

**Republika e Kosovës**

**Republika Kosova - Republic of Kosovo**

***Qeveria – Vlada – Government***

***Ministra e Shëndetësisë - Ministarstva Zdravstva - Ministry of Health***

**Terms of Reference for creation of Zoning in the Primary Health Care**

**Table of content**

[**1 Introduction……………………………………………………………………. 3**](#_Toc15282)

[**2 Purpose of the assignment……………………………………………….. 4**](#_Toc15283)

[**3 Description of the assignment……………………………………………….. 4**](#_Toc15284)

[**4 Functional Requirements ………………………………………………………5**](#_Toc15285)

[**5 Implementation Plan………………………………………………………. 6**](#_Toc15286)

[**6 Team of experts………………………………………………………………… 7**](#_Toc15287)

[**7 Qualification requirements for EO:…………………………………………. 9**](#_Toc15288)

List of Acronyms

PHC - Primary Health Care

MFMC - Main Family Medicine Centre

FMC - Family Medicine Center

FMA - Family Medicine Ambulanta

CRA- Civil Registry Agency

API- Application Programming Interface

BHIS- Basic Health Information System

GIS- Geographic Information System

INSPIRE - Infrastructure for Spatial Information in Europe

EU- European Union

SOP - Standard Operating Procedures

ToR - Terms of Reference

**Introduction**

Based on the Law on Health 04/L-125, article 18 Primary Health Care, paragraph 9 specifies that every citizen and resident has the right to choose the family doctor in the municipality where he lives, within the area of inclusion defined by the municipality, and has the right change it. In this regard, the Ministry of Health has determined the criteria for the registration of residents to the PHC for the selection of the family doctor in the municipality where they live within the area of inclusion.

The integration of geospatial information for health institutions today is a crucial element for planning, monitoring and developing various kinds of policies and for achieving the objectives of the digital agenda of each modern country. Moreover, institutions are creating more and more sophisticated data to better analyze statistical phenomena in the field of health related to people, society, economy, environment, etc.

Integrated analysis of health facilities and geospatial data enables better planning for population’s public health. Since these data are not integrated in our country, Ministry of Health intends to initially include four municipalities in the pilot: Lipjan, Prizren, Istog and two FMCs in Prishtina. After that, all the municipalities will be included.

Since currently in the Republic of Kosovo there is still no interconnection between the Civil

Registry and the Address Registry, zoning must be based on the data from the Kosovo Agency of Statistics and the Address Registry, for the determination of zonal maps of primary health facilities.

In addition to the creation of zonal maps, the development of the module for the registration of residents in PHC is in process, an activity supported by the AQH project.

**Purpose of the assignment**

The purpose of the assignment is to determine the zonal maps for the health institutions, the exact geospatial coordinates, to offer the population better access to the health facilities/institutions to meet their needs.

The scope of assignment is 4 pilot municipalities (Lipjan, Prizren, Istog and two FMCs in Prishtina). After the piloting, the results of the piloting will be evaluated in order for the positive findings from the pilot to be applied in all municipalities of Kosovo.

**Description of the assignment**

The assignment shall digitize geographic data of all primary health care facilities/institutions in the four pilot municipalities (according to the lists from the MoH):

1. Design and construction of electronic GIS that can hold and maintain database of health facilities and zones attached to them.
2. Identification of geographic location of health facilities based on existing data or through field work;
3. Entering the necessary attributive and geographic data for health facilities into the GIS database;

1. Creation of zones according to list of health facilities and certain criteria for the number of residents and entering the necessary attributive and geographic data that describe zones attached to facilities;

All health facilities must be digitized in GIS and have a link to the database identifying data from the Ministry of Health, example: name of municipality, name of settlement/location, address, type of facility, as well as geographical coordinates X, Y.

**Functional Requirements**

**R01:** EO must install and set the proposed GIS technology in a high-availability environment at the MoH (data center). The GIS technology shall be accompanied with the application information system that will provide required functions to create and maintain the database of facilities and zones, as well as connection to external systems such as BHIS, Address Registry, and Civil Registry.

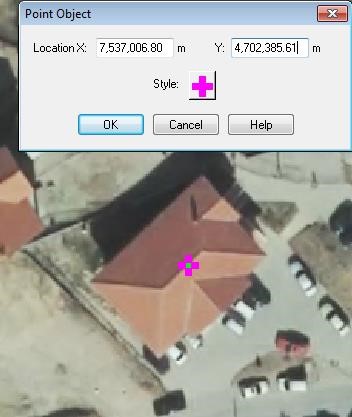
**R02**: EO must carry out the general task in accordance with the national legislation of Kosovo and the EU INSPIRE directive, considering the best practices from other EU countries.

**R03**: In order to carry out these activities, field visits should be carried out in cases where there is no information about the geographic location of health facilities (collection of data about the geographic position of health facilities in cooperation with the relevant municipalities), then to increase the level of accuracy, orthophotos of the newest situation should be used. In the geometric aspect, facilities must be presented in the form of a point which must be connected to the database.

**R04**: For each health facility, a zone will be defined according to the criteria established by the Ministry of Health. Zones shall be described in both attributive and vectorial (polygonal) formats.

**R05**: All these data must be saved in the following formats: Shape (one of the widely accepted open standard, geo-relational or object-based formats shall be used, such as Esri Shapefile. GeoJSON or similar), in the official coordinates system Kosovaref, according to the municipalities for the entire territory of Kosovo and relational or object-based attributive data. A figure is presented below, which shows the required accuracy for health facilities for the four pilot municipalities.

Fig 1. Accuracy of geographic position for health facilities that must be in GIS



**R06**: The application/system shall be developed in such a way as to have the possibility of updating the data, considering the interconnection of the Civil Registry with the addresses registry. Activity which is being developed by the Civil Registry Agency and the Cadastral Agency of Kosovo under the monitoring of the Prime Minister's Office and the support of the German GIZ and the World Bank.

**R07:** The system shall have the interface to ARC. Through the interconnection with the ARC, it becomes possible to make adequate planning of the number of residents in a certain area, since the ARC, based on the LAW\_NO.\_02\_L-121 on DWELLING AND EMPLACEMENT, knows the number of residents in real time in a certain place of residence.

In Kosovo, there are currently 38 municipalities where each municipality has a unique code of the municipality, also each place of residence has its own unique code within the respective municipality, which can facilitate the zoning.

Communication must be carried out using the GG interoperability platform where API is developed by ARC in accordance with SOP and which is then integrated through GG into the electronic system of PHC/ BHIS.

**Implementation Plan**

At the beginning of the task, there should be an initial phase (Inception Phase) among all the stakeholders involved, such as, EO, experts, etc., to precisely define the scope of the project. This can be, at a high level, what will the system do, who are the users, what data, timeline setting, potential risk analysis, preparation the project environment, etc.

That phase would lead the EO to the drafting of a technical design document, specifications and implementation of the work plan. For each phase, the duration and deliverables must be explicitly stated. The document must be officially approved by the MoH.

Technical documentation must be prepared for the following topics:

* GIS Environment Document (Environment). The document must contain details on the implementation of the architecture, connectivity, installation of the GIS software and the structure of the geodatabase.
* **The interconnection with BHIS** - BHIS system will use the data provided by this system (GIS system) which determines the zoning of the health facilities in the PHC and the residents who are entitled to receive health services from that health institution. This will be done through the creation of the API for the interconnecting system with the BHIS.

**Timeframe of activities**

|  |  |  |  |
| --- | --- | --- | --- |
| **Delivered / Stage** | | **Set Date** | **Expert** |
| 1. Initial phase and assessment of current needs, initial work plan for the overall project. | | Start of project (first week) | A, B, C, D, E |
| 2. Detailed work plan for the overall project. | | Start of project (first week) | A, B, C, D, E |
| 3. | Collection of data from the field when they are missing from the MoH list | Second week | B, C, E |
| 4. | Data processing according to the criteria of the  MoH | Third week | B, C, D, E |
| 5. | Data digitization and zoning in GIS and geodatabases. | Fourth week | B, C, D, E |
| 6. | System and API development and testing | Fourth week – until  the completion | E, D |
| 7. | Delivery of Final data and final report. | Ninth week | A, B, C, E |

Total **duration** of piloting of the work must be 2.5 months, whereas the application maintenance must be at least 12 months after the delivery of the system.

**Team of experts**

The following experts must be made available according to their specific job descriptions and the indicative work period is reported in the table below.

Job positions:

* No. 1 Project Manager (Position A)
* No. 1 GIS Expert (Position B)
* No. 1 GIS Expert (Position C)
* No. 3 Application and Database Developer (Position D)
* No. 1 Quality control expert (Position E)

|  |  |  |
| --- | --- | --- |
| **Position A - Project Manager:** | -  -  - | Coordinates and guides the team of experts in the design and development of the Project and takes full responsibility for the project in accordance with the main experts of the project and MoH.  Is responsible for the initial phase, the prototype and development of the detailed work plan of the activities  Initiates and organizes meetings with MoH and project experts to report and discuss about the planned activities; |
|  | - | Prepares monthly reports in coordination with other experts; |
|  | - | Organizes, coordinates and supports the provision of training for the Ministry of Health for the initial maintenance of the implementation and operation of the Database for the Zoning of Health Facilities. |
| **Position B – GIS Expert:** | -  - | Creates and enters attributive and vectorial data for health facilities according to the required levels  Prepares the zoning of health facilities according to the criteria established by the Ministry of Health, (zones in polygon/geographical format). |
|  | - | Creates and enters attributive and vectorial data for zones. |
|  | - | Supports the Project Manager in the initial phase and in the preparation of the detailed work plan of the activities; |
|  | - | Participates in weekly technical meetings with MoH and project experts; |
|  | - | Prepares monthly reports in coordination with the Project Manager. |
| **Position C – GIS**  **Expert** | -  -  -  - | Creates and enters attributive and vectorial data for health facilities according to the required levels  Prepares the zoning of health facilities according to the criteria established by the Ministry of Health, (zones in polygon/geographical format).  Creates and enters attributive and vectorial data for zones.  Supports the Project Manager in the initial phase and in the preparation of the detailed work plan of the activities; |
|  | - | Participates in weekly technical meetings with MoH and project experts; |
|  | - | Prepares monthly reports in coordination with the Project Manager. |
| **Position D -**  **Application and**  **Database Developer** | -  -  -  - | Performs user requirement analysis for zoning GIS  Designs GIS logic and user interface, structures and creates the database  Develops the GIS system for the zoning of health facilities based on user requirement analysis  Develops API that interconnects ARC and zoning of facilities |
|  | - | Develop API for interconnecting with Basic HIS system |
|  | - | Develops various APIs as needed |
|  | - | Identifies possible Bugs in the system |
| **Position E- Expert for quality control** | -  -  -  -  - | Checks the quality of database construction  Guarantees the correct technical implementation of processes and procedures  Tests and checks the quality of the APIs created  Checks and tests the quality of interconnections with other systems  Detects eventual omissions in technical processes |
|  | - | Identifies, analyses and documents eventual errors in the flow of processes |
|  | - | Applies adequate dimensions such as accuracy, completeness, etc. for evaluating and improving data quality |
|  | - | Inspects and proposes necessary measures to improve the system |

**Qualification requirements for EO:**

* Proof of registration information in the trade register (business registration certificate or business registration number)
* In the case of the candidate/bidder consortium: Declaration signed by the candidate/bidder consortium
* Turnover of 100,000 EUR for the last three financial years
* At least 2 reference projects in the creation/drafting of Zonal Maps or Municipal Development Plans in the last 5 years in the municipalities of Kosovo or other countries.
* Proven knowledge of legislation and regulations in the field of spatial planning
* Evidence of experience in institutional organization

* Technical and professional capacity:

**Technical and professional capacity: Documentary evidence required**

**1.** The Economic Operator must prove **1.** The list of engaged experts, together that it has qualified experts with with the employment contracts.

educational and professional training of the leading personnel and in particular of the persons who are directly responsible for the provision of services, as follows:

**a. One Project Manager a. Decision on the engagement capacity**

1. Working experience of at least five 1. Reference letter from the employer

(5) years after graduation in

development and management 2. Notarized copy of university diploma

1. Graduate in computer science, 3. Notarized copy of the certificate or geoscience or similar software online verification option engineering;
2. Minimum of 5 years of work experience and a minimum of 3 projects for software projects management;
3. Certified for project management

**b. Two GIS Experts (Positions B and b. The decision on the engagement C),** At least five (5) years of **work capacity**

**experience** in GIS, geospatial data collection, zonal mapping and similar work

1. Certified in GIS;
2. Graduate Degree in Geography or other degree relevant to GIS utilization.
3. Reference letters from the employer (to be proved with references of the work experience in the required field).
4. Notarized copy of the certificate or

**c. Software application development expert:**

1. Graduate in computer science, or software engineering, or computer engineering;
2. At least 5 years of work experience in the development of software applications and at least 3 projects with .NET-based technology;
3. Certified on software development in one of .NET**2** based technologies.

online verification option

**c. The decision on the engagement capacity**

1. Reference letters from the employer
2. Notarized copy of university diploma
3. Notarized copy of the certificate or online verification option

**d. Quality control expert:**

* 1. Minimum, a Graduate Degree in Computer Science, or Software Engineering, or Computer

Engineering;

* 1. Work experience as an expert for quality control in at least 3 projects with .NET based technologies.

**c. Decision on the engagement capacity** 1. Reference letters from the employer

2. Notarized copy of university diploma,

**Request for Expression of Interest**

*Country: Kosovo*

*World Bank Loan/Credit Name: Kosovo Emergency COVID-19-Additional Financing*

*Project ID: P173819*

*Ref. No.: AF-XK-MoH-240162-CS-CQS*

**Creation of Zoning in the Primary Health Care**

**Introduction/Background**

At the request of the Government of Kosovo (GoK) for support to respond to the COVID19 emergency, the Kosovo Emergency COVID-19 Project (P173819) was approved on May 20, 2020, with an Additional Financing (AF) approved in June 2021. Both the Kosovo

Emergency COVID-19 and AF project’s objective is to prevent, detect, and respond to the threat posed by COVID-19 and strengthen national systems for public health preparedness in Kosovo.

The following are the components of the project:

Component 1: Health Care delivery and health system strengthening:

Component 2: Supporting households to comply with public health containment measures: Component 3: Project monitoring, communication, and community engagement:

**Objective of the Assignment:**

The purpose of the assignment is to determine the zonal maps for the health institutions, the exact geospatial coordinates, to offer the population better access to the health facilities/institutions to meet their needs.

The scope of assignment is 4 pilot municipalities (Lipjan, Prizren, Istog and two FMCs in Prishtina). After the piloting, the results of the piloting will be evaluated in order for the positive findings from the pilot to be applied in all municipalities of Kosovo.

**Description of the assignment:**

The assignment shall digitize geographic data of all primary health care facilities/institutions in the four pilot municipalities (according to the lists from the Ministry of Health):

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All health facilities must be digitized in GIS and have a link to the database identifying data from the Ministry of Health, example: name of municipality, name of settlement/location, address, type of facility, as well as geographical coordinates X, Y.

***Other specific information’s for duration, deliverables, reporting etc. are indicated under TOR for this assignment***

**Qualifications of the Consulting Firm**

1. Proof of registration information in the trade register (business registration certificate or business registration number);
2. Turnover of 100,000 Euro for the last three financial years (i.e. 2022, 2021, 2020);
3. At least 2 reference projects in the creation/drafting of Zonal Maps or Municipal Development Plans in the last 5 years (i.e. 2022, 2021, 2020, 2019, 2018) in the municipalities of Kosovo or other countries;
4. Proven knowledge of legislation and regulations in the field of spatial planning
5. Evidence of experience in institutional organization

The team of experts proposed by the consulting firm shall include the following key members:

* + Project Manager
  + GIS Experts (2 position)
  + Software application development expert;
  + Quality control expert

**Selection process:**

Experienced and qualified firms will be selected according to the World Bank’s Procurement Regulations for IPF Borrowers’ (the Regulations), issued in July 2016, and revised November 2017 and August 2018, based on the selection method for Consultant’s Qualification based Selection (CQS).

***Detailed TOR this assignment is available on MoH web page or may be requested to the*** ***contact person below:***

Expression of interest may be submitted to Ministry of Health to the below stated address until **9 March, 2023.**

*Ministry of Health,*

*Atnn.: Afrim Bajrami, Procurement Specialist*

*Address: Rr. Zagrebit Nr. 60*

*10 000 Prishtinë, Republic of Kosovo*

*Website: https://msh.rks-gov.net*

E-mail: To : [afrim.bajrami@rks-gov.net](afrim.bajrami@rks-gov.net%20%20)