TERMS OF REFERENCE

Project: Smart Government Project

Credit No.: 5483-MN

Assignment Title: Consulting service to support design and development of a national

integrated portal for public digital services

Reference No. 1.3.1

1. Introduction

The Government of Mongolia (GOM) has received financing from the World Bank toward the cost of the Smart Government Project to improve accessibility, transparency and efficiency of public services in Mongolia through ICT advantages within the framework of three main components including i) enhancement of civic engagement and citizen feedback mechanisms, ii) enabling foundations for SMART government and iii) enabling Open data.

The current activity (assignment) described in this Terms of Reference is set within the context of the first two components mentioned above, namely to enhance civic engagement and enable foundations for SMART government. The Cabinet Secretariat office (CS) is a main implementing agency for these components and Communication and Information Technology Authority (CITA) will be a beneficiary agency for this activity.

2. Objective

The objective of this assignment is to provide CITA with assistance and support for the implementation of National Integrated Portal (NIP). Specifically, the consultant will provide technical assistance support for: (i) assessment of the NIP needs and content definition of NIP; (ii) review and propose system design and technical specifications for the NIP that meets the needs and budget; (iii) review and propose system design for a selected system to be integrated into the NIP via links; (iv) propose methodology of integration of systems of early adopter agencies into the NIP via links; (v) prepare ToRs according to World Bank procurement guidelines; and (vi) supervision of development and commissioning of the system.

The NIP shall eliminate access ambiguities of citizens to public digital services by different agencies, and enable a single access point through an integrated portal with web based and mobile version.

Key aspects of NIP are summarized as follows, but not limited:

- Citizen centered content: to get most demanding services in digital version through single window;
- Citizens can view process flow map including procedures and guideline to get public services;

- Submit feedbacks and enquires on public services;
- Online payment;
- Notification service for citizens i.e. disaster & emergency case notifications;
- Notifications when citizen's personal information is accessed (email, sms, web portal);
- Monitor transaction status where&when citizen's enquires and requested services are processed;
- Statistical reports related to the public digital services;
- Mobile version: both Responsive Design and Mobile Application.

3. General structure of the Assignment

- Task 1: System design and technical specifications for the NIP;
- Task 2: System Design and TS of a selected system to be integrated into the NIP;
- Task 3: Enabling integration of adopted systems of public services;
- Task 4: Supervision of system development and commissioning.

4. Detailed Scope of work

The consultant(s) will liaise directly with the CS, CITA and the Project Implementation Unit (PIU).

4.1 Task 1. System Design and TS of the NIP

The consultant(s) will undertake the following activities:

- 4.1.1 Assess NIP needs and define content as follows:
 - Conduct a survey on NIP needs for Mongolia including content of the portal and methodology for integration of public digital services via links;
 - Review international best practices (3 reviews) on National Integrated Portals for public digital services;
 - Recommend the most appropriate content of the NIP i.e. content taxonomy, FAQs, content layout etc.
- 4.1.2 Propose functional and technical requirements to develop the NIP (including web portal and mobile application: IOS, Windows and Android) as follows, but not limited:
 - Propose usability framework;
 - Propose System Requirement Specifications (functional, nonfunctional requirements and etc.) as follows:
 - o User Interface Design;
 - Input requirements;
 - Output requirements;
 - o Data flows, storage requirements;
 - o eService Process Design;
 - System control;

- o Backup or recovery.
- Propose an appropriate TS for hardware, which will support the NIP. The NIP is required to have the response time as indicated in the following table. The contractor shall work with the Client to recommend the appropriate set of hardware and system software to meet the stated response times.

Response time for NIP

Туре	Datasize	Avarage (message/sec)	Max (message/sec)	Response time(sec)
Publish/Subscribe	0KB -200KB	500	800	0.5
Request/Reply	0KB -200KB	120	200	0.5
Publish/Subscribe	200KB-2MB	30	50	0.5
Publish/Subscribe	2MB-50 MB	20	30	1
Request/Reply	2MB-50 MB	10	15	0.5

- Produce a prototype for the NIP to validate requirements and citizens' needs. Gatherings with Client (CITA) and citizens need to be conducted for requirements' validation.
- 4.1.3 Prepare a ToR for consultant to implement the NIP. ToR should include system requirements specifications and other software developing aspects (except TS for hardware);
- 4.1.4 Draft guideline/methodology to integrate digital services via links to NIP and NIP mobile application.
- 4.1.5 Define the most appropriate brand name for the NIP and create its logo and mockup design.

4.2 Task 2: System Design and TS of a selected system enabling digital services, to be integrated into the NIP via links

The consultant(s) will undertake the following activities:

- 4.2.1. Propose system design and TS for a system to digitalize 9 welfare services (See ANNEX for list of services) as follows:
 - Conduct system analysis of existing electronic system for General Agency for Labor and Social Welfare Service (GAWLS);
 - Propose a system requirement specifications including functional, non-functional and technical requirements to development the system for digitalization of the 9 services.
 - Produce a prototype to validate requirements and citizens' needs. Gatherings with Client (GAWLS) and citizens needs to be conducted for requirements' validation.
- 4.2.2 Prepare a ToR for consultant to develop the system for 4.2.1. ToR should include system requirements specifications and other software developing technical aspects (excepts TS for hardware);

4.3 Task 3: Enabling integration of adopted systems of public services

The consultant(s) will undertake the following activities

- 4.3.1 Review and identify at least 10 potential electronic systems of government agencies and/or public services (except GALWS, General Agency for State Registration (GASR) and CCGO) that may need to link into the NIP;
- 4.3.2 Review and identify at least 10 potential mobile applications of government agencies and/or public services that may need to link to the NIP.

4.4. Task 4: Supervision of system development and commissioning

- 4.4.1 Supervision of development and commissioning of the NIP as follows:
 - Provide recommendations if needed during the procurement, development and deployment;
 - Provide monitoring and evaluation of the completed work that has been carried out by the selected firm for implementation of the NIP.
- 4.4.2. Supervision of development and commissioning of the system development to digitalize 9 welfare services as follows:
 - Provide recommendations if needed during the procurement, development and deployment;
 - Provide monitoring and evaluation of the completed work that has been carried out by the selected firm for implementation of the system.

5. Timelines and Deliverables

This assignment is scheduled to be completed within about 12 months from the date of signing the agreement between the client and consultant. Task 1-3 in 4.1-4.3 shall be completed within max. 3 months. Task 4 shall be implemented within during the procurement and the development of NIP and the System to digitalize 9 welfare services. The procurement and the development will start 2 weeks and 20 weeks after final versions of the ToRs (stated in 4.1.3 and 4.2.2).

The project site is based in Ulaanbaatar.

The consultant should submit reports and assignments with a soft copy and 2 hard copies.

Timeline with expected Deliverables

No.	Timeline	Deliverables	Language
1	Contract signature +	- Inception report	Mongolian
	1 weeks	- Work plan	
2	Contract signature +	- Interim report	Mongolian
	6 weeks	- Summary of international practices of the	
		NIP	
		- Draft ToR of the NIP	
		- Draft ToR the System to digitalize 9	
		welfare services	
3	Contract signature +	- Final report	Mongolian/
	12 weeks	- Final ToR of the NIP	English
		- Final ToR the System to digitalize 9	
		welfare services	

4	Contract signature of the development of the NIP and the System to digitalize 9 welfare services + 1 months	- Monitoring Report -1 on supervising of development of the NIP and the System to digitalize 9 welfare services	Mongolian
5	Contract signature of the Development of the NIP and the System to digitalize 9 welfare services + 4 months	- Monitoring Report -2 on supervising of development of the NIP and the System to digitalize 9 welfare services	Mongolian
6	Once in a month /submit first week of the next month/	Monthly progress report	Mongolian

Requirements of Deliverables

The deliverables of the assignment are submitted both English and Mongolian languages. as follows:

- 1. Recommendations on NIP content;
- 2. The ToR for developing the NIP which shall include followings:
 - General requirements for a contractor;
 - Special requirements for a contractor;
 - System Design and TS for the NIP;
 - Functional and technical requirement specifications for the NIP;
 - System requirement specifications to develop mobile application of the NIP for IOS, Windows and Android;
- 3. The ToR for developing a system for digitalize 9 welfare services which shall include the followings:
 - General requirements for a contractor;
 - Special requirements for a contractor;
 - System Design and TS for the digitalization system of 9 welfare services;
 - A document for development of a business process for 9 social welfare services;
 - System requirement specifications for online service system of General Authority for Labor and Welfare Services.
- 4. Draft guideline/methodology to integrate digital services via links to NIP web portal and NIP mobile application.

6. Consultant (s) Qualifications:

- 7.1 . A consultant (consulting firm) will meet a minimum the following requirements:
 - Knowledge of the Government of Mongolia, its structure and processing;
 - Excellent experience of designing successful system integration, and architecture of system integration;
 - Experience with digitalizing public services and solving interoperability issues with success;
 - Experience with implementing public digital services and business process reengineering;

- Advanced expert level experience in governance, public service delivery and emerging technology in public services.

7.2. A consulting firm should comprise a minimum the following members:

7.2.1 Senior consultant

- A minimum of master degree in IT;
- A minimum of 5 year experience in system development, digitalization of public services specially in leading role;
- Proven experience with providing technical assistances to ministries and government agencies;
- Experience in project management including leading success software projects;
- Open and collaborative communication skills, including the ability to articulate strategic issues and to guide discussion on these issues among diverse constituencies;
- Problem-solving and problem-analysis capabilities, experience with providing advice to government agencies;
- Excellent English language communication skills (verbal and written), superb English language writing skills;
- Capability of developing technology architecture and application architecture;
- Reporting, presenting, high communications skill.

7.2.2. Business process consultants

- A minimum bachelor degree in information technology or business administration;
- Experience in business process, work flow, data management;
- Experience in project management, including leading success software projects;
- Open and collaborative communication skills, including the ability to articulate strategic issues and to guide discussion on these issues among diverse constituencies;
- Excellent English language communication skills (verbal and written), superb English language writing skills.

7.2.3. Software consultant

- A minimum bachelor degree in information technology or software engineer;
- A minimum 10-year experience of software development and data management;
- Experience of successful software projects in executive level;
- Open and collaborative communication skills;
- Independent problem solving skills;
- Excellent English language communication skills (verbal and written),

---oOo---

ANNEX:

List of welfare services to be digitalized

- a. Pension for elders /men over 60, women over 55/
- b. Pension for dwarf citizen older than 16 years old
- c. Allowance for disabled person
- d. Allowance for twins
- e. Allowance for mothers who have more than 4 and 6 kids
- f. Allowance for pregnancy
- g. Allowance for maternity who has 0-3 year-old year child
- h. Monthly allowance for family member whose husband/wife had lost lives during the war
- i. Monthly allowance for state prize awardees & elderly veterans