

Requirements Worksheet for HPD's Body Worn Camera Solution

Proposer Name: _____ **Date:** _____
RFP# _____

Requirement & Optional Matrix is intended to summarize the functionality desired. A lack of ability to meet each of the functions indicated may not preclude a vendor from consideration during the selection process.

	Yes	No	Comments
BODY WORN CAMERA REQUIREMENTS & OPTIONAL ITEMS			
SOW Section Number, Description			
4.0 Video Evidence Management System Specifications			
4.1 Vendor may use the current HPD Video Evidence Management System or propose an internally hosted Video Evidence Management System (VEMS) solution. The proposed Video Evidence Management System (VEMS) will be internally hosted on HPD systems and must be capable of maintaining chain of custody for use as evidence. Additionally video can be classified with a selection such as violation types or citizen or other contacts made, that can be captured at the time of the event			
4.1a Vendors proposing a VEMS solution other than the current HPD VMS system will need to convert existing video into their VEMS			
4.1b Vendors proposing a VEMS solution other than the current HPD VMS system will need ensure that their system can comply with "4.21 Provide a software system that maintains "chain of custody" activity by recording and logging the following actions: Uploading digital video file(s), downloading digital video file(s), who viewed the digital video file(s), who exported the digital video file(s) and who edited metadata.". Externally hosted solution must provide "end to end" encryption whenever data is transferred HPD to and from HPD to the hosted solution.			
4.1c Vendors proposing a VEMS solution other than the current HPD VMS system will need to connect to and integrate their technology with; Homeland Security Video, Harris County District Attorney and with the HPD RMS system (Tiburon) and the vendor will need to be responsible for the ongoing changes with them.			

<p>4.1d Vendors proposing a VEMS solution other than the current HPD VMS system will need to provide the capability to import video from any source, i.e. video camera, digital camera, cellular telephone, tablet or iPod, into their VEMS. The above list is not all inclusive and is intended as a representative sample of likely video sources from commonly encountered devices capable of producing video files.</p>			
<p>4.2 Vendors may submit a separate proposal for an externally hosted solution that otherwise meets the requirements contained in this SOW and the additional requirements in section 5.0 Externally Hosted VEMS Specifications (Optional).</p>			
<p>4.3 Provide System Administration functions to create security rights by “role” or “group”. System administrator rights should be able to set variable user profiles and access rights for users including view only, export, archive, delete, or purge</p>			
<p>4.4 Provide fields in the system to input the following designated information for each event captured: Ticket Number, Incident number field (case number), Case Number, Suspect information, HPD Division, Confidential Status, Officer ID number (officer ID number is already associated with the video once he/she logs into the system. There is another field at log-in to associate a partner, if needed). The software can be configured to collect information that needs to be associated with each video.</p>			
<p>4.5 The System captures and records the following ancillary information and includes it on the video file when it is copied to another media type (CD/DVD) so the metadata is present when the media is viewed: GPS data, Name of person (Officer) capturing video, Date/Time.</p>			
<p>4.6 Provide within the VEMS a textual comments field associated with a created bookmarks so the officer can add comments or information (i.e., vehicle description, suspect information, case information, item being thrown from vehicle, or any other relevant comments).</p>			

<p>4.7 Provide the capability to copy a digital video file to other media. There are multiple methods to copy a video to CD/DVD, depending on the user's requirements. In any case, all video files are transferred pixel for pixel with NO conversion, maintaining the original format and integrity of the video. All video files are stored in standard, non-proprietary formats, which can be played by any standard Windows platform that has the proper Codecs installed. In most cases, the videos will be periodically uploaded to the system server from a camera. Depending on the users' access rights and privileges, they would be able to search for a video, select a video and easily burn it to CD/DVD without conversion from the management client.</p>			
<p>4.8 Provide the ability to view or listen to video files in Industry Standard Video Formats which do not require the purchase of proprietary software for encryption or any other purpose.</p>			
<p>4.9 Provide Administrator/Supervisor Controls - The system must provide the ability to restrict access to any and all settings by way of Administrator/Supervisor passwords. Multiple Administrator/Supervisor and Administrator/Supervisor passwords must be supported.</p>			
<p>4.10 Provide Event Categorization - System must allow events to be categorized. Categorization selections must be administratively configurable. For example Homicide, Robbery, Confidential, Confidential Homicide, Traffic Stop, Confidential IAD, DWI.</p>			
<p>4.11 Provide searching for digital video files by the following key fields: Employee Number (minimum of seven characters), Incident number field (case number), Suspect information, HPD Division, Confidential Status, Date range, Event type (cause of traffic stop) - event types are defined by the system administrator, Ticket number, Driver's license number, Name of violator (first name, last name, or both), Comments. The event types are defined by the system administrator</p>			
<p>4.12 Provide the ability in the VEMS user interface after the video has been classified to transfer the video to a designated file storage location via button click.</p>			
<p>4.13 Provide capturing of metadata in a searchable database that can be used to create specialized reports. Software shall use Microsoft SQL Server Database to store captured metadata. Data stored in VEMS can also be used by the police department's IT personnel to generate specialized reports.</p>			

<p>4.14 Provide software that stores digital video files on the server where they are logged, indexed, searchable, and accessible by workstations</p>			
<p>4.15 Provide the ability to “receive/log/track” the camera storage devices. The software tracks the usage and status of each camera storage device and maintains a complete activity log for each.</p>			
<p>4.16 Provide software that can transfer 4 hours of video (MPEG4) from the removable camera storage media to the back office server in 4 minutes or less.</p>			
<p>4.17 Provide the ability to burn CD/DVD’s that start up (self-loading), when inserted into an industry standard Windows workstation. The software VEMS can export videos in standard formats</p>			
<p>4.18 Provide the ability to Log and track all captured video. Provide a VEMS that can log and track all captured video that is copied from the camera to the VEMS server, this includes when the videos are uploaded, reviewed, and exported</p>			
<p>4.19 The software VEMS needs to provide the ability to mark certain videos for retention as well the ability to “flag/tag” digital video criminal files, which must be retained for unlimited years period, so they are not erased/deleted within that timeframe. The length of the retention period is defined by the system administrator.</p>			
<p>4.20 Provide a system that can transfer/convert video data files to alternate formats (Evidence Video Management System playable format, Windows Media Player format, MPEG4 format, DVD playable format). The software VEMS can directly transfer videos to VEMS playable and Windows Media Player formats and be able to generate DVD playable format.</p>			
<p>4.21 Provide a software system that maintains “chain of custody” activity by recording and logging the following actions: Uploading digital video file(s), downloading digital video file(s), who viewed the digital video file(s), who exported the digital video file(s) and who edited metadata.</p>			
<p>4.22 Provide a software system that produces “canned” audit reports for activities associated with storing, archiving, retrieving digital video files. The software system to provide several management reports including an audit report on video system usage activities such as upload time, download time, storage used, storage available, user log on/off to assist in the maintenance and administration of the system.</p>			
<p>4.23 Provide a software system that produces “canned” daily operation summary reports (but not limited to) on video archiving, database backup, and video file access information</p>			

<p>4.24 Provide a software system that produces management reports that shall include but are not limited to: Incomplete or partial video download, Uploaded videos, Camera maintenance reports to include out of focus, video flagged as, failed video, microphone off, etc., Any and all failures with the system, Retention period expiration warnings on videos about to be deleted by division, Video Audit report of the previous month and a random 10% (or at least one) of all shift employees with assigned body cameras. The software system will produce the audit report for 10% of the previous month's video for supervisory review.</p>			
<p>4.25 Provide a VEMS that once a user locates digital video file(s) can: Playback the video. The software system to provide an interface to search and playback videos, Update the data associated with the video. When a video is located and played back, the software system to provide an interface for the user to review and update the associated data, Export the video. The software system to provide a function to export video files to CD, DVD or digitally to a specified location on the network, check integrity. The software system to provide a function to check the integrity of each video to ensure it has not been altered, Mark the video for retention. The software system should provide an interface for the user to mark certain videos for retention.</p>			
<p>4.26 Provide a software system that has capabilities/functions that run on a server with a Windows 2012 or better Server operating system. Provide a software system that can be patched to current Microsoft security requirements and is able to accept all future critical Microsoft security patches. Back Office systems will be required to have current anti-virus software installed and operational.</p>			
<p>4.27 Provide a software system that has capabilities/functions that must run on a server with Microsoft's SQL 2012 database or better.</p>			
<p>4.28 Provide a software system that can manage digital video files when saving to a mass storage devices. This would include additional disk storage devices and tape libraries. In addition to RAID disks, the software can work with digital tape libraries and automatic DVD burners to provide a complete storage solution.</p>			
<p>4.29 Provide for the software system to integrate, replace or convert files and data with HPDs existing software system in order to accommodate our existing Body Worn Camera System, DWI and In Camera systems</p>			
<p>4.30 Provide in the software system the ability to specify HPDs own file naming convention</p>			
<p>4.31 Provide in the software system the ability for self-problem diagnosis such as camera out of focus, failed video, microphone off, poor quality sound, no GPS signal received etc. but not limited to these.</p>			

4.32 Provide in the software system that supports and synchronizes with Microsoft Active Directory (LDAP compliant).			
4.33 Provide the ability in the software system to send video to the Harris County DA's office via electronic transfer with a click of a button.			
4.34 Provide the ability in the software system to create a link from a key field to be queried by HPD's RMS system that will point to the digital video to open in a browser			
4.35 System shall be capable of classifying video on the camera or when downloading the video. This feature shall be configurable by the system administrator and is not user selectable. Optional			
4.36 The software system to provide a function to check the integrity of each video to ensure it has not been altered, mark the video for retention. The software system should provide an interface for the user to mark certain videos for retention.			
5.0 Externally Hosted VEMS Specifications (Optional)			
5.1 An externally hosted VEMS with a BWC solution proposal is optional and must be proposed as a separate and comprehensive proposal meeting all HPD requirements contained in this SOW. Proposals which do not include all facets may be rejected as incomplete.			
5.2 Vendors proposing a VEMS solution other than the current HPD VMS system will need ensure that their system can comply with "4.21 Provide a software system that maintains "chain of custody" activity by recording and logging the following actions: Uploading digital video file(s), downloading digital video file(s), who viewed the digital video file(s), who exported the digital video file(s) and who edited metadata. Externally hosted solution must provide at a minimum "end to end" encryption whenever data is transferred to and from HPD to the hosted solution.			
5.3 Vendors proposing an externally hosted VEMS solution will need to ensure that the solution provides at a minimum; stored data is encrypted with industry standard encryption, the system maintains a strict audit trail, provides redundant data paths, has documented standards for custody and control of evidence, is a "high reliable/high availability" system in the order of 5 9's of reliability/availability and has a disaster recovery hardware/software/policy and procedure that guarantees full data recovery in a minimal amount of time.			
5.4 Vendors proposing an externally hosted VEMS solution shall guarantee that HPD shall retain sole ownership of any and all data stored on a hosted solution. The vendor shall also guarantee that HPD shall at all times have full and unfettered access to any and all data stored on a hosted solution and such access shall not be revoked at any time for any reason. The vendor shall also guarantee that the pricing submitted in their proposal shall include the access listed above and that there will be no additional charges for access or retrieval of any and all data stored on a hosted solution for any reason.			
6.0 Body Worn Cameras Specifications			

6.1 Provide a Video Resolution of 1920x1080p (30 FPS); 1280x720p (30 FPS); 848x480 (30FPS); 848x480 (60FPS). The resolution shall be configurable by the system administrator and is not user selectable. Required			
6.2 Provide a Video Type and Aspect Ratio of Color Video 16:9 Aspect ratio. Required			
6.3 Provide a Recording Speed of 30 Frames per Second and up to 60 Frames per Second. Required			
6.4 Provide a recording Format, a “generic”, industry standard, MPEG4 output format that can be edited by industry standard (or de facto standard) redacting software. Required			
6.5 Provide a Lens field of view of 120 degree wide angle lens with minimal or no fogging. Required. (Optional item-camera can have a rotating lens)			
6.6 Provide a Date and time stamp on Video Files. Required			
6.7 Provide a Recording time on internal Memory of 8.5 hours at 1080p ; 11.5 hours at 1280x720p; 11.5 Hours at 848x480 (60 FPS); 17 Hours at 848x480 (30FPS) on a single battery charge. Required			
6.8 Provide infrared Illumination or better and a user selectable switch to toggle on or off. Required			
6.9 Provide Invert Recording Unit can record right side up when upside down. Define is user selectable or automatic. Required			
6.10 Provide video stabilization (shaking or bouncing) should the officer be running. Required			
6.11 Provide a Confirmation Chime when Recording Starts, Chime can be disabled in volume control settings. Optional			
6.12 Provide a Confirmation Chime when Recording is stopped, Chime can be disabled in volume control settings. Optional			
6.13 Provide Audible Confirmation to be disabled, Disable audible confirmations for discreet recordings. Optional			
6.14 Provide a Recording Activation Button and or Switch, One Touch Record Switch & for activation or deactivation. Required			
6.15 Provide a Playback Method using a desktop or laptop computer, HD monitor, or on the unit itself. Required			

<p>6.16 Provide a PC player compatibility with the ability to view and listen to video files in Industry Standard Video Formats which does not require the purchase of proprietary software for encryption or any other purpose. Windows Media Player, QuickTime, Real Player, VLC Player and more. Required</p>			
<p>6.17 Provide a USB Type 2.0 or 3.0 connections for video uploading. Required</p>			
<p>6.18 Provide a device that works in the parameters of an environment. Minimum Working Temperature -30°C, Maximum Working Temperature 55°C, Minimum Storage Temperature -28°C, Maximum Storage Temperature 53°C, Water Testing IPX3 Ratings, Drop Testing 6 feet. Required</p>			
<p>6.19 Provide a Battery Type Lithium Polymer or better, Recording Life at continuous non-stop recording to be 5.5-6 hours or more at 848x480 and 3.5 Hours or more at 1920x1080p Standby 1 week. Unit is normally off until needed, Charge cycles Approximately >300 cycles, Charge Time Approximately 4 hours, Charging Method By AC wall Charger or by connecting to USB Port on PC and by 12volt charger in the patrol car. Battery needs the availability to be replaced with an off the shelf replacement. Battery shall be field replaceable. Required</p>			
<p>6.20 Provide a Power Input, 5V DC 1 Amp via charger/USB. Required</p>			
<p>6.21 Device security by using a two user password system, one password for the administrator and separate password for the user. Administrator can set user permissions. Required</p>			
<p>6.22 Provide Storage, Memory Minimum of 32GB Internal Memory, Temperature Proof, Water Proof, Shock proof, and X-Ray proof. Storage Format MP4. Required</p>			
<p>6.23 Design shall not interfere with officer safety or create officer safety issues. Design shall be comfortable and unobtrusive to wearer with respect to; weight, size and shape of equipment, wiring.</p>			
<p>6.24 Provide Mounting methods, Belt Clip on jacket/ uniform shirt/ Epaulette; Mounting Patch; Car Windshield Mount, Helmet Mount, Weapon Mount. Required</p>			
<p>6.26 Provide Video Management Compatibility with Windows 7 or better, Computer Connectivity USB Cable, Software Management platform Evidence Video Management System. Required</p>			

6.26 Each unit to have unique ID that can be registered to a specific user and the ability to add a unique ID number, 8 characters Alpha-Numeric, to be stamped onto the video file. Required			
6.27 Provide detection for “low battery voltage” situations where system automatically “shuts off” without damage to the camera or the recordings. Required			

<p>6.28 Provide an "indicator" light that enables the Officer to see that the unit is "on and recording". Provide "Power on" button that has an LED light showing the status of the system being on/off. This is an Optional feature, however, if this feature is provided, the indicator "must not" be viewable by the citizen.</p>			
<p>6.29 Provide both video and sound playback to occur during a review of video. Required</p>			
<p>6.30 Provide GPS - The system must offer the capability of determining the location of the camera by Global Positioning System (GPS) to within 33 ft. Additionally, GPS shall allow the system to automatically and continually update its date and time to ensure accuracy. Required</p>			
<p>6.31 On scene viewing of videos to be accessible via a pc or laptop. If video is reviewed video stays on camera until downloaded. On camera review should be system administrator configurable allowing for no video review on camera or all video review on camera. Required</p>			
<p>6.32 Indicate in a log when recording was stopped and the cause of the stop (battery, memory full, failure, user initiated). Required</p>			
<p>6.33 Firmware updates for the camera should be loaded when camera is docked. Required</p>			
<p>7.0 Training</p>			
<p>7.1 Provide camera product training to Officers activities include, but are not limited to: System Hardware Capabilities, Features and Functionality, Microphones, Camera, User Interface, Log-In, System Initiation, Data Entry, Playback, Exiting system, Video Transfer Check-in / Check-out Procedures. Required.</p>			
<p>7.2 Provide VEMS product training to Technology Services Technicians (VEMS equipment administration personnel). Training activities include, but are not limited to: System Overview, Software System Flow, Software System Operation and Management: Log In, User Account Management, Mobile HDD Account Management, Mobile Unit Set Up, Up Load Video & Data, Check-in / Check-out Procedures, Viewing and Searching Video, Retain Video & Data, Export Video & Data - DVD, CD, etc., Special Feature - Image Enhancement. System Configuration and Profile Management, Software system Maintenance - Video and Data Maintenance, Server Maintenance - Administrative Reports, Security - Server, Workstation & Mobile Unit Security Settings, Create and Setup Client Workstation. Required</p>			
<p>7.3 Training will be for approximately 3500 end-users, 50 train the trainers and 10 system administrators. Required.</p>			
<p>7.4 The Vendor will make recommendations for on-site training and/or propose facilities for HPD personnel based on the training requirements. Required</p>			

8.0 Installation and Testing			
<p>8.1 Provide in the VEMS installation and testing of hardware/software system. Installation activities include, but are not limited to: Installed back office hardware: Assess and design the integration of the server into the internal network, install all storage devices (disk library) VEMS server and integration into the existing IP network, Test/verify hardware is installed correctly and works as specified, Install software – VEMS software, Configure the VEMS server, storage devices (disk library) and all other VEMS associated software, Verify proper operation (basic functions) of the VEMS server by demonstrating the input, cataloging/indexing, query, and management functions of the software, Test/verify all software is installed and configured correctly, and works as specified. There will be shock, drop and situational testing. Performance testing to be done using (or simulating) 1,000,000 videos in the system for server utilization, bandwidth, simultaneous downloads, speed of downloads, flicker free viewing simultaneous at multiple sites, etc. Vendor to propose 24x7 30 day support at each station as system is implemented. Vendor and HPD will agree on specific measures for User Acceptance Testing (UAT) for the listed items above during system design.</p>			
9.0 Data Storage			
<p>9.1 Provide recommended solutions for data storage. Required solutions are: a complete storage solution by the City within the HPD network and separate complete external hosted storage solution. Server requirements for HPD storage solution: Must be Windows based 64bit. Prefer support for virtualization (specifically Hyper-V), SAN requirements: Must support Compellent SAN.</p>			
