INTERNATIONAL INSTITUTE FOR DEMOCRACY AND ELECTORAL ASSISTANCE

ANNEX B

TO THE CONTRACT NO. _____
TERMS OF REFERENCE

1. *Background*

The International Institute for Democracy and Electoral Assistance (International IDEA) is an intergovernmental organization established in 1995, which aims to support sustainable democracy worldwide.

International IDEA has built a cloud-based architecture leveraging the AWS 'Well-Architected framework' consisting of multiple services for several of its websites. Applications are built using EC2 and ECS processes and the code is stored in a GitHub code repository.

International IDEA is seeking a qualified contractor to provide technical support, maintenance services and proactive monitoring for the environment to ensure the availability, stability, and security of the hosting environment.

2. *Scope of Work*

The contractor will perform the following tasks as part of the support, maintenance, and monitoring of environment contract:

a) Environment Management:

- Provisioning, configuration, and optimization of EC2 instances and ECS services as per requirements.

- Deployment of applications using ECS and Docker containers.

- Collaboration with website developers to implement deployment best practices.

- Monitoring and troubleshooting of the hosted environment to identify and resolve any performance or availability issues.

- Scaling resources based on workload demands to ensure optimal performance.

b) Security Management:

- Implementing and maintaining robust security measures, including access controls, network security, and encryption mechanisms.

- Regularly updating and patching system software and environment to address any security vulnerabilities.

- Conducting periodic security audits and vulnerability assessments to identify and mitigate potential risks.

c) Backup and Disaster Recovery:

- Designing and implementing backup strategies to ensure the integrity and availability of data.

- Regularly testing backup and disaster recovery processes to validate their effectiveness.

- Developing and maintaining a disaster recovery plan to minimize downtime in the event of a system failure.

d) Code Repository Management:

- Setting up and managing the GitHub code repository, including branch management, code versioning, and code review processes.

- Implementing continuous integration and deployment (CI/CD) pipelines to automate code deployment and testing processes.

- Ensuring proper code documentation and adherence to coding standards.

- Provide support for code deployment and integration processes.

e) Performance Optimization:

- Conducting regular performance analysis and optimization of the hosted environment, including resource utilization, network latency, and response times.

- Implementing caching mechanisms, load balancing, and other performance-enhancing techniques to improve application responsiveness.

f) Incident and Problem Management:

- Establish and maintain a ticketing system for incident and problem management.

- Respond to and resolve incidents within defined Service Level Agreements (SLAs).

- Investigate and troubleshoot reported problems and perform root cause analysis.

- Implement preventive measures to minimize the occurrence of incidents and problems.

g) Change and Release Management:

- Establish and follow a structured change management process.

- Coordinate and implement authorized changes to the environment and code repository.

- Plan and execute regular maintenance activities, including patches and upgrades.

- Ensure proper documentation and communication of all changes and releases.

h) Support & Maintenance

Successful contractor will manage AWS environment proactively and reactively according to severity of incidents and service level agreement as outlined.

Tier 1 Response within 1 hour during working hours Response within 4 hours outside of working hours	Tier 2 Response within one working day
Security issues involving personal data	Styling issues
Unavailability of environment, websites, or application	Content issues
App loading in over 10 seconds	App loading in over 5 seconds

Tier 1 Response within 1 hour during working hours Response within 4 hours outside of working hours	Tier 2 Response within one working day
Failure of critical functionality	Failure of non-critical functionality
Identification of unauthorised intrusion to the app	
Malicious defacement of product	
Any Tier 2 issues that International IDEA escalate to Tier 1 that is having a significant impact on customers	

3. *Deliverables and Reporting Requirements*

The contractor is responsible for delivering the following:

- Provisioned and configured AWS EC2/ECS instances for the hosted environment.
- Well-documented system configurations, installation procedures, and troubleshooting guidelines.
- Regular backups and tested disaster recovery plan documentation.
- Security measures implemented and documented, including access controls, firewall configurations, and encryption mechanisms.
- GitHub code repository managed with proper version control, branching, and deployment processes.
- Monthly reports summarizing the performance and status of the hosted environment, including any incidents, changes, or optimizations made.
- Timely and effective support in resolving incidents and service requests.

4. *Monitoring and Evaluation*

Key Performance Indicators (KPIs):

The performance of the contractor will be evaluated based on the following KPIs:

- Availability of the hosted environment (e.g., uptime percentage).
- Response time and resolution time for incidents and problems.
- Adherence to SLAs for incident and problem management.
- Successful execution of authorized changes and releases.
- Compliance with security and access control requirements.