THE VILLAGE OF TINLEY PARK
Cook County, Illinois
Will County, Illinois

RESOLUTION
NO. 2023-R-068

A RESOLUTION APPROVING A QUOTE-2152931 BETWEEN THE VILLAGE OF TINLEY PARK AND COOK COUNTY EMERGENCY TELEPHONE SYSTEM BOARD FOR PURCHASE OF 100 APX NEXT RADIOS WITH SUBSCRIPTION SERVICE QUOTE-2152931 THRU MOTOROLA SOLUTIONS

MICHAEL W. GLOTZ, PRESIDENT
NANCY M. O'CONNOR, VILLAGE CLERK

WILLIAM P. BRADY
WILLIAM A. BRENNAN
DENNIS P. MAHONEY
MICHAEL G. MUELLER
KENNETH E. SHAW
COLLEEN M. SULLIVAN
Board of Trustees

Published in pamphlet form by authority of the President and Board of Trustees of the Village of Tinley Park

RESOLUTION NO. 2023-R-068

A RESOLUTION APPROVING A QUOTE-2152931 BETWEEN THE VILLAGE OF TINLEY PARK AND COOK COUNTY EMERGENCY TELEPHONE SYSTEM BOARD FOR PURCHASE OF 100 APX NEXT RADIOS WITH SUBSCRIPTION SERVICE QUOTE # 2152931 THRU MOTOROLA SOLUTIONS

WHEREAS, the Village of Tinley Park, Cook and Will Counties, Illinois, is a Home Rule Unit pursuant to the Illinois Constitution of 1970; and

WHEREAS, the Corporate Authorities of the Village of Tinley Park, Cook and Will Counties, Illinois, have considered purchasing 100 Motorola APX Next Radios with **COOK COUNTY EMERGENCY TELEPHONE SYSTEM BOARD**, a true and correct copy of such Quote - 2152931 being attached hereto and made a part hereof as **EXHIBIT 1**; and

WHEREAS, the Corporate Authorities of the Village of Tinley Park, Cook and Will Counties, Illinois, have determined that it is in the best interests of said Village of Tinley Park that said purchase of 100 Motorola APX Next Radios Quote – 2152931 be entered into by the Village of Tinley Park;

NOW, THEREFORE, Be It Resolved by the President and Board of Trustees of the Village of Tinley Park, Cook and Will Counties, Illinois, as follows:

Section 1: The Preambles hereto are hereby made a part of, and operative provisions of, this Resolution as fully as if completely repeated at length herein.

Section 2: That this President and Board of Trustees of the Village of Tinley Park hereby find that it is in the best interests of the Village of Tinley Park and its residents that the aforesaid Quote – 2152931 be entered into and executed by said Village of Tinley Park, with said Quote - 2152931 to be substantially in the form attached hereto and made a part hereof as **EXHIBIT 1**.

Section 3: That the President and Clerk of the Village of Tinley Park, Cook and Will Counties, Illinois are hereby authorized to execute for and on behalf of said Village of Tinley Park the aforesaid Quote - 2152931.

Section 4: That this Resolution shall take effect from and after its adoption and approval.

ADOPTED this 20th day of June, 2023, by the Corporate Authorities of the Village of Tinley Park on a roll call vote as follows:

AYES: Brady, Mahoney, Mueller, Shaw, Sullivan

NAYS: None

ABSENT: Brennan

APPROVED this 20th day of June, 2023, by the President of the Village of Tinley Park.

Village President

ATTEST:

Village Clerk

EXHIBIT 1

QUOTE-2152931 BETWEEN THE VILLAGE OF TINLEY PARK AND COOK COUNTY EMERGENCY TELEPHONE SYSTEM BOARD FOR PURCHASE OF 100 APX NEXT RADIOS WITH SUBSCRIPTION SERVICE QUOTE-2152931 THRU MOTOROLA SOLUTIONS

MOTOROLA SOLUTIONS

QUOTE-2152931
APXNext Quote

Billing Address:
TINLEY PARK POLICE DEPT,
VILLAGE OF
7850 W 183RD ST
TINLEY PARK, IL 60477
US

Quote Date:05/04/2023
Expiration Date:08/02/2023
Quote Created By:
Chris Chisnell
Sr. Account Mgr
Chris.Chisnell@
motorolasolutions.com

End Customer:
TINLEY PARK POLICE DEPT, VILLAGE OF
Bill Neumann
wneumann@tinleypark.org
708-444-5542

Contract: 35622 - Cook County IL

Summary:

Any sales transaction resulting from Motorola's quote is based on and subject to the applicable Motorola Standard Terms and Conditions, notwithstanding terms and conditions on purchase orders or other Customer ordering documents. Motorola Standard Terms and Conditions are found at www.motorolasolutions.com/product-terms.

Line #	Item Number	Description	Qty	Term	List Price	Sale Price	Ext. Sale Price
	APX™ NEXT	APX NEXT MULTI					
1	H55TGT9PW8AN	APX NEXT; ALL-BAND MODEL 4.5 PORTABLE	100		$8,241.00	$6,015.93	$601,593.00
1a	H38DA	ADD: SMARTZONE OPERATION	100		$1,320.00	$963.60	$96,360.00
1b	Q806CH	ADD: ASTRO DIGITAL CAI OPERATION	100		$567.00	$413.91	$41,391.00
1c	QA09028AA	ADD: VIQI VC RADIO OPERATION	100		$110.00	$80.30	$8,030.00
1d	Q629BD	ENH: AES ENCRYPTION AND ADP	100		$523.00	$381.79	$38,179.00
1e	QA00580BA	ADD: TDMA OPERATION	100		$495.00	$361.35	$36,135.00
1f	QA09001AM	ADD: WIFI CAPABILITY	100		$330.00	$240.90	$24,090.00
1g	Q361CD	ADD: P25 9600 BAUD TRUNKING	100		$330.00	$240.90	$24,090.00

Line #	Item Number	Description	Qty	Term	List Price	Sale Price	Ext. Sale Price
1h	Q173CA	ADD: SMARTZONE OMNILINK	100		$0.00	$0.00	$0.00
1i	H869DB	ENH: MULTIKEY	100		$363.00	$264.99	$26,499.00
1j	QA09030AA	ADD: MOTOROLA HOSTED RADIOCENTRAL W CPS*	100		$0.00	$0.00	$0.00
1k	H636AB	ADD: APX NEXT APPLICATION BUNDLE PROMO	100		-$300.00	-$300.00	-$30,000.00
1l	H638EA	ADD: SMART LOCATE MAPPING TRIAL PROMO	100		-$56.00	-$56.00	-$5,600.00
1m	QA09017AA	ADD: LTE WITH ACTIVE SERVICE AT&T US	100		$0.00	$0.00	$0.00
1n	QA08510AA	ALT: BATTERY LI-ION IMPRES 2 IP68 5650T	100		$193.60	$141.33	$14,133.00
1o	H637AB	ADD: RADIO CENTRAL PROGRAMMING PROMO CARVE OUT	100		-$32.04	-$32.04	-$3,204.00
2	SSV01P01407B	SMARTPROGRAMMING PROMO	100	1 YEAR	$75.00	$75.00	$7,500.00
3	SSV01P01406A	SMARTCONNECT PROMO	100	1 YEAR	$75.00	$75.00	$7,500.00
4	SSV01P01902A	SMARTMAPPING PROMO	100	1 YEAR	$75.00	$75.00	$7,500.00
5	SSV01P01901A	SMARTMESSAGING PROMO	100	1 YEAR	$75.00	$75.00	$7,500.00
6	SSV01P01685B	ELIGIBLE FOR PROMO - CC AWARE STARTER	100	1 YEAR	$56.00	$56.00	$5,600.00
7	PSV00S01424A	APX NEXT PROVISIONING*	1		$0.00	$0.00	$0.00
8	PSV01S02940A	SMARTMAPPING ENABLEMENT	1		$0.00	$0.00	$0.00
9	PSV01S02941A	SMARTMESSAGING ENABLEMENT	1		$0.00	$0.00	$0.00
10	PSV01S02944A	PROVISIONING SUPPORT	1		$0.00	$0.00	$0.00
11	SSV01P01476A	SMARTLOCATE PROMO	100	1 YEAR	$75.00	$75.00	$7,500.00
12	SSV01S01407A	SMARTPROGRAMMING	100	4 YEAR	$576.00	$300.00	$30,000.00

Line #	Item Number	Description	Qty	Term	List Price	Sale Price	Ext. Sale Price
13	SSV01S01406A	SMARTCONNECT	100	4 YEAR	$576.00	$300.00	$30,000.00
14	SSV01S01476A	SMARTLOCATE	100	4 YEAR	$576.00	$300.00	$30,000.00
15	SSV01S01907A	SMARTMAPPING	100	4 YEAR	$576.00	$300.00	$30,000.00
16	SSV01S01906A	SMARTMESSAGING	100	4 YEAR	$576.00	$300.00	$30,000.00
17	NNTN9089A	BATTERY PACK,IMPRES GEN2, LIION, IP68, 5850T	100		$290.40	$188.76	$18,876.00
18	LSV01S03446A	APX NEXT DMS ESSENTIAL	100	7 YEARS	$484.60	$353.76	$35,376.00
19	LSV01P03092A	RADIOCENTRAL PROGRAMMING PROMO	100	1 YEAR	$32.04	$32.04	$3,204.00
20	LSV01S03082A	RADIOCENTRAL PROGRAMMING	100	4 YEARS	$128.16	$128.16	$12,816.00
21	PSV03S02465A	APX DMS PROVISIONING PD3*	1		$0.00	$0.00	$0.00
22	NNTN9199A	IMPRES 2 SUC, 3.0A, 120VAC, TYPE A PLUG, NA	100		$169.56	$110.21	$11,021.00
23	PMLN7560A	REC ONLY EARPIECE W/ TRANSLUCENT TUBE	100		$62.64	$40.72	$4,072.00
24	PMMN4136B	XVP830 REMOTE SPEAKER MICROPHONE NO CHANNEL KNOB	100		$486.00	$315.90	$31,590.00
25	NNTN9115A	CHARGER, MULTI-UNIT, IMPRES G2, 6-DISP, US/NA/CA/LA PLUG, ACC-CHARGER	10		$1,420.20	$923.13	$9,231.30
	CommandCentral Aware						
26	ISV00S01852A	AWARE DELIVERY SERVICE BASE	1		$0.00	$0.00	$0.00
27	SSV00S02383A	AWARE STARTER	1	1 YEAR	$0.00	$0.00	$0.00
	Critical Connect + WAVE PTX Public Safety + Unified Recorder						
28	SSV00S02078A	WAVE MESSAGING DISPATCH	3	5 YEAR	$2,700.00	$2,700.00	$8,100.00

Line #	Item Number	Description	Qty	Term	List Price	Sale Price	Ext. Sale Price
29	PSV00S03303A	CRITICAL CONNECT WAVE PTX ONBOARDING	1		$0.00	$0.00	$0.00
	CommandCentral Aware						
30	PSV00S01454A	LMS ONBOARDING	1		$0.00	$0.00	$0.00
31	ISV00S01852A	AWARE DELIVERY SERVICE BASE	1		$8,034.40	$8,034.40	$8,034.40
32	SSV00S01450A	LEARNER LXP SUBSCRIPTION	3	4 YEAR	$0.00	$0.00	$0.00
33	SSV00S03081A	INTERFACE: MOTOROLA SOLUTIONS LRRP	1	4 YEAR	$0.00	$0.00	$0.00
34	SSV00S01684A	LOCATION SERVICES	1	4 YEAR	$0.00	$0.00	$0.00
35	SSV00S02384A	AWARE STANDARD	1	4 YEAR	$61,800.00	$61,800.00	$61,800.00

Grand Total $1,268,916.70(USD)

Pricing Metric :

Price is indicative of the following -
# of Named Users for CommandCentral Aware - 3

Notes:

- Additional information is required for one or more items on the quote for an order.

Motorola's quote (Quote Number: 2152931 Dated: 5/4/2023) is based on and subject to the terms and conditions of the valid and executed written contract between Customer and Motorola (the "Underlying Agreement") that authorizes Customer to purchase equipment and/or services or license software (collectively "Products"). If no Underlying Agreement exists between Motorola and Customer, then the following Motorola's Standard Terms of use and Purchase Terms and Conditions govern the purchase of the Products which is found at http://www.motorolasolutions.com/msi/omterms.

The Parties hereby enter into this Agreement as of the Effective Date.

Motorola Solutions, Inc.

By: _____

Name: Frank Galvin

Title: MSSSI Vice President

Date: 6/13/2023

Customer

By: _____

Name: Michael W. Glotz

Title: Village President

Date: June 20, 2023

COMMANDCENTRAL AWARE SOLUTION DESCRIPTION

OVERVIEW

Motorola Solutions' CommandCentral Aware combines disparate systems and data into an accessible interface. This single interface offers command centers a complete operating picture to support field personnel in real time. CommandCentral Aware unifies data from mapping, correlated event monitoring, analytics, and communications. This unified interface streamlines public safety workflows and viewpoints, enabling users to access and act on critical information.

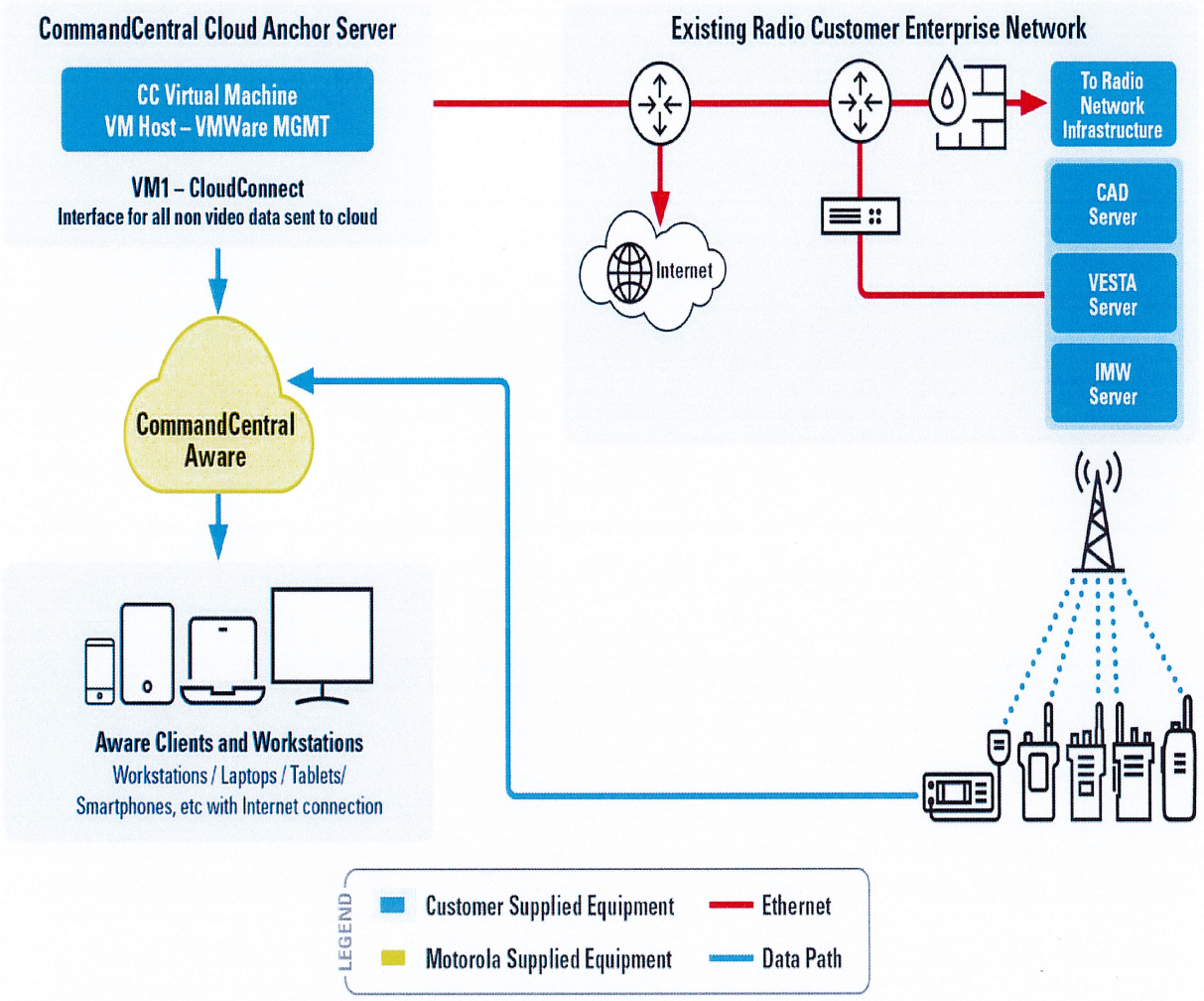
Agencies can increase the value of their current investments by connecting CommandCentral Aware to other software platforms. These integrations include Computer Aided Dispatch (CAD) systems, Call Handling, Land Mobile Radio (LMR), or Video Management Systems (VMS). Users can communicate with confidence, knowing their information is hosted in the highly secure Microsoft Azure cloud.

Software and Solution Components

CommandCentral Aware includes the following components:

- CommandCentral Aware Standard.
- ASTRO 25 Radio Location on Push-to-Talk (PTT).
- Broadband Device Location on Cadence.
- Agency Esri Data Sets Integration.
- Accuweather Service.
- Motorola Solutions CAD Integration for incident and/or unit location Automatic Vehicle Location (AVL).
- Motorola Solutions Call Handling Integration for 911 Call Data.
- CommandCentral Community Integration.
- Vigilant License Plate Recognition Integration.
- APX NEXT ViQi Alert Integration.
- Interfaces as presented in the pricing section.
- Software Maintenance and Technical Support.
- Services as described in the Statement of Work.
- Cloud Anchor Server Hardware.

Motorola Solutions CommandCentral Aware SaaS System Diagram



A typical CommandCentral Aware system diagram. Components in the diagram may not be applicable to the solution. Components will be reviewed and confirmed in the Contract Design Review.

COMMANDCENTRAL AWARE FEATURES

CommandCentral Aware provides a range of capabilities, described in the sections below.

Mapping

CommandCentral Aware features a unified interface to display locations and alerts. Users can view all location-based data on the map map display to enhance decision making. CommandCentral Aware Mapping features also include the following:

- Event Monitors – View device status and location, CAD incidents, open-source data alerts, and sensors on a map. This map can consist of Esri online, Esri server, or static map layers. This map can be modified with other data layers.

- Data Layer Panel – Show or hide data layers to refine the map view.
- Event Information Display – View details associated with each icon on the map.
- Historical Map – View a 90-day lookback of radio locations, CAD incidents, service requests, or emergencies. An export tool extracts the recreated timeline to KML format to view in Google Earth or ESRI ArcGIS Pro. The Location Replay feature enables the historic path of a device's location.
- Breadcrumbing – Track individual APX user radios. Tracking begins at the time the action is toggled on. Devices can provide up to the last 30 minutes of live movement.

Geographic Information System (GIS) Data Set

CommandCentral Aware integrates with hosted GIS data sets from Esri ArcGIS Server or ArcGIS online. The geospatial information contained within these data sets are core to the intelligent map display. This enhances workflow details driven by geography and the metadata contained within these data sets.

Esri's powerful geospatial engine within CommandCentral Aware is used to automatically invoke spatial queries, including nearby items and geographic boundaries. This geospatial processing enables intelligence-driven analysis in order to focus on the concentrated area of concern and orientate those responding.

Data sets help users to:

- Refine displayed data based on the geographic area defined per user. Data includes area, beat, sector, precinct, zone, or quadrant.
- Find nearby entities by predefined distance. Parameters include closest camera while in route, closest cameras to an event - CAD, gunshot detection, alert.
- Determine road blockages caused by traffic jams, flooded roadways, or other obstacles.

Rules Engine

The Command Central Aware rules engine allows users to create rule-sets to trigger actions based on event types. For example, rows in the Event Monitor can be highlighted, and sound alerts for critical CAD incidents can be customized. These visual or auditory triggers reduce the number of steps needed to support an incident.

APX Radios Location on Push-to-Talk or Location-on-Receive (TDMA)

CommandCentral Aware provides the location of users from GPS-enabled LMR (ASTRO 25 radios) and broadband devices (LTE/WiFi-enabled smartphones, tablets, and modems). When a user presses the PTT, Emergency Button, Man-Down, or On-Demand buttons (or Stale Location or Not Reporting indications activate), CommandCentral Aware pinpoints the location. With each PTT press, CommandCentral Aware updates, delivers, and ingests device location data. This keeps command center personnel informed during critical incidents and allows dispatch to make more informed decisions. A user can be affiliated with multiple devices (both broadband and LMR). Multiple users and their devices can be affiliated with a unit.

Location on PTT increases location accuracy even when the radio system is congested with voice traffic. Location on PTT can be sent over the voice channel, in addition to cadence, distance, or manual updates already being sent over the data channel. Once location data is received by the Packet Data Gateway (PDG) at the ASTRO 25 master site, it is forwarded to the application via Intelligent Middleware (IMW). The CommandCentral Aware application then allows dispatchers to view the location of any APX radio in near real-time to accelerate response.

An APX radio in a group or emergency call sends its current GPS location over the voice channel during each transmission. Location data is embedded directly in the voice stream and sent continuously without impacting voice quality. Radios with Location on PTT can be configured to send their location after each PTT during group calls and during emergency calls.

COMMANDCENTRAL AWARE INTEGRATIONS

CommandCentral Aware provides a range of integrations, described in the sections below.

APX NEXT SmartLocate Integration

The APX NEXT SmartLocate feature provides dispatchers with accurate location data over a broadband network. This location data, combined with CommandCentral Aware functionality, enables better tracking of field personnel and improved situational awareness. SmartLocate quickly sends GPS coordinate updates and location information from the field to dispatchers, providing a more effective operating picture of any situation. This gives dispatchers a greater ability to manage incidents and allocate resources in the most efficient way possible. Broadband connectivity increases the frequency of location reporting beyond the capability of an LMR system. This improves location accuracy and enables more users to be tracked. The CommandCentral Aware tool set features many location triggers, including time, distance, push-to-talk (PTT), emergency, and accelerated cadence during emergency.

Computer Aided Dispatch (CAD) Integration

CommandCentral Aware integrates with CAD to provide CAD status and event monitor capabilities. The CAD status monitor allows users to see a listing of incidents (event type, location incidents, narrative, priority, status, geographic area, location of devices or units). The application consumes event-driven data from multiple CAD systems, allowing for real time assessment with other relevant data published to the platform, such as officer location, alarms, alerts, tips, tactical information, voice, and video.

Motorola 911 Mapping Integration

CommandCentral Aware integrates with Motorola Solutions CAD and 911 call data. The CommandCentral Aware application shows key caller events, such as 911 ringing, connects, and disconnects, alongside location updates to monitor the status of wireless callers. This provides essential information to assist personnel responding to an incident. In addition, a view of a call-based heat map helps PSAP resources understand where the volume of calls is coming from and improve the decision making process.

- Authenticates 9-1-1 calls for Hybrid Enhanced Location information.
- Maps Text-to-9-1-1 calls.
- Displays links to building footprints and Automated External Defibrillator (AED) locations.
- Presents user-supplied profiles in the same interface with mapping and display of landline, VoIP, and wireless 9-1-1 calls.

Vigilant LPR Integration

Motorola Solutions' LPR enables law enforcement agencies to organize and archive data collected from multiple mobile and fixed site LPR deployments. LPR technology has numerous applications including parking enforcement, law enforcement and city surveillance, and security and monitoring. Capabilities of Motorola Solutions' LPR system are as follows:

- Photograph a vehicle and focus on its license plate in moving traffic.
- Raise an alert, show a photo of the vehicle and license plate, and display why it is of interest in response to a match.

- Mine and analyze plate identification data for patterns.
- Map all locations related to a single plate to locate and map vehicle movements. The web interface allows data to be shared across multiple locations and agencies. Create wildcard hotlists with partial license plate numbers, and hotlists that notify assigned investigators of hits without alerting in-car vehicle officers.
- Associate related data from disparate systems to get a full view of an incident or hot-list hit/alarm occurrence via the Correlation Engine. Display nearby video sources based on the LPR hot-list hit/ alarm, sensor alarms, and provided third-party data alerts.
- Enforce parking with digital tire chalking for enforcement of time-limits and residential, university semester, employee, short-term, and shared permits.
- Support law enforcement and city surveillance with live data transmission between vehicles and the back office, and back office data mining and geo-fencing.

AccuWeather Integration

CommandCentral Aware includes integration with AccuWeather. This integration provides customized weather-driven services. Services include site-specific forecasts, severe-weather warnings, historical data, and custom analytics. AccuWeather also provides the following data:

- Location key for your desired location.
- Forecast information for a specific location.
- Current Conditions data for a specific location.
- Daily index values for a specific location. Index availability varies by location.
- Radar and satellite images.

CJIS AND COMPLIANCE

For U.S.-based customers, the CommandCentral infrastructure runs in a CJIS compliant GovCloud. Motorola Solutions operates CommandCentral according to requirements dictated by the CJIS Security Policy document. Motorola Solutions performs periodic internal reviews to ensure the operation of CommandCentral is in compliance for each of the thirteen policy areas established by the CJIS Security Policy.

All Motorola Solutions employees with administrative access to the CommandCentral system must complete CJIS Security and Awareness training and complete a fingerprint-based background check. User activities are logged for auditing purposes.

All Motorola Solutions CommandCentral SaaS offerings are deployed in Microsoft Azure. These cloud service providers (CSPs) offer a secure infrastructure to build our applications. All Azure customers leverage a data center and network architecture that meets the requirements of the most security-sensitive organizations.

When it comes to meeting compliance requirements, Azure provide their customers with an infrastructure which already complies with many assurance programs. Systems built on top of the cloud infrastructure of these CSPs will receive immediate benefit for compliance requirements that affect infrastructure, physical security, or other areas that CSP bears responsibility for.

APX NEXT STARTER PACKAGE FOR COMMANDCENTRAL AWARE

APX NEXT STARTER PACKAGE

Motorola Solutions' APX NEXT Starter Package for CommandCentral Aware provides a host of mapping and location capabilities. CommandCentral Aware combines disparate systems and data into an accessible interface. This single interface offers command centers a complete operating picture to support field personnel in real time. CommandCentral Aware unifies data from mapping, correlated event monitoring, analytics, and communications. This unified interface streamlines public safety workflows and viewpoints, enabling users to access and act on critical information.

The APX Next Starter Package includes three named users for one year.

APX NEXT SmartLocate

The APX NEXT SmartLocate feature provides dispatchers with accurate location data over a broadband network. This location data, combined with CommandCentral Aware functionality, enables better tracking of field personnel and improved situational awareness. SmartLocate quickly sends GPS coordinate updates and location information from the field to dispatchers, providing a more effective operating picture of any situation. This gives dispatchers a greater ability to manage incidents and allocate resources in the most efficient way possible. Broadband connectivity increases the frequency of location reporting beyond the capability of an LMR system. This improves location accuracy and enables more users to be tracked. The CommandCentral Aware tool set features many location triggers, including time, distance, push-to-talk (PTT), emergency, and accelerated cadence during emergency.

ViQi Alert Integration

Maintaining situational awareness and first responder safety through natural operation is integral to the APX NEXT radio. This outcome is achieved through ViQi™ Virtual Partner—a cloud-based service that provides vital public safety information via voice. Users can activate ViQi with a single button press and simple audio prompt. Using natural language, personnel can run a license plate or driver's license and search for vehicles with matching vehicle identification numbers. This action happens straight from the field without disruption. The CommandCentral Aware ViQi integration provides visual context for these alerts to further improve field response.

Geographic Information System (GIS) Data Set

CommandCentral Aware integrates with hosted GIS data sets from Esri ArcGIS Server or ArcGIS online. The geospatial information contained within these data sets are core to the intelligent map display. This enhances workflow details driven by geography and the metadata contained within these data sets.

Esri's powerful geospatial engine within CommandCentral Aware is used to automatically invoke spatial queries. These queries inform the user of nearby items, refine geographic boundaries and focus attention on location to orientate those responding. This geospatial processing enables intelligence-driven analysis and focuses on the concentrated area of concern.

Data sets can be used in the following ways:

- Refine displayed data based on the geographic area defined per user (by Area, Beat, Sector, Precinct, Zone, or Quadrant).
- Determine road blockages caused by traffic jams, flooded roadways, or other obstacles.

AccuWeather

The starter package includes integration with AccuWeather to provide customized weather-driven services, including site-specific forecasts, severe-weather warnings, historical data, and custom analytics. AccuWeather provides the following:

- Location key for your desired location.
- Forecast information for a specific location.
- Current Conditions data for a specific location.
- Daily index values for a specific location. Index availability varies by location.
- Radar and satellite images.

COMMANDCENTRAL AWARE STATEMENT OF WORK

OVERVIEW

This Statement of Work ("SOW") defines the principal activities and responsibilities of all parties for the implementation of the CommandCentral Aware and Video Camera systems. When assigning responsibilities, the phrase "Motorola" includes our subcontractors and third-party partners.

Deviations and changes to this SOW are subject to mutual agreement between Motorola and the Customer and will be addressed in accordance with the change provisions of the Contract.

Motorola's PM will use the SOW to guide the deployment process and coordinate the activities of Motorola resources and teams. The project manager will also work closely with the Customer's project manager to clearly communicate the required deployment activities and schedule tasks involving Customer resources.

The scope of this project is limited to supplying the contracted equipment and software as described in the Solution Description and system integration and or subscription services as described in this SOW and contract agreements. Deviations and changes to this SOW after contract are subject to mutual agreement between Motorola and the Customer and will be addressed in accordance with the change order provision of the Contract.

Contract Administration and Project Initiation

After the contract is dually executed, the project is set up in Motorola's information and management systems, project resources are assigned and Project Planning activities commence. Motorola and Customer will work to complete their respective responsibilities in accordance with the mutually agreed upon and executed project schedule. Any changes in the project schedule will be mutually agreed upon via change order in order to avert delay.

Completion and Acceptance Criteria

Motorola's work is considered complete upon Motorola completing the last task listed in a series of responsibilities or as specifically stated in Completion Criteria. Customer task completion will occur in a way that enables Motorola to complete its tasks without delay.

The Customer will provide Motorola with written notification that it does not accept the completion of a task or rejects a Motorola deliverable within five business days of completion or receipt of a deliverable.

Project Planning and Pre-Implementation Review

A clear understanding of the needs and expectations of both Motorola and the Customer are critical to the successful implementation and on–going operation of CommandCentral. In order to establish initial expectations for system deployment and to raise immediate visibility to ongoing operation and maintenance requirements, we will work with you to help you understand the impact of introducing a new solution and your preparedness for the implementation and support of the CommandCentral system.

Shortly after contract signing, Motorola will conduct a one–on–one teleconference with your designated resource to review the task requirements of each phase of the project and help to identify areas of potential risk due to lack of resource availability, experience or skill.

The teleconference discussion will focus on the scope of implementation requirements, resource commitment requirements, cross–functional team involvement, a review of the required technical resource aptitudes and a validation of existing skills, and resource readiness in preparation for the Project Kickoff meeting.

Motorola Responsibilities

- Make initial contact with the Customer Project Manager and schedule the Pre–Implementation Review teleconference.
- Discuss the overall project deployment methodologies, inter–agency/inter–department decision considerations (as applicable), and third party engagement/considerations (as applicable).
- Discuss Customer involvement in system provisioning and data gathering to understand scope and time commitment required.
- Discuss the online Learning Management System (LMS) training approach.
- Obtain mutual agreement of the Project Kickoff meeting agenda and objectives.
- Discuss the CommandCentral Solution Discovery Requirements checklist and verify Customer has a copy of the checklist.
- Coordinate enabling designated Customer administrator with access to the LMS and CommandCentral Admin Console.

Customer Responsibilities

- Provide Motorola with the names and contact information for the designated LMS and application administrators.
- Collaborate with the Motorola PM and set the Project Kickoff meeting date.

Project Kickoff Meeting

The purpose of the project kickoff is to introduce project participants and review the overall scope of the project.

Motorola Responsibilities

- Conduct a project kickoff meeting.
- Validate key project team participants attend the meeting.
- Introduce all project participants.
- Review the roles of the project participants to identify communication flows and decision–making authority between project participants.
- Review the overall project scope and objectives.
- Review the resource and scheduling requirements.
- Review the teams' interactions (meetings, reports, milestone acceptance) and Customer participation.
- Verify Customer Administrator(s) have access to the LMS and CommandCentral Admin Console.

Customer Responsibilities

- Validate key project team participants attend the meeting.
- Introduce all project participants.

- Review the roles of the project participants to identify communication flows and decision-making authority between project participants.
- Provide VPN access to Motorola staff to facilitate delivery of services described in this Statement of Work.
- Validate any necessary non–disclosure agreements, approvals, and other related issues are complete in time so as not to introduce delay in the project schedule. Data exchange development must adhere to third-party licensing agreements.
- Provide all paperwork and/or forms (i.e. fingerprints, background checks, card keys and any other security requirement) required of Motorola resources to obtain access to each of the sites identified for this project.
- Provide the contact information for the license administrator for the project (IT Manager, CAD Manager, and any other key contact information as part of this project).
- Validate access to the LMS and CommandCentral Admin Console.
- Provide the information required in the CommandCentral Solution Discovery Requirements checklist.

CONTRACT DESIGN REVIEW (CDR)

Contract Design Review

The objective is to review the contracted applications, project schedule, bill of materials, functional demonstration approach, test plan, and contractual obligations of each party. Any changes to the contracted scope can be initiated via the change provision of the contract.

Motorola Responsibilities

- Review the contract exhibits: Solution Description, Implementation Plan, Statement of Work, and Project Schedule.
- Review the technical, environmental and network requirements of the system.
- Request shipping address and receiver name.
- Provide completed paperwork, provided to Motorola during project kickoff that enables Motorola resources to obtain site access.
- Review the information in the Customer provide CommandCentral Solution Discovery Requirements checklist.
- Grant Customer Administrator with access to CommandCentral Admin Console.
- Grant Customer LMS Administrator with access to the LMS.
- Generate a CDR Summary report documenting the discussions, outcomes and any required change orders.

Customer Responsibilities

- Project Manager and key Customer assigned designees attend the meeting.
- Provide network environment information as requested.
- Providing shipping address and receiver name.
- Provide locations and access to the existing data and video equipment that will be part of the CommandCentral system per contract.

Completion Criteria

The CDR is complete upon Customer receipt of the CDR Summary report.

HARDWARE/SOFTWARE REQUIREMENTS

Procure and Ship Equipment

Motorola Responsibilities

- Procure contracted equipment in accordance with the equipment list.
- Arrange for shipping to the Customer's location.
- Notify Customer of equipment shipping specifics and ETA for arrival.

Customer Responsibilities

- Provide and install all communications lines and network equipment and configuration that are not Motorola provided in accordance with the contracted equipment list and project schedule.
- Provide software required for the support of interfaces that have not been contracted for through Motorola.

Completion Criteria

Equipment order is completed and ready to be shipped to Customer.

CloudConnect Configuration

Motorola Solutions Responsibilities

- Remotely configure CloudConnect Virtual Machine within the Cloud Anchor Server.
- Configure network connectivity and test connection to the CloudConnect Virtual Machine.

Customer Responsibilities

- Provide remote access to the CloudConnect Virtual Machine.

Completion Criteria

CloudConnect Virtual Machine configuration is complete.

Workstation Installation and Configuration

Motorola Responsibilities

- Verify remote access capability after Motorola completes physical installation.
- Supply and configure contracted CommandCentral Solution workstations with the monitors.
- Perform physical installation of the CommandCentral Solution workstations. Connect to power and network. Assign IP addresses for the network.
- Supply and configure contracted CommandCentral Solution workstations with the monitors.

Customer Responsibilities

- Provide a dedicated delivery point for receiving, inventory and storage of equipment.
- Receive and inventory contracted equipment (reference equipment list).
- Provide remote access to the CommandCentral Solution workstations.

Completion Criteria

CommandCentral Solution workstation configuration is complete.

HARDWARE DESIGN CONSIDERATIONS

Design considerations for the proposed CommandCentral Aware solution are as follows:

Customer Responsibilities

- Provide connectivity between the various networks.
- Provide VPN remote access for Motorola Solutions deployment personnel to configure the system and for Customer Support to conduct diagnostics
- Motorola Solutions will have no responsibility for the performance and/or delays caused by other contractors or vendors engaged by the Customer for this project, even if Motorola Solutions has recommended such contractors.
- Provide backup power, as necessary.
- Provide Internet access to CommandCentral Aware server(s). This includes software licenses and media and installation support from the Customer's IT personnel.
- Responsible for any electrical or infrastructure improvements required at the Customer's facility are the responsibility of the Customer.
- Provide backhaul equipment, installation, and support costs.
- Provide devices such as workstations, tablets, and smartphones with Internet access in order to use the proposed CommandCentral Aware solution. Chrome Browser is recommended for optimal performance. CommandCentral Aware workstations to support MS Windows 10 Enterprise. Customer will provide Antivirus software for the CommandCentral Aware client.
- Existing APX subscribers will be at software version R15.00.00 or later and equipped with GPS and IV&D options in order to use the Location on PTT feature.

- Provide Motorola Solutions access with administrative rights to Active Directory for the purpose of installation/configuration and support.
- If interfaces are being included in this quote, the Customer is responsible for all necessary third-party upgrades of their existing system(s) as may be required to support the CommandCentral solution. Our solution does not include any services, support, or pricing to support Customer third-party upgrades in this proposal.
- If interfaces are being included in this quote, the Customer is responsible to mitigate the impact to third-party systems, to include CommandCentral interfaces that result from the customer upgrading a third-party system. Motorola Solutions strongly recommends working with Motorola Solutions to understand the impact of such upgrades prior to taking any upgrade action.

CommandCentral Aware Technical Discovery Requirements

In order to prevent a delay in implementation, the Customer must provide the following information required at the time of Project Kickoff for each interface/integrated system for Motorola to confirm.

Virtual Machine

- Remote access to Customer-provided Cloud Anchor Server VM.
- Data Interface VM requirements met?

If interfaces are included in this quote, the following responsibilities apply:

Interface Information (required for each interface)

- Manufacturer and Current Software Version.
- Confirm API/SDK Availability.
- Provide IP addresses.
- Provide Data format.
- Provide Data Frequency (peak & average events and content).
- Provide operational aspects (data latency, key fields/information, number of inputs).
- Data path factors (bandwidth, NAT, latency, jitter).

Interface Integration

- Customer's IP Network layout (traffic segmentation, NAT required).
- Active Directory and email policies.
- Customer's third-party IP Network Connections (schools, fire, traffic).
- Remote Access Policy/Procedures.
- Who owns/maintains each Customer network/firewalls.

Additional Information Required for Integration with CAD and ALPR Systems

- Data delivery latency rat.
- Data interface type.
- Fileshare/Dump.
- SOAP/REST.
- SQL Extraction.
- Database IP Address, login credentials, DB version.
- Data volume (calls per service, peak event rates).
- Data Fields.
- CAD Event Geolocation data availability.
- AVL/ARL data available.
- Event Types.

HARDWARE ENVIRONMENT REQUIREMENTS

Cloud Anchor Server

- One rack unit per Cloud Anchor server.
- Two circuits to distribute power to the server rack (dual power supplies).
- UPS (Uninterruptible Power Supply) at the site where the Cloud Anchor Server and CommandCentral Aware workstations will be installed.
- Internet access

Customer-provided Cloud Anchor Server (minimum requirements)

- VMware Vsphere 6.7 and above installed.
- Windows 2016 and above installed.
- Server must have access to Internet
- Server must have remote access capability for Motorola to install software
- Server must contain the following Virtual Machine(s):
- Data Interface Virtual Machine 8GB RAM, 2 virtual CPUs, 20GB disk storage.

Customer-provided Aware Workstation (minimum requirements)

- Processor - Intel Xeon 6136 @3.0 GHz (12 cores).
- Memory - 32 GB.
- Drive - One NVMe 512G SSD.
- NIC - 1 Gb port NIC.

- OS - Windows 7 Professional or Windows 10 Pro.
- Graphics Card - NVIDIA Quadro P2000

Customer Provided Workstation Monitors (minimum requirements)

- 27-inch Narrow Bezel IPS Display, 2560X1440

CONNECTIVITY AND DESIGN REQUIREMENTS

Motorola Solutions will work with the Customer's IT personnel to verify that connectivity meets requirements. The Customer will provide the network components.

Network Physical Requirements

- Two static IP addresses, corresponding subnet masks/default gateway, and available NTP and DNS IP to the Cloud Anchor Virtual Machines
- Three static IP addresses, corresponding subnet masks/default gateway, and available NTP and DNS IP to the Cloud Anchor Server.

Network Bandwidth Requirements

- Provide network ports that are 1GB capable and network routable.
- Minimum bandwidth needed between the Cloud Anchor Server and the CommandCentral Aware platform is 1.1 Mbps.

Low latency is critical for real–time operations. The speed with which data appears on the CommandCentral Aware display depends in large part on how quickly the information is presented to the CommandCentral Aware interface. Major contributors to the latency are network delays and the delay time from occurrence of an event to when that event information is presented to Aware from the source application (CAD, AVL, ALPR). Consequently, although CommandCentral Aware strives to provide near–real–time performance, Motorola Solutions provides no guarantees as to the speed with which an event (or video stream) appears on CommandCentral Aware once the event is triggered.

CommandCentral Aware Design Limitations

- A maximum of 3000 Icons viewed on the CommandCentral Aware client at one time, per instance.
- A maximum of 100 updates per second on the CommandCentral Aware client.
- A maximum 5000 radios per server.

Vigilant LPR Requirements

Bandwidth requirements include the following:

- 1 Gbps hardwire switched network between the Vigilant server and Cloud Anchor.
- Upload of ALPR data to the LEARN backoffice requires approximately 350 Kbps for each scan per second. Depending on maximum scan volume, the maximum bandwidth may need to be adjusted.

- The RTSP video feed from cameras requires a 1Gbps hardwire switched network device to allow for data communications exceeding four connected cameras.

Firewall requirements include the following:

- CommandCentral Aware Workstation needs access to the IP addresses of Cloud Anchor and Vigilant server. Access to Cloud platform endpoints.
- Ports that need to be open—TCP 80, TCP 443, TCP 3310 (or custom SQL Database Engine listening port that might have been configured for security reasons).
- The basic service requirements of the system through a firewalled environment consist of: HTTPS web based calls to a cloud back–office solution (LEARN) with S3 image storage. Typically, through a mobile broadband endpoint. A local IP listener for RTSP video stream is used from cameras with TCP communications.
- Ingress requirements (firewall traffic in): For Wireless Broadband we require TCP port 443 to communicate with the LEARN server backoffice to receive acknowledgement responses from the client. Camera Communications: TCP port 2000, 3000, 4000, 5000 (LAN/DSP).
- Egress requirements (firewall traffic out): For Wireless Broadband communications the ALPR client requires TCP port 443 to communicate with the LEARN server backoffice. The HTTPS protocol is primarily used to communicate over TLS 1.0, 1.1, or 1.2 with 128-bit encryption ciphers or better. This allows for the upload of ALPR data to the LEARN web services and request for data from the LEARN services and Google Maps.

ASTRO 25 Radio Requirements

The solution can be deployed to send location data information via LMR. It requires a ASTRO 25 radio equipped with a GPS receiver with minimum firmware version 7.18.8 and at software version R15.00.00 or later.

ASTRO 25 Infrastructure Requirements

ASTRO 25 system release 7.14 or above is required if the data will be sent via the LMR system. Enhanced Data and Intelligent Middleware (IMW) in addition to a firewall to connect the system CEN and internet securely including a packet data gateway and GGSN for each zone are used to send the location updates and events can be enabled as part of that effort. The Customer will be responsible for providing internet connection and will allow Motorola Solutions to add any necessary firewalls.

- GPS Activation and Enabled.
- Packet Data Interface.

Broadband Locationing Requirements

A data subscription is needed for broadband devices. The broadband subscription is not included in the price of the CommandCentral Aware offer. Android and iOS devices will require Motorola Solutions client software to be installed on each device.

Broadband Infrastructure Requirements

Broadband networks should provide connectivity over 4G LTE, or fourth generation mobile data technology Long-term Evolution as defined by the International Telecommunication Union's Radio Sector (ITU–R) and/or WiFi defined as IEEE Standard 802.11 (preferably 802.11ac or 802.11n).

COMMANDCENTRAL PROVISIONING

CommandCentral Solution

Motorola will discuss industry best practices, current operations environment and subsystem integration in order to determine the optimal configuration for CommandCentral Solution.

Motorola Responsibilities

- Using the CommandCentral Admin Console, provision users, groups, and rules based off Customer Active Directory data.

Customer Responsibilities

- Supply the access and credentials to Customer's Active Directory for the purpose of Motorola conducting CommandCentral Solution provisioning.
- Respond to Motorola inquiries regarding users/groups/agency mapping to CommandCentral Solution functionality.

Completion Criteria

CommandCentral Solution provisioning is complete upon Motorola completing provisioning activities.

COMMANDCENTRAL ONLINE TRAINING

CommandCentral training is made available to you via Motorola Solutions Software Enterprise Learning Management System (LMS). This subscription service provides you with continual access to our library of on–line learning content and allows your users the benefit of learning at times convenient to them. Content is added and updated on a regular basis to keep information current. All Motorola tasks are completed remotely and enable the Customer to engage in training when convenient to the user.

LMS Administrators are able to add/modify users, run reports, and add/modify groups within the panorama.

Motorola Responsibilities

- Initial setup of Panorama* and addition of administrators.
- Provide instruction to Customer LMS Administrators on:
- Adding and maintaining users.
- Adding and maintaining Groups.**
- Assign courses and Learning Paths.***
- Running reports.

Customer Responsibilities

- Provide Motorola with names (first and last) and emails of Customer LMS administrators.

- Provide access to learningservices.motorolasolutions.com.
- Complete LMS Administrator training.
- Advise users of the availability of the LMS.
- Add/modify users, run reports and add/modify groups.

Completion Criteria

Work is considered complete upon conclusion of Motorola provided LMS Administrator instruction.

*Panorama – A panorama is an individual instance of the Learning Management System that provides autonomy to the agency utilizing.
**Groups – A more granular segmentation of the LMS that are generally utilized to separate learners of like function (dispatchers, call takers, patrol, and firefighters). These may also be referred to as clients within the LMS.
***Learning Path – A collection of courses that follow a logical order, may or may not enforce linear progress.

FUNCTIONAL DEMONSTRATION

The objective of functional demonstration is to validate Customer access to the CommandCentral features and functions and system integration via configured interfaces (as applicable).

Motorola Responsibilities

- Update functional demonstration script.
- Provide script to Customer for review and acknowledgement.
- Conduct functional demonstration.
- Correct any configuration issues impacting access to cloud based features; i.e. map display, location updates, video display and/or interface and integrations.
- Create a summary report documenting the activities of the functional demonstration and any corrective actions taken by Customer or Motorola during the demonstration.
- Provide Customer instruction on using the Customer Feedback Tool for feature/enhancement requests.

Customer Responsibilities

- Review and agree to the scope of the demonstration script.
- Witness the functional demonstration and acknowledge its completion.
- Resolve any provisioning impacting the functional demonstration.
- Provide Motorola with any requests for feature enhancements.

Completion Criteria

Conclusion of the functional demonstration.

COMPLETION MILESTONE

Following the conclusion of delivery of the functional demonstration the project is considered complete and the completion milestone will be recognized.

TRANSITION TO SUPPORT

Following the completion of the functional demonstration Customer may commence using CommandCentral Solution for all purposes including productive use. Motorola and Customer will schedule a mutually agreeable time to transition Customer's ongoing support to the Motorola Support organization. The transition to Motorola's Support organization completes the implementation activities.

Motorola Responsibilities

- Provide Customer with Motorola Support engagement process and contact information.
- Gather contact information for Customer users authorized to engage Motorola Support.
- Schedule and facilitate the handover call between Customer and Motorola Support organization.
- Complete the System Configuration Workbook and provide to Motorola Support as part of the handover.

Customer Responsibilities

- Provide Motorola with specific contact information for those users authorized to engage Motorola Support.
- Participate in the handover call and familiarize themselves with the terms and conditions of support.
- Engage the Motorola Support organization as needed.

Completion Criteria

Conclusion of the handover to support.

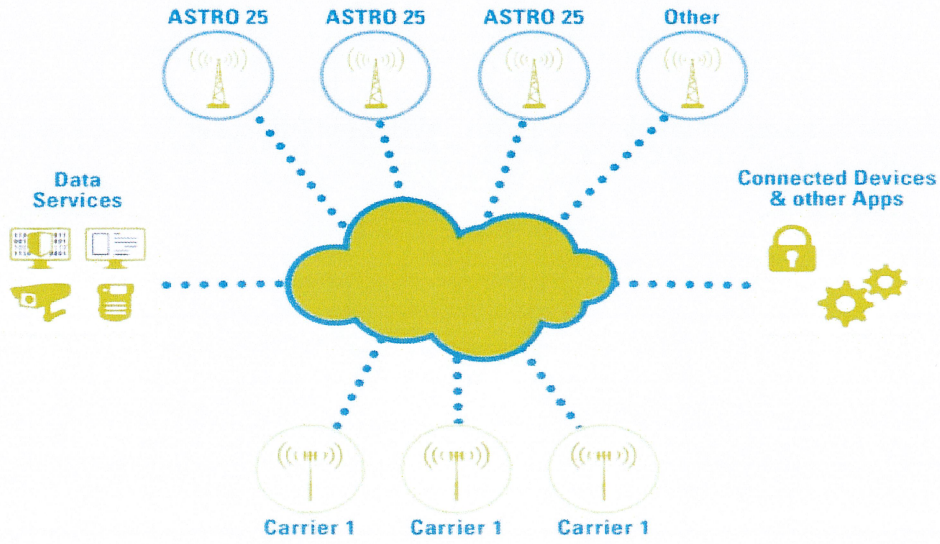
CRITICAL CONNECT SOLUTION DESCRIPTION

Overview

Motorola Solutions' Critical Connect enables cloud-based interoperability between networks, agencies, and applications to eliminate barriers and unify communications. This real-time exchange of voice, video, messaging, and location data leads to more detailed intelligence and more informed response, regardless of device or network.

Critical Connect supports many types of communications, such as ASTRO 25 to ASTRO 25 and ASTRO 25 to carrier-integrated broadband push-to-X (talk, messaging, and mapping). Critical Connect's cloud-based interface connects multiple agencies and locations to provide a common operating picture.

Critical Connect adapts to agency needs and makes it easier to manage complex communication centers. Users can quickly set up and scale connections from a directory of agencies and broadband PTT carriers. These connections are easy to maintain and can grow in terms of capacity, unique connections, features, and future services. This allows the solution to evolve over time. And Critical Connect's value increases as more agencies connect. The data sharing tools and interoperability provide better collaboration. As a result, users can focus their attention and resources on important operations.



Motorola Solutions' Carrier-Integrated Broadband PTT

Critical Connect offers the following features to improve agency response and coordination:

- Talkgroup Linking – Link local and remote talkgroups to provide voice interoperability. This includes enhanced features like sharing of group IDs, user IDs, and emergency calls and alerts. Each connection supports up to eight talkgroup links (radio local and remote talkgroups, broadband PTT local, and remote talkgroups).
- Manual Roaming – Enable manual roaming by linking home and foreign talkgroups through the Critical Connect portal using the talkgroup linking feature. Home radio users must be programmed and allowed in the foreign systems.

- Automatic Roaming – Enables radio roaming into a foreign system to continue talking with its home talkgroup without having to change channels. Automatic Roaming is set up and configured during onboarding (users do not need to enable this feature).
- Security – Critical Connect is hosted in highly-secure, geographically separate dual cloud datacenters. All traffic leaving an agency's premises is encrypted using AES-256.
- Redundancy – Provides multiple levels of redundancy. At the cloud, we have in-data center redundancy by default, in addition to geo-redundancy if a data center is lost. On premises, optional multiple edge gateways provide redundancy for ASTRO 25 DSR configurations. Agencies can choose to add additional backhaul redundancy through the use of multiple ISPs or MPLS providers. Motorola Solutions recommends our ASTRO 25 connectivity service for optimal performance and reliability.

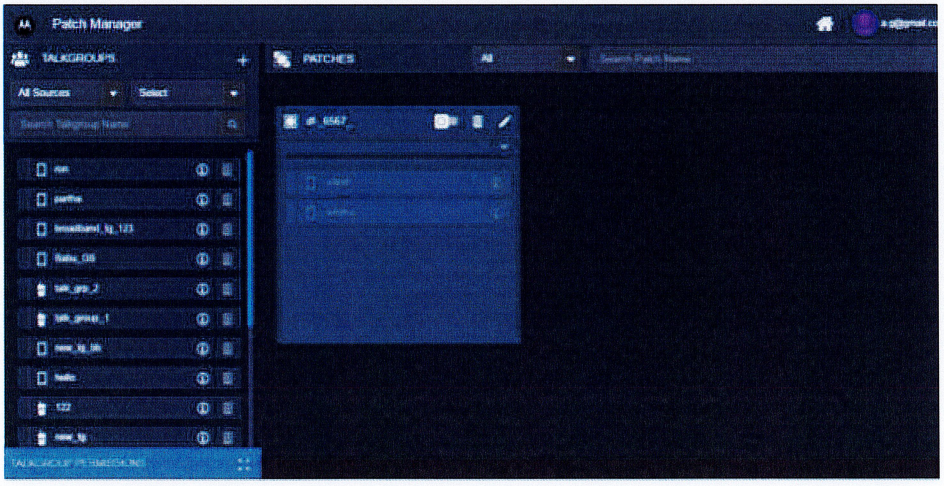
PROPOSED PACKAGE

Critical Connect offers connectivity between ASTRO 25 systems, WAVE PTX, and carrier-integrated PTT or P25 systems. Motorola Solutions proposes the package below to meet specific capacity needs.

CRITICAL CONNECT PORTAL

The web-based Critical Connect portal allows users to access management tools, as well as a map of internal and external talkgroups (supports talkgroups such as ASTRO 25 radio and broadband). Users can remove or reject pre-approved talkgroups as needed.

Through this portal, the Link Manager provides interoperability across broadband PTT talkgroups and LMR talkgroups. This enables secure, web-based access to your agency's broadband talkgroups and LMR talkgroups. Users can link one or more broadband and LMR talkgroups (up to eight talkgroups per connection or tile). Users can share a talkgroup outside of their agency (external talkgroup) to other agencies with an "Invite-Approve-Reject" model. Users can create a talkgroup link across internal and external talkgroups to bridge communications.



Critical Connect Patch Manager Screen

CRITICAL CONNECT INTERFACES

Critical Connect integrates with various interfaces to connect radio systems and broadband PTT solutions. LMR users can connect to systems across boundaries with one connection to Critical Connect.

P25 ISSI
Critical Connect uses the ISSI interface to connect ASTRO 25 systems or other P25 ISSI-compliant LMR systems. This interface enables home LMR systems to link or patch talkgroups with other foreign LMR systems. It also allows radio talkgroups to link with broadband PTT talkgroups. Emergency Alert, Calling, and Radio Unit IDs are all transferred between compatible systems.
Critical Connect ISSI provides the following features:

- Talkgroup linking/patching.
- Manual Roaming.
- Automatic Roaming (if applicable based on subscription).
- P25 Encryption with Critical Connect AES-256 keys.
- P25 Encryption End-to-End for LMR (if applicable based on subscription)

Wave Messaging Dispatch
The WAVE Messaging Dispatch Console is a windows-based application that allows personnel to exchange multimedia messages with APX NEXT radios in the field. This feature supports messaging with text, pictures, or video files. Users can send messages to individuals or predefined groups of radios. Only the WAVE Dispatch Multimedia Messaging feature extends to APX NEXT radios.

WAVE PTX Push-to-Talk Solution Description

Overview

Motorola Solutions' WAVE integration for Critical Connect offers a flexible, device-agnostic solution to implement carrier-independent push-to-talk (PTT) communications.

WAVE is a cloud-based solution that connects personnel across devices, networks, and locations. Users receive instant and reliable PTT features that extend communications beyond the coverage of an LMR system.

With simple installation and straightforward provisioning of new users, WAVE can scale and adapt as needs evolve. Costs are kept predictable with a low monthly subscription, offering reliable and budget-friendly unified communications. This simplified pricing structure consists of a monthly, per-user plan with broadband and LMR interoperability.

WAVE enhances your agency's Critical Connect solution with the following:

- Enables ASTRO 25-to-broadband PTT communications, leveraging the latest broadband LTE and Wi-Fi nationwide coverage to support public safety communications.
- Eliminates communication barriers between agencies by enabling virtual connections.
- Uses on-demand fleet-maps to provide flexible communications that adapt to changing needs.
- Offers inter-agency group voice communication between ASTRO 25 radios and broadband mobile devices.

WAVE offers users the following capabilities:

- Group Call – Talkgroup users (including LMR and WAVE users, WAVE-only users, and LMR-only users) can make group calls using any WAVE application. Users select the talkgroup, push-to-talk, and the talkgroup can hear the speaker's transmission and can reply. Talkgroups and assigned participants are created and managed by the WAVE Central Administration tool.
- Individual Private Call – Make private calls between two WAVE users. A user selects the person they wish to call from a contact list available within the application and can communicate with a button press.
- Text Messaging – Send and receive group text messages with other WAVE users in a talkgroup.
- Multimedia Sharing – Share images or videos from the gallery or directly from the camera. Users can share with other users or a group, and can view received videos and photos, play or save to their device. Users' history saves media to view when they log in.
- Location – View the location of WAVE group members on a map.

- Voice Message Pre-Recorded or Record-and-Send – Record a message that users can send to a group or to a contact. Voice messages can be played back by users at any time.
- Persistent Threaded History on Client – View the history of text messages and PTT events for group or private calls even if they log out and log back in. Events that occur while users are logged out will be pushed down to the client so that they are caught up.
- PTT from Lock Screen – Users can PTT from a device's lock screen without having to unlock the device or go through the application. This is exclusive to Android devices.
- Headset Integrations – Wired or Bluetooth headsets can be used to respond hands-free in any situation.

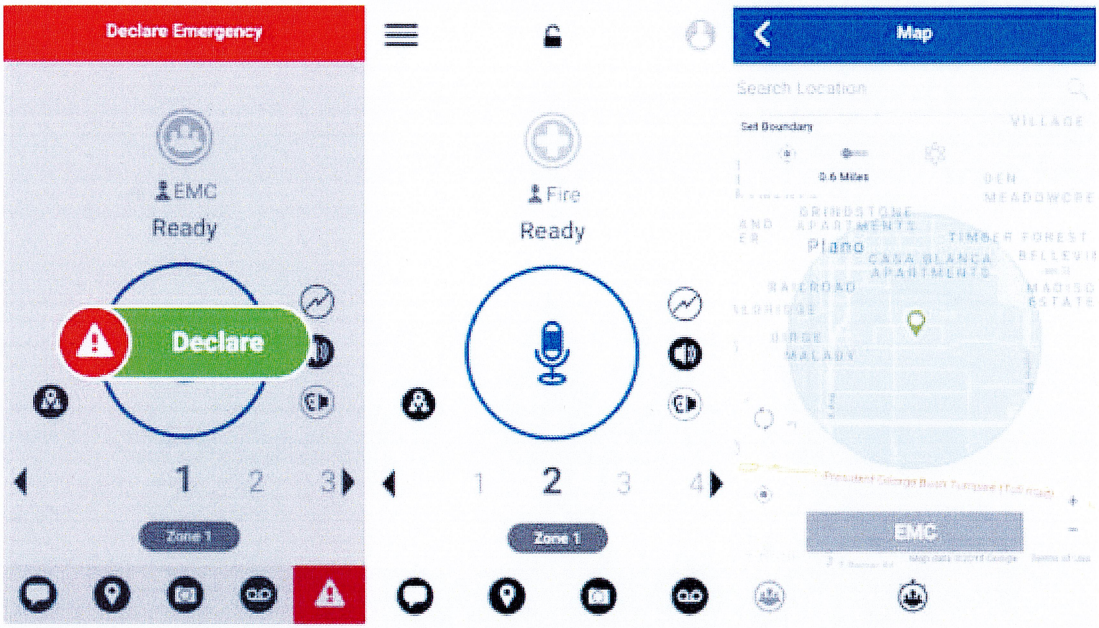
WAVE users engage with two different interoperable clients: the WAVE Mobile Client and WAVE Dispatch Client. Each client grants access to enhanced WAVE PTT features, as shown in the tables below.

Mobile Application

The proposed WAVE mobile application includes the following features:

WAVE PTX

- PTT (Private and Group Calling).
- 250 members per talkgroup.
- Time and distance-based Location Updates.
- Presence and Alerts.
- Priority Talkgroup Scanning.
- Geofencing.
- Secure Messaging and Multimedia .
- Broadcast Calling.
- Quickgroups.
- Administrator and User-Managed Contacts/Groups.
- Location and Mapping Services.
- MC Streaming Video (add-on).



PTT Call Ready, Active Emergency, and Location Services Screens

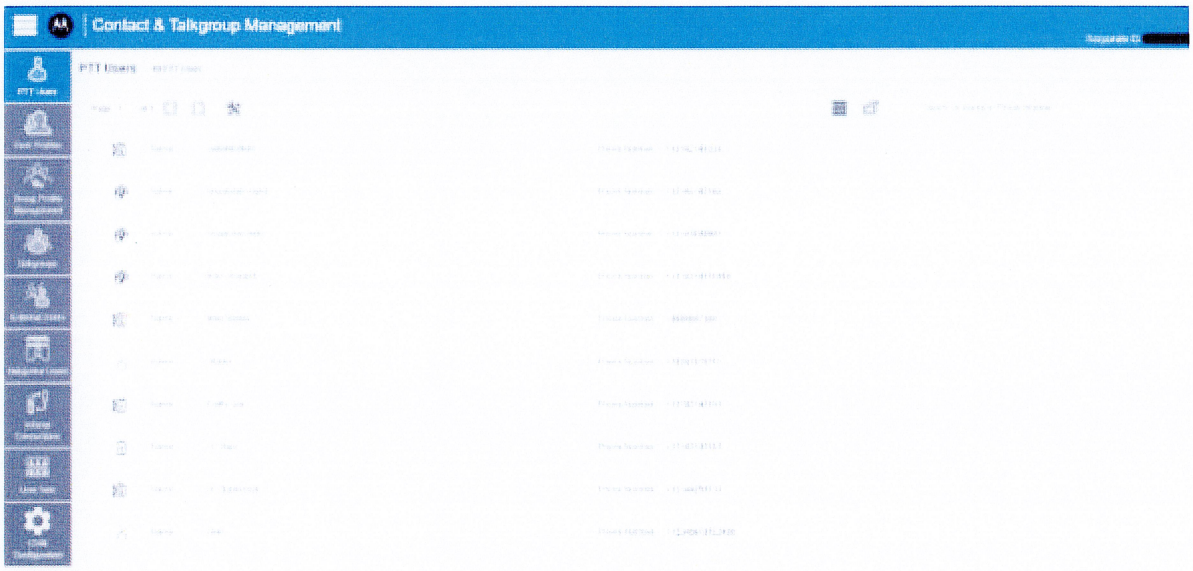
WAVE is compatible with Android and iOS devices over 3G, 4G, and Wi-Fi networks globally, providing hardware flexibility to fit different customer setups.

WAVE Administration Portal

WAVE's Central Administration Tool (CAT) helps administrators manage user contacts and talkgroups. The WAVE Administration Portal allows users to manage PTT user profiles and permissions, talkgroups, and external users.

- PTT Users – Manage the PTT user profile such as name, email ID, and permission type. User profiles allow for the assignment to and management of multiple users in an identical profile.
- Group Profile Management – Assign and manage talkgroup profiles. Talkgroup profiles enable the assignment of talkgroup attributes such as avatar, type, and Operational Status Message list.
- Talkgroups – Manage talkgroups including assigning avatar, talkgroup scanning, supervisory override, permission to the talkgroup members for call initiation, and receive and in call accessibility. There are three types of talkgroups that users can manage: standard, dispatch, and broadcast groups.
- External Users and Integrated Users – Manage users external to the corporation, and manage API integrations with WAVE (i.e. CommandCentral).
- Interop Connections – Manage the connections between Critical Connect and PTT.
- User Sets – Manage the user sets of PTT Users, Talkgroups, or Integrated Users.
- OSM Configuration – Configure the Operation Status Messages assigned to users.

Certain functionality (Group Profile Management, Integrated Users, OSM Configuration) will only be displayed if the administrator has the appropriate accesses and licenses



WAVE CAT Screen Example

Critical Connect Statement of Work

Agreement

This Statement of Work (SOW) is an integral part of the Subscription Services Agreement for the Critical Connect and/or WAVE services entered into by Motorola Solutions ("Motorola Solutions") and the Customer ("Agreement") and will be governed by the terms and conditions in the Agreement. If there is a conflict between the terms of the Agreement and the terms of this SOW, the terms of this SOW shall prevail.

The term "Customer" means a Public Safety Agency with whom Motorola Solutions has the signed written Agreement with.

Request Fulfillment by Service Desk

"Request Fulfillment" is the service, as defined herein, available to a Customer with a Critical Connect and/or WAVE subscription issued through Motorola Solutions Request Fulfillment enables users of Critical Connect and/or WAVE to request certain support services as set out in this SOW ("Fulfillment Service/s"). Customer, or its authorized Critical Connect and/or WAVE users ("Users"), may request the Fulfillment Services through Request Fulfillment.

The objectives of Request Fulfillment are as follows:

- Provide a mechanism for users of the Critical Connect and/or WAVE services to request and receive Fulfillment Service set forth in this SOW.
- Provide information to Customer and Users about the availability of Fulfillment Services and the pre-defined approval and qualification procedures for obtaining them.
- Assist with general information or questions.

Service Desk

Motorola Solutions has established a service desk to monitor, escalate, provide dispatch assistance, and fulfill service requests ("Service Desk").

The Service Desk provides a single point of contact for Users of the Critical Connect and/or WAVE services on a day-to-day, 24/7 basis. The Service Desk handles all incidents and service requests, using specialized, proprietary software tools and methodologies to log and manage all such events.

The primary goal of the Service Desk is to provide incident resolution and restoration of service to 'normal operation' as demonstrated during the functional acceptance testing. Restoration of service may involve fulfilling a service request or handling relevant queries about a service process that is needed to allow Critical Connect and/or WAVE services to return to normal operation.

The Service Desk contributes to an integrated service management approach through:

- Answering Customer or User phone requests regarding Critical Connect and/or WAVE service issues in accordance with the support process set forth in the Customer Support Plan (CSP). The CSP is an integral part of this SOW and once agreed upon by the parties, will be automatically incorporated into this SOW.

- Responding to phone calls regarding Fulfillment Service, Critical Connect, WAVE, and/or security matters relating to the Fulfillment Services.
- Receiving and responding to emails on matters regarding reported issues or requested services.
- Monitoring and receiving Customer or User incident tickets.
- Verifying, analyzing, and validating reported issues.
- Performing initial impact analysis of reported incidents.
- Opening, issuing, or updating corresponding incident tickets, as appropriate.
- Escalating to the next level of support within the period of time set forth in the CSP, if required.

Fulfillment Service Process Descriptions

Request Fulfillment uses the following process:

- Receive Service Request – Requests are submitted through a pre-defined process agreed upon by Motorola Solutions and Customer in the CSP.
- Logging and Validation – Service Requests are logged with a service request record created at the Service Desk with relevant information and a description of the request.
- Categorization and Prioritization – Service requests are categorized by type and nature, and prioritized in relation to other new and existing requests to determine the sequence in which they will be fulfilled. Priority is determined based on severity, level of effort, benefit to the organization and urgency to the requestor.
- Review and Authorization – Service requests are reviewed for categorization, prioritization, and User profiles to determine the correct level of authorization as agreed. Requests also may have functional and/or financial impacts which are factors considered during authorization.
- Execution and Closure – Service requests are routed to the appropriate fulfillment team. The fulfillment team follows documented procedures for fulfilling the request. Certain requests, such as questions or inquiries, may be completed by the Service Desk, acting as first-line support, while other Service requests are forwarded to specialist groups and/or suppliers for fulfillment.

Roles and Responsibilities

Motorola Solutions Responsibilities

- Make available all Service Desk contact options and contact information.
- Develop a CSP, unless a plan already exists.
- Respond to requests in accordance with the pre-defined severity levels set forth in the CSP.
- Log, validate, categorize, and prioritize all received requests.
- Manage and fulfill service requests.

Customer Responsibilities

- Provide all relevant and accurate information requested by Motorola Solutions in order to develop a CSP or modify an existing one.
- Collaborate with Motorola Solutions to document service request and approval processes.
- Ensure Users are notified about the request process and required authorizations.
- Contact Motorola Solutions, as necessary, with service requests.
- Ensure appropriate requests are pre-authorized, as required.
- Cooperate with Motorola Solutions and perform all acts and provide all information in a timely manner that is necessary to enable Motorola Solutions to respond to service requests.

- Support closure of request as requested by the Service Desk.
- Obtain any Third-Party consents for Motorola Solutions to provide the Fulfillment Service, if applicable.

Critical Connect and WAVE Technical Support

This SOW introduces the technical support service ("Technical Support") which is part of service delivery management for Critical Connect and/or WAVE. The objective of Technical Support is to provide administrative support of the Critical Connect and/or WAVE service.

Fulfillment Service Description

Motorola Solutions Critical Connect and/or WAVE Technical Support provides support calls for technical requests and incidents from authorized points of contact from the Customer to help the Customer in resolving issues.

Technical Support standard operating hours are 8/5/5, Monday through Friday. Calls can be made to the Motorola Solutions Help Desk 24/7. However, only Severity 1 (total service outage) issues will be addressed by Technical Support outside of standard operating hours. Please refer to the CSP for severity definitions and associated target service response windows.

Roles and Responsibilities

Motorola Solutions Responsibilities

- Provide Technical Support 8/5/5, Monday through Friday.
- Receive Technical Support request at the Service Desk and categorize.
- Verify access request for User authenticity and the legitimate right to access the service being requested.
- Define problem based on the following categories of fault:
- Critical Connect server connection issue.
- WAVE service issue.
- Internet connectivity verification.
- Password reset.
- Verify with Customer the proper functioning of Critical Connect and/or WAVE service based on troubleshooting steps performed.

Customer Responsibilities

- Designate authorized personnel as administrators.
- Reference the CSP for appropriate severity levels and call routing procedures.
- Provide Motorola Solutions customer support representatives with the proper information to assist in Tier 1 support issues.
- Verify with Motorola Solutions the proper functioning of Critical Connect and/or WAVE based on troubleshooting steps performed.
- Obtain Third-Party consents, as necessary for Motorola Solutions to provide the Fulfillment Service.

Critical Connect On-Site SUPPORT

Motorola Solutions on-site support and dispatch service ("On-Site Support") is triggered during the initial support process if it is determined that an on-site technical representative is needed to access error logs or address issues with the Critical Connect WAVE Radio Gateway ("WRG") hardware. The On-Site Support provides incident management and technical service support to enable on-site incident resolution relating to the WRG. The On-Site Support is delivered in conjunction with a Third-Party services provider ("On-Site Service Provider"). The On-Site Service Provider is responsible for providing On-Site Support to ensure strict compliance with the committed response times outlined in the CSP.

On-Site Support Description

The Motorola Solutions Service Desk will dispatch an On-Site Service Provider and then provide support to maintain contact with the On-Site Service Provider until system restoral.

Once dispatch is issued and received, the On-Site Service Provider will respond to the Customer location based on pre-defined severity levels set forth in the CSP. Motorola Solutions Technical Support will provide support and maintain contact with the On-Site Service Provider until system restoral and incident closure occurs. The On-Site Service Provider will be required to provide incident status updates on a predefined basis to allow tracking of incident status.

As part of the On-Site Support service delivery, a detailed On-Site Support service process will be designed and developed according to the Customer's needs and policies and documented in the CSP. The On-Site Support service process provides the required procedures to ensure standardized methods are used both reactively and proactively to resolve deviations from normal operations.

Scope

On-Site Support is available in accordance with Severity Level Definitions and Response Time Commitments set out in the CSP.

Roles and Responsibilities

Motorola Solutions Responsibilities

- Respond to dispatch request as required by the On-site Support service process outlined in the CSP.
- Ensure the required service personnel have access to Customer sites as needed.
- On-Site Service Provider will perform the following on-site activities:
- Run diagnostics on the server or network equipment.
- Replace defective server or network equipment as required.
- On-site servicer ensures that faulty server or network equipment is sent for repair with associated Return Merchandise Authorization (RMA).
- Provide materials, tools, documentation, physical planning manuals, diagnostic/test equipment, and any other requirements necessary to perform the maintenance service outlined in the CSP, if any.
- If a third-party vendor is needed to restore the system, the servicer will accompany that vendor onto the Customer's premises as needed.
- Escalate the incident to the appropriate next level of support upon expiration of defined response times.
- Notify Service Desk that the incident is resolved.
- Notify Customer of case status as defined by the CSP.
- Provide On-Site Support activity reports to the Customer if requested.

Customer Responsibilities

- Contact Motorola Solutions, as necessary, to request On-Site Support.
- Provide Motorola Solutions with the following predefined Customer information and preferences for inclusion in the CSP.
- Case notification preferences and procedure.
- Repair verification preference and procedure.
- Escalation procedure forms.
- Submit changes in any information supplied in the CSP to the Service Delivery Manager (SDM).
- Allow servicers access to facilities and equipment.
- Verify with the Service Desk that restoration is complete or system is functional, if required by repair verification preference provided by the Customer.
- Cooperate with Motorola Solutions and perform all acts that are reasonable or necessary to enable Motorola Solutions to provide these Fulfillment Services.

Installation and Onboarding

This Statement of Work (SOW) is an integral part of the Subscription Services Agreement for the Critical Connect and/or WAVE services entered into by Motorola Solutions and Customer ("Agreement") and will be governed by the terms and conditions in the Agreement. If there is a conflict between the terms of the Agreement and the terms of this SOW, the terms of this SOW shall prevail.

"Customer" means Public Safety Agency with whom Motorola Solutions has the signed, written Agreement with.

This SOW describes the activities required in deploying Critical Connect on the customer premises. P25 trunking systems will require the deploying of an enablement server (also called a Critical Connect WAVE Radio Gateway Server ["WRG Server'"]) on an ASTRO 25 customer premises, connecting the WRG Server to Critical Connect, and connecting the WRG Server to the ISSI Gateway ("ISGW")/ASTRO 25 Core. Analog or Conventional systems will require the deployment of a Radio-over-IP (RoIP) gateway on the customer premises and the connecting of it to Critical Connect. This SOW is an integral part of the Subscription Services Agreement for interoperability services.

Contract

Contract Award

The Customer and Motorola Solutions execute the Agreement and both parties receive all the necessary documentation.

Contract Administration

Motorola Solutions Responsibilities

- Assign a project manager as the single point of contact with authority to make project decisions.
- Assign resources necessary for project implementation.
- Schedule the project kickoff meeting with the Customer.

Customer Responsibilities

- Assign a project manager as the single point of contact with authority to make project decisions.
- Assign other resources necessary to ensure completion of project tasks for which the Customer is responsible.

Completion Criteria

- Both Motorola Solutions and the Customer assign all reasonably required resources.
- Project kickoff meeting is scheduled.

Contract Document Review

Review Contract Document

Motorola Solutions Responsibilities
- Meet with the Customer project team.
- Review SOW, Project Schedule, and Acceptance Test Plans, and update the contract documents accordingly.
- Establish demarcation points supplied by the Motorola Solutions to define the connection points between the Customer and Critical Connect in Motorola Solutions data center.
- Submit network topology and configuration to the Customer for approval.

Customer Responsibilities
- The Customer's key project team participants attend the meeting.
- Make timely decisions, according to the Service Deployment Project Schedule.

Completion Criteria
- Agreement between Motorola Solutions and Customer on updates to contract documentation.
- Updated contract documentation, which may include updated SOW, Project Schedule, Network Topology, and Acceptance Test Plans.

Order Processing

Process Equipment List

Motorola Solutions Responsibilities

- Validate if Customer has WRG Server on premises and available for interoperability services.
- Applicable if WRG Server is not available on Customer premises: Validate equipment list by checking for valid model numbers, versions, compatible options to main equipment, and delivery data.

- Create ship views, to confirm with the Customer the secure storage location(s) to which the equipment will ship.
- Ship views are the mailing labels that carry complete equipment shipping information, which direct the timing, method of shipment, and ship path for ultimate destination receipt.
- Create equipment orders.
- Reconcile the equipment list(s) to the Contract.
- Procure third-party equipment if applicable.

Customer Responsibilities

- Approve shipping location(s).

Completion Criteria

- Motorola Solutions will verify that the equipment list contains the correct model numbers, version, options, and delivery data.

Install Enablement Server (WRG) Server Equipment

Motorola Solutions Responsibilities

- Provide for the installation of WRG Server and associated network equipment and will interface with the following network connections:
- ISGW External Critical Connect servers.
- All equipment will be installed employing a standard of workmanship consistent with Motorola Solutions R56 installation standards and in compliance with applicable National Electrical Code (NEC), EIA, Federal Aviation Administration (FAA)/Transport Canada, and FCC standards and regulations/Industry Canada.
- Receive and inventory all equipment.
- Bond the supplied equipment to the site ground system in accordance with Motorola Solutions R56 standards.
- Coordinates the receipt of the equipment with the Customer's designated contact, and inventory all equipment.
- Provide the R56 requirements for space, power, grounding, HVAC, and connectivity requirements at each site.
- Motorola Solutions will perform installation tasks on site as outlined in the manual of procedures ("MOP"). Please refer to the MOP for further details.

NOTE: Manual and automatic roaming functionality requires additional configuration through the ASTRO 25 provisioning manager which is not covered under the Critical Connect integration services.

- Self-Service customers with access to the provisioning manager will be able to implement the required configurations without engaging the Motorola Solutions' ASTRO 25 team.
- Customers with a provisioning manager that is managed by Motorola Solutions may incur additional implementation fees. Please consult your Customer Success or Account Manager for additional details.

Customer Responsibilities

The Customer agrees to provide rack space and power at the Customer site location as part of the deployment of the Critical Connect service.

Rack & Power Requirements	QTY	R/U	Depth	Power	Plug
HP Server	1	2	48"	15A/Unit	NEMA 5-15p

Additional rack unit space may be needed for accommodating MPLS site equipment for backhaul MPLS Internet service.

Additional Customer Responsibilities

- Provide secure storage for the Motorola Solutions provided equipment at a location central to the site.
- Coordinate the receipt of the equipment with Motorola Solutions and inventory all equipment.
- Provide access to the sites as necessary.

- Provide adequate electrical power in proper phase and voltage at sites.
- Confirm that there is adequate utility service to support the new equipment and ancillary equipment.
- Ensure that each site meets the R56 standards for space, grounding, power, HVAC, and connectivity requirements.
- Provide site owners/managers with written notice to provide entry to sites identified for Motorola Solutions personnel.
- Customer is responsible for providing backhaul service for connection between WRG Server and Critical Connect in Motorola Solutions data center. Minimum 4 Mbps bandwidth required
- Provide information technology support, as needed, during project implementation.
- Customer is responsible for providing broadband devices with broadband service and P25 Radios for functional acceptance testing. NOTE: Subscriber radio programming and services are not included. If required, a separate quote can be provided upon request.
- Customer is responsible for assigning the Customer representative to witness system functional acceptance testing.

Provision WAVE Subscribers and Administrative Access

Motorola Solutions Responsibilities

- Provide an Onboarding Request Form that documents all of the necessary data for WAVE subscriber provisioning and administrative access ("Request Form").
- Provision administrative access and WAVE subscribers based upon the data collected in the Request Form.

NOTE: Motorola Solutions will provision WAVE subscribers within 48 hours of receipt of the provisioning request and completed Request Form (Monday through Friday, excluding holidays). Provisioning requests will only be honored up to the purchased amount of WAVE subscriber licenses. Additional WAVE subscriber licenses can be purchased by contacting your Motorola Solutions representative.

- Provide necessary information for administrative access and WAVE subscriber management to the Customer contact identified in the Request Form.

Customer Responsibilities

- Provide the necessary information requested within the Request Form to Motorola Solutions. NOTE: A completed Request Form can be emailed to 'WaveCCfulfillment@motorolasolutions.com'
- Notify Motorola Solutions of the need to provision administrative access or WAVE subscribers by sending an email to 'WAVEPTX.Admin@motorolasolutions.com'.

Completion Criteria

- Provisioning of all purchased WAVE subscriber licenses and associated administrative access.

NOTE: A completed Request Form with information pertaining to all purchased WAVE subscriber licenses and administrative access requests must be provided within the month following the successful implementation of Critical Connect and/or WAVE. Failure to provide the completed Request Form within this timeframe will constitute a successful Completion Criteria acceptance by the Customer.
NOTE: For orders of WAVE subscriber licenses that do not include a Critical Connect implementation, a completed Request Form with information pertaining to all purchased WAVE subscriber licenses and administrative access requests must be provided within the month following the date of Customer signature on the Subscription Services Agreement for Critical Connect and/or WAVE. Failure to provide the completed Request Form within this timeframe will constitute a successful Completion Criteria acceptance by the Customer.

Links
Onboarding Request Form – Critical Connect + WAVE
Onboarding Request Form – WAVE

Functional Acceptance Testing

Functional Acceptance Test Plan

Motorola Solutions will provide an Acceptance Test Plan (ATP) based upon the Critical Connect and/or WAVE services being integrated. The ATP will outline the testing procedures and acceptance criteria required to demonstrate 'normal operation' of the Critical Connect and/or WAVE services.

Perform Functional Acceptance Testing

Functional acceptance testing will be performed after completing the on-site installation and setup of the WRG Server, and necessary configuration for system interoperability and/or broadband, as applicable. The functional acceptance testing criteria will be outlined in the ATP.
NOTE: Functional acceptance testing of any LMR to broadband interoperability, as applicable, will solely be performed by utilizing the Motorola Solutions WAVE PTX broadband push-to-talk application platform.

Motorola Solutions Responsibilities

- Motorola Solutions will perform functional acceptance testing of the procedures outlined in the ATP.

Customer Responsibilities

- Witness the functional acceptance testing.

Completion Criteria

- Successful completion and Customer approval of the functional testing as outlined in the ATP.

System Acceptance

Successful demonstration of the functional tests outlined in the ATP to the Customer and the Customer participating in the testing will constitute successful system acceptance by the Customer.
The acceptance criteria are 100% passing of the tests outlined in the ATP, witnessed by the Customer.
NOTE: Functional acceptance testing must be scheduled within the month following the successful implementation of Critical Connect and/or WAVE. Failure to execute the functional acceptance testing within this timeframe will constitute successful system acceptance by the Customer.

Dependencies and Assumptions

This SOW clearly sets out what is outside the scope of the Fulfillment Service/s. Any services, which may be performed by Motorola Solutions at the direction of the Customer which are outside the scope of the Fulfillment Service/s, will be considered to be additional services ("Additional Services"). Additional Services may incur an additional cost in accordance with Motorola Solutions' standard time and material rates as published from time to time Where the Customer has refused the quote for the Additional Services and the Fulfillment Service/s in Motorola Solutions Inc' opinion either (a) cannot be provided without the Additional Services; and/or (b) cannot be provided so as to ensure Motorola Solutions' applicable quality standards are met, then Motorola Solutions shall have the right to refuse the provision of the Fulfillment Service/s and such refusal shall not be considered a breach of the Agreement. The Customer may request changes to the Fulfillment Service/s. If Motorola Solutions agrees to a requested change, the change must be agreed in writing. A reasonable price adjustment will be made.

- Customer responsibilities are outlined in this SOW. All Customer responsibilities must be met after the contract signing and prior to start of the installation on the Customer site.
- If any of the Customer responsibilities are not met, start and/or completion of the installation activity and service start date will be delayed. Motorola Solutions, Inc shall not be responsible for any delays or non-performance caused by Customer failing to meet the Customer responsibilities.
- If extraordinary delay is caused in start and/completion of installation and setup of site equipment is caused because of not meeting any of the customer responsibilities, a modification of implementation schedule will be required.

Training

Critical Connect Training and Documentation

Critical Connect training and documentation can be found on the Motorola Solutions' Learning Experience Portal (LXP). Access to LXP can be requested by submitting a request to the Learning Management System at the link below.
https://learning.motorolasolutions.com/content/learning-management-system-customer-account-request
The following tables show the trainings and documentation that will be made available upon receiving access to LXP:

TRAINING		
Course Description	Course #	Hyperlink
Critical Connect Portal	PSA0032	https://learning.motorolasolutions.com/online/59957enus

DOCUMENTATION		
Description	Course #	Hyperlink
System Admin User Guide	MN007993A01	https://learning.motorolasolutions.com/search?t=MN007993A01
Customer Admin User Guide	MN007989A01	https://learning.motorolasolutions.com/search?t=MN007989A01
Patch Manager User Guide	MN007987A01	https://learning.motorolasolutions.com/search?t=MN007987A01

STATE OF ILLINOIS)
COUNTY OF COOK) SS
COUNTY OF WILL)

CERTIFICATE

I, NANCY M. O'CONNOR, Village Clerk of the Village of Tinley Park, Counties of Cook and Will and State of Illinois, DO HEREBY CERTIFY that the foregoing is a true and correct copy of Resolution No. 2023-R-068, "**A RESOLUTION APPROVING A QUOTE-2152931 BETWEEN THE VILLAGE OF TINLEY PARK AND COOK COUNTY EMERGENCY TELEPHONE SYSTEM BOARD FOR PURCHASE OF 100 APX NEXT RADIOS WITH SUBSCRIPTION SERVICE QUOTE-2152931 THRU MOTOROLA SOLUTIONS**, which was adopted by the President and Board of Trustees of the Village of Tinley Park on June 20, 2023.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the corporate seal of the Village of Tinley Park this 20th day of June, 2023.

Nancy M. O'Connor
VILLAGE CLERK