

Invitation for Bids (ITB) for Goods/Services

Project: 23144-00 “Minimising the impact of the COVID-19 outbreak in Georgia through telemedicine and digital health solutions”

“Telecare Platform (Software) for Telemedicine System of Rural Primary Health Care of Georgia”.

Ref No: ITB/2023/48726

**October 2023
Tbilisi, Georgia**

Section II: Schedule of Requirements

A. Summary of Requirements

Provision of Telecare Platform (TP) Software for Telemedicine System of Georgia Rural Primary Health Care.

B. Technical specifications for Goods and Comparative Data Table

	UNOPS Minimum Technical Requirements
	Telecare Platform (TP)
1	Description of Function: TP shall enable healthcare professionals, administrative users, patients, and caregivers to have a remote facility, which guarantees the new model of non-face-to-face care.
2	Operational Requirements: TP shall be capable to provide clinicians with the capability to collect detailed biometric information from remote patients (telemonitoring) and support telehealth consultations through video conferencing (video conferencing) for the purposes of delivering primary care, chronic care management, and remote patient monitoring at any time, at any place, for any patient who requires care.
3	System Configuration: TP shall have a multi-language interface, Georgian and English.
4	Technical Specification:
A	General Requirement:
5	TP shall enable effective (bi-directional) communication between the central government and health care providers and between health care providers and patients/caregivers.
6	The quoted TP shall require minimum infrastructure to support a telemedicine system. Please indicate the infrastructure required for the platform to operate in full functionality.
7	TP shall have the ability to integrate with existing Electronic Medical Records (EMR/EHR).
8	TP shall be compatible with different devices such as: Smartphones, laptops/desktops and tablets to ensure that patients can access healthcare services from anywhere using the devices they have.
8a	TP shall be set up in two data centers available at the Ministry of Health. It shall continue working in the other data center during an emergency or scheduled shutdown of one of the data centers
B	Features for general practitioner (GP) / family Doctor (FD)
9	TP shall display the healthcare professional profile that shall include the provider's credentials, areas of expertise, years of expertise, and availability.

10	The patient's condition, medical history, test record and past prescriptions shall be accessible to the healthcare provider.
11	TP shall provide complete appointment management, export appointments to standard calendars and allow "manager access" to appropriate staff to schedule appointments on behalf of GP.
<u>C Teleconsultation:</u>	
12	TP shall have teleconsultation functionalities in a secure and private environment for patients to share the details of their condition to GP/FD.
13	TP shall have a secure voice and video call function that allows the healthcare practitioner to listen and also examine the patient remotely.
14	TP including teleconsultations and other communications shall be encrypted on both sides and secure from hacking attempts. (provide the details of measures taken to achieve encryption and security).
<u>D Digital Prescriptions:</u>	
15	TP shall be able to generate prescriptions that meet the legal standards and requirements, and automatically store them in GP's and patients' private database.
16	TP Shall have interoperability with other healthcare facilities ensuring the secure and confidential exchange of healthcare information between different organizations.
17	Shall be able to send SMS/ email notifications to the patients to inform about medications and lab tests to be performed and /or other notifications.
18	Patients should be able to see the list of available pharmacies and laboratories and select where samples should be taken.
<u>E Clinical proceeds:</u>	
19	It shall be possible to configure clinical entries at the user level, without the need for programming, using a tool that allows them to be created or modified.
20	The User (managers) shall be able to create/modify questions, and change the possible answers, as well as the clinical logic that determines the flow, the notification/alerts to the care systems and frequency that the patient shall respond.
<u>F Results and analytics:</u>	
21	TP shall be able to retrieve and/or consult results, structured or not, in text, image or signal format.

22	TP shall have a module to define the information reports for analysis, as well as to program and automate these extractions.
22a	The report function, which shall allow us to extract data about the conducted consultations. Reporting shall allow the user to extract the data about consultations conducted. In particular the date of the video consultation, name of the village doctor (person who initiated the consultation), patient's name and its ID number, name of the doctor to be in charge of the video consultation, recommendations given to the patient and preliminary/approved diagnosis.
G	<u>Symptom Checker (upgradable feature)</u>
23	A symptom checker app shall be available as future upgradation in the platform that helps patients to define their symptoms and answer questions concerning the current general condition.
24	<p>A symptom checker shall suggest the list of preliminary possible diagnoses, for patients.</p> <p>Preliminary diagnoses shall be accessible only by the medical personnel, to ensure that the results are properly interpreted, and a definitive diagnosis can be issued to the patient, which will be presented in a clear and understandable manner.</p> <p>In case, when specialized consultation, it shall have an option to select hospital facilities having resources to provide a high-quality care model.</p>
H	<u>Adherence monitoring:</u>
25	The patients and GPs shall have a personalized pathway and learn the use of service from the developers.
26	TP shall allow a system of assessment of therapeutic adherence, both by the professional and the patient
I	<u>Remote Patient Monitoring (RPM) and IoT Integrations</u>
27	TP shall provide real-time integrations with IoT devices such as wearables and other medical devices which help clinicians monitor the digital biomarkers (like blood pressure, heart rate, sleep quality, physical activity, glucose levels) of patients regularly.
J	<u>Vital signs monitoring:</u>
28	It shall be able to record vital signs of the patient. The variables include data such as BP, Temp, Heart rate, ECG, steps in numerical values and letters.
29	TP shall be able to recognize the variables out of range and trigger alarms for either single parameter or for the result of parameters measured in different times
30	The vital parameters shall be collected directly, by asynchronous measurements or in real time with specific devices already available in the centres or as requested as well as using devices like pulse oximeter, BP monitoring device, pedometer, health program of app etc to send data to the system.

H	<u>Notifications and Alarm Service:</u>
31	The notifications and alarm system for professionals, patients and caregivers shall be independent.
32	The notifications and alarms shall be categorised into 3 different levels according to severity: Minor, Intermediate, Urgent.
33	It shall be possible to generate notifications, depending on the results of a questionnaire (for a question or the sum of several of them), for a variable, for lack of data...
34	All monitoring services (variables, questionnaires, alarms, notifications) shall be adaptable for each patient and easy to modify.
I	<u>Customization:</u>
35	TP shall be customizable for each patient.
36	All the variables/ vital parameters, questionnaires, alarms and educational programs shall be compacted individually to create a large, easy-to-find repository with agile tags.
37	The healthcare professionals shall be able to customize the system per patient and per productive unit, adapting it to the specific patients' needs and avoiding duplication of information.
38	TP shall be able to allow the GP/ FD to select the datasets they want to monitor for each patient's health problems.
K	<u>Referral to specialist:</u>
39	TP shall be able to refer to the appropriate provider or specialist
L	<u>Integrated Chat and Messaging:</u>
40	TP shall include private, encrypted text messaging features between the GP, FD and the patients and Administrative staffs and patients and GPs , FD.
41	The messaging feature shall allow patients to raise doubts or a question about their condition and prescription and allow GPs to respond to patient inquiries.
42	The chat environment should allow for both synchronous and asynchronous communication.
M	<u>Features for Patients and caregivers</u>
43	The patient profile shall collect all vital health-related information, including age, gender, latest test records, symptoms, known health conditions, medication history, geolocations etc

44	A verification system shall be in place to ensure genuine patient profiles and avoid scams.
45	Selective privacy settings shall be available for patient information to control what information is publicly available and what information is available to healthcare practitioners.
46	The patient shall be able to access a dashboard containing data from their last visit, prescriptions, treatments etc.
47a.	The patients shall have the ability to request an appointment with a GP, add it to their personal calendar via integrations and reschedule or cancel appointments if necessary.
47b.	<u>The TP shall have a booking function (so that rural doctors are able to book visits with cardiology, dermatology, ophthalmology and otorhinolaryngology, and only admin will be able to modify this function.</u>
47c	Requirement for archiving: ability to transfer data into idle mode though retrievable on demand (including patients' data).
N	<u>Video and Voice calls</u>
48	The TP shall include a videoconferencing service between professionals and/or patients.
49	While video conferencing, the platform shall offer the ability to chat in real-time and allow videos and photos.
50	The system shall allow the integration of regular phone calls.
51	To control the quality of the service, it shall be able to record video and audio consultations, with the consent of all the involved parties.
52	The TP shall have a content service where different contents to read are defined. These contents can be in standard formats, daily push capsules, videos, links to other websites, or games. They shall be customizable for smartphones over time.
53	Shall have the possibility to define professionally curated information spaces for professionals and/or groups of patients.
P	<u>Medicine Tracker and Push Notifications:</u>
57	TP shall have a medicine tracker with a customizable calendar that sends push notifications to remind patients to take their medicines at proper time and notify them of upcoming appointments, successful transactions, incoming messages and promote the services.
Q	<u>General and Administrative features:</u>
58	The TP software shall be completely in Georgian language, customised to /comply with the required medical equipment.

R	<u>Data Privacy and storage</u>
59	TP shall be compliant with GDPR regulations and protect the privacy of patients. Please document and submit how the quoted platform will achieve this requirement.
60	It is mandatory that the TP shall be on-premises, meaning that data is stored locally, rather than on a remote server.
S	<u>EMR/EHR Integration:</u>
61	TP shall have the ability to integrate EMR/EHR systems to maintain clinical record of the disease and treatment history.
62	The EMR/EHR integration shall store all the user's health data to save time for both patients and healthcare providers in monitoring health progress and inspecting it when necessary, not just when sick.
63	Shall have a feature for Admin panel / dashboard that allows control of all processes inside the system i.e necessary data, access to users' profile, and all tools needed.
I	<u>Support Service:</u>
64	The proposal shall include documents on the model of support for both groups (i.e professionals and patients), specifying communication channels, availability of service.
65	Support shall be provided 24/7 for professionals, focusing on technical problems and for patients, on problems with passwords or technical and functional problems. User Management shall be transferred to ITA after completion of the first stage of implementation process.
66	Same as for GPs and patients, administrative staff shall have a personalized pathway and learn the use of services from the developers.
U	<u>Technological Model:</u>
67	TP shall have a technical architecture that allows it to scale progressively to more rural areas, urban areas and more functionalities. Please submit documentation on the proposed architectural model.
68	TP shall be available in on-premises mode and shall be independent of the equipment and capabilities, according to the interfaces, to work in a web environment (responsive mode_ or a mobile environment (web browsers, iOS or Android App) allowing organizations to use their existing infrastructure and equipment without specific investment.
69	TP shall have at least 3 environments: 1. production 2. Pre- production 3. Testing/integration

70	TP shall be able to use wireless communications over a secure channel (SSL/VPN) until proper infrastructure is improved/available.
<u>V</u>	<u>Integrations</u>
71	Operational Requirements: The TP shall be capable to provide clinicians with the capability to collect detailed biometric information from remote patients (telemonitoring) and support telehealth consultations through video conferencing (video conferencing) for the purposes of delivering primary care, chronic care management, and remote patient monitoring at any time, at any place, for any patient who requires care.
72	TP shall have an integration bus architecture, which will access data from the healthcare systems to implement the services and present them to the user.
73	In case an online integration could not be possible, at least the telemedicine system shall be regularly loaded with patient data from the Georgian EHR defined by the Health Service using ETL techniques.
<u>W</u>	<u>Documentation</u>
74	User documentation in both English and Georgian language: It explains all the functionality of the service. This documentation shall be adapted to the healthcare personnel and administrative areas, avoiding so many technical terms and being easy to read with a good thread and index
75	Technical documentation in both English and Georgian language: It explains all tech specifications on configuration, maintainability, and performance. Besides, it needs to include all the ways of communication with other services.
<u>X</u>	<u>How to's & FAQ in both English and Georgian</u>
<u>Y</u>	<u>Remote Support</u>
76	Possibility of remote access for on-line technical support/consultation for solving technical and application-related problems without delaying the workflow
<u>Z</u>	<u>Product Certification</u>
77	The connection with medical devices for patient data collection should be established based on the international standards: ISO/IEEE 11073 family Health informatics.
78	EN 301 549 v3.2.1 (2021-03) European norm for "Accessibility requirements for ICT products and services"
79	Legal standards: General Data Protection Regulation (GDPR)
<u>ZA</u>	<u>Semantic:</u>
81	UNE ISO/13606:2

82	Systematised nomenclature of Medicine (SNOMED)
83	Medical Subject Headings (MeSH)
84	Logical Observation Identifiers Name and Codes) LOINC)
85	A valid copy of the certificate shall be submitted. In case certification is not available, a declaration of conformity to the standard or protocol is accepted.

C. Services Requirements:

UNOPS Minimum Technical Requirements	
A Assembly and Calibration	
1	Installation of a TP in 50 rural primary care facilities in Georgia (see Section II, Par F, for detailed list).
2	Integration of the TP with the existing healthcare systems in these facilities.
3	Training and support for healthcare professionals on the use of the telemedicine platform.
4	Provision of technical support and maintenance for the telemedicine platform.
5	Development of guidelines and protocols for the use of the TP.
B Trainings	
6	On-site User Training - Functionalities for GPs, Patients, Administrative staff details the need for a training pathway. It shall be considered the approach in this work by orienting it in 3 differential areas (50 rural primary care facilities in Georgia, see Section II, Par F, for detailed list).
7	Training for healthcare professionals. Include the knowledge and the potentiality of the useful functionalities of the telemedicine system to the champions. Then, these can extend to other colleagues.
8	Training for technical professionals as future upgradation. Teach them how to use the API, and the language to promote a better approach to their libraries
9	Training for administrative staff. Giving administrative solutions to the administrative staff.
10	A proof of training (certificate) should be provided to the staff that is trained.
11	The training shall be performed within 3 (three) weeks after the roll out of the platform
12	The training shall be performed by qualified and authorized personnel.
13	Training materials shall be provided in Georgian language.
C After Sales Support	
31	A service-level agreement (SLA) shall be a contract between a service provider and the customer that documents what services the provider will furnish and defines the service standards the provider is obligated to meet.
32	The service level to be provided by the TP shall be greater than 95% of the time in 10x5 functioning mode - 10hours, 5 days a week, 36 months.
33	Response time for the incident shall be as following: <ul style="list-style-type: none"> • Response time: < 4 working hours from Monday to Friday. • Resolution time for minor incidents: < 36 working hours from Monday to Friday. • Resolution time for medium incidents: < 24 working hours from Monday to Friday. • Resolution time for critical incidents: < 8 working hours from Monday to Friday.
34	Local representation and service centre(s), to provide after sales services in Georgia.
D Implementation, Test and Validation	
35	This project includes all tasks necessary for the implementation and commissioning of the system, as well as the configuration of the system to work across the entire infrastructure provided by the Georgian Health Service.
36	The TP source code shall be deposited under certain conditions for inspection and safeguarding. It could be proprietary but should be available for inspection if required.

D. Delivery requirements and Comparative Data Table:

UNOPS Requirements	
Delivery time	<p>Bidder shall deliver, install goods, and provide corresponding training(s) within 130 (one hundred and thirty) days after the contract execution.</p> <p>UNOPS shall deduct 0.1% of the total Contract price shall be deducted for each day of delay until actual delivery or performance, up to a maximum deduction of 10%. Once the maximum is reached, UNOPS may terminate the Contract pursuant to the General Conditions of Contract Ref.: to the:</p> <p>a) Par 36. CONTRACT MANAGEMENT of the Section I – Instructions for Bidders;</p> <p>b) General Conditions of Contract: https://www.unops.org/business-opportunities/how-we-procure</p>
Customs clearance and VAT	<p>Bidders shall include in the price all costs related to exportation/ importation procedures, if required, including the costs of custom clearance, offloading of the goods, and transportation of the goods to UNOPS specified locations.</p> <p>Bidders to specify DPU delivery time for the quantity as per the price form.</p> <p>The international Bidders shall include in the price all costs related to exportation/ importation procedures, if required, including the costs of freight forwarder and the custom clearance company.</p>
Delivery place and Incoterms rules	<p>DPU (delivery at place uploaded) Incoterm.</p> <p>50 ambulatories of Georgia, see Section II, Par F for detailed list.</p>
Consignee details	<p>UNOPS Georgia</p> <p>#87 Z. Paliashvili str., Tbilisi, Georgia.</p>
Right to Vary ordered Quantity	<p>At the time the Contract is awarded, UNOPS reserves the right to vary the quantity of the goods and associated services specified above, provided this does not exceed +/- 20%, without any change in the unit prices or other terms and conditions of the ITB.</p>
Performance Security	<ul style="list-style-type: none"> Performance security shall be required from the awarded Bidder in the amount of 5(five)% of the total Contract amount, in the form of a Bank Guarantee as set out in the document titled Section IV: Contract Forms which is available in the Documents section. To minimise Credit Risk, UNOPS will only accept Bank Guarantees from Banks or other Financial Institutions with a minimum Long Term Credit Rating of BBB- with Standard and Poor's, a minimum Long Term Credit Rating of Baa3 with Moody Investor Services, or a minimum Long Term Credit Rating of BBB- with Fitch Ratings. Any Bank Guarantee issued by a financial institution with a credit rating below the outlined credit ratings will require prior validation from UNOPS. Performance security shall be furnished within 21 (twenty-one) days after receipt of the Contract from UNOPS. The Performance Security shall be discharged by the Purchaser and returned to the Supplier not later than thirty 30 (thirty) days following the date of Completion of the Contractor's performance obligations under the Contract.

E. Sustainability Requirements

UNOPS Requirements	
"Climate change mitigation and Adaptation (e.g. energy efficiency, greenhouse gas reporting and offsetting)"	Suppliers shall provide proof that the manufacturers are in possession of a valid ISO 14001 EMS certificate, or equivalent.

F. List¹ of Ambulatories for Delivery and Installation of ICT equipment

N	Region	Municipality	Community	Village
1	Adjara	Kobuleti	Khala	Khala
2	Adjara	Keda	Daba-Keda	Zendidi
3	Adjara	Khelvachauri	Machakhela	Machakhela
4	Guria	Lanchkhuti	Nigvizani	Nigvizani
5	Imereti	Khoni	Kinchkha	Kinchkha
6	Imereti	Baghdati	Meore Obcha	Meore Obcha
7	Imereti	Vani	Bzvani	Bzvani
8	Imereti	Zestaponi	Zovreti	Zovreti
9	Imereti	Khoni	Ivandidi	Ivandidi
10	Imereti	Chiatura	Katskhi	Katskhi
11	Imereti	Tskaltubo	Partskhanakanevi	Partskhanakanevi
12	Imereti	Kharagauli	Tskalaporeti	Tskalaporeti
13	Imereti	Sachkhere	Argveti	Argveti
14	Imereti	Kharagauli	Khunevi/Nadaburi/Khevi	Khevi
15	Kakheti	Sighnaghi	Kvemo Bodbe	Bodbe
16	Kakheti	Lagodekhi	Kabali/Pona/Giorgeti	Kabali
17	Kakheti	Akhmeta	Jokolo/Khalatsani/Tusheti	Jokolo
18	Kakheti	Telavi	Pshaveli	Pshaveli
19	Kakheti	Kvareli	Shilda	Shilda
20	Kakheti	Dedoplistskaro	Arboshiki	Arboshiki
21	Kakheti	Sagarejo	Khashmi	Khashmi
22	Kakheti	Akhmeta	Zemo Khodasheni	Zemo Khodasheni
23	Mtskheta-Mtianeti	Mtskheta	Kanda	Mukhrani/Kanda
24	Mtskheta-Mtianeti	Kazbegi	Goristsikhe	Goristsikhe
25	Mtskheta-Mtianeti	Tianeti	Sioni	Sioni
26	Mtskheta-Mtianeti	Dusheti	Bazaleti	Bazaleti
27	Racha-Lechkhumi-Kvemo Svaneti	Ambrolauri	Abari	Likheti
28	Racha-Lechkhumi-Kvemo Svaneti	Lentekhi	Babili	Daba Lentekhi
29	Racha-Lechkhumi-Kvemo Svaneti	Tsageri	Chkhuteli	Chkhuteli
30	Racha-Lechkhumi-Kvemo Svaneti	Oni	Utsera	Utsera
31	Samegrelo-Zemo Svaneti	Senaki	Dzveli Senaki	Meore Nosiri
32	Samegrelo-Zemo Svaneti	Martvili	Bandza	Bandza
33	Samegrelo-Zemo Svaneti	Chkhorotsku	Zumi	Zumi
34	Samegrelo-Zemo Svaneti	Khobi	Torsa-dghvaba	Torsa-dghvaba
35	Samegrelo-Zemo Svaneti	Abasha	Ketilari	Ketilari
36	Samegrelo-Zemo Svaneti	Chkhorotsku	Kirtskhi	Kirtskhi
37	Samegrelo-Zemo Svaneti	Zugdidi	Narazeni	Narazeni
38	Samegrelo-Zemo Svaneti	Chkhorotsku	Napichkhovo	Napichkhovo
39	Samegrelo-Zemo Svaneti	Abasha	Ontopo	Ontopo
40	Samtskhe-Javakheti	Borjomi	Tba	Tba
41	Samtskhe-Javakheti	Aspindza	Nakalakevi	Nakalakevi
42	Samtskhe-Javakheti	Aspindza	Oshora	Oshora
43	Samtskhe-Javakheti	Akhaltzikhe	Skhvilisi	Skhvilisi
44	Kvemo Kartli	Dmanisi	Gomareti/Sarkineti	Gomareti
45	Kvemo Kartli	Tsalka	Kokhta	Kokhta

¹ list might be changed prior to the contract award

46	Shida Kartli	Gori	Tkviavi	Tkviavi
47	Shida Kartli	Kareli	Brerti	Breti/Giganti
48	Shida Kartli	Kaspi	Metekhi	Metekhi
49	Shida Kartli	Gori	Tkviavi	Plavi, Plavismani
50	Shida Kartli	Khashuri	Tsromi	Tsromi