

Development of the Soil Values Website and Geoportal Integration Terms of Reference (ToR)

Background

IFDC operates the **Soil Values program**, an initiative that supports evidence-based soil management and sustainable fertilizer use through innovative digital tools and sustainable solutions. The program includes an existing Geoportal providing spatial data visualization and analytics.

IFDC seeks to engage a qualified Service Provider to **design and develop the Soil Values website**, and to **host and integrate the existing Geoportal within IFDC's AWS cloud environment**, ensuring seamless access through the new website.

The Geoportal assignment focuses strictly on technical hosting, integration, and operational readiness of the Geoportal. The internal design, analytical logic, models, and dashboards shall remain unchanged.

Objective of the Assignments

The objective of this assignment is to

1. Design and Develop the Soil Values Website; and
2. To securely host, deploy, and integrate the existing Geoportal within IFDC's AWS environment and ensure reliable access through the Soil Values website, while maintaining high standards of performance, security, and scalability.

Scope of Work

In-Scope Responsibilities

The Service Provider shall be responsible for the following:

- 1. Development of the Soil Values website**
 - a. Homepage**
 - Highlight the challenges of soil health and fertilizer use in Africa
 - Introduction to the Soil Values program
 - Display Soil Value and donor/partner logos and provide links of donor and partner organizations
 - Feature news/events
 - b. About Us**
 - Overview of Soil Values' mission and vision
 - Explanation of fertilizer and soil health challenges that the program addresses
 - c. Partners**
 - Overview of program partners and donor
 - d. Contact Us**
 - General inquiry form
 - e. Any other suggested landing pages/contact forms**
- 2. Geoportal Hosting and Integration**
 - a. Geoportal Hosting & Deployment**

- Deploy the existing Geoportal application within IFDC's AWS environment
- Ensure the Geoportal backend is properly configured, reachable, and securely exposed
- b. Domain & Routing Configuration**
 - Configure appropriate domain and subdomain routing using AWS Route 53
 - Example:
 - geo.soilvalues.org
 - geoportal.soilvalues.org
- c. Website Integration**
 - Embed Geoportal access within the Soil Values website navigation
 - Integrate frontend access without modifying the Geoportal's internal application logic
- d. Performance, Availability & Scalability**
 - Ensure optimal performance, uptime, and scalability of the hosted Geoportal
 - Configure infrastructure-level monitoring and alerts
- e. Authentication Integration (If Applicable)**
 - Integrate the Geoportal with existing authentication mechanisms
 - Harmonize user authentication and authorization across the website and Geoportal (e.g., Single Sign-On or shared identity provider)
 - Ensure consistent role-based access without duplicating user management

Explicitly Out of Scope

The following activities are **explicitly excluded** from this assignment:

- Redesign or redevelopment of the Geoportal
- Modification of Geoportal analytics, models, dashboards, or indicators
- Creation of new GIS layers or spatial analyses
- Changes to internal application logic or data processing workflows

Technical Integration & Architecture

The Service Provider shall:

- Integrate Geoportal frontend access through the Soil Values website using appropriate domain/subdomain routing
- Ensure secure backend deployment and endpoint exposure within AWS
- Implement HTTPS/TLS encryption using AWS Certificate Manager
- Configure appropriate network security, backups, monitoring, and recovery mechanisms
- Ensure that application logic, analytics, data processing, and indicator calculations remain under the responsibility of the Geoportal system

DevOps & CI/CD within AWS

The Service Provider shall implement structured DevOps practices within the IFDC AWS environment, including:

a. CI/CD & Source Control

- Version-controlled source code repository (Git-based)
- Automated CI/CD pipelines for controlled deployments
- Rollback procedures for failed releases

b. Monitoring & Alerting

- Performance monitoring dashboards
- Security alerting mechanisms
- Automated alerts for downtime or performance degradation

Monitoring and alerting shall leverage **AWS-native services**, including but not limited to:

- Amazon CloudWatch
- AWS CloudTrail

All configurations must be documented as part of the handover process.

Security, Performance, & Compliance

The Service Provider shall ensure:

- Secure hosting environment and encrypted data transmission
- Integration with authentication mechanisms where required
- Backup and disaster recovery mechanisms using AWS services
- Compliance with IFDC data governance, security, and privacy policies

Maintenance, Support & Documentation

The Service Provider shall provide:

- Website and hosting architecture documentation
- Geoportal hosting and configuration documentation
- Administrator manuals
- Knowledge transfer and handover sessions
- Post-deployment technical support during an agreed warranty period

Deliverables

The expected deliverables include:

- Inception report and technical integration plan

- Fully functional, responsive website with modern design
- User-friendly content management system (CMS) for Soil Values staff
- Basic Search Engine Optimisation implementation
- Training and handover sessions for Soil Values staff on content management of the website and Geoportal integration
- Delivery of all source code and digital assets
- Geoportal Successfully hosted and integrated
- Tested, secure, and operational production environment
- Technical and user documentation

Duration of Assignment

The assignment is expected to last **three (3) months**, with clearly defined milestones and review points.

Required Qualifications of the Service Provider

The Service Provider should demonstrate:

- Proven experience in developing modern, data-driven websites
- Experience hosting and integrating complex web platforms
- Strong understanding of cloud hosting, security, and performance optimization
- Experience with international development or donor-funded projects (an asset)

Reporting & Coordination

The Service Provider shall report to IFDC and coordinate closely with the Soil Values:

- Monitoring, Evaluation, and Learning (MEL) team
- Geoportal technical team
- Communications team

Submission Requirements

Interested Service Providers shall submit:

- A detailed technical and budget proposal
- CVs of key personnel proposed for the assignment
- Company profile and relevant experience in non-profit/international development sector

- Portfolio of at least 3 related projects
- Proposed methodology, design concept, and technology stack
- Detailed project timeline and plan

How to apply: Interested applicants can fill out the submission form online at:
<https://ifdc.org/2026/02/26/soil-values-website-proposals/>.

If you have questions, please direct them to: akoffi@ifdc.org and
csmitherman@ifdc.org.

Deadline for applications: March 23th CoB UTC.