

MINISTRY OF NATIONAL SECURITY, NASSAU BAHAMAS REQUEST FOR PROPOSAL

FOR THE

EXPANSION OF RBPF

CLOSED CIRCUIT TELEVISION

DISCLAIMER

The information contained in this Request for Proposals (the "RFP") is provided to Bidder(s) on behalf of the Royal Bahamas Police Force ("RBPF") or any of their employees or advisors, on the terms and conditions set out in this RFP and such other terms and conditions subject to which such information is provided.

This RFP is not an agreement and is neither an offer nor invitation by RBPF to prospective Bidders or any other person. The purpose of this RFP is to provide Bidders with information that may be useful to them in making their submissions (the "Bids") pursuant to this RFP. This RFP includes statements which reflect various assumptions and assessments arrived at by RBPF in relation to the expansion of closed circuit television around New Providence ("the Project"). Such assumptions, assessments and statements do not purport to contain all the information that each Bidder may require. This RFP may not be appropriate for all persons, and it is not possible for RBPF, its employees or advisors to consider the investment objectives, financial circumstances and particular needs of each Bidder. The assumptions, assessments, statements and information contained in this RFP may not be complete, accurate, adequate or correct. Each Bidder should, therefore conduct its own investigations and analysis and should check the accuracy, adequacy, correctness, reliability and completeness of the assumptions, assessments, statements and information contained in this RFP and obtain independent advice from appropriate sources.

Information provided in this RFP to the Bidder(s) is on a wide range of matters, some of which depend upon interpretation of the law. The information given is not an exhaustive account of statutory requirements and should not be regarded as a complete or authoritative statement of law. RBPF accepts no responsibility for the accuracy or otherwise for any interpretation or opinion on law expressed herein.

RBPF, its employees and advisors make no representation or warranty and shall have no liability to any person, including any Bidder under any law, statute, rules or regulations or tort, principles or restitution or unjust enrichment or otherwise for any loss, damages, cost or expense which may arise from or be incurred or suffered on account of anything contained in this RFP or otherwise, including the accuracy, adequacy, correctness, completeness or reliability of the RFP and any assessment, assumption, statement or information contained therein or deemed to form part of this RFP or arising in any way in this bid stage.

RBPF accepts no liability of any nature whether resulting from negligence or otherwise howsoever caused arising from reliance of any Bidder upon the statements contained in this RFP.

RBPF may in its absolute discretion, but without being under any obligation to do so, update, amend or supplement the information, assessment or assumptions contained in this RFP.

The issue of this RFP does not imply that RBPF is bound to select a Bidder or to appoint the Selected Bidder, as the case may be, for the Project and RBPF reserves the right to reject all or any of the Bidders or Bids without assigning any reason whatsoever.

The Bidder shall bear all its costs associated with or relating to the preparation and submission of its Bids including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations which may be required by RBPF or any other costs incurred in connection with or relating to its Bid. All such costs and expenses will remain with the Bidder and RBPF shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by a Bidder in preparation for submission of the Bid, regardless of the conduct or outcome of the Bidding Process.

The Bidding Process shall be governed by, and construed in accordance with, the laws of The Bahamas and the courts of The Bahamas shall have exclusive jurisdiction over all disputes arising under, pursuant to and/or in connection with the Bidding Process.

Statement of Work

Purpose

The purpose of this RFP is to invite prospective vendors ("Bidders") to submit a proposal to upgrade and expand the existing CCTV network of the RBPF.

Coverage & Participation

The intended coverage of this RFP, and any agreement resulting therefrom, shall be for the use in the Commonwealth of The Bahamas commencing at New Providence. Any changes to this initial agreement/proposal will only be honoured with the agreement of all parties in writing.

1. General Information

Original RFP Document

RBPF shall retain the RFP, and all related terms and conditions, exhibits and other attachments, in original form in an archival copy. Any modification of these, in the vendor's submission, is grounds for immediate disqualification.

The Organization

The Police Act 2009 charges RBPF with the maintenance of law and order, the preservation of peace, the prevention and detection of crime, the apprehension of offenders and the offenders and the enforcement of all laws with which it is charged.

2. Existing Technology Environment

- 2.1.1 The current CCTV system operates on a combination of Bahamas Telecommunication Company's ("BTC") wired and wireless infrastructure. The CCTV system is administered from the Police Headquarters on East Street North in the city of New Providence. The system can be viewed from a computer via a web browser, mobile device ,has the ability to show historical video while recording, has several search-by features, can record on motion, can adjust to daylight and night time vision, has the ability to download video, and has video monitoring station. The current system has 243 cameras.
- 2.1.2 The RBPF requires the following services:
 - Design & build a hybrid network infrastructure consisting of both fibre optics & wireless backhaul
 - Design and implement a new system architecture that will both facial & License Plate Recognition
 - ➤ ("LPR")
 - > Design a migration plan for the replacement of end devices, the upgrade of the existing Video
 - Management System & upgrade of the Storage Platform.
 - System architecture design must have built-in redundancy at all levels including but not limited to cameras, network, servers, storage & application.
 - System Architecture must provide and account for reliability, high availability & scalability for future growth.
 - Design & implement a UPS to supply and maintain VMS Infrastructure

2.1.3 The LED Video Wall must:

- ➤ Be Designed for 24-hour reliability
- ➤ Be Energy Efficient
- Include Pixel Patches

2.2 Schedule of Events

The following is a tentative schedule that will apply to this RFP, but may change:

| Stage Number | Event Description | Date |
|-----------------|--------------------------------------|------------------------------------|
| 1 | Issue of the RFP | January 25 th 2019 |
| 2 | Clarification Period Begins | February 11 th 2019 |
| 3 | Deadline for Clarification Questions | February 15 th 2019 |
| 4 | Clarifications Issued by RBPF | February 22 nd 2019 |
| 5 | RFP Bids Due ("Bid Due Date") | March 1 st 2019 at 4pm |
| 6 | Opening of Bids | March 5th 2019 at 10am |
| 7 | Successful Bidder Announcement | March 16 th 2019 |
| 8 | Execution of the Agreement | March 29 th (tentative) |

2.3 Amendment of the RFP

- 2.3.1 At any time prior to the Bid Due Date, RBPF may, for any reason, whether at its own initiative or in response to clarifications requested by a Bidder, modify the RFP by the issuance of amendments.
- 2.3.2 Any amendment issued will be sent in writing to all the Bidders.
- 2.3.3 In order to afford the Bidders a reasonable time for taking into account a material amendment (the materiality of which the RBPF in its own discretion may determine) or for any other reason, the RBPF may, at its own discretion, extend the Bid Due Date.

2.4. Right to Accept and to Reject Any or All Bids

- 2.4.1 Notwithstanding anything contained in this RFP, RBPF reserves the right to accept or reject any Bid and to end the Bidding Process and reject all Bids at any time without any liability or any obligation for such acceptance, rejection or annulment, and without assigning any reasons thereof.
- 2.4.2 RBPF reserves the right to reject any Bid if:
 - a. at any time, a material misrepresentation is made or uncovered; or
 - b. the Bidder does not provide, within the time specified by RBPF, the clarification sought by RBPF for evaluation of the Bid.
- 2.4.3 Such misrepresentation shall lead to disqualification of the Bidder. If the Bidder is a Consortium, then the entire Consortium shall be disqualified. If the highest-ranked Bidder is disqualified after the Bids have been opened RBPF reserves the right to negotiate with the next highest-ranking Bidder or in the sole discretion of RBPF, cancel the Bidding Process.
- 2.4.4 In case it is found during the evaluation, or at any time before signing of the Agreement, that one or more of the qualification conditions have not been met by the Bidder, or the Bidder has made material misrepresentation, or has given any materially incorrect or false information, the Bidder shall be disqualified forthwith.
- 2.4.5 Notwithstanding anything to the contrary contained in the RFP, in case it is found after Successful Bidder has been announced, but before the Agreement has been executed, that the Successful Bidder has made any misrepresentation, the award may be rescinded in writing by RBPF in its sole and absolute discretion, without RBPF being liable in any manner whatsoever to the Bidder, as the case may be.
- 2.4.6 RBPF reserves the right to verify all statements, information and documents submitted by the Bidder in response to the Bidding Documents. Failure of RBPF to undertake such verification shall not relieve the Bidder of its obligations or liabilities hereunder nor will it affect any rights of RBPF to disqualify any Bidder or rescind the award as granted under this RFP including this Clause 2.4.

3. Proposal Preparation Instructions

3.1 Bidder's Understanding of the RFP

In responding to this RFP, the Bidder accepts full responsibility to understand the RFP in its entirety, and in detail, including making any inquiries to the RBPF as necessary to gain such understanding. RBPF reserves the right to disqualify any Bidder who demonstrates less than such understanding. Further, RBPF reserves the right to determine, at its sole discretion, whether the Bidder has demonstrated such understanding. That right extends to cancellation of award, if award has been made. Such disqualification and/or cancellation shall be at no fault, cost, or liability whatsoever to RBPF.

3.2 Bid Due Date

Bids are due no later than 4:00pm (Eastern Time) on February 22nd 2019. RBPF may, in its sole discretion, extend the Bid Due Date by issuing an amendment in accordance with Clause 2.2. uniformly for all Bidders.

3.3 Late Bids

Bids received after the Bid Due Date shall not be considered and shall be summarily rejected.

3.4 Good Faith Statement

All information provided by RBPF in this RFP is offered in good faith. Individual items are subject to change at any time. RBPF makes no certification that any item is without error. RBPF is not responsible or liable for any use of the information or for any claims asserted there from.

3.5 Communications

All communications must be in writing in the English Language.

3.6 Clarifications

- 3.6.1 Questions concerning this RFP (including inquiries about technical interpretations) must be submitted in writing and be received prior to Stage Number 3 outlined at Clause 2.2.
- 3.6.2 All requests for clarification must be received in writing via e-mail to secretariat@rbpf.bs on the date outlined at Clause 2.2. Written responses to all questions will be forwarded to all vendors on the date outlined at Clause 2.2., without identifying the source of inquiry.

3.6.3 RBPF may also **on its own motion**, if deemed necessary, issue interpretations and clarifications to all Bidders. All clarifications and interpretations issued by RBPF shall be deemed to be part of the RFP. Any verbal clarifications and information given by RBPF or its employees or representatives shall not be deemed "clarification" for the purposes of this RFP.

3.7 Proposal Preparation and Submission

- 3.7.1 Bidders are required to deliver a sealed envelope that includes the name and address of your point of contact on the outside. The sealed envelope shall contain:
 - One (1) proposal marked 'Team/Company Name Original'.
 - Three (3) hard copies marked 'Team/Company Name Copy 1' and 'Team/Company Name Copy 2' respectively;
 - Bidder Certification in the form provided at Appendix A;
 - ➤ One CD ROM with an electronic version marked 'Team/Company Name Copy 3'.
- 3.7.2 Proposals must be signed by an authorized representative of the proposal and be delivered sealed to:

Chairman
Tenders Board
c/o Ministry of Finance
Cecil Wallace Whitfield Building
Nassau, Bahamas

Attention: Royal Bahamas Police Force CCTV Expansion

on or prior to the date set at Clause 2.2. Vendors are to submit three (3) copies that must be individually bound. All pages of the Bid are to be numbered. Bidders to this tender must also submit a **digitally signed** copy of the proposal electronically via e-mail to **tendersboard@bahamas.gov.bs** with the subject of "Royal Bahamas Police Force CCTV Expansion".

- 3.7.3 Proposals should be organized as follows:
 - 1. **Title Page** Show the RFP subject, the name of the vendor, local address, telephone number, name of contact person, and the date.
 - 2. **Table of Contents** Show a clear identification of the material by section and by page number.
 - 3. **Profile of the Vendor** Show vendor qualifications as stated in Section 5 of this RFP; state the location of the office that will be performing the installation and responding to requests for support.

- 4. **Complete copy of Proposal** Show a complete copy of their proposal in the order of the requirements set forth in Section 5 of this RFP. Provide images and technical specifications of each type of proposed hardware that is to be used in the proposed surveillance system.
- 5. Tax Compliance Certification.
- 3.7.4 All information requested in the Section 4 below should be submitted. RBPF reserves the right to reject any Bid which is non-responsive and no request for alteration, modification, substitution or withdrawal shall be entertained by RBPF in respect of such Bid.
- 3.7.5 Proposal should be prepared in plain and lucid language, providing a clear and concise description of capabilities that meet the criteria of this RFP.
- 3.7.6 Bidders may be required to give an oral presentation of their response to the RBPF. The RBPF will schedule a time and date of these presentations. Oral presentations are an option of RBPF and may or may not be conducted.

3.8 Modifications/Substitutions/Withdrawal of Bids

- 3.8.1 At any stage in its review, RBPF may seek clarifications from Bidders concerning any aspect of their Bids. If such clarification is sought, Bidders must respond to the Authority in the manner and within the timeframes stipulated by RBPF on a case-by-case basis. Bidders are reminded however that this process would not be used by RBPF to rectify a failure by the Bidder to submit, by the Bid Due Date, all required information, which failure may result in disqualification from the Bid Process.
- 3.8.2 Any alteration/ modification in the Bid or additional information supplied after the Bid Due Date, unless the same has been expressly sought for by the RBPF, shall be disregarded and will be considered undesirable practice as specified in Clause 8.3.

3.9 Criteria for Selection

The evaluation of each response to this RFP will be based on its demonstrated competence, compliance, format, and organization. The purpose of this RFP is to identify those Bidders that have the interest, capability, and financial strength to supply the RBPF with a surveillance system solution identified in the Scope of Work. Selections will be based on the capability of the vendor to meet the criteria outlined at Clause 4.

3.9 Evaluation Criteria:

This is the grading to determine whether the proposal meet the requirements.

| No | Category | Weighting Factor |
|----|---|------------------|
| 1 | Compliance with RFP Requirements | 30% |
| 2 | Company Qualifications and Support Experience | 30% |
| 3 | Technical & Implementation Approach | 20% |
| 4 | Cost | 20% |

3.11 Notification and Issue of the Award

- 3.11.1 The Ministry of National Security anticipates selecting at least two individuals or firms to have more indepth discussions with, and will make an award to one of these "downselected" individuals or firms.
- 3.11.2 Secretariat shall notify the Successful Bidder by writing.
- 3.11.3 The Successful Bidder shall confirm acceptance within Seven (7) calendar days and evidenced by writing.
- 3.11.4 After the acknowledgement by the Successful Bidder, it shall execute the Agreement within the period prescribed.
- 3.11.5 The Secretariat will notify other Bidders who were not successful.

4 Scope of Work, Specifications & Requirements

4.1 Technical Specifications

- 4.1.1 RBPF is requesting proposals from qualified firms interested in providing Indoor and Outdoor IP Security Cameras, Camera Mounting Hardware, a Network Voice Recording (NVR) System, NVR Software, a Milestone Video Management System, new video wall, Support, Maintenance, Warranty, Cabling and Training. This system will enhance our current Milestone CCTV system.
- 4.1.2 The IP Surveillance System Solution should be capable of handling at least One Thousand (1,000) cameras of which One Hundred must be License Plate recognition, One Hundred Facial Recognition and one Hundred and Twenty Pan Tilt Zone cameras. The solution should have the capability of adding cameras as deemed necessary by the RBPF.

4.1.3 **Outdoor Cameras**: All cameras must be a product from Milestone Elite cameras manufactures partners e.g. Bosch, Sony, Panasonic etc. All outdoor cameras should be vandal proof and anti-vibration compliant.

4.2 General description

- 4.2.1 The cameras should be capable of the following:
 - ➤ Full High Definition (FHD)
 - ➤ IP66 Rating to protect against dust and environmental elements
 - > IK10 rating for vandal resistant housing
 - > Infrared Illumination for night visibility
 - Defocus Detection
 - ➤ View DR (120dB) for areas that have lighting differences
 - Capability to produce 30 FPS or more
 - Image stabilizing to reduce blurring
 - Day/Night capability
 - > Pan, Tilt, Zoom (PTZ) capability
 - > RJ45 Connectivity
 - Power Over Ethernet (POE)
 - > 5-megapixel resolution
 - Must have tamper detection
 - Must have motion detection
 - Capability to record audio
 - ➤ SD Card Slot
 - Ability to deploy Facial Recognition Technology
 - ➤ Ability to deploy Licence Plate Recognition Technology
- 4.2.2 The recommended specifications of the License Plate and Facial recognition System are as follows:
 - High accuracy and high speed recognition
 - International Number Plate Reading Capability
 - Analytic and reporting capabilities
 - Functions in all weather conditions, 24/7, with no downtime

4.2.3 License Plate Recognition

- The software must run in a web environment and allow multiple simultaneous users, consulting information from a centralized administration console
- You must have a quick for car license plate search with just one click
- Must be able to handle different blacklists where for car license plates with a request for kidnapping will be registered. Said lists should be able to be added manually or automatically in different formats, as it can be in a comma separated file (CSV).
- Must offer cross-searches where for car license plates may be found that have been captured in two or more locations at different times
- Must offer caravan searches to find for car license plates that have been captured with another vehicle in front or behind with certain seconds
- ➤ All search must be exportable to PDF, CSV, HTML and XML at least
- Searches must be quick
- Searches must display the following information:
- Colour photo of the vehicle
- > Black and white photograph of the license plate
- Date and time of reading
- For car license plate reading in plain text
- GPS status
- > Reader's name
- Name of the camera
- > Type of alert if it is in a list
- Single click inside the search, the detail of that reading should be displayed, including the full colour and black-and-white image, the location on the map, the nearest text address, as well as the possibility of exporting to PDF All the information with a single click.
- It must have a user and group administration based on roles, being able to specify who has access to search, modify lists, export, view monitoring tools, configure the application, manage devices, view audit messages and user configuration
- The system must store a record of all the movements made in the application in order to have a log for any audit.
- > The system must perform the data debugging to have a storage of 365 days of readings. After this time the records should be deleted.
- Must have an analytical and statistical tool displaying the number of readings that the system has, the readings per minute that are entering at a certain moment, the count of readings of the day compared to the previous day, the breakdown of readings per unit, the breakdown of alarms by each reader, the GPS status of the units, as well as the possibility of making comparisons of readings and alarms in different periods of time. All this information must be exportable to PDF.
- > Dashboard should gather and display all the alarms that are arriving at the system in real time,

including the location of the alert, the name of the unit, as well as the relevant information of the vehicle license plate.

The software must be a native integration solution of the proposed car license plate reader brand.

4.2.4 Facial Recognition

Image format
Jpg, Jp2000, Bmp, Png, Gif

➤ Image size 320x240 or higher

Min. Face size
 Max. Face pose
 Illumination
 Template size
 Enrollment time
 Verification time
 64x64 pixel
 300lux
 10KB
 600ms
 120ms

➤ Input Smartphones, Tablets

Video stream (Mp4, Avi, Mts, Mpg) Network Camera

Number of Enrolments
Unlimited

Matching Method 1:1, 1:N, N:1, N:N

Alarm mode
Voice, Pop-up, Email, Sms alarms

Enrolment
 Matching
 Search
 Single & Batch enrolment
 Matching from Name
 Text, Image, Category

> Other Duplicated record check Watchlist

Supported Browsers Chrome, Firefox, IE, Opera

Easy view of Matching Results

All matched persons display

Searching from Image and text

Easy Verification confirmation

➤ DB search by ID, Name/Birthday/Country

Simplified User Interface

Unlimited numbers of client access to server

Support web client access

Search from User area

4.3 Milestone Video Management System

- 4.3.1 The proposed solution should describe the administration/management interface that will be used. Preference will be given to Bids that demonstrate systems that are easy to use, that have the option to integrate with Active Directory, have an HTML client, have the ability to record on alarm, supports video aging, and have the option to search by thumbnails. Additionally, the system must be able to do the following:
 - Limitless multi-server and multi-site solution (support an unlimited number of users, cameras, servers and sites);
 - Centralized management management server shall enable full remote system configuration f all recording servers, failover servers, devices, rules, schedules and user rights;
 - Hardware accelerated Video Motion Detection:
 - Support High availability operates in two failover modes; cold stand-by and hot standby;
 - Support Federated Architecture hierarchical architecture for infinite scalability and central management;
 - ➤ Alarm Manager a single-point alarm function that supports a consolidated and clear overview of security and system-related alarms;
 - Support multi-factor authentication;
 - Metadata support shall support reception, storage and export of metadata, including metadata from camera-resided video analytics;
 - Support evidence lock and video grooming;
 - Edge Storage flexible video retrieval based on time schedules, events or manual requests, including the ability to combine centrally and remotely stored video using Scalable Video Quality Recording;
 - Capacity to secure multi-stage storage with the option to encrypt and digitally sign stored video and audio;
 - > Smart maps & Intuitive map function Multi-layered and interactive maps with seamless geonavigation that support standard map services;
 - ➤ Audit logs extensive logging of all user system accesses, configuration changes and operator actions;
 - Flexible user and rights management strict privileges of users' access to functions and camera actions, and support single sign-on Microsoft Active Directory accounts;
 - Versatile rule system automation of different aspects of the system, including camera control, systems behavior and external devices, based on events or time schedules;
 - System Monitor real-time system monitoring dashboard and report function;
 - ➤ Shall enable seamless integration of video analytics algorithms and other third -party applications including but not limited to: a) shotspotter, facial recognition, license plate recognition; mobile app

- > The system configuration API shall enable external applications to make changes to the system's configuration;
- > System can enable full video interoperability in multivendor installations using a standardized

ONVIF compliant video-out interface; and

The system shall facilitate simultaneous digital multi-channel MJPEG, MPEG4, MPEG-4 ASP, MxPEG, H.264 and H.265 video recording of IP cameras and IP video encoders without any software limitations on number of cameras per server.

4.3.2 Video Synopsis:

The solution must integrate to a video synopsis that have the following modules, **Review**, **Research** and **Respond**.

- 1) Review module must comply with the following:
 - Case management.
 - NAS File Upload.
 - Video Synopsis.
 - > Timestamps.
 - Bounding boxes.
 - Density Control.
 - Multicamera Search.
 - Object Filters (see the table).
 - Visual layers.
- 2) Research module must comply with the following:
 - Dashboards
 - Local Sources
 - > Trend analysis
 - Dashboard library
 - > Flexible scheduling
 - External sources
- 3) **Respond module** must comply with the following:
 - Dashboards
 - Sources.
 - > Trend analysis.
 - Dashboard library
 - > Flexible scheduling.
 - > External sources.

4.3.3 Video Wall

SCALABILITY:

- Unrestricted number of video wall configurations and monitors.
- Can be installed in any location the VMS is covering.

SYSTEM FUNCTIONALITY

- ➤ Video wall functionality shall include:
- ➤ Video Wall Configuration: Definition of unrestricted number of video wall instances, including but not limited to:
- > Size and position of individual monitors.
- Camera grid layout and display window content.
- > Video Wall Control: Real-time control of video wall layout and content.
- Dynamic User Control:
- > Control of video wall layout and show full viewing client display items including:
- Views.
- Cameras.
- > Hotspots.
- Carousels.
- Maps.
- > Smart maps.
- > Still images.
- Static or dynamic HTML pages.
- Alarms.
- User-provided texts.
- Bookmarked images.
- Bookmarked video clips.
- System monitor status display.
- > Interactive and remote-controlled playback of recordings on the video wall.
- Automated Control: Rule-based automatic event-driven control of video wall layout and content, such as:
- Motion detection.
- ► I/O.
- Integrated third-party applications.
- > Time profile.
- Video analytics events.
- View-Based Operator Collaboration: Full viewing client users have video wall layouts available as a view, to support operator collaboration.

- 4.3.4 Video Display Monitors: Any number of commercial-quality video display monitors with the following characteristics:
 - Any size and resolution of video display including full HD and 4K resolutions.
 - > Any manufacturer.

4.4 Video Analytics

- 4.4.1 The RBPF requires that the proposed solution have basic video analytics capabilities to help with the management of this amount of raw video data. It is understood that the video analytics features can reside in multiple locations on this type of network including: in camera, edge attached devices, server attached devices, or in the VMS or other software. It is up to the Bidder to determine the best method for Video Analytics capabilities based on the proposed system. The Bidder shall indicate through narrative why this method was chosen and the benefits over other models.
- 4.4.2 The RBPF has identified a number of Video Analytic capabilities that will be useful in the management and operation of this network. These features are listed below using common industry terms. The Bidder shall indicate which of these capabilities their solution supports, which are included as part of the base package at no additional charge, and which can be added or integrated in the future at an additional cost:
 - Perimeter Violation (with schedule/time of day)
 - Loitering
 - Crowd Gathering
 - People Counting
 - Vehicle Counting
 - Wrong Way Travel
 - Object Left Behind
 - Object Removal Detection
 - Subject/Object Tracking
 - Intruder Tracking (Automated)
 - Licence Plate Recognition (LPR)
 - Facial Recognition
 - Obstructed Lens
 - Others included in base package to be identified by Suppliers

4.5 Server Architecture & Storage Solution

System Architecture: The server and storage solution shall consist of:

- 1. Servers: Resilient manufacturer
- 2. Operators Workstations: Resilient manufacturer

Basic Server Configuration

- 4.5.1 The Server shall scale from one to four physical servers, or equivalent quad-blade server. Each blade shall:
 - Be hot-swappable.
 - > Be running independently without interfering with other blades.
 - Dual CPU option.
 - > RAID-1 SSD OS drives.
 - Multiple Gigabit Ethernet ports to optimize camera traffic, viewing, and external storage traffic.
 - ECC protected memory.
 - ➤ Hot-swappable drives.
 - Dual power supply option.
 - Microsoft Windows 2016 64bit.

4.5.2 The Storage solution shall:

- Ensure no frame drop received from the network with the specified data rate (up to 2Gbps).
- Verify there is no frame dropped over the 24 hours site conditions.
- > Provide the management widget to confirm no frame drop with the specified data rate.
- Support scaling of server and storage independently to optimize the cost/performance ratio for video surveillance.
- Add servers based on video management software (VMS) processing and graphics requirements.
- Independently add storage capacity for write-intensive, large block, multi-camera recording.
- Be optimized based on specific VMS.
- Reduce complexity for smaller installations. Specifically, provide a simple server-to-storage direct connect configuration without a switch (via single Gigabit Ethernet).
- > Be able to expand easily with the expansion chassis (JBOD).
- ➤ Be able to scale to 128 servers and 108 drives. In addition, each storage shall be able to connect to 128 servers through Ethernet switch(es).
- Support "full redundant" option.
- ➤ All VMS/servers shall have access to storage to allow VMS/server fail-over.
- Regardless of the number of servers and the number of Gigabit Ethernet ports, each storage system shall be accessible via single IP address for full redundancy.
- Pinpoint the potential dropping of video frames with "busy" information.
- Provide features to achieve the vision of "zero failure" by providing:

- Intelligent drive "self-healing" technologies such as drive power cycle and sector remapping to reduce the frequency of drive replacement.
- Advanced and proactive remote alerts and diagnostics.
- > iSCSI standard.
- ➤ RAID1, RAID5 and RAID6 for data protection.
- Both pro-active and re-active online drive replacement.
- ➤ With pro-active drive replacement, the storage system shall not lose entire RAID due to additional drive failure during the replacement process, regardless of the capacity of the drive. With re active drive replacement, Storage system shall have the ability to prioritize RAID rebuilding versus data access to ensure the performance.

4.5.3 Storage Availability

- Full-redundant options (dual controllers, multiple GE ports, dual power supplies/fans).
- ➤ Hot swappable drives without data access interruption.
- ➤ Hot swappable power supply/fan without data access interruption.
- ➤ Hot swappable controller without data access interruption.
- ➤ Hot add/remove expansion chassis (JBOD) without data access interruption.
- Certified VMS/server fail-over.
- > Redundant GE ports fail-over and automatic GE load balancing.
- Background data integrity check.

4.5.4 Storage Scalability

- ➤ The storage system shall support:
- ➤ Single volume up to 256TB.
- Up to 864TB and up to eight expansion chassis (JBOD).
- > Storage capacity added shall be configurable into new volumes or added to existing volumes without the need to interrupt data access.
- Advanced technologies to scale the number of concurrent video recording, and to reduce file system fragmentation.
- Scaling of performance with addition of each expansion chassis.
- Up to 2 Active/Active controllers.
- Up to 108 parallel drive access per Storage system.
- A minimum throughput of 5 Gigabits per second per controller.
- ➤ Bandwidth addition and I/O processing to be configured scaling to 50 Gigabits per second throughput.

4.5.5 Storage Management

- The storage system shall provide a graphic user interface (GUI) for ease of use. It shall:
- Support web-based browsers and a configuration wizard.
- Display active sessions and their real-time performance.
- Display active sessions and their performance in the past 24 hours.
- ➤ Be able to set performance thresholds and send out alarms for the events happened in past 24 hours.
- Dynamic provisioning of volumes.
- > RAID and dynamic increase of volume size without interruption of data access.
- Advanced maintenance and manageability features.
- System event logging.
- Detection and display of all physical failures graphically for drive/power supply/controller/cable/fan/temp/voltage/battery.
- Display of real-time system information like CPU/cache/I/O completion latency/I/O address.
- Warning of potential video frame drops with "busy" information.
- Background failure checking of disk drives.
- > CMS (central management system) for multiple Storage systems management.
- Multi-level administrator/user security login.
- Command Line Interface.
- SNMP management support.
- > Automatic alerts, which include
- ➤ Alerts on GUI.
- Four email addresses to send system alerts.
- Alerts on failures of drives, fans, power supplies, controller, temperature, voltage, Ethernet ports, SAS ports.

4.6 Wireless Technology

- 4.6.1 Wireless Technology should meet the following specifications, at minimum:
 - Bi-directional Beam Forming antennas
 - > 750Mbps aggregate bandwidth
 - Each Base Station supports (64) Subscribers Unit
 - Built in SLA (Service Level Assurance) software can monitor & report
 - Smart bandwidth allocation
 - Multiband/Multiple Frequency's supported (4.9 5.8GHz)
 - Mobile App for antenna alignment
 - ➤ Built in GPS

- > ETH RJ-45 (PoE) to ODU interface connections
- Configurable channel bandwidths 10 80MHz
- > ODU size & Weight cannot exceed 36 x 23 x 9.5 cm & 3.4kg/7.3 lbs
- Power usage under 30 watts
- > Temp range down to -35F and up to 140F
- ➤ Humidity 100% condensing and completely immiscible to 1 meter

4.7 Support and Maintenance

- 4.7.1 UPS must contain a five (5) year warranty on the UPS system & Batteries
- 4.7.2 The RBPF requires 2-years' support, including onsite support with the option to continue annual support after the 2-year period has ended. The Bidder should provide a detailed description of standard and extended support, maintenance, and the average response time for a support request.

4.8 Service Provider

- 4.8.1 Please state the name of the company which will be delivering service and on-site support for this solution. If service has been outsourced to another firm, please provide the following:
 - Company profile including organizational structure
 - Years of operation and partner relationship with your company
 - Qualification and technical certifications
 - Utilize only manufacturer-trained technicians to install, program, and service VMS equipment.
 - Ensure technicians have a minimum of five continuous years of technical experience in electronic security systems including IP networking and VMS solutions.
 - Vendor and partner insurance. E.g. Public Liability
 - Vendor certification and partners level
 - ➤ Vendor or security sub-contractors shall be licensed to perform security installations in the state/region where the work is to be performed if so required.
 - Sub-contractor shall have a minimum of three years of experience installing and servicing systems of similar scope and complexity

4.9 Roadmap

Bidders must provide a technical roadmap for the proposed solution, including how the proposed solution fits into the Bidder's current product lifecycle.

4.9.1 Bidders must also provide a list of policies on firmware updates for the proposed solution, including the frequency of change releases, how customers are notified of that change and how those changes are applied.

4.9.2 Bidders must also:

- > Describe its training methodology for both technical support staff and systems operators;
- Describe its implementation process and approach for new installation and method of procedures for migration;
- Describe its project management methodology including a sample plan of the implementation schedule including timelines;
- Describe its system and network architecture of the proposed IP Surveillance System. This should include but not be limited to:
- > Application and Database Structure;
- Integration points between system applications;
- Service and storage platform technologies; and
- > Conceptual diagram indicating design consideration for High Availability and Fault Tolerance.

4.10 Engagement Methodology

The RPBF is looking for a turn-key solution. The Bidder will be responsible for any camera hardware, any wireless installation, any cable runs, as well as installation of networking equipment. The Bidder will also be responsible for coordinating with the RBPF's Network Administrator in configuring the networking equipment to work with the RBPF's existing LAN & WAN.

5 Vendor Qualifications & References

5.1 Compulsory Information

- 5.1.1 All vendors must provide the following **compulsory** information in order for their proposal to be considered:
 - ➤ A brief outline of the Bidder and services offered, including:
 - > Full legal name of the company
 - Year business was established/incorporated
 - Number of employees
 - Income statement and balance sheet for each of the two most recently completed fiscal years certified by a public accountant.
 - > An outline of the product line-up and/or services they currently support.

- > The company organizational structure
- Product & Technical Certification
- Vendor Partnership level
- A description of their geographic reach within The Bahamas.
- ➤ Information on its current clients, including:
- > Total number of current clients.
- ➤ A list of clients with similar needs using similar products and/or services.
- Stewardship report for the past 2 years of at least two similar clients
- References: Contact information for three references from projects similar in scope and a brief description of their implementation.
- Budget & Estimated Pricing in US (BS) currency.
- ➢ Bid Bond
- Insurance for general liability (including bodily injury and property damage) must be included
- 5.1.2 All vendors must fill out the following Total Cost Summary for the implementation of their solution for IP Surveillance System Solution project as described in this RFP. Costs should be identified as either capital or noncapital in nature. The vendor must agree to keep these prices valid for ninety (90) days as of the RFP's submission deadline.

6 Total Budget

6.1 Three-Year Cost Summary

6.1.1 The Bidder must provide a three year cost summary for all available deployment models, as displayed below.

| | Year 1 | Year 2 | Year 3 |
|---------------|--------|--------|--------|
| Hardware | | | |
| Software | | | |
| Licensing | | | |
| Installation | | | |
| Maintenance | | | |
| Documentation | | | |
| & Training | | | |
| Project | | | |
| Management | | | |
| Miscellaneous | | | |

Hardware: List, describe, and record the cost of each piece of hardware that is required.

Software Licensing: List, describe, and record the licensing, implementation, maintenance, support, and training fees associated with your proposed solution.

Installation: Describe any labour, equipment, supplies, or other costs associated with installing your proposed solution.

Maintenance: Describe and cost out any other ongoing costs associated with the operation and maintenance of your proposed solution.

Documentation & Training: If there are fees associated with your user or technical documentation, list them here.

Project Management: If there are project management fees associated with your proposed solution, list and describe them here.

Miscellaneous: List and describe any other costs associated with the provision of additional cameras for your proposed solution.

7 Additional Terms & Conditions

7.1 Personal Information

- 7.1.1 RBPF may require information related to the qualifications and experience of persons who are proposed or available to provide services. This may include, but is not limited to, resumes, documentation of accreditation, and/or letters of reference. Unless specifically requested, any such information, whether in the form of resumes or other documentation, will be returned immediately to the Bidder.
- 7.1.2 Any personal information that is requested from each Bidder by RBPF shall only be used to consider the qualified individuals to undertake the project/services and to confirm that the work performed is consistent with these qualifications. It is the responsibility of each Bidder to obtain the consent of such individuals prior to providing the information to the RBPF. The RBPF will consider that the appropriate consents have been obtained for the disclosure to and use by the RBPF of the requested information for the purposes described.

8 General Personnel Responsibilities

- 8.1.1 The Successful Bidder shall be responsible for ensuring that its employees, agents and subcontractors comply with all applicable laws, regulations and professional standards and meet all governmental and local requirements related to their employment and profession. The Bidder shall certify that it does not, and will not, during the performance of the contract employ immigrant or illegal alien workers or otherwise violate any **Immigration Regulations** set forth by the provisions of the **Immigration Act** (Chapter 191, Statute Law of The Bahamas), as amended.
- 8.1.2 During the performance of the contract, the Successful Bidder agrees that it will not discriminate against any employee or applicant for employment because of race, religion, colour, sex, age, handicap or national origin. The Successful Bidder shall include this non-discriminatory provision in every contract it may execute to ensure that the provisions will be binding upon each respondent's subcontractor and/or suppliers.
- 8.1.3 The Successful Bidder and any of its subcontractors or suppliers shall pay all employees resident and working on this contract in The Bahamas not less than minimum wage specified in the **Employment Act** (Chapter 321A) as amended.

8.2 Costs and Intellectual Property

- 8.2.2 The RFP does not obligate RBPF to pay for any costs, of any kind whatsoever, which may be incurred by a Bidder or any third parties, in connection with its Bid. All Bids and supporting documentation shall become the property of RBPF, subject to claims of confidentiality.
- 8.2.3 The Bidder should not use any intellectual property of RBPF including, but not limited to, all logos, registered trademarks, or trade names of the RBPF, at any time without the prior written approval of RBPF, as appropriate.

8.3 Fraud and Corrupt Practices

- 8.3.1 The Bidders and their respective officers, employees, agents and advisors shall observe the highest standard of ethics during the RFP process and subsequent to the issue of the award and during the subsistence of the agreement. Notwithstanding anything to the contrary contained herein, or the Agreement, RBPF shall reject a Bid, withdraw the issue of the award or terminate the Agreement, as the case may be, without being liable in any manner whatsoever to the Bidder or Successful Bidder, as the case may be, if it determines that the Bidder or Successful Bidder, as the case may be, has, directly or indirectly or through an agent, engaged in corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice in the bidding process. In such an event, RBPF shall disqualify the Bidder from further participation in the bid process.
- 8.3.2 For the purposes of this clause, the following terms shall have the meaning hereinafter respectively assigned to them:
 - a. "corrupt practice" means (i) the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the actions of any person connected with the bidding process (for avoidance of doubt, offering of employment to or employing or engaging in any manner whatsoever, directly or indirectly, any official of the RBPF, the Ministry of National Security or the Government of The Bahamas who is or has been associated in any manner, directly or indirectly with the bidding process or the award or has dealt with matters concerning the Agreement or arising there from, before or after the execution thereof, at any time prior to the expiry of one year from the date such official resigns or retires from or otherwise ceases to be in the service of the RBPF, the Ministry of National Security or the Government of The Bahamas, shall be deemed to constitute influencing the actions of a person connected with the bidding process); or (ii) engaging in any manner whatsoever any person in respect of any matter relating to the Project or the award or the Agreement, who at any time has been or is a legal, financial or technical advisor of RBPF in relation to any matter concerning the Project;
 - b. "fraudulent practice" means a misrepresentation or omission of facts or suppression of facts or disclosure of incomplete facts, in order to influence the bidding process;
 - c. "coercive practice" means impairing or harming or threatening to impair or harm, directly or indirectly, any person or property to influence any person's participation or action in the bidding process;
 - d. "undesirable practice" means (i) establishing contact with any person connected with or employed or engaged by RBPF with the objective of canvassing, lobbying or in any manner influencing or attempting to influence the bidding process; or (ii) having a Conflict of Interest; and
 - e. "restrictive practice" means forming a cartel or arriving at any understanding or arrangement among Bidders with the objective of restricting or manipulating a full and fair competition in the bidding process.

8.4 Conflict of Interest

- 8.4.1 A Bidder shall not have a conflict of interest ("Conflict of Interest") that affects the Bidding Process. Any Bidder found to have a Conflict of Interest shall be disqualified. Without limiting the generality of the above, a Bidder shall be considered to have a Conflict of Interest that affects the Bidding Process, if:
 - a. such Bidder (or any constituent thereof) and any other Bidder (or any constituent thereof) have common controlling shareholders or other ownership interest; provided that this qualification shall not arise in cases where the direct or indirect shareholding in a Bidder or a constituent thereof in the other Bidder(s) (or any of its constituents) is less than five percent (5%) of its paid up and subscribed capital; or
 - b. a constituent of such Bidder is also a constituent of another Bidder; or
 - c. such Bidder receives or has received any direct or indirect subsidy from any other Bidder, or has provided any such subsidy to any other Bidder; or
 - d. such Bidder has the same legal representative for purposes of this Bid as any other Bidder; or
 - e. such Bidder has a relationship with another Bidder, directly or through common third parties, that puts them in a position to have access to each other's information about, or to influence the Bid of either or each of the other Bidder.

8.5 Bidder's Responses

All accepted Bids shall become the property of RBPF and will not be returned.

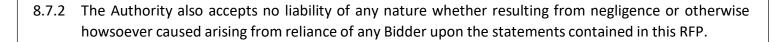
8.6 Governing Law

- 8.6.1 This RFP and all ensuing processes and agreements shall be governed by the laws of the Commonwealth of The Bahamas.
- 8.6.2 The courts of The Bahamas shall have exclusive jurisdiction over all disputes arising under, pursuant to and/or in connection with the bidding process.

8.7 Liability

- 8.7.1 RBPF shall not be liable to any Bidder, person, or entity for any losses, expenses, costs, claims, or damages of any kind:
 - Arising out of, by reason of, or attributable to, the Bidder responding to this RFP; or

| | As a result of the use of | any information error | or omission co | ontained in this | RFP document |
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8.8 Entire RFP

This RFP, any addenda to it, and any attached schedules, constitutes the entire RFP.

9 APPENDIX A

VENDOR CERTIFICATION

This certification attests to the vendor's awareness and agreement to the content of this RFP and all accompanying calendar schedules and provisions contained herein.

The vendor must ensure that the following certificate is duly completed and correctly executed by an authorized officer of your company.

This proposal is submitted in response to RFP-IP SURVEILLANCE SYSTEM SOLUTION issued by Royal Bahamas Police Force. The undersigned is a duly authorized officer, hereby certifies that:

(Vendor Name) agrees to be bound by the content of this proposal and agrees to comply with the terms, conditions, and provisions of the referenced RFP and any addenda thereto in the event of an award. Exceptions are to be noted as stated in the RFP.

The vendor warrants and declares that in submitting this response, it is not relying on any information or documents provided on behalf of RBPF other than these documents.

The proposal shall remain in effect for a period of ninety (90) calendar days as of March 5th 2019

IN WITNESS THEREOF, the parties have caused this Agreement to be executed by their duly authorized representatives on the date(s) shown below.

| Company, | Commonwealth of the Bahamas, | | |
|------------------------|------------------------------|--|--|
| Ву: | By: | | |
| (Authorized Signature) | (Authorized Signature) | | |
| Name: | Name: | | |
| Title: | Title: | | |
| Date: | Date: | | |