# BH-L1033: CITIZEN SECURITY AND JUSTICE PROGRAMME (CSJP) TERMS OF REFERENCE CONSULTANCY:

Systems Administrator (Project Management Information System)

#### 1. Background:

The Ministry of Finance of The Commonwealth of The Bahamas has received financing from the Inter-American Development Bank (IADB) (Loan BH-L1033), to implement a Citizen Security and Justice Programme. The overall objectives of this program are to: (i) improve behaviours for non-violent conflict resolution in New Providence; (ii) increase employability and employment of the at-risk youth population in New Providence; (iii) strengthen institutional capabilities of justice services; and (iv) reduce the recidivism rate among persons within the juvenile system. To fulfill these objectives, the Ministry of National Security has applied part of the proceeds of this Loan to contract a firm to design, develop and implement a comprehensive and user-friendly Integrated Project Management Information System and Electronic Records Management System. As a result, the Ministry of National Security intends to apply part of the proceeds of this Loan to contract an Individual Consultant to manage the operationalization, maintenance, and ongoing management of the system.

# 2. Objective (s) of the Assignment

Projects contain an abundance of information, documents, and data. The management of these aspects of the project requires the same level of discipline as the management of other organizational process. Therefore, as a primary goal the consultancy is to assist the Ministry of National Security CSJP PEU in the planning, monitoring, and execution of project deliverables by managing an efficient, semi-automated data and record keeping process in alignment with the CSJP project management methodology. The procured PMIS manages initiatives throughout its life cycle from ideation to closing and the Systems Administrator is responsible for ensuring its efficient and effective operation. In this vein, the consultancy referenced herein will support the PEU by managing the integrated Project Management Information and Records Management System. The consultant will play a vital role in making sure the integrated systems are a) running smoothly and securely and b) its functionality continues to meet the needs of the PEU. Key objectives include and are not limited to:

• Upgrading, installing, and configuring application software and related computer hardware

- Troubleshooting and providing technical support to the Ministry of National Security and its PEU
- Creating and managing system permissions and user accounts
- Performing regular security tests and security monitoring
- Maintaining networks, network file systems and computer servers
- Supporting a multiuser computing environment and ensure continuous, optimal performance of IT services and support systems.
- Maintaining essential IT operations related to PMIS
- Owning projects, solutions, and key responsibilities within the larger initiative
- Handle operations-critical IT tasks and systems
- Enable efficient and effective operational and management processes and implement analytics for meaningful insights
- Nurture dependable IT infrastructure and networking that's always up and running
- Communicate with internal and external stakeholders to convey technology status, activities, and achievements

# 3. Specific Objectives of the Consultancy:

3.1 Identify and execute a methodology for the management and efficient/effective operations of the integrated project management information and records management system:

In conjunction with the Project Execution Unit (PEU), procured firm, and other stakeholders of Ministry of National Security as needed, the consultant will develop and implement an appropriate methodology for managing the overarching Integrated Project Management Information and Records Management System (PMIS) considering key operational requirements that include and are not limited to the following:

- Installing and configuring software and hardware as needed
- Managing network servers and technology tools
- Organizing, modifying, and supporting hardware and software systems as needed
- Developing, managing, and executing hardware/software maintenance plans
- Maintaining responsibility for capacity, storage planning, and database performance
- Installing, configuring, and maintaining servers and networks
- Developing and managing a systems monitoring plan
- Coordinating new account set-up and managing active directory administration
- Monitoring performance and maintaining systems according to delineated requirements

- Maintaining responsibility for the maintenance, configuration, and reliable operation of integrated computer systems, network servers and virtualization
- Installing and upgrading hardware/software components, manage virtual servers, and integrate automation processes
- Providing documentation and technical specifications for planning and implementing upgrades to hardware/software infrastructure
- Protecting critical information, systems, and assets; building solutions; implementing new software and hardware; and developing an overarching technology strategy
- Providing training, and upgrading training material as needed
- Optimizing and leading process improvement
- Ensuring security through access controls, backups, and firewalls
- Upgrading systems with new releases and models
- Developing expertise to train staff on new technologies
- Building an internal wiki with technical documentation, manuals, and IT policies
- Providing a reliable virtual working environment
- Maintain responsibility for capacity, storage planning, and database performance
- Ensuring high-level security and efficiency resulting in 100% output
- Performing system upgrades following new releases
- Performing account setup
- Sustaining network integrity, server deployment, and security
- Monitoring and maintaining network servers such as file servers, VPN gateways and intrusion detection systems
- Ensuring familiarity with tasks related to scripting, automation, and programming
- Maintaining responsibility for requirements in alignment with virtualization and cloud computing skills
- Provisioning, configuring, and managing system performance
- Managing user accounts, permissions, access rights, and storage allocations
- Offering technical support and troubleshoot any hardware and software problems related to integrated system
- Handling issues concerning application and database server operations
- Conducting thorough research on upcoming products, service protocols, and standards in support of systems software procurement and development efforts
- 3.2 Develop and manage Risk Mitigation Plan to quickly arrange for replacement or resolve the issues in case of any hardware/software failure. This encompasses tasks that may include and are not limited to:

- Developing and managing backup and recovery policy
- Overseeing system performance and troubleshooting issues
- Creating backup and safeguard policies for data in preparation of any hindrances
- Leading software and hardware support efforts ensuring that all problems are resolved in a timely manner
- Troubleshooting issues and outages
- Managing, troubleshooting, and proactively updating hardware and software assets to prevent downtime or zero-day exploits from occurring
- Troubleshooting hardware and software errors by running diagnostics, documenting problems and resolutions, prioritizing problems, and assessing impact of issues
- Performing regular backup operations and implementing appropriate processes for data protection, disaster recovery, and failover procedures
- Troubleshooting, managing firewalls and provide technical support
- Maintain responsibility for running reports on system performance
- Managing and offering necessary technical support for firewall and network system ensuring the integrated systems are safe and secure from breaches or viruses
- Ensuring that technology infrastructure runs smoothly and efficiently
- Installing and troubleshooting IT resources, establishing, and managing user accounts, upgrading, and patching software, and performing backup and recovery tasks
- Monitoring system performance and troubleshooting issues
- Ensuring security and efficiency of IT infrastructure

#### 4. Deliverables:

The Deliverable Submission Matrix highlights the respective Deliverable and Submission Schedule. Details of the requirements for each Deliverable are further described below:

#### Submission Schedule

Deliverable #	Report	Monthly	Quarterly reports	Periodic
	Name		(one report every	
			3 months no later	
			than the last	
			working day of	
			the month it is	
			due)	
Deliverable #1	Work Plan		Updated	
	Within 2 weeks of		Quarterly	
	contract signing			
Deliverable #2	Hardware		X	
	Compatibility		Quarterly	
	Report			
Deliverable #3	System			
	Monitoring/	Χ		
	Administration	Monthly		
	Report			
Deliverable #4	PMIS Training			X
	Wiki Update			As updates are made
	Report			are made
Deliverable #5	System Security		X	
	Report		Quarterly	
Deliverable #6	Risk Mitigation		X	
	and Audit Report		Quarterly	

#### Deliverable 1: - Work Plan

Develop a work plan within 2 weeks of contract signing to be updated quarterly. Include the strategy in support of the Project Management Information and Records Management System's overarching objectives, vision, and delineated capacity. Work Plan Strategy should include stakeholder assessments, systems management and maintenance plan, and content/administration management strategy. This Work Plan document should operate in conjunction with the approved Program Operations Manual (POM) as well as operational documents of the PMIS. The Work Plan is to include and is not limited to a proposed reporting format for the deliverables outlined below.

#### Deliverable 2: - Hardware Compatibility Report

Hardware Compatibility Report is to be completed and submitted to the Project Manager and requisite ministerial stakeholders (on a quarterly basis). In preparing this report, the Systems Administrator should outline details that include and are not limited to the following categories:

- Outlining in what ways do existing hardware components meet, exceed, or demonstrate incompatibility with system needs
- Delineation of overarching Hardware Evaluation Strategy
- Resource requirements
- Requirements and strategy for efficiently and effectively monitoring datacenter health using Administrator-determined management tools
- Strategy for responding to hardware issues as they arise (including and not limited to build, test, and maintain new servers as needed)
- Strategy for maintaining internal infrastructure requirements (for example: laptop and desktop computers, servers, routers, switches, firewalls, printers, phones, security updates; as well as any other hardware required in support of internet, intranet, LANs, WANs, and network segments)
- Providing documentation and technical specifications for planning and implementing upgrades to hardware/software infrastructure
- Outlining quality standards

# Deliverable 3: System Monitoring/ Administration Report

Prepare (monthly) reports outlining the consultant's strategy for and achievements in monitoring and administering Project Management Information and Records Management System. This report should include month-over- month statistics relating to administration and monitoring methods, as well as recommendations strategy changes. Reports should include details including and not limited to:

- Overview of consultant's server administration tasks performed including and not limited to user/group administration, security permissions, group policies, research event log warnings and errors, and resource monitoring – ensuring system architecture components work together seamlessly
- Notation of interactions with the 'help desk' and internal/external stakeholders through which Administrator assisted in troubleshooting, identifying root cause, and providing technical support as needed

- Delineation of software update requirements based on current system capacity
  as well as thorough research on upcoming products, service protocols, and
  standards in support of systems software procurement and development efforts
- Delineation of/updates to process improvement and optimization strategy based on lessons learnt
- Overview of systems monitoring plan effectiveness

### Deliverable 4: - PMIS Training Wiki Update Report

Training and orientation courses and ancillary material have been developed to guide transfer of learning and better enable user navigation of the Integrated Project Management Information and Records Management System portal. Based on this existing documentation, provide update reports as needed delineating updates made and the change that made the training wiki update necessary. Reporting therefore will:

- Outline updates to Training plan in accordance with requirements for training and in alignment to existing Systems Manuals, Training Manuals, Operational Guides, and other training aids such as videos and tutorials
- Outline training sessions provided if they were periodically needed

### Deliverable 5: System Security Report

Create a System Security Report (to be updated quarterly) that includes the capacity, format and objectives of system security aspects and activities leveraged as a part of the system security strategy. In creating this Security Report, the Systems Administrator should have already provided a comprehensive strategy for ensuring system security and outline the regular completion of activities that include and are not limited to:

- Monitoring and maintaining network servers such as file servers, VPN gateways and intrusion detection systems
- Performing routine/scheduled audits of system security, including all backups in conjunction with Deliverable 6 (Risk Mitigation and Audit Report)
- Troubleshooting hardware and software errors by running diagnostics, documenting problems and resolutions, prioritizing problems, and assessing impact of issues
- Implementing and adjusting Cybersecurity and Data Privacy Policies & Standards within the solution
- Managing firewalls and provide technical support
- Setting up security policies for users and taking care of identity management

# Deliverable 6: Risk Mitigation and Audit Report

Prepare quarterly Risk Mitigation and Audit Reporting in line with the consultancy's overarching objective of ensuring that the integrated systems are in proper working condition. Outline methods taken to reduce risks including those related to security, access, and data availability. Reporting should delineate steps completed including and not limited to:

- updating the application software versions, along with executing the policies for the use of the computer system and network
- Performing regular backup operations and implementing appropriate processes for data protection, disaster recovery, and failover procedures
- Developing and managing backup and recovery policy
- Overseeing system performance and troubleshooting issues
- Creating backup and safeguard policies for data in preparation of any hindrances
- Ensuring that technology infrastructure runs smoothly and efficiently
- Performing routine/scheduled audits of the systems, including all backups
- Troubleshooting hardware and software errors by running diagnostics, documenting problems and resolutions, prioritizing problems, and assessing impact of issues
- Developing a sustainability strategy

# 5. Duration of Assignment

The duration of the contract is one (1) year, full time, with the possibility of being renewed based on satisfactory performance as evidenced by performance evaluation ratings.

A probationary period will extend for a period of four (4) months. Ongoing feedback will be provided to support the Systems Administrator in understanding the overall objectives of the programme and their role. The Systems Administrator is expected to demonstrate capacity and competence in performing the duties and responsibilities of the contract as indicated above.

# 6. Reporting Arrangements

The Systems Administrator will report to the Project Manager of the Project Implementation Unit of the Citizen Security and Justice Programme, or as otherwise assigned.

# 7. Deliverables and Payment Schedule

For the performance of duties outlined in these Terms of Reference, the Systems Administrator will be paid on a monthly basis, by or before the last day of the month in accordance with submission of monthly reports within the agreed timeframe.

#### 8. Qualifications

The Systems Administrator, PMIS will be responsible for the overall quality of engagement and quality of interventions and outcomes as outlined. Eligible Candidate must be resourceful and demonstrate the able to diagnose and resolve problems quickly. They should also have the patience to communicate with a variety of interdisciplinary teams and users. Additional skills and qualifications include:

- An Associate or Bachelor's degree (bachelor's preferred) in Computer Science, Information Technology, System Administration, computer engineering or related field from an accredited institution, OR equivalent experience with relevant certifications such as Microsoft Certified Solutions Expert (MCSE), Red Hat (RHCSA and RHCE), Linux Professional Institute LPIC System Administrator, CompTIA Server+, VMware Certified Professional Data Center Virtualization (VCP-DCV) or ServiceNow Certified System Administrator.
- System administration and IT certifications in Linux, Microsoft, or other network related fields are a plus
- At least five (5) years' experience of database, network administration, or system administration as well as database, network, and patch management.
- At least three (3) years' experience with a proven track record in developing and implementing IT strategy and plans
- At least three (3) years' experience implementing and effectively developing IT operations best practices, including expert knowledge of security, storage, data protection, and disaster recovery protocols
- Knowledge of and experience in system security (e.g. intrusion detection systems) and data backup/recovery
- Experience with or knowledge of programming languages and operating systems; current equipment and technologies, enterprise backup and recovery procedures, system performance-monitoring tools, active directories, virtualization, HTTP traffic, content delivery, and caching
- Experience in project management, application design and integration, and cloud computing
- Working knowledge of virtualization, VMWare, or equivalent

- Expertise in creating, analyzing, and repairing large-scale distributed systems as well as creating volumes, assigning to servers and remote replication
- Experience in and ability to create scripts in Python, Perl or other language as well as automation tools
- The Systems Administrator PMIS will be analytical and strategic in thought with exceptional technical competence in computer system development, management, and security.
- They will be organized, self-motivated, apt in working independently as well as collaboratively, given to deadlines and results, open to change and shifting priorities, skilled in establishing and adjusting priorities.
- Eligible candidate will have demonstrated competence in oral and written communication and will have demonstrated ability to influence others, build collaborative teams, and achieve results.
- Previous experience and knowledge of the public service system in The Bahamas is a plus.

#### 9. Performance Evaluation:

- Practical knowledge of and experience in the field
- Ability to adapt knowledge and experience to assigned tasks
- Initiative
- Productivity
- Ability to work with others
- Adherence to TOR and executing agency's working regulations
- Quality of work completed

#### 10. Citizen Security and Justice Programme Recourse:

The Citizen Security and Justice Programme reserves the right to withhold all, or a portion of payment if performance is unsatisfactory, if work outputs are incomplete, not delivered, or for consistent failure to meet deadlines.

#### 11. Documents to be included when responding to Expression of Interest

Interested candidates shall submit the following documents/information to demonstrate their qualifications:

- Letter of interest (dated and signed), explaining why they are the most suitable for the work
- Updated and Completed CV
- Technical Portfolio

#### 12. Evaluation:

Consultants will be evaluated based on Letter of Interest and CV. Qualifying candidates will be contacted for an interview.

# 13. Obligations of Citizen Security and Justice Programme, Project Implementation Unit:

The Citizen Security and Justice Programme Project Implementation Unit agrees to:

- Review and provide feedback on consultancy deliverables;
- Provide the consultant with all necessary logistical support to ensure that the consultant undertakes the consultancy with reasonable efficiency;
- Meet all the agreed cost related to the consultancy;
- Provide relevant documents and make all necessary contacts that may be needed; and
- Guide the consultancy as needed and necessary.

# 14. Intellectual Property Rights:

The Bahamas Government shall hold all property rights, such as copyright, patents, and registered trademarks, on matters directly related to, or derived from, the work carried out through this contract. The consultant shall avoid copyright violations on all work related to this contract.