

## **Terms of Reference**

### **Modular EIS Deployment Package with Botswana Deployment**

<b>Position Title:</b>	Software Developer / Technical Consultant for EIS Deployment Package and Botswana Deployment
<b>Organization:</b>	Centre for Environment and Development for the Arab Region and Europe (CEDARE)
<b>Duty Station:</b>	Home-based/remote, with coordination with CEDARE and Botswana DEP & DIT
<b>Contract Type:</b>	Consultancy
<b>Direct Supervisor</b>	CEDARE Project Manager
<b>Duration</b>	Until 30 August 2026

### **Background**

CEDARE is supporting the implementation of Environmental Information System (EIS)-related activities in Botswana under its cooperation with UNEP. The Botswana EIS is currently hosted on Microsoft Azure and is required to be deployed to the on-premises server environment of the Botswana Department of Environmental Protection (DEP), in coordination with the Botswana Department of Information Technology (DIT).

At the same time, the assignment is intended to be undertaken as a modular EIS deployment package. This package should allow the EIS to be configured and deployed for future participating countries according to their approved hosting environments and operational requirements.

The current online EIS is built on the ASP.NET Boilerplate (ABP) framework and is hosted on Azure Cloud services, including Azure-based document storage and Microsoft SQL Server. This baseline is provided to ensure that prospective consultants understand the current technical stack before proposing the implementation approach. Also, documentation for the current online EIS shall be made available to the selected service provider immediately upon contracting.

Following successful CEDARE review and simulation, the consultant shall support and carry out the Botswana deployment remotely, in coordination with CEDARE, Botswana DEP, and Botswana DIT. A dedicated Remote Deployment Support allocation shall be used to address deployment coordination, configuration, troubleshooting, and issue resolution during deployment on the Botswana DEP on-premises environment.

Given the operational importance of the assignment, the work shall include a formal review point before the package is used for the Botswana deployment. This review will allow CEDARE to confirm readiness, review the proposed deployment package, identify remaining risks, and agree on whether the assignment should proceed to the Botswana deployment stage.

### **Objectives**

The objective of this assignment is to prepare, simulate, validate, document, hand over, and deploy a modular EIS deployment package, with Botswana serving as the first validated implementation instance. Specifically, the assignment aims to:

1. Review the current online EIS setup and distinguish between reusable system components and country-specific configuration requirements, including the configuration requirements for Botswana.
2. Prepare the EIS for modular deployment, including system files, configuration approach, database setup, document storage arrangements, email notification settings, and other local-hosting requirements.
3. Configure and validate the modular deployment package before proceeding to Botswana deployment.
4. Submit the key preparatory outputs, draft deployment package, dependencies, simulation plan, and proposed Botswana deployment approach for CEDARE review before proceeding further.
5. Deploy the EIS on the designated Botswana DEP on-premises server environment and coordinate with CEDARE, Botswana DEP, and Botswana DIT during deployment, validation, and issue resolution.
6. Provide remote technical support to address issues encountered during deployment in the Botswana on-premises environment.
7. Provide documentation and handover support that enable CEDARE to understand, retain, and reuse the deployment approach for future EIS implementation or migration assignments, without creating avoidable dependency on an independent consultant.

## Scope of Work

The consultant shall undertake the assignment in three stages: pre-deployment preparation and CEDARE review; simulation and validation; and Botswana deployment, validation, and remote deployment support in coordination with Botswana. The steps identified under the pre-deployment stage shall be submitted to CEDARE for review before the consultant proceeds to the simulation, validation, or Botswana deployment stages, as applicable.

### A. Pre-Deployment Preparation and CEDARE Review Stage

1. **Inception workplan and readiness checklist:** prepare a clear workplan showing the proposed approach, sequence of activities, expected timeline, required access, required inputs, readiness requirements, and outputs to be reviewed before implementation.
2. **Current online EIS stack review:** review and document the current setup, including its ASP.NET Boilerplate (ABP) framework, Azure Cloud hosting arrangement, Azure-based document storage dependencies, Microsoft SQL Server database, email notification settings, and other relevant baseline components.
3. **Documentation access and review:** review the available documentation for the current online EIS immediately after contracting and identify any documentation gaps, assumptions, or clarifications required before preparing the deployment package.
4. **Current EIS review and modularization note:** identify which components should remain common across deployments and which elements should be treated as country-specific configuration, such as hosting information, database connection, document storage location, email settings, user access arrangements, and institutional labels.
5. **Draft modular deployment package:** prepare the system files, configuration structure, deployment notes, and supporting materials in a reusable form that can be configured for Botswana and future participating countries, within the agreed timeframe and budget.
6. **Botswana configuration profile and reusable country configuration template:** prepare the Botswana configuration profile required for deployment, together with a reusable template showing the information required for any participating country, including local hosting settings, user access arrangements, document routing, email notification settings, database connection requirements, and institutional parameters.
7. **Local document storage approach:** prepare and test the proposed approach for storing and retrieving EIS documents from a local server environment instead of the current Azure-based

storage arrangement, while documenting how the approach can be configured for Botswana and future deployments.

8. **Database migration and validation approach:** prepare the database transfer and validation approach, including the proposed method for transferring, checking, and validating data before it is moved to the Botswana local Microsoft SQL Server environment.
9. **Hosting and access requirements:** identify the required server setup, software requirements, access permissions, folder structure, security or certificate needs where applicable, email notification requirements, and other hosting inputs required for the Botswana DEP/DIT on-premises deployment.
10. **Botswana deployment and remote support plan:** define the Botswana deployment sequence and the scope of remote deployment support including eligible support activities, coordination requirements with Botswana DEP and DIT, escalation points, expected response arrangements, issue logging, and closure requirements.
11. **Draft deployment and handover guide:** prepare a practical guide setting out the deployment steps, configuration checklist, validation steps, fallback arrangements, handover requirements, and key items that CEDARE would need to retain for future deployments.

## B. Simulation, Validation, and Handover

1. **Proceed after review clearance:** following confirmation from CEDARE, configure and simulate the modular EIS deployment package using the reviewed deployment package and configuration template.
2. **Configure the simulated instance:** complete the required application settings, database connection, local document storage settings, email notification settings, and related operational parameters.
3. **Conduct system testing:** test the simulated instance to confirm that key functions, user access, document upload and retrieval, database records, email notifications, and general system performance operate as expected.
4. **Resolve issues and document limitations:** record and address issues identified during testing, with particular focus on critical or high-priority issues that may affect later operational deployment.
5. **Update the modular deployment package after validation:** incorporate lessons learned from the CEDARE simulation into the final package, guide, and handover notes so that CEDARE retains a reusable implementation reference before the Botswana deployment proceeds.
6. **Participate in coordination and handover:** participate in coordination meetings with CEDARE and relevant technical focal points, provide progress updates, and support the handover of both the validated modular deployment package and the related implementation knowledge.

## C. Botswana Deployment, Validation, and Remote Deployment Support Stage

1. **Deploy the EIS in Botswana:** after CEDARE review clearance and successful simulation, deploy the EIS on the designated Botswana DEP on-premises server environment using the validated modular deployment package and the Botswana configuration profile.
2. **Coordinate with Botswana DEP and DIT:** coordinate directly with the designated Botswana DEP and DIT technical focal points, through CEDARE and its supervision, to confirm access, server readiness, configuration requirements, deployment timing, and issue-resolution arrangements.
3. **Support configuration and troubleshooting:** support the relevant technical focal points in resolving configuration, access, document storage, database connection, email notification, or application-startup issues that arise during Botswana deployment.
4. **Validate the deployed Botswana instance:** test the deployed system to confirm that key functions, user access, document upload and retrieval, database records, email notifications,

and general system performance operate as expected in the Botswana on-premises environment.

## **Pre-Deployment Review and Clearance Milestone**

Before the modular deployment package is simulated in the CEDARE virtual environment or used for the Botswana deployment, the consultant shall submit a Pre-Deployment Review Package to CEDARE. This package shall consolidate the preparatory outputs that can reasonably be completed and reviewed before implementation proceeds.

The purpose of this milestone is to ensure that CEDARE has sufficient visibility on the proposed deployment package, configuration approach, Botswana deployment requirements, expected changes, readiness requirements, risks, dependencies, and remote support arrangements before the package is validated or used for deployment in Botswana.

The following steps and processes shall be reviewed before proceeding:

1. Review of the current online EIS setup, including the ASP.NET Boilerplate (ABP) and Azure Cloud baseline
2. Review of available online EIS documentation and identification of documentation gaps, if any
3. Inception workplan and readiness checklist
4. Draft modular EIS deployment package
5. Botswana configuration profile and reusable country configuration template
6. Local document storage approach and preliminary testing evidence
7. Database migration preparation approach and data-validation method
8. Server, access, email notification, security/certificate, and hosting requirements for the Botswana DEP on-premises environment
9. CEDARE simulation plan
10. Risk, dependency, and decision log
11. Draft deployment and handover guide, including the configuration checklist and the information CEDARE needs to be retained for future deployments

Implementation shall proceed only after CEDARE confirms that the Pre-Deployment Review Package has been reviewed and that there is no objection to proceeding. CEDARE may provide comments, request clarifications, or require adjustments before implementation proceeds. The review shall not replace final acceptance but shall serve as a practical control point to reduce implementation risks and confirm that the assignment is being packaged in a reusable form for CEDARE and deployable in Botswana.

## **Deliverables**

The contractor shall provide the following outputs as per the staged implementation approach:

### **A. Before Simulation and Botswana Deployment**

1. Inception Workplan and Modular Packaging Approach: a clear workplan covering the implementation approach, expected sequence, timeline, roles, required inputs, access requirements, readiness needs, coordination arrangements, and the proposed approach for preparing the work as a reusable deployment package.
2. Current Online EIS Technical Baseline Review: a concise review of the current online EIS setup, including the ASP.NET Boilerplate (ABP) framework, Azure Cloud hosting arrangement, Azure-based storage dependencies, Microsoft SQL Server database, email notification settings, and other relevant baseline components.
3. Documentation Review Note: a short note confirming receipt and review of the available online EIS documentation immediately after contracting, including any documentation gaps, assumptions, or clarifications required.

4. Current System Review and Modularization Note: a summary of the current EIS hosting arrangement, key dependencies, document storage arrangements, database considerations, email notification requirements, changes required for local hosting, and the distinction between common system components and country-specific configuration items.
5. Draft Modular EIS Deployment Package: the prepared system files, configuration structure, deployment notes, and related materials required to allow the EIS to be configured for Botswana and future participating countries, subject to their respective hosting environments.
6. Botswana Configuration Profile and Reusable Country Configuration Template: the Botswana-specific configuration profile required for the first deployment, together with a reusable template identifying the country-specific information required for future configuration and deployment, including hosting settings, user access, document routing, email notification settings, database connection requirements, and institutional parameters.
7. Local Document Storage Package: the proposed and tested document storage approach for the local server environment, including evidence that document upload, retrieval, and access arrangements have been checked, and notes on how the approach can be configured for the Botswana deployment and future deployments.
8. Database Migration Preparation Package: the database migration approach, related transfer/checking procedures, validation method, and any required database preparation notes, including requirements relevant to the Botswana local Microsoft SQL Server environment.
9. Hosting and Configuration Requirements Checklist: a practical checklist setting out the server setup requirements, required access, folder structure, application settings, email notification settings, security/certificate considerations where applicable, and other inputs required before the Botswana deployment.
10. Botswana Deployment and Remote Support Plan: a plan defining the Botswana deployment sequence, support scope, issue logging method, eligible support activities, coordination requirements with Botswana DEP and DIT, escalation points, and closure requirements.
11. Pre-Deployment Review Package and Clearance Record: a consolidated package including the draft modular deployment package, Botswana configuration profile, reusable configuration template, database migration approach, local document storage approach, server and access requirements, risk and dependency log, simulation plan, Botswana deployment and remote support plan, and record of CEDARE review or no-objection before proceeding.

## **B. After Simulation, Botswana Deployment, Validation, and Support**

1. Validated Modular EIS Deployment Package: a configured and tested version of the modular EIS deployment package.
2. Deployed Botswana EIS Instance: an operational EIS instance deployed on the designated Botswana DEP on-premises server environment using the validated modular deployment package and Botswana configuration profile.
3. Testing and Validation Report: a report confirming the results of functional testing, user-access testing, document upload and retrieval testing, database validation, email notification testing, issue resolution, and any remaining non-critical limitations, covering both the CEDARE virtual environment simulation and the Botswana deployment, as applicable.
4. Final Modular EIS Deployment Package: the final version of the reusable EIS deployment package, updated based on the CEDARE simulation and the Botswana deployment experience, and suitable for future configuration and deployment by CEDARE for participating countries, subject to country-specific requirements and approvals.
5. Deployment and Handover Guide: practical documentation covering deployment steps, configuration checklist, key settings, user and administrative considerations, maintenance guidance, troubleshooting guidance, fallback considerations, and known limitations, if any.
6. Botswana Remote Deployment Support Log: a log of remote deployment support provided for the Botswana deployment, including issues raised, actions taken, time used, pending items, decisions required, and closure status.

7. Final Completion and Knowledge-Retention Report: a final report summarizing the work completed, deliverables submitted, issues resolved, outstanding matters, recommendations, follow-up actions, and the knowledge or materials retained by CEDARE to support future EIS deployments.

## Required Qualifications and Experience

The consultant should demonstrate the following qualifications and experience:

- Proven experience in web application development, deployment, and troubleshooting.
- Familiarity with ASP.NET Boilerplate (ABP), Azure Cloud services, Azure-based storage arrangements, and Microsoft SQL Server, or demonstrated ability to work effectively with this stack based on the available documentation.
- Strong experience with Microsoft SQL Server, including database transfer, backup, restoration, validation, and performance review.
- Practical experience moving applications from cloud-hosted environments to locally hosted server environments.
- Experience replacing cloud-based document storage arrangements with secure local server storage arrangements.
- Experience preparing deployment packages, configuration guidance, and operational documentation that can be reused by institutional teams.
- Experience in application setup, hosting configuration, email notification settings, server-side troubleshooting, and operational testing.
- Ability to coordinate with government technical teams during remote deployment, validation, troubleshooting, and handover.
- Ability to prepare clear documentation and communicate effectively with technical and non-technical stakeholders.
- Prior experience with environmental information systems, government-hosted platforms, or institutional data systems would be an asset.

## Coordination and Reporting

The consultant shall report to CEDARE and coordinate closely with the project manager. As needed, the consultant, under the supervision of the project manager, will coordinate with the designated technical focal points from CEDARE, UNEP, Botswana DEP, and Botswana DIT. The consultant shall participate in coordination meetings as required and shall provide progress updates covering completed tasks, pending actions, technical risks, dependencies, and decisions required from the project team.

The consultant shall clearly distinguish between activities completed before simulation, activities requiring CEDARE review, activities undertaken within the CEDARE virtual environment, and activities undertaken for the Botswana deployment and related remote deployment support.

## Intellectual Property

All source code, scripts, configuration files, migration tools, deployment package materials, documentation, reports, and other outputs produced under this assignment shall be the property of the contracting institution, subject to the provisions of the governing project agreement. The consultant shall not reuse, publish, transfer, or disclose any project output without prior written approval.

The modular EIS deployment package, Botswana configuration profile, reusable country configuration template, handover guide, Botswana remote deployment support log, and related implementation knowledge shall be handed over to CEDARE in an editable and reusable form, so

that CEDARE may use them for EIS implementation, migration, or localization assignments, subject to applicable agreements and approvals.

## Confidentiality

The service provider shall maintain the confidentiality of all data, system credentials, database records, source code, server information, security materials, and sensitive institutional information accessed during the assignment. No information may be shared with any third party without prior written approval. The consultant shall apply appropriate safeguards when handling credentials, backups, configuration files, and any data exported or transferred during the assignment.

## Acceptance Criteria

Final acceptance will be based on:

1. Submission and review clearance of the Pre-Deployment Review Package before simulation or Botswana deployment support begins.
2. Submission of a current online EIS technical baseline review covering the ASP.NET Boilerplate (ABP), Azure Cloud, Azure-based storage, and Microsoft SQL Server setup.
3. Submission of a modular EIS deployment package that clearly distinguishes between reusable system components and country-specific configuration elements, including the Botswana configuration profile.
4. Successful deployment of the EIS on the designated Botswana DEP on-premises server environment in coordination with Botswana DEP and DIT.
5. Successful completion of testing covering key functions, user access, document handling, database records, email notifications, and general system operation.
6. Resolution of all priority issues identified during testing before handover.
7. Delivery of documentation sufficient for handover, maintenance, troubleshooting, follow-up, and future configuration of the deployment package by CEDARE.
8. Confirmation that the modular deployment package, Botswana configuration profile, related support records, and documentation have been handed over to CEDARE in a usable and editable form, without increasing the agreed implementation timeframe or budget.

## How To Apply

❖ Interested candidates should submit their CV and any supporting documents via email to: [hrcedare@gmail.com](mailto:hrcedare@gmail.com)

❖ Please indicate the following subject line in the email: **“Application for Software Developer / Technical Consultant for EIS Deployment Package and Botswana Deployment – CEDARE”**

❖ Application deadline: **Thursday, July 09, 2026 – 5:00 PM (Cairo Local Time)**

❖ Only shortlisted candidates will be contacted.