



Section 3

# Detailed Description of the Proposed Solution

Public Safety Video Products and Services

June 28, 2022

**Commonwealth of Virginia**

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## Section 3

# Detailed Description of Proposed Solution

## 3.1 Appendix F

Motorola Solutions (Motorola) has provided Appendix F on the following pages.

### 3.1.1 A. General Questions

General		Y (yes), F (Future), N (No)	Additional Detail
1A.	Does Supplier's organization currently have existing customers in the Commonwealth? If yes, please explain.	Y	Motorola has developed an extensive footprint across the Commonwealth of Virginia, with 68 existing Land Mobile Radio Systems deployed and operational. Additionally, we have many localities that have invested in our Video Suite, our CAD Solutions and NG-911 Call Taking Solutions. These customers include: STARS, Dinwiddie County, City of Virginia Beach, York County, Roanoke County, Scottsville Virginia PD, Falls Church Virginia PD, Vinton Virginia PD, and Front Royal Virginia PD.
2A.	Does Supplier's Solution have the capability of providing products and related services to all public bodies in the entire Commonwealth? If yes, please provide detail on how this will be accomplished?	Y	Motorola has sales people across the State of Virginia, who sell within their geographical areas, and we also have long-standing relationships with accredited direct sellers, service, and installation shops across the State. We have been fortunate enough to leverage these existing relationships that were borne from our P25 Radio System deployments and these direct sellers and service shops have become a valuable extension of our business.
3A.	Does Supplier's Solution include the use of subcontractors or alliances? If yes, please describe the type of work that will be performed by them.	Y	<p>Motorola's Subcontractors work is contingent upon the solution(s) purchased. Some examples of the types of work they perform:</p> <ul style="list-style-type: none"> <li>• Provide warehousing/storage of the initial delivery</li> <li>• Coordinate and execute on transporting the required equipment to agency facilities and inventory services after delivery</li> <li>• Hardware installation or servers, cameras, Access Points, Wi-Fi docs</li> <li>• Provide project management services coordinating with agency staff and the Motorola's team. Assist with any needed on site field commissioning, testing and client training assist with on-site field surveys for system design and engineering.</li> </ul>

General		Y (yes), F (Future), N (No)	Additional Detail
5A.	Does Supplier's organization currently interface, via a punch out to Supplier's application, with existing customer e-procurement portals similar to the Commonwealth's eVA portal solution?	Y	Currently all State and Local entities within the Commonwealth of Virginia are able to log in using the following URL: <a href="https://businessonline.motorolasolutions.com/">https://businessonline.motorolasolutions.com/</a> to validate pricing of Radio equipment. A unique user ID and login credentials have been provided for entities to access. This URL platform is in the process of migrating to the link shared in 4A.
4A.	Does Supplier's Solution include a punch-out catalog website? VITA encourages Suppliers to develop a catalog website that interfaces with eVA.  Refer to: <a href="https://eva.virginia.gov/pages/eva-catalog-creation.htm">https://eva.virginia.gov/pages/eva-catalog-creation.htm</a>  Please provide either screenshots or a link to serve as an example.	Y	Motorola has the following URL developed specifically for the Commonwealth.  <a href="https://shop-stage.motorolasolutions.com/">https://shop-stage.motorolasolutions.com/</a>  A unique user name and password will be provided so that the relevant entity is able to view all products and associated part numbers and enjoy the overall customer experience. Motorola is also open to working with eVA and the interfaces they have provided.
6A.	Does Supplier's Solution include product incentives, credits and or rebate programs? If yes, please provide details.	Y	Motorola may have specific incentives and rebate programs, which are offered for a limited period of time. These incentives are shared with the Commonwealth Agencies by their respective Account Managers. The Account Manager specifically assigned to the Commonwealth will share these programs accordingly. The shop page will also feature any specific promotions.
7A.	Does Supplier's Solution include volume-tiered discounts on products? If yes, Please provide details.	Y	Motorola can offer volume-tiered discounts, depending on the quantity of units and the time frame for delivery.
8A.	Does Supplier's Solution provide any additional related services that would be an added value to the Commonwealth? If so, please explain and provide details.	Y	Motorola has included descriptions of the Premier Support and Video as a Service offerings in Section 7, Appendices.

General		Y (yes), F (Future), N (No)	Additional Detail
9A.	Does Supplier's Solution include a dedicated account manager for the duration of any awarded contract? If yes, please explain.	Y	Motorola follows this practice as we have seen the value that a dedicated Account Manager brings to the Commonwealth. A single point of contact provides consistency and is intimately familiar with the contract and the processes. We have enjoyed the success of this practice with our current radio contract with the Commonwealth.
10A.	Will Supplier's organization market and promote any resulting contract? If yes, please provide details.	Y	<p>Motorola will promote the cost-saving benefits to our customers, by avoiding the official solicitation process that adds to operational expenses, and delays getting the public safety equipment their agencies need. We will help our customers obtain the Participating Addenda documentation as well as navigate the VITA website.</p> <p>Motorola looks forward to promoting this contract as it will provide assistance, establish relationships and strengthen existing relationships between Motorola and the agencies within the Commonwealth.</p>
11A.	Does Supplier's Solution include any additional marketing services that would be an added value to the Commonwealth? If yes, please provide details.	Y	Motorola can offer Marketing services, including assistance with media relations (press releases, community outreach), support with customer-organized and customer-sponsored events, and speaking opportunities at public events. Motorola and the Motorola Foundation are also active supporters of industry groups such as IACP, APCO, MCCA, NAWLEE and NOBLE.
12A.	Does Supplier's Solution include a customer support program for the duration of any resulting contract? If yes, please describe Supplier's organization's ability to keep users informed of new products, changes in technology and other related market information.	Y	Our customers receive regular communications on product updates, upgrades and lifecycle changes. We publish technology- and industry-focused information on our website, encourage customer conversations in our online communities, and sponsor informative webinars in collaboration with our media partners.

	General	Y (yes), F (Future), N (No)	Additional Detail
13A.	<p>Does Supplier's solution provide effective, interactive control and use with nonvisual means and provide 508 Compliance in accordance with the following standard regarding IT Accessibility and 508 Compliance:  <a href="https://www.vita.virginia.gov/media/vitavirginiagov/it-governance/psgs/domain-amp-topic-reports/pdf/ETAITAccessibilityTopicReportGOV103.pdf">https://www.vita.virginia.gov/media/vitavirginiagov/it-governance/psgs/domain-amp-topic-reports/pdf/ETAITAccessibilityTopicReportGOV103.pdf</a></p> <p>(Refer to <a href="https://www.section508.gov/">https://www.section508.gov/</a> and <a href="http://www.access-board.gov">www.access-board.gov</a> for further information)</p> <p>If yes, please describe how this functionality is achieved and include a completed Voluntary Product Accessibility Template (VPAT) with Supplier's proposal. The VPAT template can be accessed at the following URL:  <a href="https://www.section508.gov/sell/vpat">https://www.section508.gov/sell/vpat</a></p> <p>If no, does Supplier's Solution provide alternate accessibility functionality? Please describe.</p>	Y	<p>This Certificate verifies that this site has been reviewed and tested by software developers and remediated to be meet standards set by the WCAG 2.1 (Web Content Accessibility Guidelines 2.1) AA level. The Web Content Accessibility Guidelines (WCAG 2.1) AA level covers a wide range of recommendations for making Web content more accessible.</p> <p>The WCAG 2.1 AA level guidelines include specific details on how to develop accessible Web content. This statement certifies that specific techniques were met for the Success Criterion detailed by WCAG. As a result your content has been made accessible to a wider range of people with disabilities, including blindness and low vision, deafness and hearing loss, learning disabilities, cognitive limitations, limited movement, speech disabilities, photosensitivity and combinations of these. By implementing and adhering to these guidelines your site's web content has also become more usable to users in general.</p> <p>For more information on compliance guidelines see Understanding WCAG 2.1 and Techniques for WCAG 2.1.</p> <p><b>Compatibility with Browsers and Assistive Technology</b></p> <p>Our mission goal is to be able to support the widest array of browsers and assistive technologies as possible.</p> <p>We have therefore invested efforts to support popular systems with high market share, including Chrome, Firefox, edge, Opera and Safari VoiceOver on a MAC. We have also addressed JAWS and NVDA assistive technologies for Windows and MAC.</p> <p><b>Accessibility Modifications</b></p> <p>Our team of developers, designers and content accessibility experts has reviewed, remediated and tested this website by performing multi-layer accessibility testing and analysis of the new and updated accessibility measures and web content. As part of the process adjustments were made</p>

General		Y (yes), F (Future), N (No)	Additional Detail
			<p>that included Javascript &amp; CSS work. The process also includes accessibility modifications for assistive technologies (eg. NVDA, JAWS etc.). Below is a complete list of accessibility modifications and functionalities made.</p> <p><b>Accessibility Functions</b></p> <p>The following is a detailed list of the remediation modifications made during the audit to make your website accessible.</p> <ul style="list-style-type: none"> <li>• Enable keyboard navigation - a full accessibility component.</li> <li>• Site adjustment for assistive technologies (eg. NVDA) - a full accessibility component.</li> <li>• Stopping moving elements and blocking flickers - a full accessibility component.</li> <li>• Ability to increase the site font to 4 different sizes.</li> <li>• Change color contrast based on dark background.</li> <li>• Change color contrast based on a light background.</li> <li>• Matching and monochrome option for color blind people.</li> <li>• Change the font for readability.</li> <li>• Increase the cursor and change its color to black or white.</li> <li>• Increase the display to 200%.</li> <li>• Highlight links on the site.</li> <li>• Highlighting headers on the site.</li> <li>• Display an alternative description of the images.</li> </ul> <p>We have made a concentrated effort to provide an accessibility option on all the pages of the website. It is possible that some pages on the site may not have been discovered, or the appropriate technological solution has not yet been found. We will continue our efforts to improve the site's accessibility as we are committed to having a site that is accessible – friendly and can be used by the entire population, including people with disabilities.</p>

### 3.1.2 B. Design, Plan, Install, and Configuration

	Requirements	Y (yes), F (Future), N (No)	Additional Detail
1B.	Does Supplier's Solution include project management services? If yes, please explain.	Y	Motorola's project manager will work with the Commonwealth on the development and execution of a project schedule. Motorola's project manager will schedule, coordinate, and manage the Motorola resources and activities in accordance with the project schedule as defined in the Statement of Work.
2B.	Does Supplier's Solution include in house resources that can analyze a customer's environment in order to plan, design and configure a reliable public safety video system? If yes, please explain.	Y	In-house resources are available to engage with the Commonwealth at the time of request to evaluate the current environment(s) in order to plan, design and configure required to determine the delivery costs for a reliable public safety video system.
3B.	Does Supplier's Solution include detailed methods/practices for designing/installing/validating public safety video systems? If yes, please explain.	Y	<p>Motorola uses the standard project management methodology, which outlines the initiating, planning, executing, monitoring/controlling, phases for the deployment work. Motorola will provide a project workbook that outlines the communication plan, the tracking of issues, action items and risks associated with the project. In addition to the project workbook, an integrated project schedule/timeline will be provided. Motorola will provide a high-level design and implementation plan.</p> <p>Motorola's approach to the installation of all products, is to review the solution architecture with the Commonwealth and seek approval to move forward with the plan.</p> <p>Functional testing of all Public Safety Video Systems is completed during and after installation, before final acceptance by the Commonwealth.</p> <p>As built documentation is provided after each installation.</p>
4B.	Does Supplier's Solution include technicians that can install and service a public safety video system? If yes, please explain and list how many technicians that support installations.	Y	We have approximately 100 technicians throughout the Commonwealth.

	Requirements	Y (yes), F (Future), N (No)	Additional Detail
5B.	Does Supplier's Solution include technicians that can test/validate that a deployment meets performance requirements? If yes, please explain.	Y	Technicians are engaged in testing activities relative to the product solution being installed.
6B.	Does Supplier's Solution include documentation given to customers that includes all installed equipment, part numbers, quantities, serial numbers, and equipment naming? If yes, please explain.	Y	Motorola provides an acceptance checklist after installation is complete, which highlights serial numbers, part numbers, and equipment naming.
7B.	Does Supplier's Solution include customer training on installed hardware and software? If yes, please explain.	Y	Training offerings are available and vary per solution component. Training can consist of remote instructor led, on-site instructor led and or computer based training.
8B.	Does Supplier's Solution include reports detailing equipment that has been ordered by customers? If yes, please provide examples.	Y	Motorola provides a detailed packing list with each order.  Each order is visible on our customer order tracking portal, providing the date of the order, purchase order number, detailed description of the items, quantities and associated costs.
9B.	Does Supplier's Solution include reports detailing where equipment has been installed? If yes, please provide examples.	Y	According to our checklist provided, we inform our customer of the equipment that has been installed and where it is located in the vehicle.
10B.	Does Supplier's Solution include any additional inventory management reports that would be an added value to the Commonwealth? If yes, please provide details.	Y	Account management and customer support management work together to track all customer orders and provide additional inventory management.

### 3.1.3 C. Warranty, Service & Maint.

	Requirements	Y (yes), F (Future), N (No)	Additional Detail
1C.	Does Supplier's Solution include warranty and software updates? If yes, please explain. Also, please also confirm all updates will be provided at no additional cost to agency. If no, please explain.	Y	Cloud updates will occur every 2 weeks and follow the standardized process of Development, Test, Production Test, and promotion to Production. Security vulnerability updates will follow an accelerated deployment with the objective of minimizing disruption to the system. All updates are provided at no additional cost.
2C.	Does Supplier's Solution include warranty updates? If yes, please explain. Also, please also confirm all updates will be provided at no additional cost to agency. If no, please explain.	Y	<ul style="list-style-type: none"> <li>• V300 - 1 year (Standard); 5 Years Extended at extra fee</li> <li>• M500 - 1 year (Standard); 5 Years Extended at extra fee</li> <li>• Interview Room -1 year (Standard); 5 Years Extended at extra fee</li> <li>• EL5 -1 year (Standard); 5 Years Extended at extra fee</li> <li>• ELC - 1 year (Standard); 5 Years Extended at extra fee</li> <li>• CCE - 1 year (Standard); 5 Years Extended at extra fee</li> </ul>
3C.	<p>Please provide Suppliers standard warranty period.</p> <p>During the warranty period, does Supplier's Solution include the replacement or repair of failed equipment at no additional cost to an authorized user? If yes, please explain.</p>	Y	<ul style="list-style-type: none"> <li>• V300 - 1 year (Standard); 5 Years Extended</li> <li>• M500 - 1 year (Standard); 5 Years Extended</li> <li>• Interview Room -1 year (Standard); 5 Years Extended</li> <li>• EL5 -1 year (Standard); 5 Years Extended</li> <li>• ELC - 1 year (Standard); 5 Years Extended</li> <li>• CCE - 1 year (Standard); 5 Years Extended</li> </ul>
4C.	Does Supplier's Solution include warranty replacement equipment and system software that is equal to or better than, and compatible with, the equipment and system software being replaced? If yes, please explain.	Y	Motorola will provide an equal to or better replacement.
5C.	Does Supplier's Solution include documentation describing how it provides technical support for its current customers? If yes, please explain.	Y	Motorola has provided our response for technical support in section 4.10.1, Post Implementation and Account Management Plan.

	Requirements	Y (yes), F (Future), N (No)	Additional Detail
6C.	Does Supplier's replacement equipment/system software/parts assume the warranty coverage terms of the replaced equipment and system software? If yes, please explain.	Y	Replacement equipment/system software/parts assume the warranty coverage terms.
7C.	Does Supplier's Solution honor all warranties extending beyond the expiration or cancellation of any resulting contract as if the contract were still in effect on all equipment, replacement equipment and system software? If yes, please explain.	Y	If the warranty period purchased at time of the device purchase extends beyond this contract duration, the warranty will be honored for the period originally purchased.
8C.	Does Supplier's Solution include profiles for the personnel that will be assigned to this contract? If yes, please explain.	Y	Motorola provides representative resumes for each resource type that could be assigned to work on a Commonwealth of Virginia project. Motorola will provide a named resource possessing equivalent skills, abilities and experience at the time of award.
9C.	Does Supplier's Solution include service representatives and technicians providing telephone support located in the continental United States? If yes, please explain.	Y	Our customers dial 1-800-MSI-HELP and select prompt #5.
10C.	Does Supplier's Solution include the use of loaner equipment if inop equipment will be out of operation for more than 24 hours? If yes, please explain.	Y	Spare hardware can be provided with the order at the customer's request. Advanced Return Material Authorization (RMA) included with service and support. New hardware will be shipped within 24 hours of notice in advance of receiving the defective devices.

### 3.1.4 D. Body Worn Video Camera (BWVC) and Recording Devices

	Requirements	Y (yes), F (Future), N (No)	Additional Detail
1D.	Does Supplier's Solution include BWVCs with a minimum 1280 X 960 Native resolution? If yes, please explain and include other resolution options that are available.	Y	The V300 is 1920x1080 (1080p), 1280x720 (720p), 864x480 (480p).
2D.	Does Supplier's Solution include BWVCs with a format of MPEG4? If yes, please explain and include other formatting options.	Y	Motorola can render in AVI, MPEG2, DVD and MP4.
3D.	Does Supplier's Solution include BWVCs with a 90 degree field of view? If yes, Please explain and include other field of view options.	Y	The V300 is 130° Horizontal, 73° Vertical, adjustable up + 15° down - 20° (User can adjust vertical field of view).
4D.	Does Supplier's Solution include BWVCs that can produce an effective and consistent video through automatic exposure, automatic white balance, and automatic illumination source. If yes, please explain LUX options.	Y	The V300 body-worn camera has a 0.35 Lux rating.
5D.	Does Supplier's Solution include BWVCs with a minimum of 9 hours recording capability? If yes, please explain.	Y	The battery for the V300 will record for 9 hours.
6D.	Does Supplier's Solution include BWVCs with a minimum of 12 hours of standby life? If yes, please explain and include other standby life options.	Y	The battery for the V300 will function for 12 hours.
7D.	Does Supplier's Solution include BWVCs with configurable pre-event capability? If yes, please explain.	Y	The V300 Pre-Event settings are None, 15s, 30s, 45s, 1m, 2m  Continuous background recording also available.
8D.	Does Supplier's Solution include BWVCs with a storage capacity of 32GB? If yes, please explain and include other storage options.	Y	The V300 128GB / 23 hours of 1080p HD video; 46 hours of 720p HD Video; 114 Hours of 480p SD Video.
9D.	Does Supplier's Solution include BWVCs with a battery charge time of 6 hours or less? If yes, please explain and include other battery charge time options.	Y	The V300 is < 4 hours using Ethernet charging station.

	Requirements	Y (yes), F (Future), N (No)	Additional Detail
10D.	Does Supplier's Solution include BWVCs with a minimum fixed Frame Rate of 39.97 FPS day and night with no dropped frames? If es, please explain and include other frame rate options.	Y	The V300 body-worn camera records at 60 frames per second internally. The output is 30 frames per second. This helps get the best image quality from the V300. Our body worn camera solution can be configured to record in 10, 15, 30fps, and 60 fps. Video recordings playback at 30 fps. This is possible because Motorola's mobile camera solutions are the first law enforcement camera systems to use the most advanced video compression technology available, H.264 High Profile (HP). H.264 HP technology creates files that are up to 40% smaller than video captured at equivalent qualities using simpler forms of H.264.
11D.	Does Supplier's Solution include BWVCs with multiple recharging options such as a USB cable or a docking station? If yes, please explain.	Y	The V300 - 8-bay transfer station, USB base, or in-car Wi-Fi base.
12D.	Does Supplier's Solution include BWVCs with a visual or audible recording indicator? If yes, please explain.	Y	The V300 body-worn camera has multiple recording indicators, including colored LED indicators on the front of the camera, as well as the top of the camera that will turn from green to red when recording. There is a multi-tone speaker that gives an audible tone when a recording starts, and a vibration motor also shows a recording has started. The back-lit display will show battery condition, memory space used and available, number of recordings, incident categories, current recording duration, current time/date, assigned officer name, covert recording status, error codes, Wi-Fi, and GPS.
13D.	Does Supplier's Solution include BWVCs with weatherproof construction (minimum IP66) that can operate within the range of -10 to +40 degrees Celsius? If yes, please explain and include other weatherproof construction options.	Y	The V300 operational temperature range -20°C to +60°C; -4°F to +140°F
14D.	Does Supplier's Solution include BWVCs with the ability to display remaining storage in Hours/Minutes on the camera or through an interface such as a desktop computer, cellphone, etc.? If yes, please explain.	Y	The V300 can display the battery condition, memory space used and available, number of recordings, incident categories, current recording duration, current time/date, assigned officer name, covert recording status, error codes, Wi-Fi, and GPb.

	Requirements	Y (yes), F (Future), N (No)	Additional Detail
15D.	Does Supplier's Solution include BWVCs with a rotatable lens? If yes, please explain.	Y	The V300 is 130° Horizontal, 73° Vertical, adjustable up + 15° down - 20° (User can adjust vertical field of view)
16D.	Does Supplier's Solution include BWVCs with video compression (H.264 or H.265) that can meet recommendations set by ITU-TH.264 International Standard ISO/IEC 14496-10 (02/2014)? If yes, please explain and include additional video compression options.	Y	The V300 video compression H.264 High Profile - reduces file sizes by nearly 50% and provides best image quality to file size ratio.
17D.	Does Supplier's Solution include BWVCs with multiple sound quality (minimum of 32kHz – 44 kHz) options? If yes, please explain and include additional sound quality options.	Y	AAC Audio. Acoustic foam chamber blocks wind noise. High-tech membrane blocks water but not sound. Dual Audiophile quality solid state microphones, eliminate wind noise.
18D.	Does Supplier's Solution include BWVCs designed with wiring, cables, clips, or other methods of attachment required for the device to function properly that can be disengage to prevent the wearer from becoming entangled, but stay attached with physical activity? If yes, please explain.	Y	Magnetic Chest Mount Designed to fit perfectly over shirt placket buttons and zippers. MOLLE Mount Two adjacent loops across 2 rows of MOLLE webbing secures the camera to your uniform.
19D.	Does Supplier's Solution include BWVCs that do not cause and are not subject to electromagnetic interference with nearby electronic equipment and radio communication systems using MIL-STD-461(G) standards? If yes, please explain.	Y	Motorola's solutions do not cause and are not subject to electromagnetic interference with nearby electronic equipment and radio communication systems.
20D.	Does Supplier's Solution include BWVCs that can focus within the range of 0.5 meter to infinity without adjustment? If yes, please explain.	Y	The BWC will focus from .10 m to infinity, without adjustment.
21D.	Does Supplier's Solution include BWVCs that requires the physical sliding of a switch or pressing of button to activate or deactivate recording? If yes, please describe the physical feedback to the operator such as a click, or an audible beep or vibration. If remote capable, then a click or audible beep or vibration needs to identify the officer of engagement by remote means	Y	The V300 body-worn camera integrates with the M500 in-car video system and other V300 body-worn cameras. Bidirectional activation. Multi-tone speaker, Vibration motor, Colored LED indicators. Both audio and haptic responses, when recording is initiated and stopped.
22D.	Does Supplier's Solution include BWVCs that have an indicator showing battery charge level/status? If yes, please explain.	Y	The V300 body-worn camera LED displays battery condition, memory space used and available, number of recordings, incident categories, current recording duration, current time/date, assigned officer name, covert recording status, error codes, Wi-Fi, and GPS.

	Requirements	Y (yes), F (Future), N (No)	Additional Detail
23D.	Does Supplier's Solution include BWVCs that encode a group of pictures greater than 30 frames. If yes, please explain.	Y	At 30fps, the camera records both standard and hi definition streams.
24D.	Does Supplier's Solution include BWVCs that can capture conversational speech at a distance of one meter? If yes, please explain.	Y	The V300 body-worn camera has a bidirectional set of 2 microphones, which includes noise cancellation technology that will isolate conversational voices from 2 meters, regardless of background noise.
25D.	Does Supplier's Solution include the ability of demonstrating an industry standard method of validating the reliable transfer of data from the recorder to the backend storage system, including a digital signature produced that can be used to validate the transfer of data? If yes, please explain.	Y	Each video is made from sequential 96MB proprietary video files, each of which is assigned an individual hash code. This hash code is verified at each stage of concatenation, transcoding, and export.
26D.	Does Supplier's Solution include the ability to have recorded footage that contains a date and time stamp (hrs.: mins: secs) in the metadata and as a watermark on the video? If yes, please explain.	Y	Each video contains various metadata, GPS coordinates, watermark, date/time.
27D.	Does Supplier's Solution include the ability for the date and time stamp to be exported with the imagery, without employing lossy compression? If yes, please explain.	Y	The videos do the requested task, without loss of compression.
28D.	Does Supplier's Solution allow a user/administrator to calibrate the date and time displayed by a device? If yes, please explain.	Y	The systems synchronize with a GPS external clock, and then also sync over Wi-Fi if GPS is unavailable.
29D.	Does Supplier's Solution include footage time and dates that are regularly and automatically checked and calibrated via an external clock signal? If yes, please explain.	Y	The systems synchronize with a GPS external clock, and then also sync over Wi-Fi if GPS is unavailable.
30D.	Does Supplier's Solution include a unique ID that is embedded within every video file? If yes, please explain.	Y	Each recording device comes clearly marked with a unique device ID, with all video files having a unique event ID specific to each individual device.
31D.	Does Supplier's Solution export all recorded footage to a data archiving/management system in its original file and format without loss of quality or associated metadata? If yes, please explain.	Y	Store, manage, and share evidence in a cloud-hosted or on-premises system.
32D.	Does Supplier's Solution protect data from loss or corruption when system power is lost? If yes, please explain.	Y	Loss of power does not cause data to be lost or corrupted on the BWC. There is a SHA2 that is placed on each video file to ensure there is no corruption or manipulation of data. There is a

	Requirements	Y (yes), F (Future), N (No)	Additional Detail
			checksum on each file to validate before transfer of the data.
33D.	Does Supplier's Solution include BWVCs that can indicate if it is not meeting minimum operating standards? If yes, please explain.	Y	The LCD display of the V300 body-worn camera has visual indicators for battery strength and storage capacity. It will also display an error code number should any problem arise with the normal function of the camera.
34D.	Following the conclusion of activities related to analyzing VITA environments and determining the service delivery scope and cost, Motorola develops a Scope of Work specific to the requested service. Project delivery activities occur in accordance with the scope of work to industry recognized standards of performance. Project Management practices conform to Project Management Institute (PMI) standards.	Y	Video, audio, and metadata is encrypted at rest and in motion using FIPS-140-2 compliant encryption. The V300 body-worn camera uses AES-256 bit encryption for all video-at-rest.
35D.	Does Supplier's Solution encrypt data at rest per FIPS 140-2 certified or FIPS 197 certified (AES) and at least 256-bit strength. If yes, please explain.	Y	Video, audio, and metadata is encrypted at rest and in motion using FIPS-140-2 compliant encryption. The V300 body-worn camera uses AES-256 bit encryption for all video-at-rest.
36D.	Does Supplier's Solution have the capability of remote activation and live streaming by an administrator or other permission based setting? If yes, please explain.	Y	Using the Smart Control app (on either Android or iOS), the admin can start, stop, tag recordings, as well as view live recordings.

### 3.1.5 E. Vehicle Mounted Video Camera

	Requirements	Y (yes), F (Future), N (No)	Additional Detail
1E.	Does Supplier's Solution's mobile video system and related audio equipment conform to the applicable minimum standards as set by Electronic Industries Association (EIA)? If yes, please explain.	N	None of these standards apply to our Solutions.
2E.	Does Supplier's Solution's mobile video system and related audio equipment conform to the applicable minimum standards as set by Federal Communications Commission rules and regulations (FCC)? If yes, please explain.	Y	All our products are tested and certified under all applicable FCC rules including but not limited to intentional and unintentional radiator emissions and conducted emissions.
3E.	Does Supplier's Solution's mobile video system and related audio equipment conform to the applicable minimum standards as set by Institute of Electrical and Electronic Engineers (IEEE)? If yes, please explain.	Y	In-car video system uploads are 100% hands free over an 802.11n wireless connection. IEEE 802.11 is part of the IEEE 802 set of local area network (LAN) technical standards, and specifies the set of media access control (MAC) and physical layer (PHY) protocols for implementing wireless local area network (WLAN) computer communication.
4E.	Does Supplier's Solution's mobile video system and related audio equipment conform to the applicable minimum standards as set by International Electro technical Commission (IEC)? If yes, please explain.	Y	Cameras meet waterproof specifications for IEC 60529 - IP67 all-weather operation (protected at meter water depth for 30 minutes), and applicable standards for MIL-STD-810G – (including thermal shock, vibration, and solar radiation).
5E.	Does Supplier's Solution's mobile video system and related audio equipment conform to the applicable minimum standards as set by National Fire Protection International (NFPA)? If yes, please explain.	N	Fire hazard is covered under UL testing. Electronic products used in non-hazardous environments (oil and gas) are generally not tested for NFPA.
6E.	Does Supplier's Solution's mobile video system and related audio equipment conform to the applicable minimum standards as set by National Highway Traffic Safety Administration (NHTSA)? If yes, please explain.	N	NHTSA standards are for car assemblies like tires, windshields, etc., which are not required as a part of our solution.
7E.	Does Supplier's Solution's mobile video system and related audio equipment conform to the applicable minimum standards as set by Society of Automotive Engineers (SAE)? If yes, please explain.	N	SAE standards are for car assemblies like tires, windshields, etc., which are not required as a part of our solution.

	Requirements	Y (yes), F (Future), N (No)	Additional Detail
8E.	Does Supplier's Solution's mobile video system and related audio equipment conform to the applicable minimum standards as set by Underwriters Laboratories Inc. (UL)? If yes, please explain.	Y	Our products are tested per UL/EN/IEC 62368.
9E.	Does Supplier's Solution ensure that any items installed in the interior of a vehicle meets the requirements stated in Federal Motor Vehicle Safety Standards? If yes, please explain.	Y	<p>FMVSS standards are for all assemblies that make up a car e.g. rear view mirrors, seat belts, etc. There are no standards per FMVSS for accessories that don't make up the car. Our products are not considered "integral" to the function of the car and its safety. Our products fall in the same criteria as a charger for cell phones that you may plug in your car.</p> <p>The In-Car components are extremely modular and can be installed to fit each vehicles needs and not impact the officer's safety.</p> <p>Specifications:</p> <ul style="list-style-type: none"> <li>• Digital Video Recording (DVR) – The DVR can be console mounted with a 2" faceplate, or universally mounted anywhere in the vehicle, such as: in the trunk, on the cage, under the dash, etc. Access to the DVR is only necessary when the redundant USB drive is needs to be accessed in the event that wireless transfer is either not operational or not installed.</li> <li>• Remote Display Control Panel – May also be mounted in various locations, depending on the existing equipment in the vehicle. Primarily, it will be mounted overhead on a vehicle specific bracket, within easy reach of the Officer.</li> <li>• Front Camera – It is recommended that the front camera be mounted on the windshield, which is the most stable location for the camera. With digital video, any vibration introduced to the camera will greatly affect video quality. This location also provides easy access to the camera buttons.</li> </ul>

	Requirements	Y (yes), F (Future), N (No)	Additional Detail
			<ul style="list-style-type: none"> <li>As stated above, Motorola has unique mounting brackets for all types of Police vehicles and we will determine with EPS the best possible location for all components prior to installation. This will help to ensure officer safety.</li> </ul>
10E.	Does Supplier's Solution include the necessary brackets, mounting hardware, and installation instructions that will ensure the equipment is installed in accordance with all applicable Federal Motor Vehicle Safety Standards (FMVSS)? If yes, please explain.	Y	<p>FMVSS standards are for all assemblies that make up a car e.g. rear view mirrors, seat belts, etc. There are no standards per FMVSS for accessories that don't make up the car. Our products are not considered "integral" to the function of the car and its safety. Our products fall in the same criteria as a charger for cell phones that you may plug in your car.</p> <p>The In-Car components are extremely modular and can be installed to fit each vehicles needs and not impact the officer's safety.</p> <p>Specifications:</p> <ul style="list-style-type: none"> <li>DVR – The DVR can be console mounted with a 2" faceplate, or universally mounted anywhere in the vehicle, such as: in the trunk, on the cage, under the dash, etc. Access to the DVR is only necessary when the redundant USB drive is needs to be accessed in the event that wireless transfer is either not operational or not installed.</li> <li>Remote Display Control Panel – May also be mounted in various locations, depending on the existing equipment in the vehicle. Primarily, it will be mounted overhead on a vehicle specific bracket, within easy reach of the Officer.</li> <li>Front Camera – It is recommended that the front camera be mounted on the windshield, which is the most stable location for the camera. With digital video, any vibration introduced to the camera will greatly affect video quality. This location also provides easy access to the camera buttons.</li> </ul>

	Requirements	Y (yes), F (Future), N (No)	Additional Detail
			<ul style="list-style-type: none"> <li>As stated above, Motorola has unique mounting brackets for all types of Police vehicles and we will determine with EPS the best possible location for all components prior to installation. This will help to ensure officer safety.</li> </ul>
11E.	Does Supplier's Solution's mobile video system include a screen/monitor with minimum 3 inch diagonal color display? If yes, please explain.	Y	The M500 screen size 5" diagonal, 1920x1080 resolution, full color.
12E.	Does Supplier's Solution's mobile video system operate within the temperature range Sub Zero to 120 Degrees Fahrenheit as outlined in MIL-STD-810(G)? If yes, please explain.	Y	The M500 operating temperature -30°C to +65°C (-22°F to +149°F).
13E.	Does Supplier's Solution's mobile video system include a viewing angle/diagonal with a minimum rotation of 360 degrees? If yes, please explain.	Y	The M500 unit can, with a proper mount, rotate 350 degrees, with an additional camera that provides overlap and the remaining angles.
14E.	Does Supplier's Solution's mobile video system include a front field of view with a minimum 24 feet width, 35 feet full wide angle? If yes, please explain.	Y	The M500 will show 72 ft. by 105 ft.
15E.	Does Supplier's Solution's mobile video system include signal to noise ratio with a minimum of 46 db? If yes, please explain.	Y	The M500 HiFi mic 200-10,000 Hz +/- 3 dB.
16E.	Does Supplier's Solution's mobile video system include a microphone with a minimum wireless audio range of 1000 feet? If yes, please explain.	Y	The wireless HiFi mic has a range of 1 to 2 miles, line-of-sight range, and building penetration capabilities.
17E.	Does Supplier's Solution's mobile video system include an activation button (minimum record button, emergency lights and/or siren)? If yes, please explain.	Y	The M500 activation triggers lights, siren, AUX triggers (x2), impact/ crash, speed, wireless microphone, and backseat occupancy.
18E.	Does Supplier's Solution's mobile video system include an uninterrupted recording duration of 18 hours? If yes, please explain.	Y	There is 64 hours of continuous recording at minimum.
19E.	Does Supplier's Solution's mobile video system include a power source between 9 and 18 volts? If yes, please explain.	Y	Motorola Solution's mobile video system provide multiple 12 volt switched sources.
20E.	Does Supplier's Solution's mobile video system include a record indicator (minimum illumination indicator visible outside and front seat)? If yes, please explain.	Y	The M500 System can be configured to record with no visual or audio indicators.
21E.	Does Supplier's Solution's mobile video system include a camera lens with a	Y	M500 cameras have auto-focus, auto-exposure and auto-white balance.

	Requirements	Y (yes), F (Future), N (No)	Additional Detail
	minimum of autofocus/auto exposure/auto white balance? If yes, please explain.		
22E.	Does Supplier's Solution's mobile video system include erasure prevention with a minimum of no erasing, altering, and/or recording over data? If yes, please explain.	Y	Saved videos will not be overwritten. Manual purge of videos is limited by agency defined admin personnel.
23E.	Does Supplier's Solution's mobile video system include time stamp (minimum video, audio, metadata consistent)? If yes, please explain.	Y	Each and every stage of the video's life is time stamped, and recorded in the audit trail.
24E.	Does Supplier's Solution's mobile video system include an audit log (minimum name/ID, automated verification-min 128 bit hash value)? If yes, please explain.	Y	The hash value is 256 bit.
25E.	Does Supplier's Solution's mobile video system include equipment diagnostic capabilities that can perform self-tests such as storage space remaining and send notifications to users for any malfunctions? If yes, please explain.	Y	Any error state is communicated to the user via the touchscreen display. Also, available storage is displayed on the same screen with a visual and audible alert when capacity is nearly reached.
26E.	Does Supplier's Solution's mobile video system include a minimum of 720p high definition resolution? If yes, please explain.	Y	The M500 resolution 3840x1920 pixels.
27E.	Does Supplier's Solution's mobile video system include a minimum of 128GB internal storage? If yes, please explain.	Y	The M500 internal has 1 TB automotive-grade solid state drive.
28E.	Does Supplier's Solution's mobile video system interfere with the normal operation of an emergency vehicle or possess any safety risks for the operator or passengers. Please explain.	N	<p>FMVSS standards are for all assemblies that make up a car e.g. rear view mirrors, seat belts, etc. There are no standards per FMVSS for accessories that don't make up the car. Our products are not considered "integral" to the function of the car and its safety. Our products fall in the same criteria as a charger for cell phones that you may plug in your car.</p> <p>The In-Car components are extremely modular and can be installed to fit each vehicles needs and not impact the officer's safety.</p> <p>Specifications:</p> <ul style="list-style-type: none"> <li>Digital Video Recorder (DVR) – The DVR can be console mounted with a 2" faceplate, or universally mounted anywhere in the vehicle, such as: in the trunk, on the cage, under the dash, etc. Access</li> </ul>

	Requirements	Y (yes), F (Future), N (No)	Additional Detail
			<p>to the DVR is only necessary when the redundant USB drive is needs to be accessed in the event that wireless transfer is either not operational or not installed.</p> <ul style="list-style-type: none"> <li>• Remote Display Control Panel – May also be mounted in various locations, depending on the existing equipment in the vehicle. Primarily, it will be mounted overhead on a vehicle specific bracket, within easy reach of the Officer.</li> <li>• Front Camera – It is recommended that the front camera be mounted on the windshield, which is the most stable location for the camera. With digital video, any vibration introduced to the camera will greatly affect video quality. This location also provides easy access to the camera buttons.</li> <li>• As stated above, Motorola has unique mounting brackets for all types of Police vehicles and we will determine with EPS the best possible location for all components prior to installation. This will help to ensure officer safety.</li> </ul>
29E.	Does Supplier's Solution's mobile video system cause any interference with any other electronic systems in operation (radio, computer, speed detection, etc.)? Please explain.	N	<p>Motorola understands the critical importance of ensuring that the MVR does not interfere with mission critical voice communications and complies with the requirement.</p> <p>Motorola has utilized knowledge of previous radio interference challenges and leveraged our experience in Land Mobile Radio engineering to implement critical design changes that ensure the M500 MVR and V300 body-worn camera products will not interfere with the in-vehicle and portable subscriber equipment used by an agency. The result is a mobile video device that is truly integrated into the total law enforcement ecosystem, eliminating the potential for harmful interference to the mission critical voice communications network.</p>
30E.	Does Supplier's Solution's mobile video system have a "low battery" indicator? If yes, please explain.	Y	The system is hardwired into the vehicle's battery. In the rare event that power is lost, the camera system will run off of an

	Requirements	Y (yes), F (Future), N (No)	Additional Detail
			internal battery. This battery will alert the user when its supply is low.
31E.	Does Supplier's Solution's mobile video system provide a process for the system to power down without causing any damage to recording device or data storage unit? If yes, please explain.	Y	System can self-power for several seconds in case of vehicle collision / power failure.
32E.	Is Supplier's Solution's mobile video system able to be installed and mounted to accommodate different types of vehicles, (i.e. Ford Explorer and Taurus, Chevrolet Impala and Tahoe, Fire and EMS vehicles, Public Transportation Buses or Subway cars) without degrading original equipment performance? If yes, please explain.	Y	<p>Our proposed solution provides the flexibility of multiple mounting locations:</p> <ul style="list-style-type: none"> <li>• DVR – The DVR can be console mounted with a 2" faceplate, or universally mounted anywhere in the vehicle, such as: in the trunk, on the cage, under the dash, etc. Access to the DVR is only necessary when the redundant USB drive is needed to be accessed in the event that wireless transfer is either not operational or not installed.</li> <li>• Remote Display Control Panel – May also be mounted in various locations, depending on the existing equipment in the vehicle. Primarily, it will be mounted overhead on a vehicle specific bracket, within easy reach of the Officer.</li> <li>• Front Camera – It is recommended that the front camera be mounted on the windshield, which is the most stable location for the camera. With digital video, any vibration introduced to the camera will greatly affect video quality. This location also provides easy access to the camera buttons.</li> <li>• Cabin Camera – It is recommended that the cabin camera be mounted against the ceiling of the vehicle, behind the front seat so that it may have full view of the back seat area.</li> <li>• Wireless Microphone(s) – The wireless microphone can be mounted anywhere in the vehicle, but it is recommended that it be within easy reach of the officer. Optimal mounting locations are overhead with a visor post bracket or attached to the console.</li> </ul>

	Requirements	Y (yes), F (Future), N (No)	Additional Detail
			<ul style="list-style-type: none"> <li>Motorola has unique mounting brackets for all types of Police vehicles and we will determine with EPS the best possible location for all components prior to installation.</li> </ul>
33E.	Does Supplier's Solution's mobile video system include a non-glare touch screen monitor or mechanism to control video in the vehicle? If yes, please explain.	Y	The system is capacitive multi-touch.
34E.	Does Supplier's Solution's mobile video recording system include a non-proprietary video format? If yes, please explain.	Y	MPEG4 Video evidence is encrypted at rest and in transit.
35E.	Does Supplier's Solution's mobile video system include recordings in both audio and video, with separate channels and capabilities of recording events inside and outside the vehicle simultaneously? If yes, please explain.	Y	Video and audio are captured on each camera and microphone to separate channels on the same video file. Audio that is captured during recording will be included with the video files on separate channels.
36E.	Does Supplier's Solution's mobile video system have wireless upload capabilities and an upload process that will resume from point of interruption if an upload is interrupted? If yes, please explain.	Y	The system can upload events via a Sierra Wireless LTE/Wi-Fi modem/router.
37E.	Does Supplier's Solution's mobile video system have a secure method to access camera system to prevent any unauthorized access to recording device? If yes, please explain.	Y	All administrative access is password-protected. Additionally, it is encrypted at rest, at 256 bit AES.
38E.	Does Supplier's Solution's mobile video system have the ability to allow user input for data/metadata associated with tagged video? If yes, please explain.	Y	The m500 has no limits to the number of user inputted metadata fields.
39E.	Does Supplier's Solution's mobile video system have ability to determine and authenticate an original digital video file or indicate if the file has been modified? If yes, please explain.	Y	Each component of the video (a proprietary file format) is assigned a 256 bit hash code, which is verified at each stage of the video's collection and processing.
40E.	Does Supplier's Solution's mobile video system have the ability to cover more than two cameras for use in prisoner transport vehicles? If yes, please explain.	Y	The system covers up to 5 cameras.
41E.	Camera(s) must have at least 12 hours of continuous recording available for review and retrieval, regardless if a record action was initiated or not.	Y	Redundancy Record-After-The-Fact (patented, configurable). Events can be recovered from the system even if no recording was initiated.

	Requirements	Y (yes), F (Future), N (No)	Additional Detail
42E.	Does Supplier's Solution's mobile video system camera(s) have the ability to record as a standalone system with external mic, but without a laptop? If yes, please explain.	Y	The system is designed to work independently of the laptop, but can integrate, if the agency prefers.
43E.	Does Supplier's Solution's mobile video system have a weatherproof external microphone (minimum IP66) that can operate within the range of -10 to +40 degrees Celsius? If yes, please include other weatherproof construction options.	Y	The operating temperature is -25°C to +65°C (-13°F to +149°F).
44E.	Does Supplier's Solution's mobile video system's external audio microphone have the ability to record for at least 12 hours before a charge is needed? If yes, please explain.	Y	The Hi-Fi microphone can record for 23 hours.
45E.	Does Supplier's Solution's mobile video system include interior-facing cameras with infrared capabilities to provide detail in low light? If yes, please explain.	Y	The system is 0 lux (infrared illumination).
46E.	Does Supplier's Solution's mobile video system's interior-facing cameras have microphones that can record audio? If yes, please explain.	Y	The system has an Integrated MEMs microphone (digital audio over coax).
47E.	Does Supplier's Solution's mobile video system include a visual indicator that shows when the hard drive that is storing the recordings is full? If yes, please explain.	Y	The system has an on-screen Disk Usage Meter that graphically shows the user how much video is on the current USB Flash Drive and how much space remains. Additionally, the system has audible and visual warnings when the drive is nearing its capacity.
48E.	Does Supplier's Solution's mobile video system include the capability to support at least three microphones (2 officers and one interior-facing camera)? If yes, please explain.	Y	The system supports up to 2x portable wireless microphones plus Support for discreet cabin microphone x2.
49E.	Does Supplier's Solution's mobile video system include external microphones with unique identifiers that can differentiate between multiple microphones? If yes, please explain.	Y	The system supports up to 2x portable wireless microphones plus Support for discreet cabin microphone x2.
50E.	Does Supplier's Solution's mobile video system include the ability to assign separate channels for individual microphones? If yes, please explain.	Y	The video playback will include all audio inputs, which can be chosen 1 at a time.
51E.	Does Supplier's Solution's mobile video system include the ability to prioritize one or more video wireless offloads over others? If yes, please explain.	Y	Videos marked as "critical" through the event tagging will automatically be prioritized.

	Requirements	Y (yes), F (Future), N (No)	Additional Detail
52E.	Does Supplier's Solution's mobile video system include the ability to capture the GPS coordinates of a vehicle in the video metadata? If yes, please explain.	Y	Support for integrated GPS location information and timing reference.
53E.	Native resolution (minimum 1280 X 960.) Please indicate other resolution options in the space provided.	Y	1920x1080p, 1280x720p, 864x480p (dual stream, configurable), with configurable high/medium/low bitrate.
54E.	Format (minimum MPEG4). Please indicate other format options in the space provided.	Y	Video evidence is encrypted at rest and in transit.
55E.	Does Supplier's Solution's mobile video system include configurable pre-event capability? If yes, please explain.	Y	Pre-Event settings are: None, 15 sec, 30 sec, 45 sec, 90 sec, 1 min, 2 min, 3 min, 5 min, or 10 min.
56E.	Does Supplier's Solution's mobile video system have a minimum frame rate of fixed 39.97 FPS day and night with no dropped frames? If yes, please include other frame rate options.	N	The frame rates can be configured to 5, 10, 15 and 30fps.
57E.	Does Supplier's Solution's mobile video system include a minimum sound quality of 32kHz – 44 kHz? If yes, please explain and include other sound quality options.	Y	This sound quality option applies.
58E.	Does Supplier's Solution's mobile video system's video compression (H.264 or H.265) meet recommendations set by ITU-T H.264 International Standard ISO/IEC 14496-10 (02/2014)? If yes, please include other video compression options.	Y	Motorola's mobile camera solutions are the first law enforcement camera systems to use the most advanced video compression technology available, H.264 High Profile (HP). H.264 HP technology creates files that are up to 40% smaller than video captured at equivalent qualities using simpler forms of H.264. At equivalent video qualities, older MPEG-4 systems create files that are more than 100% larger than H.264 HP. H.264 HP leverages a highly intelligent video compression algorithm to render video at much higher quality using the same data rate. It can also render video at the same quality using a much lower data rate. Additionally we use standard AAC multichannel audio for captured audio.
59E.	Does Supplier's Solution's mobile video system encode a group of pictures greater than 30 frames? If yes, please explain.	N	The M500 in-car camera systems record at 30 frames per second. Per DHS Memo: Thirty fps is a standard video frame rate that provides clear and smooth video. <a href="https://www.ojp.gov/pdffiles1/nij/grants/250382.pdf">https://www.ojp.gov/pdffiles1/nij/grants/250382.pdf</a> .
60E.	Does Supplier's Solution's mobile video system have the ability to demonstrate an industry standard method of validating the	Y	The videos are held in the device, protected, until multiple checks from the DEMS have been satisfied, resulting in a

	Requirements	Y (yes), F (Future), N (No)	Additional Detail
	reliable transfer of data from the recorder to the backend storage system including a digital signature that can be produced and then be used to validate the transfer of data? If yes, please explain.		"marked for deletion" file being sent back to the device.
61E.	Does Supplier's recorded footage contain a date and time stamp (hrs.: mins: secs) in the metadata and as a watermark on the video. The date and time stamp shall be exported with the imagery, without employing lossy compression. By what means does a user and/or administrator calibrate the date and time displayed by the device.	Y	Each piece of metadata is date/time stamped, and recorded in the audit log.
62E.	Does Supplier's Solution's mobile video system include the ability for footage time and date to be regularly and automatically checked and calibrated via an external clock signal including automatic adjustment for DST changes? If yes, please explain.	Y	The system is time synced via GPS.
63E.	Does Supplier's Solution's mobile video system have a unique ID that is embedded within every video file (as metadata)? If yes, please explain.	Y	Each video has a specific Recording Event ID, which is generated at the creation of the video.
64E.	Does Supplier's Solution's mobile video system include the ability to export all recorded footage to data archiving/management system in its original file and format without loss of quality or associated metadata? If yes, please explain.	Y	There are 3 ways to export the video in its native format. These include a manual download of the video itself, the unauthenticated sharing of the video, and the authenticated share.
65E.	Does Supplier's Solution's mobile video system protect data from becoming lost/corrupted if power is lost? If yes, please explain.	Y	In the event of a catastrophic lost to vehicle power, an internal battery will keep the system operational for an additional hour.
66E.	The device does not cause and is not subject to electromagnetic interference with nearby electronic equipment and radio communication systems using MIL-STD-461(G) standards	Y	
67E.	Does Supplier's Solution's mobile video system include the ability to prevent unauthorized alteration or deletion of records and recorded data? If yes, please explain.	Y	All permissions are password provisioned, and any such action is logged within the system. Adulteration of the files themselves will result in mismatched hash codes.
68E.	Does Supplier's Solution's mobile video system include the ability to encrypt data in transit that can meet FIPS 140-2?	Y	The system has FIPS-140-2 compliant encryption.

	Requirements	Y (yes), F (Future), N (No)	Additional Detail
69E.	Does Supplier's Solution's mobile video system include a description of how it can resume original retention schedules after recorded data has been used for an investigation, litigation, or any other legal action and said activity has been concluded? If yes, please explain.	Y	The configurable retention policy set by agency administration.
70E.	Does Supplier's Solution's mobile video system include the capability to access, search, and retrieve recorded data entirely throughout the predetermined retention period? If yes, please explain.	Y	The video remains accessible, searchable and reviewable throughout the entirety of its retention.
71E.	Does Supplier's Solution's mobile video system include the capability to restrict access to certain videos? If yes, please explain.	Y	Videos can be deemed as "restricted", on a one-off basis. Once set as restricted, only users with the permission to view restricted videos may view, search or access the video.

### 3.1.6 F. Automated License Plate Readers

	Requirements	Y (yes), F (Future), N (No)	Additional Detail
1F.	Does Supplier's Solution include the ability to be fully scalable, configurable, and customizable to allow for incremental changes in capacity and functionality? If yes, please explain.	Y	<ul style="list-style-type: none"> <li>L5M/F (LPR, standalone mobile and fixed): The LPR cameras have built in Infrared lights which emit and "light" the area in the direction the camera is aimed</li> <li>M500 (LPR, integrated with In-Car Video): The system can include as little as one LPR camera or as many as several thousand. Each camera would communicate with Motorola / Vigilant LEARN database in the cloud.</li> </ul>
2F.	Does Supplier's Solution function at night and in dim lighting situations with not external lighting required other than the lighting that is integrated within the hardware? If yes, please explain.	Y	The LPR cameras have built in Infrared lights which emit and "light" the area in the direction the camera is aimed.
3F.	Does Supplier's Solution include the ability to import data from third-party sources? If yes, please explain.	Y	Using API connections or a simple CSV file, existing data can be transmitted to the client's database.
4F.	Does Supplier's Solution include the ability to support a minimum of two (2) cameras operating independently and simultaneously for mobile setup? If yes, please explain.	Y	A minimum of (1) and a maximum of (6) cameras per vehicle/Mobile system can be obtained.
5F.	Does Supplier's Solution include the ability to operate on any mobile data terminal or on-board laptop without adversely affecting any other existing applications? If yes, please explain.	Y	Our solution can run "Headless" without the need for the MDT or in conjunction with the MDT using a windows based application called Car Detector Mobile. Using the MDT is the preferred method and allows for the most "real time" instant alerting of hot listed vehicle tags.
6F.	Does Supplier's Solution include cameras that are ruggedized, allowing for operation in wet conditions, extreme hot and/or cold temperatures, and in heavy winds? If yes, please explain.	Y	All Motorola cameras are rated for external use in low and high temperature climates.
7F.	Does Supplier's Solution include cameras that have the capability of being mounting, either temporarily or permanently in such a way that an individual's field of view is not obstructed? If yes, please explain.	Y	LPR cameras are mounted either to the roof of the vehicle or to the trunk but never in a way that would obstruct the view of the driver. Our cameras are meant to be mounted externally so that the Infrared lighting works properly and will provide the best results for license plate capture.

	Requirements	Y (yes), F (Future), N (No)	Additional Detail
8F.	Does Supplier's Solution include the ability for the cameras to provide IR for license plate capture and color overview images for vehicle identification? If yes, please explain.	Y	The cameras natively have IR built in for ensuring license plate capture and will also provide color overview of vehicle in very low lighting conditions. The cameras have two lenses one specifically for the color overview and one specifically in place for capturing the license plate.
9F.	Does Supplier's Solution include cameras with the ability to read all readable license plates, including digitally printed place, from all fifty (50) states including vanity plates, multiple plates and half-height characters, in both daylight and darkness and read license plates that produce digital characters? If yes, please explain.	Y	Our cameras have been tested with success on all plates mentioned in the question as well as paper temporary tags and the new Tennessee non-embossed license plates.
10F.	Does Supplier's Solution include a minimum one (1) self-illuminating IR camera for effective license plate image capture in a variety of weather and lighting conditions? If yes, please explain.	Y	The cameras natively have IR built in for ensuring license plate capture and will also provide color overview of vehicle in very low lighting conditions. The cameras have two lenses one specifically for the color overview and one specifically in place for capturing the license plate.
11F.	Does Supplier's Solution include a mobile camera system with a minimum of three (3) self-illuminating IR cameras for effective license plate image capture in a variety of weather and lighting conditions? If yes, please explain.	Y	A minimum of (1) and a maximum of (6) cameras per vehicle/Mobile system can be obtained.
12F.	Does Supplier's Solution's camera system include the capability to capture license plates in an adjacent lane on either side of the patrol vehicle while driving through traffic and/or parking lots? If yes, please explain.	Y	With proper configuration and camera quantity, our solution will perform as questioned. Typically, we ask agencies what their intention of use is for the mobile LPR system which then allows us to properly configure the correct number of cameras and camera mounting and angles to obtain the requested capture task.
13F.	Does Supplier's Solution's camera system include the capability to capture traffic in an adjacent lane while parked on the side or should of a roadway? If yes, please explain.	Y	Our solution will capture any license plate/vehicle that passes by the patrol vehicle with the correct camera configuration for the intended task of the system.
14F.	Does Supplier's Solution's camera system include the capability to capture any parking application from parallel to perpendicular parked car orientation with respect to the movement of a patrol vehicle? If yes, please explain.	Y	Our solution will due this as requested. Additionally our solution integrates with over 150 parking applications to provide a full parking solution to the end user and allow for the parking license plate data to also be shared with law enforcement.

	Requirements	Y (yes), F (Future), N (No)	Additional Detail
15F.	Does Supplier's Solution's camera system include the capability to capture the rear license plate of the vehicle as it passes the patrol vehicle or vice versa? If yes, please explain.	Y	The correct configuration and camera quantity, our solution will perform as questioned. Typically, we ask agencies what their intention of use is for the mobile LPR system which then allows us to properly configure the correct number of cameras and camera mounting and angles to obtain the requested capture task.

### 3.1.7 G. Interrogation/Interview Room

	Requirements	Y (yes), F (Future), N (No)	Additional Detail
1G.	Does Supplier's Solution include cameras with a resolution of at least 3 Megapixels. If yes, please explain and provide additional camera resolutions.	Y	Avigilon's camera offerings in this interview room solution range from 3 to 5 MP.
2G.	Does Supplier's Solution include digital camera recording of no less than 1080P? If yes, please explain and provide additional resolutions.	Y	1080p is approximately 2 MP resolution and Avigilon cameras in this solution will meet or exceed this requirement.
3G.	Does Supplier's Solution include cameras with brightness, color saturation, contrast settings to allow for room adjustments.	Y	All of these settings can be configured in the ACC Software or the camera's web page.
4G.	Does Supplier's Solution include a frame rate no less than 10 fps? If yes, please explain and provide additional frame rates.	Y	ACC Supports frame rates up to 60 FPS. Most Avigilon cameras support up to 30 FPS.
5G.	Does Supplier's Solution include cameras with Ethernet and Wi-Fi capabilities? If yes, please explain.	Y	Ethernet: Yes. Wi-Fi: No. The Ethernet connection plugs directly into the agency's existing infrastructure.
6G.	Does Supplier's Solution include covert and/or non-covert cameras? If yes, please explain.	Y	Avigilon offers a wide range of camera models. Both Covert and Overt options are available for interview rooms.
7G.	Does Supplier's Solution include omnidirectional microphones with at least a 10 ft. range? If yes, please explain.	Y	Offering includes a Louroe microphone integrated into the ACC camera system.
8G.	Does Supplier's Solution include auto-gaining microphones that allow for low voice amplification and decrease for loud voices? If yes, please explain.	Y	With the Louroe ASK-4 Kit, the included microphone has the ability to automatically adjust gain as described.
9G.	Does Supplier's Solution include a wall switch for one touch start or stop? If yes, please explain and provide other options.	Y	Avigilon system can initiate recording based on an Aux I/O input which can be triggered from a wall switch.
10G.	Does Supplier's Solution include multi-view configurations and options such as set subject recording or rotating cameras to view an entire room? If yes, please explain.	Y	Avigilon allows a user to view and record from multiple cameras simultaneously.
11G.	Does Supplier's Solution include the ability for its recorded sessions data to be documented, indexed, and annotated?. If yes, please explain.	Y	Avigilon ACC allows for annotation to recorded video via a bookmark feature, or through export and upload into an Evidence management application such as CommandCentral Evidence.

	Requirements	Y (yes), F (Future), N (No)	Additional Detail
12G.	Does Supplier's Solution include the ability for data to be recorded on a DVD, jump drive, storage media card, or imported to a networked computer? If yes, please explain additional storage capabilities and methods of data transfer.	Y	Avigilon ACC allows for simple export of selected video clips (even multiple clips in the same file). Video formats can be selected by the user and can be native (Proprietary) or standard (AVI). Users also have the option of exporting a video viewer with auto-installation file for native format exports.
13G.	Does Supplier's Solution include evidence based data software capabilities? If yes, please explain and provide additional options for handling data post-recording.	Y	With the inclusion of CommandCentral Evidence or Evidence Library.
14G.	Does Supplier's Solution have ability to provide storage for a recorded session of at least 12 consecutive hours? If yes, please explain.	Y	Avigilon is a robust Video Management System, and 12 hours of continuous recording is easily accomplished with a properly engineered ACC Storage solution.
15G.	The recorded footage must contain a date and time (hrs.: mins: secs) camera location stamp in the metadata and as a watermark on the video. The date and time stamp shall be exported with the imagery, without employing lossy compression. There must be a means by which the user/administrator can calibrate the date and time displayed by the device. (Sec 2)	Y	The Avigilon Access Control Center (ACC) supports this.  ACC is a management software designed to bring the right information to you so that you can take action, ACC provides an easy-to-use, AI-enabled user interface to help ensure critical events do not go unnoticed.
16G.	Does Supplier's Solution include a visual indicator of the hard drive indicating that the recordings are full? If yes, please explain.	Y	Avigilon ACC provides an Administrator an indication to how much video is being retained and how much storage space is available on the server.
17G.	Does Supplier's Solution meet all applicable fire, electrical, thermal, and mechanical safety requirements of UL 60065 and/or UL 60950-1? If yes, please explain.	Y	Avigilon provides our UL and Safety Certifications on our product datasheets, we do have some products that list the UL 60950 on them such as our POE-INJ2-95W-NA, however the cameras for this project have separate certifications that pertain to their intended use.
18G.	Does Supplier's Solution operate on standard 120 VAC power and be resistant to power fluctuations at power line voltages equal to $\pm 10\%$ of the nominal value and with variations in frequency $\pm 5\%$ of the nominal value of 60 Hz? If yes, please explain.	Y	Motorola's Solution operates on standard 120 VAC power and is resistant to power fluctuations at power line voltages equal to $\pm 10\%$ of the nominal value and with variations in frequency $\pm 5\%$ of the nominal value of 60 Hz.
19G.	Does Supplier's Solution include the ability for video stream(s), audio streams, and the associated metadata trigger events to	Y	Avigilon ACC's acceptable latency is 4-6ms or lower.

	Requirements	Y (yes), F (Future), N (No)	Additional Detail
	remain synchronized to an accuracy of 33 ms throughout the duration of a recording?		
20G.	Does Supplier's Solution include the ability for time/date metadata to be encoded at least once every 33 ms without overwriting video image information? If yes, please explain.	Y	Avigilon ACC's acceptable latency is 4-6ms or lower.
21G.	Does Supplier's Solution include the ability to record audio, line level with a minimum of 16-bit per sample, and a minimum sampling rate of 44 kHz producing an uncompressed linear pulse-code modulation (LPCM) stream? If yes, please explain.	Y	The Avigilon cameras can utilize line level audio wired into the H5A Corner Mount Camera or utilize the built in microphone.
22G.	Does Supplier's Solution include the capability of recording a frequency response of at least 100 Hz through 5 kHz? If yes, please explain.	Y	The capability of recording a frequency response of at least 100 Hz through 5 kHz can be achieved if the user uses the microphone linked to the right.
23G.	Does Supplier's Solution include the ability of having multiple cameras and displaying separate synchronized video streams from each of the cameras simultaneously? If yes, please explain.	Y	Up to 64 simultaneous streams can be viewed.
24G.	Does Supplier's Solution include the ability for a user to start and stop a recording using an authentication method such as a username, password or single sign-on using network credentials? If yes, please explain.	Y	User login and password requirements can be set by an administrator, or integrated to an enterprise Active Directory system.
25G.	Does Supplier's Solution include the ability to feed at least 2 video cameras simultaneously? If yes, please explain.	Y	Up to 64 simultaneous streams can be viewed.
26G.	Does Supplier's Solution include a notification that a recording is in progress? If yes, please explain.	Y	This can be configured in a number of ways through ACC mobile alerts, email message, as well as triggering a local light when recording is in progress which would require additional hardware.
27G.	Does Supplier's Solution include the ability to clearly capture all conversations in the interrogation/interview rooms? If yes, please explain.	Y	The microphone is designed to be used in an indoor environment specifically to pick up human conversations.
28G.	Does Supplier's Solution include the ability to produce and record metadata associated with but separate from video stream? If yes, please explain.	N	Avigilon Metadata is always associated with the video stream.
29G.	Does Supplier's Solution include the ability to record in progressive scan format to prevent interlace artifacts? If yes, please explain.	Y	Avigilon cameras utilize a Progressive Scan CMOS Sensor.

	Requirements	Y (yes), F (Future), N (No)	Additional Detail
30G.	Does Supplier's Solution include primary and staging storage that will backup of videos to prevent loss? If yes, please explain.	Y	This solution can be configured with failover storage. Additionally cameras can utilize on board SD storage in the event of a network failure.
31G.	Does Supplier's Solution include a minimum of 1280 X 960 Native resolution? If yes, please explain and include other resolution options that are available.	Y	1280x960 is ~1MP. Our solution offers cameras of 3 MP and 5 MP.
32G.	Does Supplier's Solution include a minimum format of MPEG4? If yes, please explain and include other formatting options.	Y	Our cameras will record in either H.264 or H.265 CODEC.
33G.	Does Supplier's Solution include a minimum fixed Frame Rate of 39.97 FPS day and night with no dropped frames? If yes, please explain and include other frame rate options.	Y	Frame rates are configurable and can vary from 1 to 60 FPS, with many cameras supporting a maximum of 30 FPS.
34G.	Video Compression (H.264 or H.265). Must meet recommendations set by ITU-T H.264 International Standard ISO/IEC 14496-10 (02/2014). Please indicate other video compression options in the space provided.	Y	While H.264 and H.265 compression are available, another compression option includes a proprietary 'SmartCODEC' format which is similar to H.264.
35G.	Does Supplier's Solution include the ability not to encode a group of pictures greater than 30 frames apart? If yes, please explain.	Y	The Keyframe Interval can be configured to be set at any number, we do not recommend exceeding more than 3 seconds or 3x the frame rate to ensure quality recordings.
36G.	Does Supplier's Solution include the ability of demonstrating an industry standard method of validating the reliable transfer of data from the recorder to the backend storage system, including a digital signature produced that can be used to validate the transfer of data? If yes, please explain.	Y	An open standard format (AVI/MP4) allows for the embedded overlay of metadata, including camera name, location, and local device. We use a digital hashing mechanism for authentication.
37G.	Does Supplier's Solution include the ability to have recorded footage that contains a date and time stamp (hrs.: mins: secs) in the metadata and as a watermark on the video? If yes, please explain.	Y	Avigilon's video management system records the date and time with every camera feed.
38G.	Does Supplier's Solution allow a user/administrator to calibrate the date and time displayed by a device? If yes, please explain.	Y	An administrator can calibrate the time stamp by pointing the recording server to an NTP Source.
39G.	Does Supplier's Solution include footage time and dates that are regularly and automatically checked and calibrated via an external clock signal? If yes, please explain.	Y	ACC regularly gets its date/time stamp from an NTP Source and therefore is calibrated against that NTP Source.

	Requirements	Y (yes), F (Future), N (No)	Additional Detail
40G.	Does Supplier's Solution include a unique ID that is embedded within every video file. If yes, please explain.	Y	This is not applicable as our video management system is continuously databasing the footage.
41G.	Does Supplier's Solution include the capability to export recorded footage to data archiving/management system in its original file and format without loss of quality or associated metadata. If yes, please explain.	Y	Our recording system is our archiving/management system. So this is natively in the original file format.
42G.	Does Supplier's Solution protect data from being lost or corrupted if the system loses power? If yes, please explain.	Y	Avigilon's storage system uses a RAID configuration which will retain the data in the event of a sudden power loss.
43G.	Does Supplier's Solution include the ability to prevent unauthorized alteration or deletion of records and recorded data. If yes, please explain.	Y	Solution allows for bookmarks to be password protected by the user that created the bookmark, thereby making it impossible to alter or delete without the password.
44G.	Does Supplier's Solution include the ability to encrypt data in transit that is FIPS 140-2 certified? If yes, please explain.	Y	An option for FIPS 140-2 encryption is available but not included with this offering.
45G.	Does Supplier's Solution include a description of how the system can resume original retention schedules after recorded data has been used for an investigation, litigation, or any other legal action and said activity has been concluded? If yes, please explain.	Y	Video feeds are recorded and retained for the set duration by default and will maintain that retention schedule regardless of what is included on the system.
46G.	Does Supplier's Solution include the capability to access, search, and retrieve recorded data entirely throughout the predetermined retention period? If yes, please explain.	Y	Recorded data can be searched and accessed through a number of useful tools including but not limited to, date/time search, bookmark search, event search, motion search, etc.
47G.	Does Supplier's Solution include the capability to restrict access to certain videos? If yes, please explain.	Y	Bookmarks that are password protected cannot be accessed by anyone without the password, and cameras can be setup to prevent unauthorized access based on user role and permissions.

### 3.1.8 H. Security, Video Storage, Software & Peripherals

	Requirements	Y (yes), F (Future), N (No)	Additional Detail
1H.	<p>Does Supplier's solution comply with all current COV ITRM Policies and Standards, as applicable, found at: <a href="https://www.vita.virginia.gov/it-governance/itrm-policies-standards/">https://www.vita.virginia.gov/it-governance/itrm-policies-standards/</a>.</p> <p>If proposed solution does not, please provide details that specify the Standard/Policy and how Supplier's solution does not comply.</p>	Y	
2H.	<p>Do Supplier's proposed interfaces to Commonwealth systems comply with or have approved exceptions to all applicable Commonwealth Data Standards as found at <a href="https://www.vita.virginia.gov/media/vitavirginia.gov/it-governance/docs/COV_Adopted_Standards.xlsx">https://www.vita.virginia.gov/media/vitavirginia.gov/it-governance/docs/COV_Adopted_Standards.xlsx</a></p> <p>If not, please explain.</p>	Y	
3H.	<p>Does Supplier's solution/application/product or any of Supplier's subcontractors' components include any Kaspersky-branded products? See definition below. If yes, please describe.</p> <ul style="list-style-type: none"> <li>• "Kaspersky-branded products" means information security products, solutions, and services supplied, directly or indirectly, by AO Kaspersky Lab or any of its predecessors, successors, parents, subsidiaries, or affiliates, including Kaspersky Lab North America, Kaspersky Lab, Inc., and Kaspersky Government Security Solutions, Inc. (collectively, "Kaspersky"), including those identified below:</li> <li>• Kaspersky-branded products currently known to DHS are: Kaspersky Anti- Virus; Kaspersky Internet Security; Kaspersky Total Security; Kaspersky Small Office Security; Kaspersky Anti Targeted Attack; Kaspersky Endpoint Security; Kaspersky Cloud Security (Enterprise); Kaspersky Cybersecurity Services; Kaspersky Private Security Network; and Kaspersky Embedded Systems Security.</li> </ul>	N	

	Requirements	Y (yes), F (Future), N (No)	Additional Detail
4H.	Is the cloud solution you are proposing a Software as a Service, Platform as a Service or Infrastructure as a Service delivery model? Please describe. Are you offering public, private, government cloud or a hybrid cloud model? Please describe available models and ensure Supplier's pricing includes Supplier's offered options.	Y	The solutions proposed include a complete cloud option, an on-premise solution, and a hybrid solution. Each agency can choose the architecture that best fits their needs.
5H.	Is the cloud solution you are proposing FedRamp authorized? If yes, please provide a description of Supplier's authorization.	F	In process, awaiting DHS-ICE Authority to Operate (ATO).
6H.	Does Supplier's firm follow and incorporate security and privacy recommendations and best practices from the National Institute Standards and Technology ("NIST")? If yes, please describe.	Y	Motorola uses a risk-based approach throughout our entire product development, implementation and operational support lifecycle. We strongly believe in three foundational pillars of cybersecurity: Confidentiality, integrity and availability. We address these pillars with the application of protection, detection and response controls built with industry-leading people, processes and technology.
7H.	Does Supplier's cloud solution rely on third-party partners or subcontractors? If yes please describe fully.	Y	<ul style="list-style-type: none"> <li>CommandCentral Evidence is a fully cloud hosted back office solution allowing an agency to have the application and all video storage in the cloud. CommandCentral Evidence utilizes Microsoft Azure Government, which is an isolated version of Azure that is exclusively used by U.S. Government Agencies and qualified vendors. Microsoft has signed CJIS agreements with multiple states and has committed to maintain strict standards of compliance. Motorola is a Microsoft Managed Service Provider for Azure Government and can sell services to our customers if they do not already have Azure Government contracts.</li> <li>AVA Manufacturer partners with Systems integrators for installation and maintenance of product</li> </ul>

	Requirements	Y (yes), F (Future), N (No)	Additional Detail
8H.	<p>Have Supplier's appropriate staff read the Commonwealth's security policies, standards and guidelines, applicable to Supplier's proposed solution, located at the following URL?  <a href="https://www.vita.virginia.gov/it-governance/itrm-policies-standards/">https://www.vita.virginia.gov/it-governance/itrm-policies-standards/</a>  Please state yes or no. Please explain the top 5 concerns you identify, if any.</p>	Y	<p>Motorola, as a trusted cybersecurity partner, provides products and services. Motorola projects align with various ITRM standards as mentioned below. These standards contain numerous Security Control Catalogs that cover various perspectives: Technical, Management, and Operational. Motorola projects address the different perspectives and primarily enable Technical controls and provide capabilities for Operational and Management needs. The Operation and Management perspectives' compliance depends on the Commonwealth of Virginia plan for operation and maintenance of the communication system.</p> <p>Motorola did not just unilaterally decide on a way to make our products secure. We use the NIST (National Institute for Standards and Technology - part of the US Dept. of Commerce) cybersecurity framework, the same as the Virginia Information Technologies Agency: a holistic, mature, rigorously-documented, nationally- and internationally-recognized system for secure design. Specifically, we align to the NIST SP 800-53 standard for cybersecurity. (in reference to <a href="https://www.vita.virginia.gov/media/vitavirginiagov/itgovernance/psgs/pdf/SEC525_Hosted_Environment_Information_Security_Standard.pdf">https://www.vita.virginia.gov/media/vitavirginiagov/itgovernance/psgs/pdf/SEC525_Hosted_Environment_Information_Security_Standard.pdf</a> &gt;INTERDUCTION &gt; 1.1 Intent)</p>
9H.	<p>Does Supplier's cloud solution allow a customer to solely manage their own encryption keys or must that function remain with solution provider? Please explain.</p>	Y	<ul style="list-style-type: none"> <li>• CCE Data Encryption Key Management</li> </ul> <p>Azure has extensive support to safeguard your data using data encryption, including various encryption models:</p> <ul style="list-style-type: none"> <li>• Server-side encryption that uses service-managed keys, customer-managed keys in Azure, or customer managed keys on customer-controlled hardware.</li> <li>• Client-side encryption that enables you to manage and store keys on premises or in another secure location.</li> <li>• Data encryption provides isolation assurances that are tied directly to</li> </ul>

	Requirements	Y (yes), F (Future), N (No)	Additional Detail
			<p>encryption (cryptographic) key access. Since Azure uses strong ciphers for data encryption, only entities with access to cryptographic keys can have access to data. Deleting or revoking cryptographic keys renders the corresponding data inaccessible. More information about data encryption in transit is provided in Networking isolation section, whereas data encryption at rest is covered in Storage isolation section.</p> <ul style="list-style-type: none"> <li>AVA encryption keys remain with the solution's provider.</li> </ul>
10H.	Does Supplier's Solution include the ability to share video evidence with groups inside and outside of an organization, without the need for proprietary file formats to view video? If yes, please explain.	Y	<ul style="list-style-type: none"> <li>CommandCentral Evidence provides streamlined end-to-end content management from the moment an incident is recorded by an officer to when it may be requested internally or externally from your government enterprise. Rapid prioritization and fulfillment saves time and delivery of content is fast and secure. From Judicial requests, CommandCentral Evidence provides customizable agency forms, workflow, and queuing tools to simplify sharing.</li> </ul> <p>Sharing links for a particular file is as easy as copying and sending the link via email or another communication platform. CommandCentral Evidence provides a button to copy the link to the computer's clipboard for immediate pasting in any software application. Each file generates a unique link that can be shared with any user who is given permissions to view that particular file.</p> <ul style="list-style-type: none"> <li>Ava a link can be sent to anyone in the work for immediate review of evidence, this link is password protected and has no access to the user interface of the VMS.</li> </ul>

	Requirements	Y (yes), F (Future), N (No)	Additional Detail
11H.	Does Supplier's Solution include the ability to assign controlled access to evidence, define roles, permissions and passwords? If yes, please explain.	Y	The Security Management module of CommandCentral Evidence contains all user information, permissions, and group level security settings. Users of the system must include any person who will log into the Web Client or operating a solution device. After the users are entered into the system, user groups are created to allow a specific set of permissions or claims. Users are then added into user groups based on the level of access needed. Based on the agency's desire for certain users to perform certain tasks, groups may be dynamically created for any circumstance necessary.
12H.	Does Supplier's Solution include the capability to create multiple evidence files, tags, markers, indexes, and clips without altering original video? If yes, please explain.	Y	The solution is capable of creating multiple evidence files, tags, markers, indexes, and clips without altering original video.
13H.	Does Supplier's Solution include a built-in redaction system for both audio and video? If yes, please explain.	Y	The solution include a built-in redaction system for both audio and video.
14H.	Does Supplier's Solution include multifactor authentication to ensure that only authorized users can securely access videos? If yes, please explain.	Y	Command Central Evidence The software supports both SSO and integrates with active directory. The system also supports MFA.  Ava supports 2FA, SAML & OKTA
15H.	Does Supplier's Solution include the ability for a user to export video or copy it to a flash drive? If yes, please explain.	Y	The Digital Evidence Management System (DEMS) solution includes the ability for a user to export video or copy it to a flash drive.
16H.	Does Supplier's Solution include the ability to generate and maintain forensically sound and meaningful events including audit logs, such as date/time, user identification, actions taken, files affected, and source/destination information? If yes, please explain.	Y	A complete audit trail for each device and event that is transferred, viewed and exported. It includes the results of the MD5 hashing and all user transactions.  Motorola DEMS provides a set of complete audit capabilities. The powerful audit functionalities can quickly generate reports on who, what, where and when data is accessed, making it easy for compliance officers. Audit logs can set up to be centrally managed with drill downs to division and detachment levels.

	Requirements	Y (yes), F (Future), N (No)	Additional Detail
			<p>Audit logs are automatically managed within Motorola DEMS and can be downloaded as a CSV or PDF file. Motorola DEMS audits all transactions from a system, user, and object activity level. This includes operator ID, workstation ID (or IP address) date and time of transactions, the transaction type, transaction results and user activity such as addition, deletions, dissemination and printing.</p> <p>Audit data is searchable by users, specific records, actions taken, and can be further refined by the specific application utilized. Date ranges can serve as additional modifiers and any searched results can be further refined by free text filters. This fine detail audit capability returns accurate results on specific transactions as well as results based not only on operators but across specific data or content.</p>
17H.	Does Supplier's Solution include the ability to determine if a video has been tampered with or has had attempts to tamper with and alert a specified individual or group? If yes, please explain.	Y	<p>Command Central Evidence</p> <p>If the video is tampered with, more specifically if the hash code is altered upon playing, all admin persons will be notified.</p> <p>Ava</p> <p>All exports are zipped with a hash that is variable using our video verifier tool on our support portal. A "hash" in this case is a certificate that is on file creation and cannot be forged, you cannot modify the file without modifying the hash.</p>
18H.	Does Supplier's Solution include the ability to have a system user authenticated prior to viewing or downloading videos? If yes, please explain.	Y	All functionality within the system uses Role Based Access Control.
19H.	The redaction method/process must be permanent when shared and separate from the original video. It must not employ a technique that can be reversed for the purpose of reconstructing the original data.	Y	Motorola DEMS includes video clipping and automated video redaction capabilities. The solution allows users to create clips from the browser-based video player, using slide bars to navigate the video. CommandCentral Evidence automatically processes the video and provides a clip of the original video. All clips are maintained under the original file for easy access and sharing.

	Requirements	Y (yes), F (Future), N (No)	Additional Detail
20H.	Does Supplier's Solution include the ability for a redacted video file to be achieved and easily retrieved for future use? If yes, please explain.	Y	The Motorola DEMS includes online redaction ability, simple to use.
21H.	Does Supplier's Solution include the capability to search for videos by serial number, case event number, date/time, and camera location? If yes, please explain.	Y	The Motorola DEMS allows for searches via a wide variety of criteria, including these.
22H.	Does Supplier's Solution include the ability to view video one frame at a time both backwards and forwards? If yes, please explain.	Y	The Motorola DEMS allows for this.
23H.	Does Supplier's Solution include the ability to view more than one video at the same time? If yes, please explain.	Y	Command Central Evidence The videos can be viewed in multiple tabs on an internet browser, as well as side by side on the same tab.  Ava Up to 16 cameras can be viewed at the same time
24H.	Does Supplier's Solution include the ability to produce an audit log of all recordings, deletions, edits, file name, and digital signature? These reports may also indicate which items have been deleted, edited, the time and date when changes were made, and who performed the actions. In addition, the log may also record what camera is associated with which officer and which video is associated with which camera. If yes, please explain.	Y	The Motorola DEMS retains an audit log of all of these, including after the video has been purged.
25H.	Does Supplier's Solution include the capability to prevent unauthorized alteration or deletion of records and recorded data? If yes, please explain.	Y	Each video component has a specified hash code that is checked and verified for each action taken upon the video.
26H.	Does Supplier's Solution system include the capability to establish the start of a predetermined retention period for any data stored by a date or other event trigger? If yes, please explain.	Y	Event categories can be assigned individual retention periods, which themselves can be overridden when the agency deems necessary.
27H.	List how Supplier's system can resume original retention schedules after recorded data has been used for an investigation, litigation, or any other legal action and said activity has been concluded.	Y	The default global retention period is 30 days. If you increase the retention period, all tag values with a retention period that is less the new minimum are automatically increased. The retention period can be any amount of time or indefinite. For certain files (homicides and sex crimes), there is an option to apply a

	Requirements	Y (yes), F (Future), N (No)	Additional Detail
			<p>"Set Permanent Hold" for those Tagged Incident types. The Motorola DEMS also provides the ability to override retention schedules and tag video for manual purge.</p> <p>Tag Management is used to define the metadata for the videos and images details. Tag Management is also used to set specific retention policies based on that Tag identifier. All multimedia files with that specific Tag identifier will be retained in the system for the customer specified retention period for that specific Tag.</p> <p>Retention periods can be configured by the agency according to specific video categories. For example, videos that are categorized as "Warnings" may be set to purge after 30 days, whereas videos categorized under "Use of Force" may be retained for three years or five years, or whatever time period the City requires. Logging levels are fully configured by the SPS, logs and reports can be viewed online or exported. Audit logs can be exported in multiple file formats and can be archived and retained for SPS determined periods of time.</p> <p>Rules are created in the Evidence Management module. Rules will determine how long the video is kept before it is deleted or archived. This section leverages the Event Category that was selected by the 4RE or later identified in the client. For each Event Category listed, the City may specify an action that is performed and at what interval it is performed. The City determines both the retention period, and the action performed on the event. The system can have no categories assigned or up to 15 active categories for the recorded event.</p> <p>The next configuration related to Data Cleanup is how the City wants the Data Cleanup procedure to run. The schedule can run automatically or manually started by a user with permissions. Regardless of</p>

	Requirements	Y (yes), F (Future), N (No)	Additional Detail
			when and how it runs, Data Cleanup will run through the entire list of retention rules and perform the actions necessary across the entire solution.
28H.	Does Supplier's Solution include the capability to access, search, and retrieve recorded data entirely throughout the predetermined retention period? If yes, please explain.	Y	Motorola DEMS solution include the capability to access, search, and retrieve recorded data entirely throughout the predetermined retention period.
29H.	Does Supplier's Solution include the capability to restrict access to certain videos? If yes, please explain.	Y	Command Staff can restrict access to any recorded event so that only those with permission to view restricted content can view that video. This is performed by clicking a "Restrict access" button within the file asset.
30H.	Is Supplier able to provide a private cloud platform for state and local government customers?	Y	<p>Motorola is Microsoft Managed Service Provider for Azure Government and can sell services to our customers if they do not already have Azure Government contracts. The cloud platform is designed to meet U.S. government demands, including:</p> <p>Physical and logical network-isolated instance of Azure Dedicated to U.S. government with all data, applications, and hardware residing in the continental U.S. Broad range of compliance certifications critical to U.S. government U.S. datacenters located more than 500 miles apart, providing true geographic redundancy Support for hybrid scenarios, as well as a vast array of services, programming languages, and tools.</p> <p>Ava Any S3 capable cloud provider for video storage</p>

## 3.2 Solution Descriptions

### 3.2.1 V300 body-worn camera Solution Description

The V300 body-worn camera captures clear video and audio of every encounter from the user's perspective. Its continuous-operation capabilities allow constant recording, helping the user to capture every detail of each situation and create a reliable library of evidence for case-building and review.

The V300 is easy to operate, with four control buttons. Its built-in Record-After-the-Fact® (RATF) technology enables the device to capture important video evidence that can be retrieved hours or days after an incident occurs, even if a recording is not triggered by the user or sensor. With RATF, officers can prioritize response to immediate threats over manually activating their camera.



#### 3.2.1.1 Key Features of the V300

- **Detachable Battery** - The V300's detachable battery allows officers to switch to a fully-charged battery if their shift goes longer than expected. Since batteries can charge without being attached to a camera, they can be kept fully charged and ready to go in a dock for use. This feature is especially helpful for agencies that share cameras among multiple officers.
- **Wireless Uploading** - Recordings made by the V300 can be uploaded to the Commonwealth of Virginia's evidence management system via Wi-Fi or LTE networks. This enables easy transfer of critical recordings to headquarters for immediate review or long-term storage.
- **Data Encryption** - The V300 uses FIPS-140-2 compliant encryption at rest and in transit. This ensures that recordings made by officers are secure from unauthorized access.
- **Record-After-The-Fact®** - Our patented Record-After-the-Fact® technology records even when the recording function isn't engaged. These recordings are uploaded to the evidence management system and allow users to review important evidence that was captured days before.
- **Natural Field of View** - The V300 eliminates the fisheye effect from wide-angle lenses that warps video footage. Distortion correction ensures a clear and complete evidence review process.
- **SmartControl Application** - Motorola's SmartControl Application allows V300 users to tag and preview video, livestream from the camera to the app, adjust vertical field of view, and change camera settings. This application is available for iOS and Android.
- **In-Field Tagging** - The V300 enables easy in-field event tagging. It allows officers to view event tags and save them to the category directly from the camera or via smartphone application. This is made easier in conjunction with an integrated in-car video recording system.
- **Auto Activation** - Multiple paired V300 cameras and in-car systems can form a recording group, which can automatically start recording when one of the group devices starts a recording. They can be configured to initiate group recording using triggers like lights, sirens, doors, gun racks, and other auxiliary inputs. Up to eight V300 cameras can also collaborate on recordings without an in-car system, using similar triggers. Group recordings are uploaded and automatically linked in DEMS as part of one incident.

### 3.2.1.2 V300 and In-Car Video Integration

The V300 integrates seamlessly with the M500 In-Car Video System, capturing video of an incident from multiple vantage points. With these in-car video systems, all critical functions are never more than three taps away. This integration includes the following features:

- **Distributed Multi-Peer Recording** - Multiple V300 cameras and in-car systems can form a recording group and, based on configuration, automatically start recording when one of the group devices begins recording. Group recordings are uploaded and automatically linked in DEMS as part of one incident.
- **Automatic Tag Pairing** - Recordings captured by integrated in-car systems and V300 cameras can be uploaded to DEMS with the same tags automatically. From the in-car system's display, the videos can be saved under the appropriate tag category. The tag is then automatically shared with the V300 video and is uploaded as part of one incident, along with the officer's name.
- **Evidence Management Software** - When body-worn and in-car cameras both record the same incident, Motorola's evidence management software automatically links those recordings based on officer name, date, and time overlap associated with the devices.
- **Additional Audio Source** - The V300 can serve as an additional audio source when integrated with the in-car video system. The V300 also provides an additional view of the incident and inherits the event properties of the in-car system's record, such as officer name, event category, and more, based on configuration.

### 3.2.1.3 V300 and APX Radio Integration

Motorola's APX two-way radios with Bluetooth capability, and the V300 body-worn cameras are able to work together to capture video evidence. When the APX's emergency mode button is pressed, the V300 is automatically triggered to capture video evidence. The recording will continue until stopped by the officer via the start/stop button on the V300 or group in-car video system.

### 3.2.1.4 Holster Aware Integration

The V300 integrates with Holster Aware, a holster sensor that automatically prompts the V300 to record the moment holstered equipment is drawn. All sensor and V300 associations can be managed within any DEMS. This sensor allows officers to record high-stress events as they unfold, without having to sacrifice situational awareness by manually activating the V300.

### 3.2.1.5 Docking Stations

The V300 has three docking options:

**Transfer Station** - The Transfer Station is built for large, multi-location agencies with large numbers of V300 cameras in service at any given time. It can charge up to eight fully assembled cameras or individual battery packs. Each of the eight docking slots includes an LED indication of battery charging status and upload status. While a V300 is being charged, the Transfer Station can automatically offload its recording to Evidence Management Solution via an integrated 10Gb/1Gb connection to the local area network (LAN). The Transfer Station connects directly to the local area network for fast offload of recorded events to



storage while charging the camera battery. The Transfer Station supports comprehensive device management capabilities, such as camera configuration, checkout and officer assignment options; rapid checkout, kiosk, and individual camera checkout; automatic firmware and configuration updates.

**USB Base** - The USB Base charges the battery of a single V300 camera or a standalone battery pack. The USB Base can be mounted in a vehicle or attached to a desktop or Mobile Data Computer, with 12V or a USB connection for power. It has LED indications of battery charging status and upload, and an ambient light sensor for optimal LED brightness control, from the bright sunlight, to the dim interior of a patrol car. When connected to a laptop or desktop, the USB Base can be used to upload recordings to an evidence management system, receive firmware and configuration updates.

**Wi-Fi Base** - The Wi-Fi Base is mounted in the vehicle. It facilitates V300 upload of evidence to evidence management system, firmware updates, communication between V300 and in-car group devices, charges fully assembled V300 cameras or individual battery packs and more. It has LED indications of battery charging status and upload, and an ambient light sensor for optimal LED brightness control, from the bright sunlight, to the dim interior of a patrol car.



## 3.2.2 M500 In-Car Video System Solution Description

The M500 In-Car Video System is the first AI-enabled in-car video solution for law enforcement. It combines Motorola's powerful camera technology with our industry-leading digital evidence management software (DEMS), to improve the quality of evidence collected and streamline the data sharing process throughout investigation.

### 3.2.2.1 Video Recording and Capture

Equipped with high-definition, 1080p front and cabin cameras, the M500 creates a reliable record of evidence that can be uploaded to your Digital Evidence Management solution from any location with a cellular signal. Its artificial intelligence interface continuously monitors the cabin camera, detecting human faces as they enter the vehicle and automatically recording whenever anyone is detected in the back seat, eliminating the need to scroll through video of empty cabins to collect important evidence. And with patented Record-After-the-Fact (RATF) technology, the M500 ensures continuous recording from both front and cabin perspectives, whenever the camera is on - even if the recording function isn't manually engaged. All RATF data is automatically uploaded to DEMS, for easy review and data capture whenever it is needed.

### 3.2.2.2 License Plate Capture and Analysis

The M500's artificial intelligence interface also uses Vigilant PlateSearch, a license plate recognition technology that reads license plates from up to 40 feet away. It allows users access to a database of over 33 billion detections, where agencies can search for insights such as location; year, make, and model; and associate vehicle analysis. This can allow surveying for license plates that could be associated with arrest warrants or stolen automobile reports.

### 3.2.2.3 Display and User Interface

The M500 system features a 5" control panel with a bright, clear display. It offers an icon-driven interface and intuitive controls to streamline field operations. Users can execute any function on the device within three taps of the screen.

### 3.2.2.4 Automatic Recording Functionality

Users can program various sensors to activate a new recording. These sensors include emergency lights, sirens, auxiliary inputs, wireless microphones, vehicle speed, and crash detection. When these sensors are triggered, the integrated cameras automatically start recording, allowing officers to capture video evidence without manually activating any cameras.

### 3.2.2.5 Integration with V300

The M500 integrates with the V300 body-worn camera for synchronized recording and playback, as well as wireless uploading. Whenever one camera in a group is activated, the Group Recording function activates all other cameras in that group within Wi-Fi range, for easy capture of all available information. Video evidence on a V300 body-worn camera can be uploaded to your evidence management system via an LTE network (such as FirstNet) by using the optional V300 docking station in your vehicle.

### 3.2.2.6 CommandCentral Evidence

The M500 solution includes CommandCentral Evidence, a unified platform for video and device management. It provides command centers and field officers a way to store records, evidence, voice recordings, and video footage captured from M500 and V300 cameras all in one place. With this solution, agencies can streamline the collection of evidence captured by officers' cameras and upload them into one platform. This eliminates data silos that would inhibit agencies efficiency while working on cases. CommandCentral Evidence then allows for playback, redaction, automated transcription, and more to get the most information out of the video evidence as possible. Once evidence is reviewed, it can be shared with prosecutors, other agencies, and the community all while adhering to chain of custody.

## 3.2.3 Video Evidence Management

The Interview Room video system and application are compatible with three Motorola video evidence management systems: Evidence Library 5, Evidence Library Cloud, and CommandCentral Evidence.

### 3.2.3.1 Evidence Library 5 and Evidence Library Cloud

Evidence Library is an easy-to-use digital evidence management system available in on-premises and cloud-based storage configurations. It simplifies digital evidence management by allowing users to upload video evidence with important information and groups' relevant evidence together. This information includes a recording's date and time, event ID, interviewer name, and event type. Video evidence captured during interview room sessions is uploaded to Evidence Library for storage and management, organizing all relevant information together in the process.

Evidence Library has two digital evidence management options, including the cloud-based EvidenceLibrary.com and Evidence Library 5 on-premises. Whether on-premises or cloud-based, Evidence Library can be accessed from any location on any agency desktop or laptop and provides comprehensive user, device, and video management.

#### 3.2.3.1.1 CommandCentral Evidence

CommandCentral Evidence enables users to contain, organize, and manage large amounts of multimedia evidence from your agencies' Interview Rooms and other sources. Once video evidence is stored in CommandCentral Evidence, users can easily search, correlate, and review alongside other case-related evidentiary information, helping users find additional contextual information on an incident and build cases quickly. Users can search and filter content to locate additional relevant cases or incident information to link to Interview Room videos. Evidence items referenced frequently can be grouped together or bookmarked with the interface for easy and quick access to relevant case information and video evidence.

CommandCentral Evidence allows personnel to make informed decisions from an organized and complete case evidence view, while offering access control to allow only authorized personnel or judiciary partners' access to sensitive information. Users can share interview recordings—with the chain of custody intact—with judiciary partners via an unauthenticated link or with authenticated users via a dedicated prosecutor web portal.

### 3.2.3.2 Evidence Library 4 Solution Description

Evidence Library 4 simplifies evidence management, automates data maintenance, and facilitates management of your department's devices.

It is compatible with M500 in-car video systems and V300 body-worn cameras, and allows you to efficiently manage video evidence. Live-streaming capabilities are also available through the Watch Commander and V300 SmartConnect applications.



#### 3.2.3.2.1 Video Evidence Management

##### Simplified Evidence Review

Evidence Library 4's intuitive user interface allows you to upload evidence data with important information, such as date and time, device used to capture, event ID, officer name, and event type. This allows incidents recorded from several devices to be found easily and viewed simultaneously, expediting the review process by eliminating the task of reviewing irrelevant footage.

Its built-in media player includes a visual display of incident data, allowing you to see when lights, sirens, or brakes were activated during the event timeline. Users can also view the metadata graph, which includes speed triggers, to quickly find moments of interest.

Other relevant files, such as PDFs, spreadsheets, reports, third-party videos, audio recordings, pictures, and drawings, can also be grouped together and stored under a specific case entry, allowing all pertinent information to be stored in Evidence Library.

##### Easy Evidence Sharing

Users are able to export evidence on a DVD, or as MP4, MP2, AVI, and WMV files for simpler sharing in the evidence review or judiciary sharing process.

You can also find data using audit log filters, including criteria such as import, export, playback, download, share, modify, and archive dates.

##### Automatic Data Maintenance

Evidence Library 4 lets you automatically organize stored evidence data, allowing you to save time that would be spent managing data manually. It can schedule the automatic movement, archiving, or purging of events on any basis, based on how you want to configure the system.

Security groups and permissions are easily set-up in Evidence Library 4, allowing you to give individuals access to evidence on an as-needed basis.

##### Integration with M500 and V300 Cameras

Officers on the road are able to automatically upload video from in-car systems and body cameras. This eliminates the need for trips to and from the station solely for uploading data into the system.

Video and audio captured by the M500 in-car and V300 body-worn camera systems are automatically linked in Evidence Library 4 based on time, location, and recording group. You can then synchronize playback of video and audio from multiple devices at the same time.

### Optional Live Video Streaming

Evidence Library 4 can also allow high-definition, live video streaming with the addition of the WatchCommander Application, accessible on any workstation or smartphone with appropriate permissions. Through Watch Commander, you can access live video streaming from all connected M500 systems. You may also listen to audio if microphones are active.

SmartConnect, an optional smartphone application, provides V300 body-worn camera users with immediate in-field access to V300. SmartConnect includes the ability to pair with V300 cameras, change officer settings, categorize recordings with incident IDs and case numbers, and play back recordings.

#### 3.2.3.2.2 Device Management

Evidence Library 4 allows agencies to assign users to devices, track them, and streamline shift changes. You can easily manage, configure, update firmware, and deploy in-car and body-worn cameras. Individual preference settings can be configured based on user profiles, allowing quick device transactions within a pooled device system. Evidence Library 4 also tracks devices and enables them to be quickly exchanged between officers during shift changes. This minimizes the amount of devices needed for your fleet.

### Device Tracking

You can easily manage, configure, and deploy your in-car and body-worn cameras in Evidence Library 4. Devices can be assigned to personnel and tracked within Evidence Library 4, helping you keep track of which users have specific devices.

### Faster Shift Changes

Evidence Library 4's Rapid Checkout Kiosk feature allows agencies using a pooled camera system to use fewer cameras. Cameras can be checked out at the start of a shift using an easy-to-use interface. At the end of the shift, the camera can be returned to its dock, where the video is automatically uploaded and the camera is made ready to be checked out and used for the next shift.

Devices can also be configured to remember individual preference settings for each user, including volume level and screen brightness. These settings are applied whenever a device is assigned to a specific officer. A variety of settings within Evidence Library 4 also enable you to configure devices to operate in alignment with your agency's policies and procedures.

#### 3.2.3.3 Evidence Library 5 Solution Description

Evidence Library 5 simplifies evidence management, automates data maintenance, and facilitates management of your department's devices.

It is compatible with V300 body-worn cameras, as well as M500 in-car video systems, enabling you to upload video evidence quickly and securely.

The optional SmartControl and SmartConnect smart device applications support live video streaming from body-worn cameras, allowing personnel to view footage captured by the cameras in the app.



### 3.2.3.3.1 Video Evidence Management

Evidence Library 5 delivers benefits to all aspects of video evidence management. From streamlining the evidence review process to automatically maintaining your stored data, Evidence Library 5 makes evidence management as efficient as possible. With Evidence Library 5, you minimize the amount of time spent manually managing evidence, allowing your team to spend more time in the field.

#### **Simplified Evidence Review**

Evidence Library 5 makes evidence review easier by allowing you to upload captured video and audio from your in-field devices, sharing important information that groups relevant evidence together. This information includes a recording's date and time, device used to capture, event ID, officer name, and event type. Incidents recorded from several devices can be found easily and viewed at the same time, eliminating the task of reviewing irrelevant footage.

Its built-in media player includes a visual display of incident data, allowing you to view moments of interest, such as when lights, sirens, or brakes were activated during the event timeline, status of cameras and microphones, and patrol speed graph.

Other relevant files, such as PDFs, spreadsheets, reports, third-party videos, audio recordings, pictures, drawings, and applicable external files can also be grouped together and stored under a specific case entry, allowing all pertinent information to be stored together in Evidence Library.

#### **Easy Evidence Sharing**

Evidence Library 5 empowers you to easily share information in the evidence review or judiciary sharing process by exporting evidence data. It is capable of searching for data using various criteria, including import, export, playback, download, share, and modification dates, allowing users to quickly find relevant evidence.

#### **Automatic Data Maintenance**

Evidence Library 5 lets you automatically organize the evidence data you store, allowing you to save time that would be spent manually managing it. It can schedule the automatic movement or purging of events on any basis, based on how you want to configure the system.

Security groups and permissions are easily set up in Evidence Library 5, allowing you to grant individuals access to evidence on an as-needed basis.

#### **Integration with In-Car and body-worn cameras**

Officers on the road are able to automatically upload encrypted video from in-car systems and body cameras. This eliminates the need for trips to and from the station solely for uploading data into the system.

Video and audio captured by M500 and V300 camera systems are automatically linked in Evidence Library 5 based on time and location. You can then utilize synchronized playback and export of video and audio from multiple devices in the same recording group, where video and audio streams can be matched together.

#### **Optional Live Video Streaming**

Evidence Library 5 integrates with SmartControl, an optional mobile application for Android and iOS that allows officers to review video evidence from their smartphone or tablet while they're still in the field.

SmartControl also allows officers to categorize recordings using event tags, stream live video from, and change camera settings, such as adjusting field of view, brightness, and audio levels.

SmartConnect, an optional smartphone application, provides V300 body-worn camera users with immediate in-field access to their body cameras. SmartConnect includes the ability to pair with V300 cameras, adjust officer preferences, categorize recordings with incident IDs and case numbers, and play back recordings.

#### 3.2.3.3.2 Device Management

Agencies using Evidence Library 5 can assign users to devices, track them, and streamline shift changes. You can easily manage, configure, update firmware, and deploy in-car and body-worn cameras. Individual preference settings can be configured based on user profiles, allowing quick device transactions within a pooled or assigned device system. Evidence Library 5 also enables devices to be quickly exchanged between officers during shift changes. This minimizes the number of devices needed for your fleet.

#### Device Tracking

You can easily manage, configure, and deploy your in-car and body-worn cameras in Evidence Library 5. Devices can be assigned to personnel within Evidence Library 5 and tracked, helping agencies keep track of which users have specific devices.

#### Faster Shift Changes

Evidence Library 5's Rapid Checkout Kiosk feature allows agencies using a pooled camera system to use fewer cameras. Cameras can be checked out at the start of a shift using an easy-to-use interface. At the end of the shift, the camera can be returned to its dock, where the video is automatically uploaded and the camera is made ready to be checked out and used for the next shift.

Devices can also be configured to remember individual preference settings for each user, including haptic and audible alert volume level, screen brightness and camera aim. These settings are applied whenever a device is assigned to a specific officer. A variety of settings within Evidence Library 5 also enable you to configure devices to operate in alignment with your agency's policies and procedures.

#### 3.2.3.4 Evidence Library Cloud Solution Description

Evidence Library Cloud simplifies evidence management, automates data maintenance, and facilitates management of your department's devices, all in a cloud-based, off-premises storage solution.

It is compatible with V300 body-worn cameras, as well as M500 in-car video systems, enabling you to upload video evidence quickly and securely. It also allows live-streaming capabilities through the optional SmartControl and SmartConnect applications.



##### 3.2.3.4.1 Video Evidence Management

Using Evidence Library Cloud delivers benefits to all aspects of video evidence management. From streamlining the evidence review process to automatically maintaining your stored data, Evidence Library Cloud makes evidence management as efficient as possible. With Evidence Library Cloud, you

minimize the amount of time spent manually managing evidence, allowing your team to spend more time in the field.

### **Simplified Evidence Review**

Evidence Library Cloud makes evidence review easier by allowing users to upload evidence into cloud storage from their in-field devices. When uploading evidence, important information is shared that groups relevant evidence together. This information includes a recording's date and time, device used to capture, event ID, officer name, and event type. This allows you to view recordings of an incident that were taken from several devices simultaneously, eliminating the task of reviewing irrelevant footage during review.

Its built-in media player includes a visual display of incident data, allowing you to tag moments of interest, such as when lights, sirens, or brakes were activated during the event timeline.

Other relevant files, such as PDFs, spreadsheets, reports, third-party videos, audio recordings, pictures, and drawings, can also be grouped together and stored under a specific case entry, allowing all pertinent information to be stored together in Evidence Library.

### **Easy Evidence Sharing**

Evidence Library Cloud allows you to easily share information in the evidence review or judiciary sharing process by exporting evidence data as MP4 files.

You can also find relevant evidence data using audit log filters, including criteria such as import, export, playback, download, share, and modify dates.

### **Automatic Data Maintenance**

Evidence Library Cloud lets you automatically organize the evidence data you store, allowing you to save time that would be spent manually managing it. It can schedule the automatic movement or purging of events on a daily, weekly, or monthly basis, based on how the user wants to configure the system.

Security groups and permissions are easily set-up in Evidence Library Cloud, allowing you to grant individuals access to evidence on an as-needed basis.

### **Integration with In-Car and body-worn cameras**

Officers on the road are able to automatically upload encrypted video from in-car systems and body cameras. This eliminates the need for trips to and from the station solely for uploading data into the system.

Video and audio captured by the M500 and V300 camera systems are automatically linked in Evidence Library Cloud based on time and location. You can then utilize synchronized playback and export of video and audio from multiple devices in the same recording group, where video and audio streams can be matched together.

### **Optional Live Video Streaming**

Evidence Library Cloud integrates with SmartControl, an optional mobile application for Android or iOS that allows officers to complete evidence review work normally completed at their desk from their smartphone.

SmartControl also allows officers to categorize recordings using event tags, stream live video from, and change camera settings, such as adjusting field of view, brightness, and audio levels.

SmartConnect, an optional smartphone application, provides V300 body-worn camera users with immediate in-field access to their body cameras. SmartConnect includes the ability to pair with V300 cameras, adjust officer preferences, categorize recordings with incident IDs and case numbers, and play back recordings.

#### 3.2.3.4.2 Device Management

Agencies using Evidence Library Cloud are able to assign users to devices, track them, and streamline shift changes. You can easily manage, configure, update firmware, and deploy in-car and body-worn cameras. Individual preference settings can be configured based on user profiles, allowing quick device transactions within a pooled device system. Evidence Library Cloud also tracks devices and enables them to be quickly exchanged between officers during shift changes. This minimizes the amount of devices needed for your fleet.

### Device Tracking

You can easily manage, configure, and deploy their in-car and body-worn cameras in Evidence Library Cloud. Devices can be assigned to personnel within Evidence Library Cloud and tracked, helping agencies keep track of which users have specific devices.

### Faster Shift Changes

Evidence Library Cloud's Rapid Checkout Kiosk feature allows agencies using a pooled camera system to use fewer cameras. Rapid Checkout Kiosk feature allows agencies using a pooled camera system to use fewer cameras. Cameras can be checked out at the start of a shift using an easy-to-use interface. At the end of the shift, the camera can be returned to its dock, where the video is automatically uploaded and the camera is made ready to be checked out and used for the next shift.

Devices can also be configured to remember individual preference settings for each user, including volume level, screen brightness and camera aim. These settings are applied whenever a device is assigned to a specific officer. A variety of settings within Evidence Library Cloud also enable you to configure devices to operate in alignment with your agency's policies and procedures.

#### 3.2.3.5 CommandCentral Evidence Solution Description

##### 3.2.3.5.1 Overview



CommandCentral Evidence provides a suite of digital evidence management tools that help users contain, organize, and act on large amounts of incoming multimedia. These tools streamline the collection, capture, storage, and sharing of data from a single location. By centralizing digital evidence

storage and management, CommandCentral Evidence removes data silos and helps users get the most out of their critical information.

Users access all case content from a single, cloud-based location. Cases integrate records and evidence content, allowing users to view all media associated with a case. These cloud-based tools help users account for all evidence regardless of source. CommandCentral Evidence makes it easy to secure and share content with chain of custody intact to improve collaboration.

CommandCentral Evidence is available without any upfront investment. Monthly subscription service costs include the software and video storage. And CommandCentral Evidence uses the Azure GovCloud, securing data at rest and in transit to protect communications. This complies with CJIS guidelines and the NIST framework, audited annually against the Service Organization Control 1 and 2 reporting framework.



### 3.2.3.5.2 The CommandCentral Platform

CommandCentral is an end-to-end platform of interconnected solutions that unify data and streamline public safety workflows from a tip or call to case closure. Through single sign-on capabilities, your personnel can access all CommandCentral software applications with one agency username and password for a more streamlined workflow. The CommandCentral platform puts your agency's data to better use, improves safety for critical personnel, and helps keep your focus on the communities you serve.

CommandCentral evolves over time, maximizing the value of existing investments while adopting new capabilities that better meet your personnel's growing needs. With cloud-based services and an agile development methodology through constant user feedback, Motorola can deliver new features and functionality in a more manageable, non-intrusive way.



**The CommandCentral End-to-End Platform**

### 3.2.3.5.3 Community Interaction Tools

CommandCentral Evidence provides a set of Community Interaction tools to enhance the partnership between your agency and the public. This solution is the foundation for transparent community engagement by streamlining the flow of data between your agency and the people you serve. The toolkit helps build public trust and increases the value of community intelligence. As a result, your agency gains new ways to connect with the public, building collaboration and transparency.

Community interaction centers around CityProtect.com. This mobile-friendly webpage offers citizens a centralized set of tools to contribute to public safety. The tools and forms within CityProtect enable you to create a dialogue with your community and promote the value of citizen intelligence. Sharing and receiving important data is streamlined to make engagement easier.

#### Agency Page

CommandCentral Evidence provides a dedicated, public-facing webpage for your agency. This customizable page offers a unique URL to serve as the hub for community interaction with access to the tools for the public to connect with your agency.

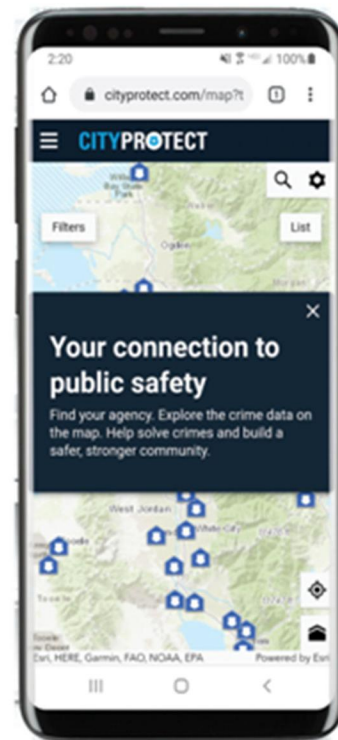
The agency page shows quick, rotating messages—bulletins (up to five 244-character messages)—to keep the public informed. Your agency will control the order, schedule, and expiration date of these bulletins. The page also integrates an agency's social media feeds to further unify communications.

#### Public Submissions

With CommandCentral Evidence, the public can submit information online with an easy-to-use interface. There are multiple self-service form options for online submissions, such as anonymous tips, public information requests, and non-emergency submissions. Your agency will decide which of these forms to deploy and how to personalize these forms with built-in form management tools. The public can submit tips using these forms on CityProtect, or via anonymous SMS communication. Together, these submissions help agencies build a more accurate operating picture. TipManager manages these submissions in a central location and saves digital content in CommandCentral Evidence. This streamlines public-provided content with officer-captured evidence in a single repository.

#### Digital Evidence Collection

CommandCentral Evidence's digital evidence collection features allows your agency to collect case-specific digital media from any source without needing a personal device or physical storage, such as CDs, USBs, or other devices checked into physical evidence stores. Digital files are automatically added and tagged within the application, making access to specific information easy and efficient.



## Crime Map

Crime Map is built into the CityProtect home page. Crime Map automatically publishes crime data and incident information from your CAD or RMS or CAD system to an interactive, online map. This map keeps the public informed of local crime activity and offers visibility into your operations. Crime Map also provides the following:

- Incident data display with up to hourly updates.
- Primary Agency shapefile.
- Sex offender listing options.
- Crime data download option and action link.

## Camera Registration

Camera Registration allows citizens to register their residential or commercial security cameras in CityProtect. Each community member can create a free CityProtect user account to manage their camera information. Your agency can then access the location of these cameras and contact the owner for potential video evidence. The data from these accounts is visualized in a variety of CommandCentral applications.



## Field Response Application

CommandCentral Evidence features a mobile application that allows users to capture video, images, and audio from the field. The application provides advanced camera controls to help users control what is captured. Integrated metadata population and tagging provides immediate access of content in the Digital Evidence Management application. This isolation ensures evidence is not accessible by other apps and ensures an uncompromised chain of custody from the moment of capture.

This application is a capture source for officers, detectives, command staff, supervisors and other law enforcement personnel. The application's user interface exists in the same ecosystem as the Digital Evidence Management tool. The field response application is available on iOS and Android.

## Records Management

CommandCentral Evidence's record management capabilities allow users to quickly and easily search video, audio, images, and other digital content. It then stores that data in a central cloud-based location, streamlining access and management across your organization to reduce the complexities of record management. As a result, this solution helps save your personnel valuable time and allows them to focus on critical tasks.

Records Management offers users the following features to benefit management workflows:

- Consolidated Record View – Enter and view incident data, officer narrative, and digital evidence with one user interface, allowing officers to spend more time in the field.
- Task Creation and Assignment – View, create, and assign tasks or projects for the day as part of the Insights Dashboard. This helps build and close cases faster by tracking progress and assigning ownership to activities.
- Unified Search – Find specific information faster by searching across all agency data.

- Master Indexes – Validate data on persons, vehicles, and organizations against the master indexes. For example, agencies can verify that an arrested person, person of interest, or suspect's information is accurate.
- Compliance Verification – Prompt officers for the information they need so you can check reports before submission and save response time.
- Record Quality Control – Keep data clean by identifying, merging, and de-duplicating records automatically.
- Trusted Agency Sharing – Remain in control of your data when you share case information with other agencies.
- Judicial Case Sharing – Share validated evidence items with trusted judicial partners for use in court, with a verifiable chain of custody.
- Crime Predictions in Dashboard – Monitor activity and set threshold alerts to identify and address crime trends.
- Data Insights Reporting – Access critical insight with pre-built reports and dashboards to make data-driven decisions.

#### 3.2.3.5.4 Digital Evidence Management

CommandCentral Evidence's digital evidence management tools streamline collecting, securing, and managing multimedia evidence. These tools simplify how a secure digital evidence library is built by incorporating data from multiple sources into a unified evidence storage framework. Users can upload digital evidence from a variety of sources to quickly build cases. Evidence stored within the tool is easy to search, correlate, and review alongside other case-related information from your CAD or RMS database. Relevant content can be marked and intelligently sorted to quickly locate critical information from a central touchpoint. This unified storage framework allows personnel to make informed decisions from an organized and complete case evidence view, while offering an access control system to allow only authorized personnel to view sensitive information.

#### Store and Manage

CommandCentral Evidence simplifies building a secure digital evidence library by incorporating data from multiple sources into a unified evidence storage framework. Users can upload digital evidence files from a variety of sources to build cases. Products from Motorola, such as body-worn cameras, in-car cameras, the mobile field response application, and other CommandCentral software, automatically transmit data to Digital Evidence Management. This saves the time and effort needed to manually upload files. Once the content is securely stored, content management is more efficient.

Digital Evidence Management streamlines content management workflows, with tags and metadata that make it easier to correlate, search, and manage evidence. The application automatically links evidence based on the tags and metadata attached to those files, helping users find additional contextual information on an incident and build cases quickly. Users can search and filter content to locate additional relevant data to link to a case or incident. To quickly access evidence items that they frequently need to reference, users can group or bookmark files within the interface.

CommandCentral Evidence provides unlimited storage for events captured by the WatchGuard V300 where the applied data retention period does not exceed one year for non-evidentiary recordings or 10 years for evidentiary recordings (recordings associated with a case). Additionally, the video recording policy must be event-based (policies that require officers to record their entire shift will not qualify for

this plan). For non-camera data storage (data not captured by the body camera and/or in-car system), agencies receive 50GB of storage per device, per month, pooled across all devices in the program.

CommandCentral Evidence provides unlimited storage for events captured by the In Car Video System where the applied data retention period does not exceed one year for non-evidentiary recordings or 10 years for evidentiary recordings (recordings associated with a case). Additionally, the video recording policy must be event-based (policies that require officers to record their entire shift will not qualify for this plan). For non-camera data storage (data not captured by the body camera and/or in-car system), agencies receive 50GB of storage per device, per month, pooled across all devices in the program.

#### 3.2.3.5.5 Optional Interface

CommandCentral Evidence includes an optional interface that uses different mechanisms (DB polling, REST, file polling) to extract required data fields. The interface maps data fields to a corresponding format accepted by CommandCentral Evidence, and sends them to the respective applications service.

### Interface Server Requirements

A customer-provided virtual machine is required to support the interface. The virtual machine must meet the following minimum specifications:

- 2 vCPU.
- 8GB RAM.
- 40GB Hard Drive.
- VMWare 5.5U2 1 CPU License or Hyper-V License.
- Access to Customer-Provided Internet.

The customer-provided virtual machine will allow CloudConnect to be installed to enable CommandCentral cloud applications to connect to on-premises applications, like CAD/RMS systems.

## 3.2.4 VB400 Solution Description

The VB400 camera is a next generation body-worn camera device equipped with features that support your team's efforts to capture and store evidence.

The VB400 is the recommended camera for frontline officer use. The VB400 has a ruggedized exterior, dual-band Wi-Fi, GPS and full high definition recording. Options include the X-100 remote lens unit for the VB400, a side-mountable camera designed for head or weapon mounting.

Features:

- Ruggedized and Reliable Casing - The VB400 can withstand extreme conditions while used in the field; it is rated IP67 and MIL-STD-810G compliant.
- Secure Encryption - AES-256 encryption ensures the footage held within the camera cannot be viewed, edited, or accessed without correct permissions in an authorized VideoManager instance.
- Intuitive, Easily Navigable Design – The VB400 is easy to use, featuring a large central activation button, audio, haptic and LED feedback.
- High Quality Video and Audio - Full 1080p HD at 30 frames per second recording functionality ensures the VB400 accurately captures events from the wearer's viewpoint. It is also equipped

with two microphones that provide dynamic recording capabilities and synchronize audio, easily capturing quiet, in-car ambience to loud, chaotic situations without any operator intervention.

- **GPS Functionality** - Built-in GPS functionality provides information about location where evidence is captured.
- **Stay Connected** - The VB400 is furnished with Bluetooth and Wi-Fi capabilities, allowing for automated recording, device pairing, or live-streaming to the control room, enhancing the overall situational awareness of your team. Allows tethering to the user's 4G smartphone to view live camera location in VideoManager, which requires Tactical VideoManager license.
- **Trigger and Auto Activation** - Peer-assisted recording allows automatic capture of multiple viewpoints of the same incident. When enabled, it automatically activates colleagues' VB400 cameras when they come into range, within 10 meters. The VB400 is also compatible with Bluetooth sensors such as Holster Aware™ to ensure footage is automatically captured in accordance with end user policy.
- **Companion App** - Bluetooth or Wi-Fi Personal Area Network (PAN) connects the VB400 to the Android Companion App for live footage review and additional recording functionality.

### 3.2.4.1 Accessories

#### 3.2.4.1.1 Docking Accessories

##### **VB400 1-Port Dock**

*(VB-400-DOCK-SOLO)*

*Charge, configure and offload a single VB400 body camera.*

Quickly charge, configure and offload your VB400 body camera. The 1-port dock is compact and lightweight, perfect for remote workers with a small number of VB400 cameras spread across multiple sites.

##### **VB400 14-Port Dock**

*(VB-400-DOCK14)*

*Charge, configure and offload up to 14 VB400 body cameras.*

Quickly charge, configure and offload up to 14 VB400 body cameras. This dock provides a secure method of hosting large fleets of body cameras for medium and large deployments.



## VB400 Charging Cable (VB400-EXT-CHARGE)

*Charge and configure a VB400 body camera, and offload footage to VideoManager*

This 2m VB400-to-USB Type A cable acts as a lightweight substitute for the VB400 1-Port Dock, making it ideal for mobile workers. Fully charge and configure your VB400, and offload footage to VideoManager, all while still in the field.

### 3.2.4.1.2 Solutions Accessories

## DockController

*(DC-200)*

*Connect multiple body-worn cameras simultaneously to VideoManager.*

The DC-200 interconnects multiple 1- and 14-port docks to provide VideoManager connectivity for up to 84 VT100 cameras, with Gigabit Ethernet LAN for rapid footage download. Compatible with RFID reader for efficient camera allocation.

## RFID Reader (RF-220)

*Secure and efficient body-worn camera allocation*

Streamline VB and VT Series body-worn camera allocation, for a more efficient, secure experience. Users simply swipe their ID card or tag to be allocated a camera ensuring it is assigned to them for the duration of their shift.

## RFID Tags

*(RF-STICKER-10)*

*Secure and efficient body-worn camera allocation*

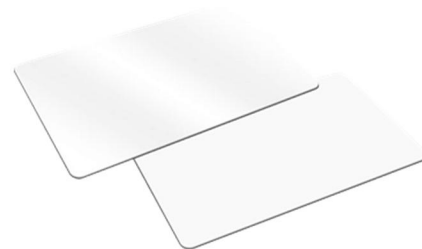
Designed to be used with the RFID Reader, these self-adhesive RFID tags provide users with an efficient and secure body-worn camera allocation experience. Each pack contains 10 RFID tags.

## RFID Cards

*(RF-CARD-10)*

*Secure and efficient body-worn camera allocation*

Designed to be used with the RFID Reader, RFID Cards provide users with an efficient and secure body-worn camera allocation experience. Each pack contains 10 RFID cards.



### 3.2.4.1.3 Klick Fast Mounts and Fixings

#### Klick Fast 3-Point Chest Harness (KF-HARN3)

*Fully adjustable harness for mounting the VT100 or VB400 body camera*

Securely wear a VT100 or VB400 body camera, while delivering an optimal first-person viewpoint. The Klick Fast 3-Point Chest Harness is adjustable and comfortable, and can be worn while wearing a seatbelt.



#### Klick Fast Shoulder Harness (KF-HARN5)

*Secure, wearable, high-mounting solution for the VT100 or VB400 body camera*

Securely wear a VT100 or VB400 body camera with any uniform, while delivering an optimal first-person viewpoint. The Klick Fast Shoulder Harness is adjustable and comfortable. Requires camera to be fitted with Klick Fast Stud.



#### Klick Fast Quick Release Wide Tilt Mount (VB-400-QR-KFTILT)

*A secure and tilting uniform mount for the VB400 body camera*

Securely wear a VB400 at a tilted angle on the chest. The Klick Fast Quick Release Wide Tilt Mount is compatible with the VB-440-64-QR-N and can be mounted directly onto uniforms and clothing with a Klick Fast fixing.



#### Klick Fast Quick Release Stud

*(VB-400-QR-KFSTUD)*

*A secure uniform mount for the VB400 body-worn camera.*

Securely wear a VB400 body camera on the chest. The Klick Fast Quick Release Stud is compatible with the VB-440-64-QR-N and can be mounted directly onto uniforms and clothing with a Klick Fast fixing.



### 3.2.4.1.4 Other Mounts and Fixings

#### Close-Fit Magnetic Mount

*(VB-400-VF-MAG)*

*A secure, magnetic uniform mount for the VB400 body-worn camera*

Securely wear a VB400 body-worn camera on any uniform or clothing using this magnetic mount. The Close-Fit Magnetic Mount is compatible with the VB-440-64-VF-N.



### Quick Release Sports Camera Pillar (VB-400-QR-SPORT)

*A secure mounting solution for the VB400 body-worn camera.*

Securely attaches a VB400 body-worn camera to an item of clothing where a sports camera pillar attachment is present. The VB400 Sports Camera Pillar is suited to protective helmets, tactical vests and other rigid items of apparel.

### Close-Fit Double MOLLE Mount (VB-400-VF-MOL2)

*A secure mounting option for your VB400 compatible with MOLLE tactical clothing*

Securely wear a VB400 body-worn camera on your MOLLE tactical clothing with this close fit mounting option. Compatible with the VB-440-64-VF-N.

### Custom VB400 Front Button Sticker

*Personalize your VB400 body-worn camera.*

Customize your VB400 body-worn camera with this front button sticker and artwork. Stickers can be designed to reflect your chosen wording, brand or company logo.



#### 3.2.4.2 Software

VideoManager is compliant with your current Verint video ecosystem, which can import your historic footage and live streamed video and audio. This allows your team to continue using your current infrastructure, which lets you save on the cost of your body worn camera solution.

VideoManager is the most advanced software tool for managing video footage, system users, and your suite of Motorola BWC devices. This browser based evidence management platform allows complete control over your entire complement of cameras, the footage they record, and other assets, including evidence collected by third-party cameras.

VideoManager is a full-featured, distributed BWC device manager that works in tandem with our range of docking accessories to deliver a flexible, highly configurable and fully auditable evidence management solution.

#### Features:

- **Maximum Security** - All video and data is securely encrypted in VideoManager at every stage, starting from evidence capture to storage. Searchable audit logs allow for accountability of all data. Granular role-based access controls grant access only to authorized users to prevent unauthorized access to evidence. This provides a reliable evidence trail that is required to support the judicial process.
- **Flexible Upload** – Capture footage is securely downloaded over your network through our robust docking stations or on-the-go using Wi-Fi. VideoManager's browser based interface allows remote device, site and evidence management. Once docked, footage captured by the VB400 can also be automatically uploaded.
- **Complete Control** - This browser-based software gives customers complete control over your cameras, the footage recorded, and other evidence collected by cameras. This evidence is then owned by the customer, not the vendor - allowing the customer total ownership of data.

- Futureproof Integration - VideoManager will securely connect with your existing ONVIF-compliant Video Management System (VMS), live streaming body-worn camera footage for remote viewing in real-time. VideoManager can also integrate with third party applications, so it will easily work with your existing processes. Our web-based management system allows easy data accessibility and will also allow your organization to take advantage of emerging technologies.

### 3.2.5 Avigilon Interview Room Solution Description

Motorola's Interview Room offering is based on the Avigilon platform of fixed video cameras and recorders. Integrated package options are presented based on common configurations, but the offering can be customized to fit any requirements or conditions not presented in this RFP.

The proposed offering includes the Avigilon Control Center (ACC™) video management software, several camera options, a recording appliance, auxiliary microphone and external switches for users to turn on/off the audio and video recording.

ACC™ is an easy to use video management software that efficiently captures and stores high definition video, while intelligently managing bandwidth, storage and export functions. Motorola's video solutions are based on open standards (ONVIF) and can incorporate many other camera brands and technologies as inputs into the system as might be required and offered on a case-by-case basis. Camera offerings range from 1 MP resolutions (~720p) all the way to 61 MP resolutions (10 k) with a variety of lens and mounting options to fit nearly any application or installation environment. Recording options for the interrogation room are included based on the most likely configuration and Motorola's understanding of likely customer requirements. These recorders can also be customized, modified or incorporated into a larger video management system for convenience or as customer requirements might dictate.

Motorola's Avigilon intends to provide an Enterprise turnkey VSS solution in response to this RFP.

This VSS solution will supply each interrogation room with the video and audio equipment necessary to:

- Record watermarked video/audio of each interrogation (as needed).
- Audio and video will be recorded locally to an Avigilon recorder appliance.
- The Avigilon recorder will have the ability to view live video/audio, record video, and playback recorded video.
- The Avigilon recorder will have the ability to transfer recorded video to other media formats such as a USB drive, or via email.

### Equipment

In response to the RFP - Motorola (Avigilon) intends to provide the following equipment as a solution for the video recording of the interrogation room(s):

#### Option 1

- (x1) Avigilon three (3) megapixel indoor dome camera.
- (x1) Avigilon eight (8) megapixel indoor fisheye dome camera.
- (x1) Louroe omni-directional microphone and base station.
- (x2) Avigilon Enterprise software licenses.
- (x1) Avigilon Enterprise recorder with 4 terabytes of storage.

### Option 2

- (x1) Avigilon three (3) megapixel indoor dome camera.
- (x1) Avigilon three (3) megapixel corner mount camera.
- (x1) Louroe omni-directional microphone and base station.
- (x2) Avigilon Enterprise software licenses.
- (x1) Avigilon Enterprise recorder with 4 terabytes of storage.

### Option 3

- (x1) Avigilon three (3) megapixel indoor dome camera.
- (x1) Avigilon three (3) megapixel indoor modular camera.
- (x1) Avigilon main unit for the modular camera.
- (x1) Avigilon five (5) meter cable for module camera.
- (x1) Louroe omni-directional microphone and base station.
- (x2) Avigilon Enterprise software licenses.
- (x1) Avigilon Enterprise recorder with 4 terabytes of storage.

## 3.2.6 Pelco Fixed Video Solution Description

Motorola's fixed video offering to the Commonwealth of Virginia also includes the Pelco family of video security products. Pelco is a global leader in the design, development, and manufacture of predictive video security solutions, including video surveillance cameras, video management and recording systems, security software, and aligned services.

As a Motorola's subsidiary, Pelco is a single source brand for video, security management, and intelligence solutions, Pelco offers a broad range of high-quality products and systems that make the world a safer place.

Pelco offers IP video security cameras designed for a wide variety of commercial and industrial settings. From our industry-leading fixed and high-speed Fixed IP cameras to Panoramic, PTZ, Multi-Directional, Specialty and more, there is a camera for any environment, lighting condition and application.

Pelco's VideoXpert video management system allows security and public safety professionals to easily see what they need to see, when they want to see it. Available in Enterprise and Professional packages, this VMS provides a scalable solution ranging from entry-level surveillance set-ups to systems that support tens of thousands of cameras across multiple continents. VideoXpert can be optimized with Pelco hardware or seamlessly integrated with third-party cameras, but it is always backed by an unparalleled level of support.

Pelco offerings in the Motorola's proposal will be custom designed based on the specific needs of the end user and as determined by direct dialogue with that end user.

## 3.2.7 Ava Interview Room Solution Description

Open, scalable, secure, and easy to use, Ava cameras and Ava Aware is a powerful cloud-based AI video management system (VMS) equipped with integrated machine learning capabilities. Suitable for both large, distributed enterprise installations and small deployments, Aware analyzes all the video feeds from all your Ava and third-party cameras all the time and in real-time. It identifies objects and events, sending instant alarms based on rules and unusual activity detection. With Aware, you can also quickly search by event, object, and similarity to find a specific person, vehicle, or event of interest through countless hours of video within seconds or minutes. Leverage Aware's open API and connect it to your existing sensors, access control systems, dashboards, external viewers, or communication systems to get a 360-degree overview of your environment. What's more, Aware helps you manage all your devices and security across sites with a simple web-based interface and Android and iOS apps accessible from anywhere without additional plugins or configurations.

## 3.2.8 Vigilant License Plate Recognition Solutions

License plate recognition (LPR) cameras take photos of license plates capturing date, time and GPS coordinates of where the photo was taken. This data aids law enforcement agencies (LEAs) in investigations from beginning to end, helping them to solve both minor and serious crimes, ranging from traffic violations to kidnappings ultimately helping them keep communities safe.

### 3.2.8.1 License Plate Recognition in Action

Our LPR cameras paired with Vigilant PlateSearch software have been trusted by law enforcement for more than 10 years to locate suspect vehicles and solve crimes faster. Real-time hot list detections provide valuable situational awareness for officers in the field on a mobile computer or smartphone, as well as dispatchers in the call center. Billions of historical detections shared between agencies and from our commercial partner network can aid detectives in generating leads and even determining the probable location of vehicles of interest using patented analytics. With the addition of our Vigilant ClientPortal software your agency can even automate parking enforcement activities, allowing your team to focus on more value-added tasks. Time and time again, our customers have relied on our LPR solutions to not just simply detect hot plates, but generate actionable intelligence from that detection data to solve a case or save a life.

### 3.2.8.2 LPR Solution Description

#### 3.2.8.2.1 L5M Mobile LPR Camera System

Detect as you drive with the ReaperHD Mobile LPR Camera System. Create instant awareness with a system that is intuitive for any officer and deployable on almost any vehicle.

#### 3.2.8.2.2 L5F Fixed LPR Camera System

Scan more than ever before with the L5F Camera System. This fixed LPR solution enables you to capture clearer images at further distances on your high-speed, high-volume roadways.

#### 3.2.8.2.3 L6Q Quick Deploy LPR Camera System

Simplify scanning with the L5Q Quick Deploy LPR Camera System. Build or expand your camera network with this affordable, easy-to-deploy anywhere camera system.

### 3.2.8.3 Vehicle Location Intelligence

#### 3.2.8.3.1 Vigilant PlateSearch

Go beyond hot list alerts and basic plate searches with our cloud-based vehicle location intelligence solution. Vigilant PlateSearch empowers you with patented analytics and billions of license plate scans from your agency's own cameras, other departments and a nationwide commercial data network to identify, predict and alert to vehicle sightings.

**Combat Drug Trafficking:** Using Convoy Analysis, easily identify vehicles traveling together as part of a trafficking convoy so you can generate new leads, establish connections and build a stronger case.

**Disrupt a Car Theft Ring:** Leveraging Associate Analysis, identify vehicles who have been seen together so you can verify a potential accomplice and getaway car used during a string of vehicle thefts.

**Find a Suspect on the run:** By doing a comprehensive Plate Location Analysis you can use historical vehicle location data to determine potential locations they might be hiding out.

**Solve a Series of Burglaries:** Common Plate Analysis can help you generate a suspect lead by identifying a vehicle which has been previously sighted at the various locations of a series of burglaries.