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

Systems Administrator (Youth and Community Centre Management 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 a) develop a network of community centres and b) design and develop and integrated Youth and Community Centre Management System to ensure the efficient and defective delivery of multi-generational programming. 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

The Ministry of National Security has developed a network of Youth and Community Centres through which programming is run under the supervision of Centre Managers, an overarching Community Centre Business Model and the auspices of the Ministry of Youth, Sports, and Culture. Through these centres, onsite multi-generational programming is provided by the Departments of Youth, Sports, and Culture supported in part by an existing eLearning Management System owned by the Ministry of Social Services. However, the use of primarily manual and paper-based systems for the management of centre operations, creates the risk of inefficiency and inconsistency. The procured CCMS seeks to provide a robust online management platform responsible for various centre functionality and the Systems Administrator is responsible for ensuring its efficient and effective operation. In this vein, the consultancy referenced herein will support the Network of Community Centres by managing the integrated Community Centre 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 Network of Centres and its beneficiary Ministry – the Ministry of Youth, Sports, and Culture. 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 Youth, Sports, and Culture and its Network of Youth and Community Centres
- 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 CCMS
- 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 Youth and Community Centre Management System:**

In conjunction with the Project Execution Unit (PEU), procured firm, the Ministry of Youth, Sports, and Culture and stakeholders throughout the Network of Youth and Community Centres, the consultant will develop and implement an appropriate methodology for managing the overarching Integrated Youth and Community Centre Management System (CCMS) considering key operational requirements that include and are not limited to the following:

- Installing and configuring software and hardware as needed
- Assisting in the management of public facing web-pages of the system 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 Name	Monthly	Quarterly reports (one report every 3 months no later than the last working day of the month it is due)	Periodic
Deliverable #1	Work Plan Within 2 weeks of contract signing		Updated Quarterly	
Deliverable #2	Hardware Compatibility Report		X Quarterly	
Deliverable #3	System Monitoring/ Administration Report	X Monthly		
Deliverable #4	CCMS Training Wiki Update Report			X As updates are made
Deliverable #5	System Security Report		X Quarterly	
Deliverable #6	Risk Mitigation and Audit Report		X 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 Youth and Community Centre 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 Community Centre Business Model as well as operational documents of the CCMS. 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 PEU Project Manager as well as requisite stakeholders across the Ministry of Youth, Sports, and Culture and its Network of Community Centres (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 submitted to the PEU Project Manager as well as requisite stakeholders across the Ministry of Youth, Sports, and Culture and its Network of Community Centres which outline the consultant's strategy for and achievements in monitoring and administering Community Centre 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: - CCMS 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 Community Centre Management System portal. Based on this existing documentation, provide update reports to the PEU Project Manager as well as requisite stakeholders across the Ministry of Youth, Sports, and Culture and its Network of Community Centres 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. Report should be submitted to the PEU Project Manager as well as requisite stakeholders across the Ministry of Youth, Sports, and Culture and its Network of Community Centres. 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. Report should be submitted to the PEU Project Manager as well as requisite stakeholders across the Ministry of Youth, Sports, and Culture and its Network of Community Centres. 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, the Coordinator of the Network of Youth and Community Centres in the Ministry of Youth, Sports, and Culture or another supervisor 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, CCMS 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 CCMS 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 work 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.