25% | $3,938 | $161,438 |
| 754 | 41 | CA03850AA | ADD: WINDOWS OS FOR MCC7500E CONSOLE | $700 | $28,700 | 25% | $525 | $21,525 |
| 754 | 41 | CA03553AA | ADD: AC LINE CORD, NORTH AMERICA | $13 | $533 | 25% | $10 | $400 |
| 754 | 41 | CA03547AA | ADD: BRACKET, MOUNTING 2RU | $75 | $3,075 | 25% | $56 | $2,306 |
| 754 | 41 | CA03572AA | ADD: CABLE RETENTION BRACKET | $65 | $2,665 | 25% | $49 | $1,999 |
| 244 | 41 | B1951 | MICROPHONE, DESKTOP, USB | $545 | $22,345 | 20% | $436 | $17,876 |
| 754 | 41 | CA03413AA | ADD: USB CABLE, TYPE A TO TYPE C, 4.5M | $29 | $1,189 | 25% | $22 | $892 |
| 443 | 82 | B1913 | MCC SERIES HEADSET JACK | $200 | $16,400 | 17% | $166 | $13,612 |
| 708 | 41 | DSTWIN6328A | PROVIDES ONE DUAL PEDAL FOOTSWITCH | $434 | $17,794 | 8% | $399 | $16,370 |
| 244 | 123 | B1952 | SPEAKER, DESKTOP, USB | $585 | $71,955 | 20% | $468 | $57,564 |
| 754 | 41 | CA03583AA | ADD: FOUR CABLES, POWER 24VDC | $150 | $6,150 | 25% | $113 | $4,613 |
| 754 | 123 | CA03413AA | ADD: USB CABLE, TYPE A TO TYPE C, 4.5M | $29 | $3,567 | 25% | $22 | $2,675 |
| 706 | 41 | RLN6099A | HDST MODULE BASE W/PTT, 25 FT CBL | $261 | $10,701 | 23% | $201 | $8,240 |
| 706 | 41 | RMN5150A | OVER-THE-HEAD, MONAURAL, NOISE-CANCELING HEADSET | $161 | $6,601 | 23% | $124 | $5,083 |
| 708 | 41 | DSTS271A | TECH GLOBAL 27IN COMMERCIAL TOUCH MONITOR | $1,650 | $67,650 | 8% | $1,518 | $62,238 |

| APC | QTY | Part # | Description | Unit List | Ext List | Disc | Unit Disc | Ext Disc |
|---|---|---|---|---|---|---|---|---|
| 504 | 5 | B1957A | AXS SOFTWARE DVD | $1 | $5 | 20% | $1 | $4 |
| 708 | 5 | DSF2B56AA | USB EXTERNAL DVD DRIVE | $172 | $860 | 8% | $158 | $791 |
| 708 | 41 | L3225A | CERTIFIED KEYBOARD FOR RSD SERVERS AND WORKSTATIONS | $42 | $1,722 | 8% | $39 | $1,584 |
| 708 | 41 | L3226A | CERTIFIED OPTICAL WHEEL MOUSE FOR RSD SERVERS AND WORKSTATIONS | $30 | $1,230 | 8% | $28 | $1,132 |
| 147 | 1 | T8639 | JUNIPER FIREWALL APPLIANCE | $4,182 | $4,182 | 20% | $3,346 | $3,346 |
| 147 | 4 | CLN1869 | 2930F 48-PORT SWITCH | $10,797 | $43,188 | 20% | $8,638 | $34,550 |
| 147 | 6 | CLN1866 | FRU: 1M DAC CABLE | $200 | $1,200 | 20% | $160 | $960 |
| 147 | 1 | T8492 | SITE ROUTER & FIREWALL-AC | $2,091 | $2,091 | 20% | $1,673 | $1,673 |
| 147 | 1 | CA03445AA | ADD: MISSION CRITICAL HARDENING | $3,300 | $3,300 | 20% | $2,640 | $2,640 |
| 147 | 1 | CA03448AA | ADD: STATEFUL FIREWALL | $1,000 | $1,000 | 20% | $800 | $800 |
| 147 | 1 | T8492 | SITE ROUTER & FIREWALL-AC | $2,091 | $2,091 | 20% | $1,673 | $1,673 |
| 147 | 1 | CA03445AA | ADD: MISSION CRITICAL HARDENING | $3,300 | $3,300 | 20% | $2,640 | $2,640 |
| 147 | 1 | CA03448AA | ADD: STATEFUL FIREWALL | $1,000 | $1,000 | 20% | $800 | $800 |
| 677 | 1 | T8810 | STANDALONE DSC 8000 CONTROLLER | $0 | $0 | 25% | $0 | $0 |
| 595 | 1 | CA03863AA | ADD: ASTRO SYSTEM RELEASE 2022.1 | $0 | $0 | 20% | $0 | $0 |
| 677 | 1 | CA03801AA | ADD: DSC 8000 CONVENTIONAL SITE CONTROLLER | $5,500 | $5,500 | 25% | $4,125 | $4,125 |
| 680 | 1 | UA00787AA | ADD: DSC 8000 CONVENTIONAL SITE CONTROLLER SW | $8,000 | $8,000 | 15% | $6,800 | $6,800 |
| 680 | 1 | CA03832AA | ADD: NM/DISPATCH SITE | $0 | $0 | 15% | $0 | $0 |
| 677 | 1 | T8811 | DSC AC POWER SUPPLY CHASSIS | $1,700 | $1,700 | 25% | $1,275 | $1,275 |
| 677 | 1 | CA03800AA | ADD: SINGLE POWER SUPPLY FOR DSC | $1,100 | $1,100 | 25% | $825 | $825 |
| 677 | 1 | CA03533AA | ADD: DSC AC POWER CABLE - US, 12 FT | $0 | $0 | 25% | $0 | $0 |
| 147 | 1 | SQM01SUM0333 | MCG 8000 CONVENTIONAL GATEWAY | $5,000 | $5,000 | 20% | $4,000 | $4,000 |
| 147 | 1 | CA03714AA | ADD: AC POWER | $0 | $0 | 20% | $0 | $0 |
| 147 | 8 | CA03717AA | ADD: ACIM INTERFACE | $750 | $6,000 | 20% | $600 | $4,800 |
| 147 | 1 | DLN8037 | FRU: MCG 8000 AC POWER MODULE | $750 | $750 | 20% | $600 | $600 |
| 147 | 1 | DLN8039 | FRU: MCG 8000 HD ENH CONV GATEWAY MODULE | $6,000 | $6,000 | 20% | $4,800 | $4,800 |
| 147 | 1 | SQM01SUM0333 | MCG 8000 CONVENTIONAL GATEWAY | $5,000 | $5,000 | 20% | $4,000 | $4,000 |
| 147 | 1 | CA03714AA | ADD: AC POWER | $0 | $0 | 20% | $0 | $0 |
| 147 | 8 | CA03717AA | ADD: ACIM INTERFACE | $750 | $6,000 | 20% | $600 | $4,800 |
| 147 | 1 | DLN8037 | FRU: MCG 8000 AC POWER MODULE | $750 | $750 | 20% | $600 | $600 |
| 147 | 1 | DLN8039 | FRU: MCG 8000 HD ENH CONV GATEWAY MODULE | $6,000 | $6,000 | 20% | $4,800 | $4,800 |
| 147 | 1 | SQM01SUM0333 | MCG 8000 CONVENTIONAL GATEWAY | $5,000 | $5,000 | 20% | $4,000 | $4,000 |
| 147 | 1 | CA03714AA | ADD: AC POWER | $0 | $0 | 20% | $0 | $0 |

| APC | QTY | Part # | Description | Unit List | Ext List | Disc | Unit Disc | Ext Disc |
|---|---|---|---|---|---|---|---|---|
| 147 | 8 | CA03717AA | ADD: ACIM INTERFACE | $750 | $6,000 | 20% | $600 | $4,800 |
| 147 | 1 | DLN8037 | FRU: MCG 8000 AC POWER MODULE | $750 | $750 | 20% | $600 | $600 |
| 147 | 1 | DLN8039 | FRU: MCG 8000 HD ENH CONV GATEWAY MODULE | $6,000 | $6,000 | 20% | $4,800 | $4,800 |
| 708 | 41 | T8742 | MCAFEE FOR WINDOWS CLIENT, A2019.2 | $165 | $6,765 | 8% | $152 | $6,224 |
| 207 | 24 | DS11011188 | PDU, 120/240 SPLIT PH OR N+1 REDUNDANT, 60A MAX PER PHASE, SIX DEDICAT | $3,126 | $75,024 | 8% | $2,876 | $69,022 |
| 207 | 288 | DS3750296 | BREAKER, 10 AMP, CB UL 489 LISTED FOR AC EDGE II (1101-1188) | $75 | $21,600 | 8% | $69 | $19,872 |
| 207 | 2 | DS1101990 | SPD, SHIELDED RJ-45 JACK, SINGLE LINE GBE (1000MBPS) R56 COMPLIANT | $154 | $308 | 8% | $142 | $283 |
| 207 | 2 | DSTSJADP | RACK MOUNT GROUND BAR, 19 IN FOR TSJ AND WPH SERIES DATA SPDS | $110 | $220 | 8% | $101 | $202 |
| 137 | 41 | _HWENCRYPT | HARDWARE ENCRYPTION | $16,598 | $680,498 | 20% | $13,278 | $544,398 |
| 708 | 1 | DSMW3HE06791AA | SAR-8 SHELF V2 | $1,607 | $1,607 | 8% | $1,478 | $1,478 |
| 708 | 1 | DSMW3HE02784PA | SAR RELEASE 21.X BASIC OS LICENSE | $595 | $595 | 8% | $547 | $547 |
| 708 | 1 | DSMW3HE06792EA | FAN MODULE (SAR-8 SHELF V2) EXT TEMP -48VDC | $707 | $707 | 8% | $650 | $650 |
| 708 | 2 | DSMW3HE02774AB | CONTROL SWITCH MODULE V2 (CSMV2) 48V | $2,450 | $4,900 | 8% | $2,254 | $4,508 |
| 708 | 2 | DSMW3HE11473BK | PMC CARD W/ 4 GIG-E SFP BUNDLE (1) 3HE02782AA PMC, (4) 3HE00062CB SFP | $4,847 | $9,694 | 8% | $4,459 | $8,918 |
| 708 | 2 | DSMW3HE05838AA | 250W 120/240V AC POWER CONVERTER | $996 | $1,992 | 8% | $916 | $1,833 |
| 708 | 2 | DSMW3HE05837BA | 7705 AC POWER CONVERTER PIGTAIL - O-RING | $167 | $334 | 8% | $154 | $307 |
| 708 | 4 | DSMW3HE00062CB | SFP - GIGE BASE-T RJ45 R6/6 DDM -40/85C | $231 | $924 | 8% | $213 | $850 |
| 708 | 17 | DSMW3HE15895AA | NETWORK SERVICE PLATFORM (NSP) APPLIANCE LICENSE POINT | $72 | $1,228 | 8% | $66 | $1,130 |
| 275 | 1 | F0016A | MC IOT MAIN MODEL | $1,045 | $1,045 | 25% | $784 | $784 |
| 275 | 1 | VA01945AA | ADD: MC EDGE AS AUX I/O SERVER | $0 | $0 | 25% | $0 | $0 |
| 275 | 1 | VA00985AA | ADD: NO PIGGY_ MC-EDGE | $0 | $0 | 25% | $0 | $0 |
| 275 | 1 | VA00148 | ADD: WALL MOUNT INSTALLATION KIT | $55 | $55 | 25% | $41 | $41 |
| 275 | 3 | VA00989AA | ADD: 8DO EE 16DI 5-18 V /DRY | $600 | $1,800 | 25% | $450 | $1,350 |
| 275 | 1 | VA00153AA | ADD:I/O MODULE EXTRACTOR TOOL | $11 | $11 | 25% | $8 | $8 |
| 275 | 1 | VA00009 | ADD: AC POWER SUPPLY UNIT 12V / 5A DC OUTPUT | $247 | $247 | 25% | $185 | $185 |
| 275 | 1 | VA00155 | ADD:DC POWER CABLE | $55 | $55 | 25% | $41 | $41 |
| 499 | 1 | DSIABDIN4 | PANDUIT IABDIN4 4 RACK UNIT DIN RAIL FOR EIA 19" MOUNT | $392 | $392 | 8% | $361 | $361 |
| 469 | 3 | FHN1668 | TERM BLOCK & CONN WIRED M25T68 | $90 | $270 | 10% | $81 | $243 |
| 275 | 1 | FHN0057 | DIN RAIL STOPPER | $17 | $17 | 25% | $13 | $13 |
| 877 | 41 | T8807A | WINDOWS SUPP FULL CONFIG, A2020.1/A2021.1 | $0 | $0 | 25% | $0 | $0 |

| APC | QTY | Part # | Description | Unit List | Ext List | Disc | Unit Disc | Ext Disc |
|---|---|---|---|---|---|---|---|---|
| **CONSOLETTES & DESKSETS** | | | | | | | | |
| 681 | 19 | L37TSS9PW1AN | ALL BAND CONSOLETTE. | $9,933 | $188,728 | 25% | $7,450 | $141,546 |
| 681 | 19 | L37TSS9PW1AN-A | ALL BAND CONSOLETTE | $0 | $0 | 25% | $0 | $0 |
| 655 | 19 | QA01749AA | INT: SW KEY SUPPLEMENTAL DATA | $0 | $0 | 25% | $0 | $0 |
| 471 | 19 | W947BB | INT: RADIO PACKET DATA | $0 | $0 | 25% | $0 | $0 |
| 471 | 19 | G193AJ | INT: ADVANCED DIGITAL PRIVACY (ADP) SW | $0 | $0 | 25% | $0 | $0 |
| 656 | 19 | G173AJ | INT:SMRTZN OMNILNK MULTZN SYSSW APX | $0 | $0 | 25% | $0 | $0 |
| 761 | 19 | G213BM | INT:BOX PKG CONSOLETTE | $0 | $0 | 25% | $0 | $0 |
| 656 | 19 | G133AJ | INT: SAFETY DATA SHEET APX | $0 | $0 | 25% | $0 | $0 |
| 681 | 19 | GA00345AD | INT: UHF R2 MP BAND | $0 | $0 | 25% | $0 | $0 |
| 681 | 19 | GA00341AD | INT: UHF R1 MP BAND | $0 | $0 | 25% | $0 | $0 |
| 681 | 19 | GA00306AD | INT: VHF MP BAND | $0 | $0 | 25% | $0 | $0 |
| 681 | 19 | GA00244AD | INT: 7/800MHZ BAND | $0 | $0 | 25% | $0 | $0 |
| 681 | 19 | G886EC | INT: TANAPA APX8500 ALL BAND | $0 | $0 | 25% | $0 | $0 |
| 656 | 19 | G507AD | INT: 12.5KHZ FCC MANDATE | $0 | $0 | 25% | $0 | $0 |
| 656 | 19 | G444AH | ADD: APX CONTROL HEAD SOFTWARE | $0 | $0 | 25% | $0 | $0 |
| 681 | 19 | G67DN | INT: REM MT MID POWER CONSOLETTE | $0 | $0 | 25% | $0 | $0 |
| 681 | 19 | L487AF | INT: CONSOLETTE HOUSING | $0 | $0 | 25% | $0 | $0 |
| 681 | 19 | L659AC | INT: RF CABLE | $0 | $0 | 25% | $0 | $0 |
| 681 | 19 | L681AF | INT: 120/240V OPERATION APX CONSOL | $0 | $0 | 25% | $0 | $0 |
| 681 | 19 | GA01786AA | INT: APX8500 STANDARD MP FACEPLATE | $0 | $0 | 25% | $0 | $0 |
| 681 | 19 | G90AC | ADD: NO MICROPHONE NEEDED APX. | $0 | $0 | 25% | $0 | $0 |
| 681 | 19 | G996AS | ENH: OVER THE AIR PROVISIONING. | $110 | $2,090 | 25% | $83 | $1,568 |
| 681 | 19 | GA00580AA | ADD: TDMA OPERATION. | $495 | $9,405 | 25% | $371 | $7,054 |
| 681 | 19 | CA01598AB | ADD: AC LINE CORD US. | $0 | $0 | 25% | $0 | $0 |
| 681 | 19 | G51AT | ENH:SMARTZONE. | $1,650 | $31,350 | 25% | $1,238 | $23,513 |
| 185 | 19 | G78AR | ADD: 3Y ESSENTIAL SERVICE. | $288 | $5,472 | 0% | $288 | $5,472 |
| 681 | 19 | L999AG | ADD: FULL FP W/E5/KEYPAD/CLOCK/VU. | $868 | $16,492 | 25% | $651 | $12,369 |
| 681 | 19 | G843AH | ADD: AES ENCRYPTION AND ADP. | $523 | $9,937 | 25% | $392 | $7,453 |
| 681 | 19 | G806BL | ENH: ASTRO DIGITAL CAI OP APX. | $567 | $10,773 | 25% | $425 | $8,080 |
| 681 | 19 | W969BG | ADD: MULTIKEY OPERATION. | $363 | $6,897 | 25% | $272 | $5,173 |
| 681 | 19 | G361AH | ENH: P25 TRUNKING SOFTWARE APX. | $330 | $6,270 | 25% | $248 | $4,703 |
| 681 | 19 | GA09008AA | ADD: GROUP SERVICES. | $165 | $3,135 | 25% | $124 | $2,351 |
| 681 | 19 | QA09113AB | ADD: BASELINE RELEASE SW. | $0 | $0 | 25% | $0 | $0 |
| | | MCD 5000 Deskset System | | | $0 | 0% | $0 | $0 |

| APC | QTY | Part # | Description | Unit List | Ext List | Disc | Unit Disc | Ext Disc |
|---|---|---|---|---|---|---|---|---|
| 202 | 1 | HKVN4865A | LICENSE,CD, MCD 5000 DOCUMENTATION. | $0 | $0 | 23% | $0 | $0 |
| 202 | 19 | F2380A | SM,MCD 5000 DESKSET. | $2,275 | $43,225 | 23% | $1,752 | $33,283 |
| 202 | 19 | FHN7469A | ASSY,P/S,MCD 5000 DESKSET / RGU PWR SPLY W/ USA PWR CORD. | $100 | $1,900 | 23% | $77 | $1,463 |
| 708 | 19 | TDN1112B | ETHERNET CABLE 25' EV CAT5E PCH CB. | $33 | $627 | 8% | $30 | $577 |
| 454 | 19 | BLN6732B | FOOT, SWITCH TRADITIONAL. | $135 | $2,565 | 20% | $108 | $2,052 |
| | | Standalone Items | | | $0 | 0% | $0 | $0 |
| 202 | 19 | FHN7470A | ASSY,ADPTR,MCD 5000 DESKSET HSET JCK BX & CBL. | $150 | $2,850 | 23% | $116 | $2,195 |
| | | Standalone Items | | | $0 | 0% | $0 | $0 |
| 761 | 41 | HKN6233C | APX CONSOLETTE RACK MOUNT KIT. | $200 | $8,200 | 25% | $150 | $6,150 |
| **ANTENNA & LINES** | | | | | | | | |
| 351 | 1 | DSSP7C03CS36UN | 764-869MHZ 3DBD GAIN CONTROL STATION ANTENNA W/N-TYPE CONNECTOR. | $1,128 | $1,128 | 8% | $1,038 | $1,038 |
| 351 | 820 | DSEC150HF | COAXIAL CABLE, 1/4" HIFLEX, 50 OHM WITH BLACK PE JACKET | $3 | $2,214 | 8% | $2 | $2,037 |
| 351 | 82 | DSNM50V14 | CONNECTOR, N MALE INTERFACE FOR EC1-50 | $21 | $1,722 | 8% | $19 | $1,584 |
| 351 | 2 | DSNM50V12 | CONNECTOR, N MALE INTERFACE FOR EC4-50 | $28 | $57 | 8% | $26 | $52 |
| 351 | 2 | DSWKU | WK-U, UNIVERSAL WEATHERPROOFING KIT | $44 | $87 | 8% | $40 | $80 |
| 351 | 1500 | DSEC450 | COAXIAL CABLE, 1/2" 50 OHM CORRUGATED COPPER WITH BLACK PE JACKET | $3 | $4,950 | 8% | $3 | $4,554 |
| 351 | 2 | DSNF50V12 | CONNECTOR, N FEMALE INTERFACE FOR EC4-50 | $28 | $56 | 8% | $26 | $52 |
| 351 | 5 | DSGKS12 | STANDARD GROUND KIT FOR 1/2" CABLES, 5' LEAD W/ UNATTACHED 3/8" TWO HO | $35 | $175 | 8% | $32 | $161 |
| 351 | 1 | DSHG12L | PRE-LACED HOISTING GRIP FOR 1/2" STANDARD CABLES, EACH | $23 | $23 | 8% | $21 | $21 |
| 351 | 7 | DSBH12 | BH-12 BUTTERFLY HANGER FOR 1/2 AIRCELL COAX,PKG OF 10 | $67 | $471 | 8% | $62 | $433 |
| 207 | 1 | DSIS50NXC2MA | RF SPD, 125-1000MHZ DC BLOCK FLANGE MT NM ANTENNA, NF EQUIPMENT SIDE | $87 | $87 | 8% | $80 | $80 |
| 351 | 2 | DSNM50V12 | CONNECTOR, N MALE INTERFACE FOR EC4-50 | $28 | $57 | 8% | $26 | $52 |
| 351 | 1 | DSSP7C03CS36UN | 764-869MHZ 3DBD GAIN CONTROL STATION ANTENNA W/N-TYPE CONNECTOR. | $1,128 | $1,128 | 8% | $1,038 | $1,038 |
| 351 | 2 | DSNM50V12 | CONNECTOR, N MALE INTERFACE FOR EC4-50 | $28 | $57 | 8% | $26 | $52 |
| 351 | 2 | DSWKU | WK-U, UNIVERSAL WEATHERPROOFING KIT | $44 | $87 | 8% | $40 | $80 |
| 351 | 2 | DSNF50V12 | CONNECTOR, N FEMALE INTERFACE FOR EC4-50 | $28 | $56 | 8% | $26 | $52 |

| APC | QTY | Part # | Description | Unit List | Ext List | Disc | Unit Disc | Ext Disc |
|---|---|---|---|---|---|---|---|---|
| 351 | 5 | DSGKS12 | STANDARD GROUND KIT FOR 1/2" CABLES, 5' LEAD W/ UNATTACHED 3/8" TWO HO | $35 | $175 | 8% | $32 | $161 |
| 351 | 1 | DSHG12L | PRE-LACED HOISTING GRIP FOR 1/2" STANDARD CABLES, EACH | $23 | $23 | 8% | $21 | $21 |
| 351 | 7 | DSBH12 | BH-12 BUTTERFLY HANGER FOR 1/2 AIRCELL COAX,PKG OF 10 | $67 | $471 | 8% | $62 | $433 |
| 207 | 1 | DSIS50NXC2MA | RF SPD, 125-1000MHZ DC BLOCK FLANGE MT NM ANTENNA, NF EQUIPMENT SIDE | $87 | $87 | 8% | $80 | $80 |
| 351 | 2 | DSNM50V12 | CONNECTOR, N MALE INTERFACE FOR EC4-50 | $28 | $57 | 8% | $26 | $52 |
| 351 | 1 | DSSP7C03CS36UN | 764-869MHZ 3DBD GAIN CONTROL STATION ANTENNA W/N-TYPE CONNECTOR. | $1,128 | $1,128 | 8% | $1,038 | $1,038 |
| 351 | 2 | DSNM50V12 | CONNECTOR, N MALE INTERFACE FOR EC4-50 | $28 | $57 | 8% | $26 | $52 |
| 351 | 2 | DSWKU | WK-U, UNIVERSAL WEATHERPROOFING KIT | $44 | $87 | 8% | $40 | $80 |
| 351 | 2 | DSNF50V12 | CONNECTOR, N FEMALE INTERFACE FOR EC4-50 | $28 | $56 | 8% | $26 | $52 |
| 351 | 5 | DSGKS12 | STANDARD GROUND KIT FOR 1/2" CABLES, 5' LEAD W/ UNATTACHED 3/8" TWO HO | $35 | $175 | 8% | $32 | $161 |
| 351 | 1 | DSHG12L | PRE-LACED HOISTING GRIP FOR 1/2" STANDARD CABLES, EACH | $23 | $23 | 8% | $21 | $21 |
| 351 | 7 | DSBH12 | BH-12 BUTTERFLY HANGER FOR 1/2 AIRCELL COAX,PKG OF 10 | $67 | $471 | 8% | $62 | $433 |
| 207 | 1 | DSIS50NXC2MA | RF SPD, 125-1000MHZ DC BLOCK FLANGE MT NM ANTENNA, NF EQUIPMENT SIDE | $87 | $87 | 8% | $80 | $80 |
| 351 | 2 | DSNM50V12 | CONNECTOR, N MALE INTERFACE FOR EC4-50 | $28 | $57 | 8% | $26 | $52 |
| 351 | 1 | DSSP7C03CS36UN | 764-869MHZ 3DBD GAIN CONTROL STATION ANTENNA W/N-TYPE CONNECTOR. | $1,128 | $1,128 | 8% | $1,038 | $1,038 |
| 351 | 2 | DSNM50V12 | CONNECTOR, N MALE INTERFACE FOR EC4-50 | $28 | $57 | 8% | $26 | $52 |
| 351 | 2 | DSWKU | WK-U, UNIVERSAL WEATHERPROOFING KIT | $44 | $87 | 8% | $40 | $80 |
| 351 | 2 | DSNF50V12 | CONNECTOR, N FEMALE INTERFACE FOR EC4-50 | $28 | $56 | 8% | $26 | $52 |
| 351 | 5 | DSGKS12 | STANDARD GROUND KIT FOR 1/2" CABLES, 5' LEAD W/ UNATTACHED 3/8" TWO HO | $35 | $175 | 8% | $32 | $161 |
| 351 | 1 | DSHG12L | PRE-LACED HOISTING GRIP FOR 1/2" STANDARD CABLES, EACH | $23 | $23 | 8% | $21 | $21 |
| 351 | 7 | DSBH12 | BH-12 BUTTERFLY HANGER FOR 1/2 AIRCELL COAX,PKG OF 10 | $67 | $471 | 8% | $62 | $433 |
| 207 | 1 | DSIS50NXC2MA | RF SPD, 125-1000MHZ DC BLOCK FLANGE MT NM ANTENNA, NF EQUIPMENT SIDE | $87 | $87 | 8% | $80 | $80 |
| 351 | 2 | DSNM50V12 | CONNECTOR, N MALE INTERFACE FOR EC4-50 | $28 | $57 | 8% | $26 | $52 |
| 351 | 2 | DSWKU | WK-U, UNIVERSAL WEATHERPROOFING KIT | $44 | $87 | 8% | $40 | $80 |

| APC | QTY | Part # | Description | Unit List | Ext List | Disc | Unit Disc | Ext Disc |
|---|---|---|---|---|---|---|---|---|
| 351 | 2 | DSNF50V12 | CONNECTOR, N FEMALE INTERFACE FOR EC4-50 | $28 | $56 | 8% | $26 | $52 |
| 351 | 5 | DSGKS12 | STANDARD GROUND KIT FOR 1/2" CABLES, 5' LEAD W/ UNATTACHED 3/8" TWO HO | $35 | $175 | 8% | $32 | $161 |
| 351 | 1 | DSHG12L | PRE-LACED HOISTING GRIP FOR 1/2" STANDARD CABLES, EACH | $23 | $23 | 8% | $21 | $21 |
| 351 | 7 | DSBH12 | BH-12 BUTTERFLY HANGER FOR 1/2 AIRCELL COAX,PKG OF 10 | $67 | $471 | 8% | $62 | $433 |
| 207 | 1 | DSIS50NXC2MA | RF SPD, 125-1000MHZ DC BLOCK FLANGE MT NM ANTENNA, NF EQUIPMENT SIDE | $87 | $87 | 8% | $80 | $80 |
| 351 | 2 | DSNM50V12 | CONNECTOR, N MALE INTERFACE FOR EC4-50 | $28 | $57 | 8% | $26 | $52 |
| 351 | 2 | DSWKU | WK-U, UNIVERSAL WEATHERPROOFING KIT | $44 | $87 | 8% | $40 | $80 |
| 351 | 2 | DSNF50V12 | CONNECTOR, N FEMALE INTERFACE FOR EC4-50 | $28 | $56 | 8% | $26 | $52 |
| 351 | 5 | DSGKS12 | STANDARD GROUND KIT FOR 1/2" CABLES, 5' LEAD W/ UNATTACHED 3/8" TWO HO | $35 | $175 | 8% | $32 | $161 |
| 351 | 1 | DSHG12L | PRE-LACED HOISTING GRIP FOR 1/2" STANDARD CABLES, EACH | $23 | $23 | 8% | $21 | $21 |
| 351 | 7 | DSBH12 | BH-12 BUTTERFLY HANGER FOR 1/2 AIRCELL COAX,PKG OF 10 | $67 | $471 | 8% | $62 | $433 |
| 207 | 1 | DSIS50NXC2MA | RF SPD, 125-1000MHZ DC BLOCK FLANGE MT NM ANTENNA, NF EQUIPMENT SIDE | $87 | $87 | 8% | $80 | $80 |
| 351 | 2 | DSNM50V12 | CONNECTOR, N MALE INTERFACE FOR EC4-50 | $28 | $57 | 8% | $26 | $52 |
| **SPARES** | | | | | | | | |
| 271 | 1 | 3082933N08 | GR500 AC POWER CORD | $36 | $36 | 23% | $28 | $28 |
| 754 | 1 | BKN2002 | FRU: POWER CABLE, 24VDC | $35 | $35 | 25% | $26 | $26 |
| 754 | 1 | BPN1030 | FRU, POWER SUPPLY WITH DC CORD | $150 | $150 | 25% | $113 | $113 |
| 443 | 1 | BLN1277 | HEADSET JACK CIRCUIT BOARD FRU | $250 | $250 | 17% | $208 | $208 |
| 443 | 1 | 3071113H01 | CABLE ASSY, 16 PIN CONNECTOR | $108 | $108 | 17% | $90 | $90 |
| 454 | 1 | 3071114H01 | CABLE ASSY, EXTENDER | $98 | $98 | 20% | $78 | $78 |
| 754 | 1 | B1956 | COMMANDCENTRAL HUB, W/CLIENT PC | $5,250 | $5,250 | 25% | $3,938 | $3,938 |
| 754 | 1 | CA03553AA | ADD: AC LINE CORD, NORTH AMERICA | $13 | $13 | 25% | $10 | $10 |
| 754 | 1 | CA03850AA | ADD: WINDOWS OS FOR MCC7500E CONSOLE | $700 | $700 | 25% | $525 | $525 |
| 754 | 1 | CA03548AA | ADD: TWO CABLES, POWER 24VDC | $75 | $75 | 25% | $56 | $56 |
| 708 | 1 | L3225A | CERTIFIED KEYBOARD FOR RSD SERVERS AND WORKSTATIONS | $42 | $42 | 8% | $39 | $39 |
| 708 | 1 | L3226A | CERTIFIED OPTICAL WHEEL MOUSE FOR RSD SERVERS AND WORKSTATIONS | $30 | $30 | 8% | $28 | $28 |
| 677 | 1 | T8810 | STANDALONE DSC 8000 CONTROLLER | $0 | $0 | 25% | $0 | $0 |
| 595 | 1 | CA03863AA | ADD: ASTRO SYSTEM RELEASE 2022.1 | $0 | $0 | 20% | $0 | $0 |

| APC | QTY | Part # | Description | Unit List | Ext List | Disc | Unit Disc | Ext Disc |
|---|---|---|---|---|---|---|---|---|
| 677 | 1 | CA03801AA | ADD: DSC 8000 CONVENTIONAL SITE CONTROLLER | $5,500 | $5,500 | 25% | $4,125 | $4,125 |
| 680 | 1 | UA00787AA | ADD: DSC 8000 CONVENTIONAL SITE CONTROLLER SW | $8,000 | $8,000 | 15% | $6,800 | $6,800 |
| 680 | 1 | CA03832AA | ADD: NM/DISPATCH SITE | $0 | $0 | 15% | $0 | $0 |
| 677 | 1 | T8811 | DSC AC POWER SUPPLY CHASSIS | $1,700 | $1,700 | 25% | $1,275 | $1,275 |
| 677 | 1 | CA03800AA | ADD: SINGLE POWER SUPPLY FOR DSC | $1,100 | $1,100 | 25% | $825 | $825 |
| 677 | 1 | CA03533AA | ADD: DSC AC POWER CABLE - US, 12 FT | $0 | $0 | 25% | $0 | $0 |
| 147 | 1 | SQM01SUM0333 | MCG 8000 CONVENTIONAL GATEWAY | $5,000 | $5,000 | 20% | $4,000 | $4,000 |
| 147 | 1 | CA03714AA | ADD: AC POWER | $0 | $0 | 20% | $0 | $0 |
| 147 | 8 | CA03717AA | ADD: ACIM INTERFACE | $750 | $6,000 | 20% | $600 | $4,800 |
| 147 | 1 | T8492 | SITE ROUTER & FIREWALL-AC | $2,091 | $2,091 | 20% | $1,673 | $1,673 |
| 147 | 1 | CA03445AA | ADD: MISSION CRITICAL HARDENING | $3,300 | $3,300 | 20% | $2,640 | $2,640 |
| 147 | 1 | CA03448AA | ADD: STATEFUL FIREWALL | $1,000 | $1,000 | 20% | $800 | $800 |
| 147 | 1 | CLN1869 | 2930F 48-PORT SWITCH | $10,797 | $10,797 | 20% | $8,638 | $8,638 |
| 147 | 1 | CLN1866 | FRU: 1M DAC CABLE | $200 | $200 | 20% | $160 | $160 |
| 244 | 1 | B1952 | SPEAKER, DESKTOP, USB | $585 | $585 | 20% | $468 | $468 |
| 754 | 1 | CA03413AA | ADD: USB CABLE, TYPE A TO TYPE C, 4.5M | $29 | $29 | 25% | $22 | $22 |
| 244 | 1 | B1951 | MICROPHONE, DESKTOP, USB | $545 | $545 | 20% | $436 | $436 |
| 443 | 1 | B1913 | MCC SERIES HEADSET JACK | $200 | $200 | 17% | $166 | $166 |
| 708 | 1 | DSTS271A | TECH GLOBAL 27IN COMMERCIAL TOUCH MONITOR | $1,650 | $1,650 | 8% | $1,518 | $1,518 |
| 706 | 1 | RLN6099A | HDST MODULE BASE W/PTT, 25 FT CBL | $261 | $261 | 23% | $201 | $201 |
| 706 | 1 | RMN5150A | OVER-THE-HEAD, MONAURAL, NOISE-CANCELING HEADSET | $161 | $161 | 23% | $124 | $124 |
| 708 | 1 | DSTWIN6328A | PROVIDES ONE DUAL PEDAL FOOTSWITCH | $434 | $434 | 8% | $399 | $399 |
| 137 | 1 | _HWENCRYPT | HARDWARE ENCRYPTION | $16,598 | $16,598 | 20% | $13,278 | $13,278 |
| 147 | 1 | T8639 | JUNIPER FIREWALL APPLIANCE | $4,182 | $4,182 | 20% | $3,346 | $3,346 |
| 708 | 1 | DSMW3HE06791AA | SAR-8 SHELF V2 | $1,607 | $1,607 | 8% | $1,478 | $1,478 |
| 708 | 1 | DSMW3HE06792EA | FAN MODULE (SAR-8 SHELF V2) EXT TEMP -48VDC | $707 | $707 | 8% | $650 | $650 |
| 708 | 1 | DSMW3HE02774AB | CONTROL SWITCH MODULE V2 (CSMV2) 48V | $2,450 | $2,450 | 8% | $2,254 | $2,254 |
| 708 | 1 | DSMW3HE11473BK | PMC CARD W/ 4 GIG-E SFP BUNDLE (1) 3HE02782AA PMC, (4) 3HE00062CB SFP | $4,847 | $4,847 | 8% | $4,459 | $4,459 |
| 708 | 1 | DSMW3HE05837BA | 7705 AC POWER CONVERTER PIGTAIL - O-RING | $167 | $167 | 8% | $154 | $154 |
| 708 | 1 | DSMW3HE05838AA | 250W 120/240V AC POWER CONVERTER | $996 | $996 | 8% | $916 | $916 |
| 275 | 1 | F0016A | MC IOT MAIN MODEL | $1,045 | $1,045 | 25% | $784 | $784 |

| APC | QTY | Part # | Description | Unit List | Ext List | Disc | Unit Disc | Ext Disc |
|---|---|---|---|---|---|---|---|---|
| 275 | 1 | VA01370AA | ADD: MC-EDGE | $0 | $0 | 25% | $0 | $0 |
| 275 | 1 | VA00985AA | ADD: NO PIGGY_ MC-EDGE | $0 | $0 | 25% | $0 | $0 |
| 275 | 1 | FLN9985A | 8DO EE 16DI 5-18 V /DRY | $650 | $650 | 25% | $488 | $488 |
| 275 | 1 | FLN0096 | AC POWER SUPPLY 12V/120W DC OUT | $248 | $248 | 25% | $186 | $186 |
| 275 | 1 | FKN0033 | DC POWER CABLE | $83 | $83 | 25% | $62 | $62 |

| | | | |
|---|---|---|---|
| List Equipment | $4,074,742 | Broward Equipment | $3,261,661 |
| | | Broward Discount | ($813,081) |

Section 7

## Pricing Summary

Motorola will invoice the equipment and services to Broward County at the following amounts/rates:

| Description | Price ($) |
|---|---|
| Equipment | $4,074,742 |
| Professional Services Implementation | |
| • Engineering | $329,522 |
| • Project Management | $204,422 |
| • Implementation (Installation, Decommissioning, Optimization) and Warranty | $1,140,884 |
| • Training | $28,233 |
| **Subtotal** | **$5,777,303** |
| *Contract Discount* | *($813,081)* |
| **Total System** | **$4,964,222** |

**Support and Maintenance Fees**
One year of Advanced Plus, to protect and maintain Broward County's critical infrastructure is included at no additional cost to County. Pricing for years 2-4 (estimated to be Fiscal Years 2027/2028 – 2029/2030) is summarized below. Subsequent years' rates shall be the prior year rate plus an annual escalator of no more than the lesser of 3% or CPI. Invoicing periods and methods shall coincide with the current Support and Maintenance invoicing schedule.

**Support and Maintenance Fees Table**

| Advanced Plus | Year 2 | Year 3 | Year 4 |
|---|---|---|---|
| **Price** | $276,741 | $285,043 | $293,595 |
| **Credit*** | -$171,078 | -$172,789 | -$174,517 |
| **Net Total** | $105,663 | $112,254 | $119,077 |

*The credit referenced above reflects the removal of Support and Maintenance for decommissioned legacy equipment no longer being supported. The credit will be applied in the amount indicated above for the applicable year against the Support and Maintenance otherwise due under the Agreement. A partial credit will be applied for Year 1 (which commences on Final Acceptance of the work under this Work Authorization) based upon the monthly credit amount of $14,115.38, calculated based upon the portion of Year 1 after cutover to the new equipment.

## Milestones

Motorola will invoice the foregoing amounts in accordance with the following Milestones, with the invoice for each Milestone requiring the prior written approval by County of the completion of the applicable Milestone.

**Milestone 1: Work Authorization execution.**
27% of the System Price due upon contract execution (due upon effective date);

**Milestone 2: Equipment shipment and System Staging.**
34% of the System Price due upon shipment of equipment;

**Milestone 3: Equipment installation (ready for ATP testing).**
12% of the System Price due upon installation of equipment;

**Milestone 4: ATPs; 30-day burn-in period with no Critical or Severe Events.**
12% of the System Price due upon installation of equipment;

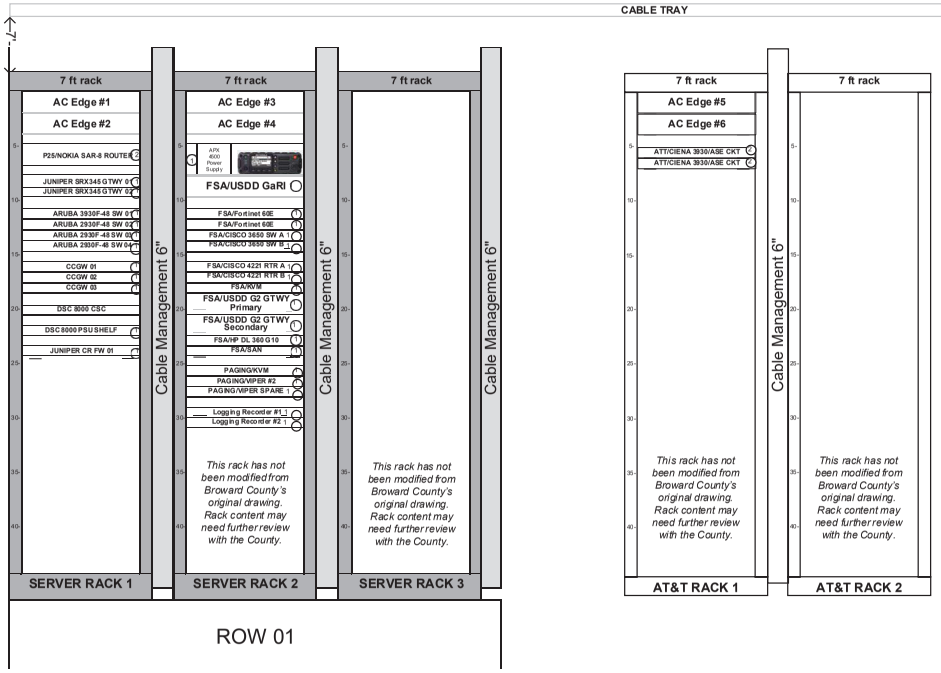
**Milestone 5: Final Acceptance (including completion of all open Punch List items and all updated documentation).**
15% of the System Price due upon Final Acceptance.

# Exhibit 1

# Preliminary Rack Drawings for 3rd Floor Server Room Equipment

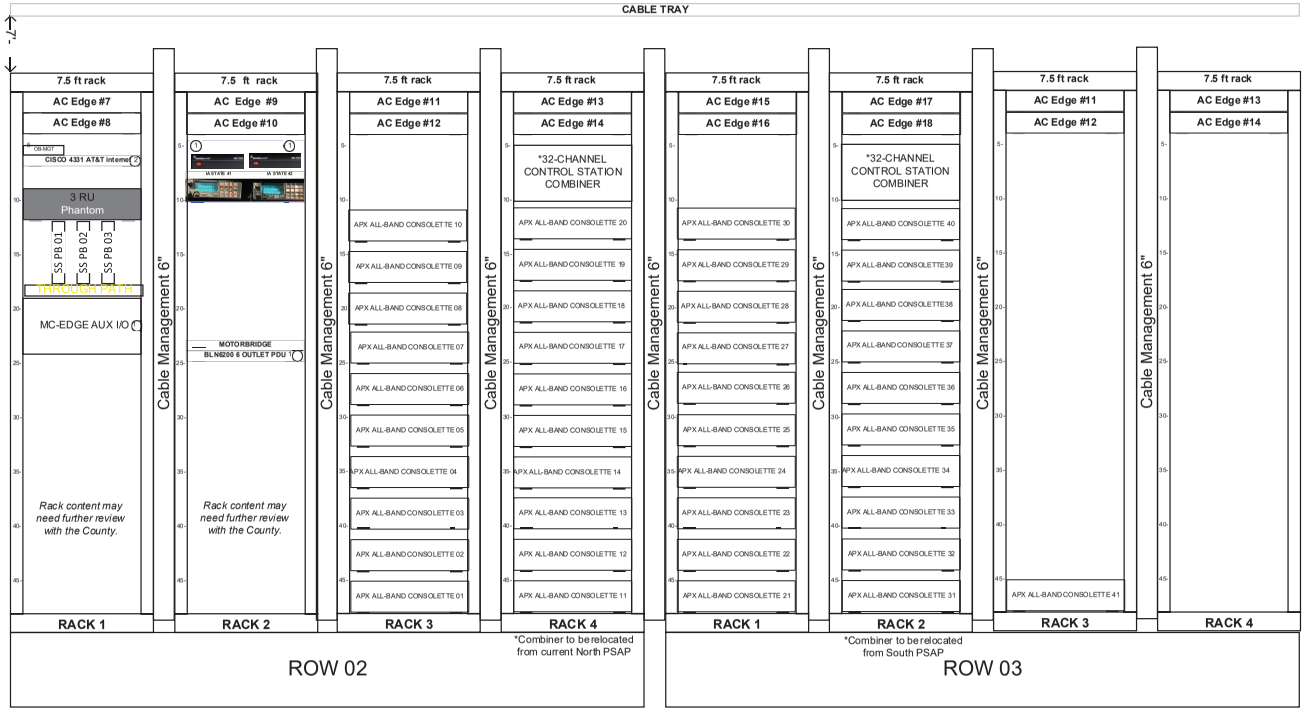
MOTOROLA SOLUTIONS

# PRELIMINARY SERVER ROOM RACK DRAWING – ROW 01




*Equipment depicted in this rack drawing is not necessarily new equipment under this proposal. Some equipment shown here is being relocated from the current North PSAP or elsewhere, or is to be furnished by a third party such as AT&T.*

# PRELIMINARY SERVER ROOM RACK DRAWING – ROWS 02 AND 03




*Equipment depicted in this rack drawing is not necessarily new equipment under this proposal. Some equipment shown here is being relocated from the current North PSAP or elsewhere, or is to be furnished by a third party such as AT&T.*

# Exhibit 2

# Antenna Data Sheets and AXS Brochure

# Control Station Antennas – 700, 800, or 900 MHz band Omni, Unity or 3 dBd

## Models-DS7B03CS36UN, DS8A00CS36UN, DS8A03CS36UN, DS9A00CS36UN, DS9A03CS36UN, SP7C00CS36UN, SP7C03CS36UN

| Specifications | |
|---|---|
| Design Type | 2” diameter Fiberglass radome, corporate-fed |
| Frequency Range, models | |
| DS7B03CS36UN, 700 band - “3dBd” | 764-806 MHz |
| DS8A00CS36UN, 800 band – Unity | 806-869 MHz |
| DS8A03CS36UN, 800 band - “3dBd” | 806-869 MHz |
| DS9A00CS36UN, 900 band - Unity | 890-960 MHz |
| DS9A03CS36UN, 900 band - “3dBd” | 890-960 MHz |
| SP7C00CS36UN, 700/800 band - Unity | 764-869 MHz |
| SP7C03CS36UN, 700/800 band - “3dBd” | 764-869 MHz |
| Gain specs - dBd (average over BW) | |
| All DSxx00- and SP7C00-models | Unity gain (0 dBd) |
| All DSxx03-models | 2.9 dBd |
| Model SP7C03CS36UN | 2.7 dBd |
| Beam Tilt (electrical down tilt) | None (0°) |
| Vertical Beam width (E-Plane) | |
| All Unity-gain models | 60° |
| All 2.7 and 2.9 dBd models | 30° |
| Impedance – Ohms | 50 |
| VSWR / Return Loss -- dB | 1.5:1 / 14 dB (min.) |
| Average Power Rating | 300 W (each antenna) |
| Polarization | Vertical |
| Lightning Protection | Direct Ground |
| Connector | N-type female |
| Equivalent Flat-Plate Area: | |
| All 3 dBd Models | 0.33 sq. ft. |
| All Unity Models | 0.24 sq. ft. |
| Lateral Wind load Thrust @100mph: | |
| All 3dBd Models | 14 lbf. |
| All Unity Models | 10 lbf. |
| Rated Wind Speed (All models) | 325 mph (without ice) |
| Total Length | |
| All 3 dBd models | 36 inches max. |
| All Unity models | 26 inches max. |
| Mounting Hardware (included) | YES |
| Mast O.D. | 2.5 inches |
| Radome color | Horizon Blue |
| Weight, antenna and hardware | 5-7 lbs. (approx.) |
| Shipping Weight | 9-11 lbs. (approx.) |
| Invertibility | The antennas are invertible, but patterns are optimized for upright mounting. |

### Features and Benefits

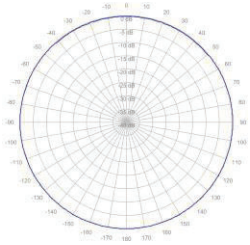
Control Station Antennas are optimized for control station or similar applications where medium-duty, lower-gain models are preferred.

Sturdy Construction – Heavy-wall 2-inch diameter fiberglass radome minimizes tip deflection yet manages weight and wind loading properties.

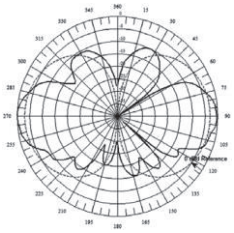
Excellent Lightning Protection – heavy internal conductor DC ground.

### Radiation Patterns:

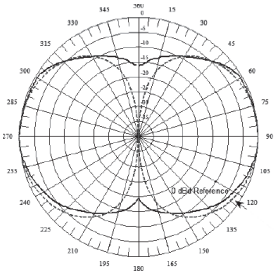
Horizontal, all



Vertical, 2.7/2.9 dBd models



Vertical, Unity gain models




# VOICE DISPATCH

## DISPATCH FOR THE MODERN WORLD

# VOICE DISPATCH

# SAY HELLO TO THE FUTURE OF DISPATCH

In today's dispatching world, there's more information, resources and tools competing for your attention than ever before. Cut through the noise and be ready for any crisis, now and into the future, with CommandCentral AXS.

CommandCentral Hub

## FEATURES

### NEXT GENERATION DISPATCH EXPERIENCE

you do, responding to touch, type or click

### SIMPLIFIED SOFTWARE UPGRADES

Continuously improved, less disruptive security updates and feature enhancements

### MISSION-CRITICAL DISPATCHING

80+ years innovation and reliability

# NEXT GENERATION DISPATCH EXPERIENCE

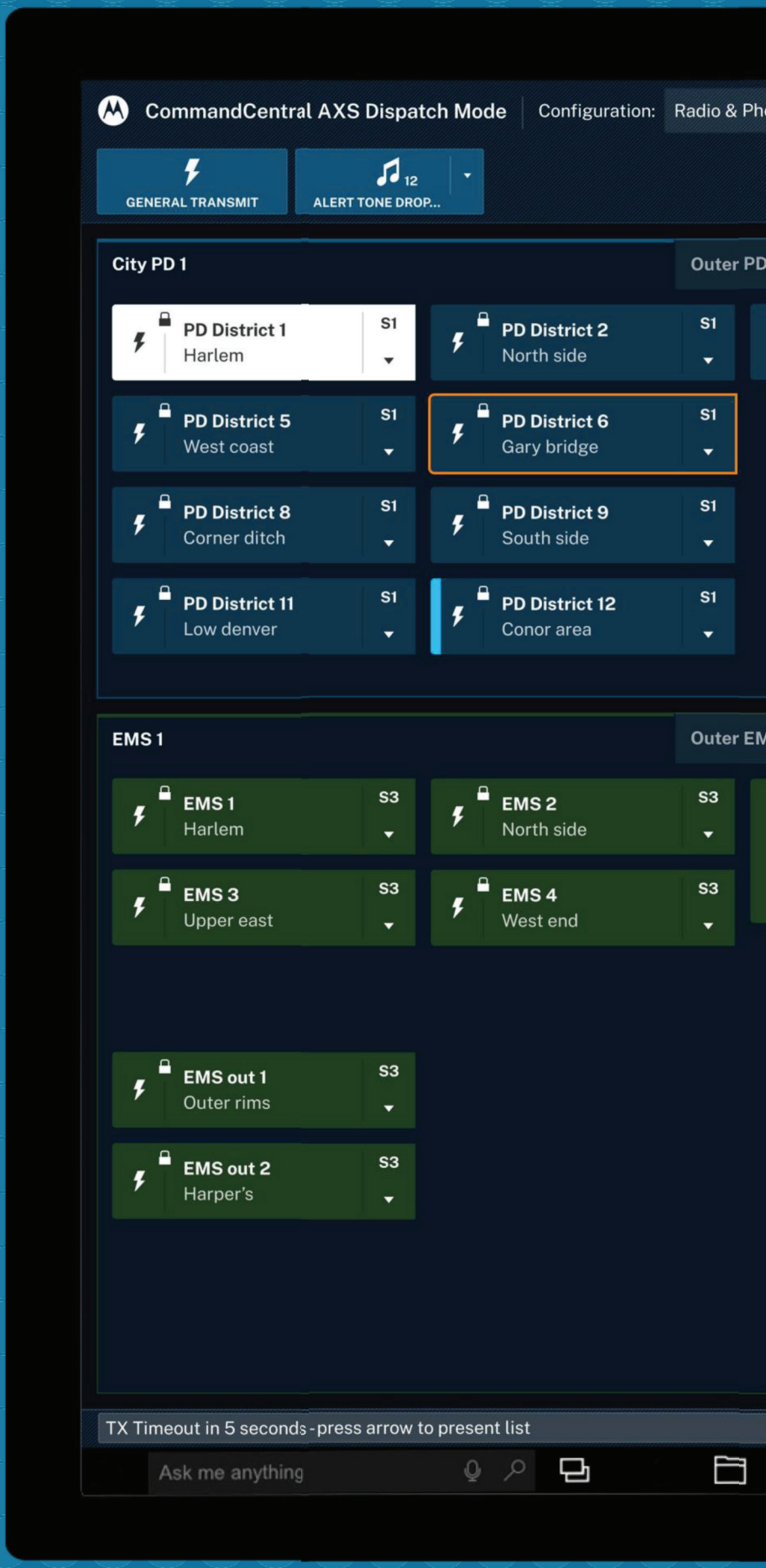
## WORKS THE WAY YOU DO

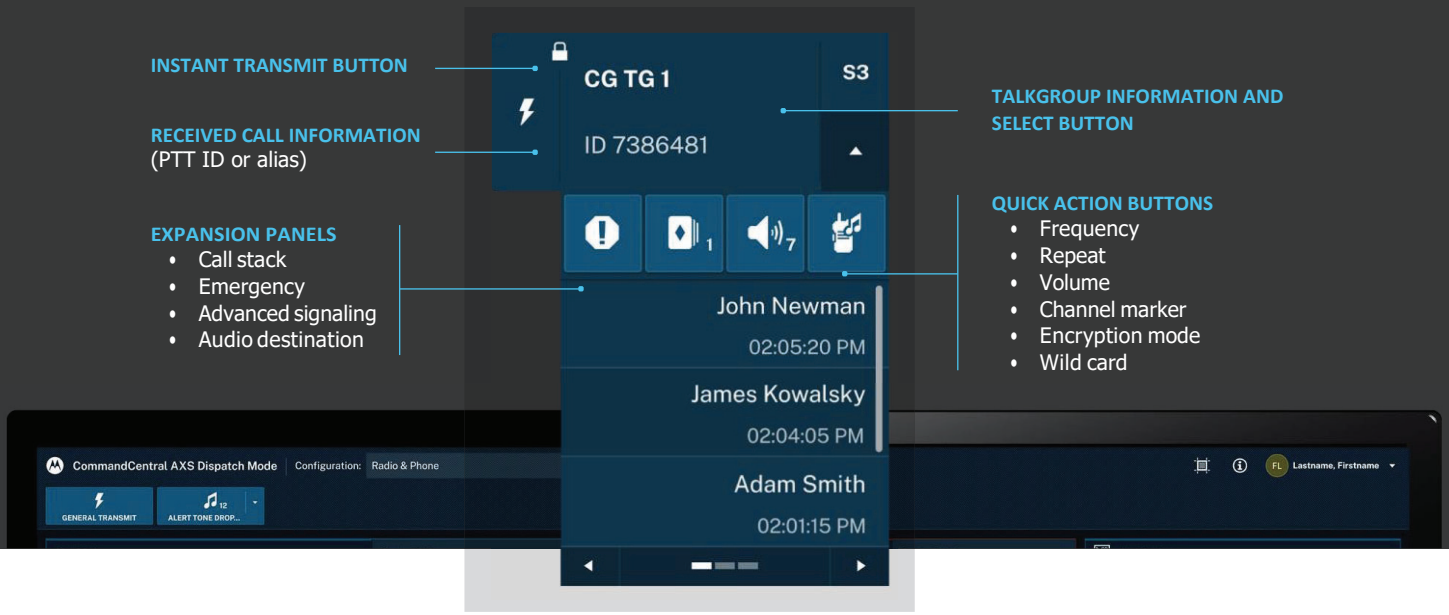
As a dispatcher, you face crisis situations every day. You need more than a new app or device. You need new thinking – a next generation platform that works for you, not the other way around. To build a whole new experience, we conducted extensive research at dispatch centers around the world, immersing ourselves in your day-to-day workflows. The result?

CommandCentral AXS, with enhancements that enable you to work faster and more accurately, even under the most stressful situations.

A completely reengineered interface responds to touch, type, or click and surfaces important information when and where you need it.

Create the dispatching experience your agency wants with an extensive set of configurable features. The CommandCentral AXS experience scales easily. Pay only for what you need now, with the room to adapt and grow as your needs change.






# ACCESS IMPORTANT FEATURES DIRECTLY WITHIN THE RESOURCE

## IMPROVE ACCURACY AND EFFICIENCY

CommandCentral AXS is all about having the important elements right where they need to be based on their priority. We put important tasks and frequently used functions directly within the resource. That way you can keep your eyes trained on what matters—even in pressure-packed moments. Whether struggling through complicated menus or accidentally pressing the wrong button, CommandCentral AXS helps minimize mistakes and confusion. Now, stay focused on the task at hand, supporting your team's need for accuracy and efficiency.


**SEAMLESSLY ADD NEW FEATURES WITHIN THE RESOURCE CAROUSEL TO FURTHER ENHANCE FOCUS**

# HIGHLY FLEXIBLE AND CONFIGURABLE

## CREATE THE DISPATCH EXPERIENCE YOUR AGENCY NEEDS

Interact with the console, however you see fit – touch, type or click. Have a console that represents your agency's identity and procedures. With this level of configurability, dispatchers can focus on what matters. Extend that flexibility and deploy it however you want. And rest assured that it will grow with you when the time comes.

### CONFIGURABLE COLORS

Create a unique visual experience with the colors of your choice or choose a predefined color theme. Color elements include resources, folder groups, buttons and more.

### CONFIGURABLE ICONOGRAPHY

Choose from a wide array of icons from our library.

### CONFIGURABLE ALERTS AND TONES

Choose from a wide array of alerts and tones from our library.

### CONFIGURABLE FOLDER AND TAB ORGANIZATION

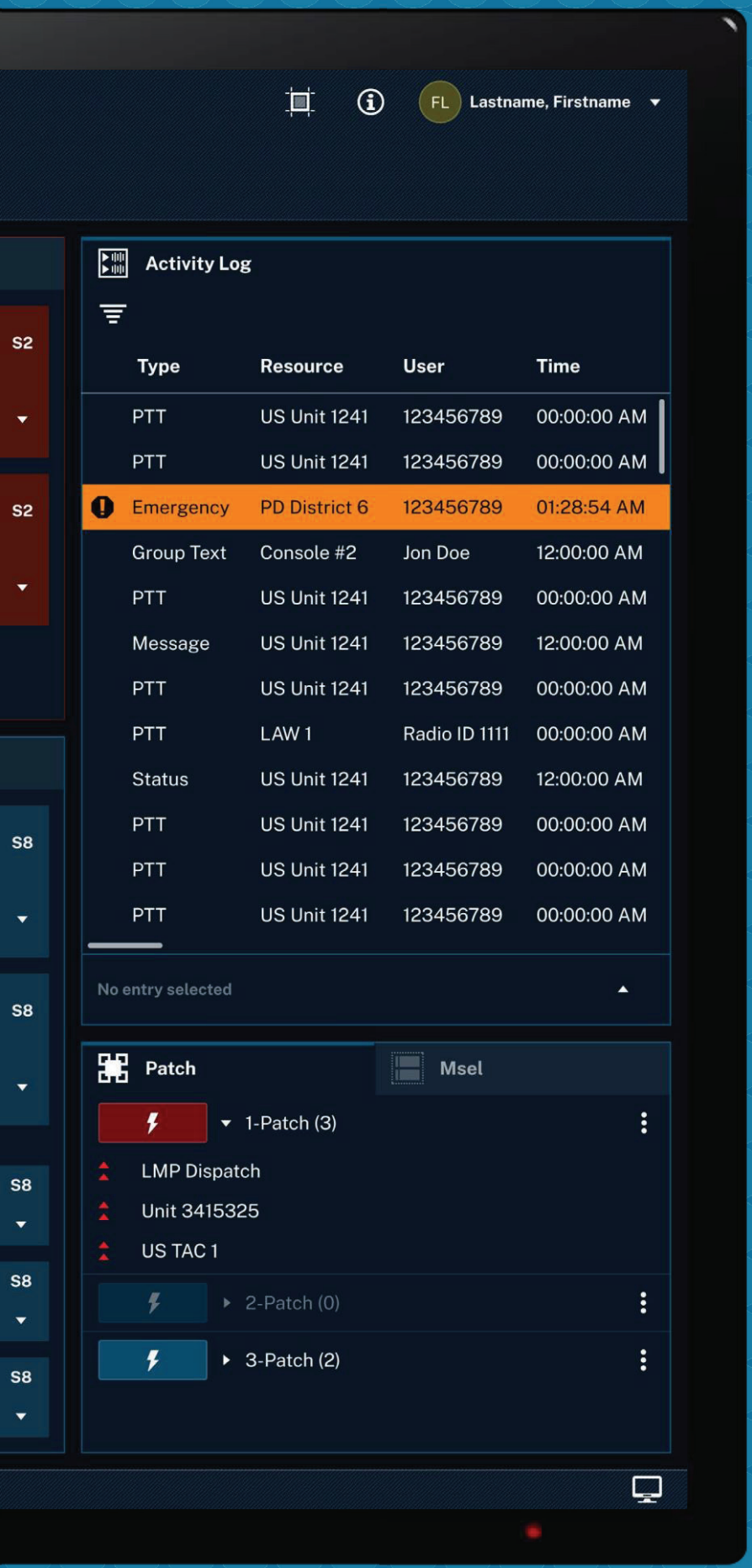
Take control of the layout with the ability to quickly and easily organize it how you see fit. With the availability of dynamic and fixed folders, you can always have important resources front and center.

### CONFIGURABLE FOR INDIVIDUAL ROLES, TEAMS AND AGENCIES

Configure the console's look and feel for an individual user, or create a agencywide look and feel.

### TOUCH, TYPE OR CLICK

Stay connected in the way that suits you best with a resource centric design and the flexibility to interact with the console by touch, type or click.




## ASSIST PANELS

### THINK FAST, WORK FASTER

Access built-in services to help you work faster while providing greater support to users in the field. Choose from a wide array of assist panel services, such as patching, paging, multi-select and an activity log.

## FLEXIBLE DEPLOYMENT CONFIGURATIONS

### ONE CONSOLE, MULTIPLE DEPLOYMENT OPTIONS

CommandCentral AXS leverages an elegant, intuitive GUI based on more than 5,000 hours of research with customers like you. Virtually unlimited screen layout options ensure you can configure consoles with the precise functionality needed across diverse deployment scenarios. Now, a single console provides your team with the right capabilities at the right time, whether at main and backup sites, for diverse dispatching roles and workflows, in support of mutual aid scenarios, or at one-time special events.

## SCALABILITY ON YOUR TERMS

### THE ABILITY TO GROW WITH YOU

Whether you are a small agency or an entire state, CommandCentral AXS easily scales with you as your needs evolve. Flexible options allow you to buy only the features, capacity and support you need, so you won't pay for functionality and resources you don't use. Add new capabilities and support options on your timetable.

## MISSION-CRITICAL DISPATCHING

### 80+ YEARS OF INNOVATION, A LEGACY OF RELIABILITY

You can't afford to be let down by your dispatch communications. But trust isn't built overnight. Dispatchers have relied on Motorola Solutions for mission-critical dispatching operations for more than 80 years. Our deep heritage in designing, deploying and supporting mission-critical systems means you can be confident that your systems, software and accessories will work when—and how—you need them to.

# MISSION-CRITICAL ACCESSORIES

Make the most of your console with dispatch accessories you can count on. Put your trust in dispatch audio accessories that have been designed and tested for mission-critical performance and reliability.

To learn more, take a look at our dispatch accessories brochure.

USB GOOSENECK MICROPHONE

USB DESKTOP SPEAKER

PLANTRONICS HEADSET

# SIMPLIFIED SOFTWARE UPGRADES

## MORE FREQUENT, LESS DISRUPTIVE UPDATES

CommandCentral AXS gives you more control of the update process, providing more enhancements with less hassle. AXS software updates are released independently from the ASTRO radio system, so you can choose when and how new capabilities, integrations and security patches are installed as well as when each dispatcher will begin using them. Download releases from the AXS Update Server (AUS)* without interrupting the console, and further minimize operational impact by testing on a single console or entire group.

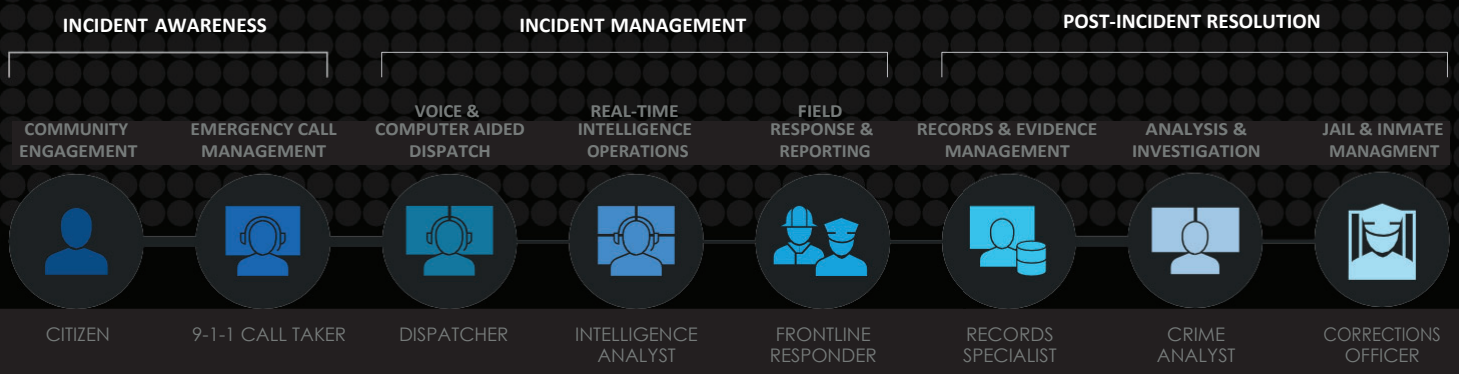
## UPGRADE ON YOUR TIMETABLE

Ensure your consoles are performing at their highest functionality and level of security with AXS Software Support. This required support plan provides AXS software upgrades, critical security patches and 24/7 remote technical support. Tailor any additional services and expert support based on your agency's unique needs. Choose from a wide range of options, from on-site tech support, scheduled preventative maintenance, equipment repair and return, and even network monitoring.

*Near future – available after initial software release.

# COMMAND CENTRAL

CONNECTED. COLLABORATIVE. COMPLETE.


## PUBLIC SAFETY'S COMPLETE SOFTWARE SUITE

You depend on solutions that help deliver on the promise of a safer world. CommandCentral AXS and other applications in our CommandCentral software suite are designed to bring clarity to decisions and simplify collaborative workflows. From call to case closure, CommandCentral connects data to create actionable intelligence, eliminates barriers to heighten collaboration and delivers the complete, 360° Incident.

Our CommandCentral software suite is unified with voice, video, and analytics, creating an integrated ecosystem for public safety. United, each individual solution becomes exponentially more powerful. Let's build the future of safety together.

For more information or to learn more please visit
**www.motorolasolutions.com/commandcentralaxs**

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