REPUBLIC OF KOSOVA

MINISTRY OF ECONOMIC DEVELOPMENT (MED) KOSOVO DIGITAL ECONOMY (KODE) PROJECT

REQUEST FOR EXPRESSIONS OF INTEREST

Consulting Services – International Individual Consultant

Country: Kosovo

Project: Kosovo Digital Economy (KODE)

Project ID. P164188 Loan No.: 6285-XK

Assignment Title: Consulting Services for MED to review technical specifications for National

Spectrum Monitoring System (NSMS).

Ref No. KODE/IC/1.2.1/2019 **Issued on:** April 16, 2019

BACKGROUND

The Government of Kosovo has secured support from the International Development Association (IDA) (hereinafter 'the Bank') for a Kosovo Digital Economy (KODE) Project in the amount of 20,7 million EUR. The KODE Project aims to improve access to better quality and high-speed broadband services in project areas and to online knowledge sources, services and labor markets among citizens, and public and academic institutions.

It is foreseen that **the Project will achieve its development objective through two main sets of activities**: (1) expanding access of Kosovars to high-speed and better quality digital infrastructure; and (2) support Kosovars to take advantage of regional and global Digital Economy (DE) opportunities, especially for income generation, usage of services, and learning, thus triggering the growth of a DE in Kosovo.

The Project is structured along three components: 1. Digital Inclusion, 2. Digital Work and Empowerment, and 3. Project Implementation Support. Two substance components of the Project are outlined below.

Component 1: Digital Inclusion component will support digital inclusion through: (1.1) the expansion of digital connectivity through the co-financing of deployment of high-speed broadband connectivity in areas that have been identified as not connected or underserved, and (1.2) improving of the enabling environment for wireless broadband services, through the deployment of the National Spectrum Monitoring System (NSMS).

Component 2: Digital Work and Empowerment will support the Youth Online and Upward (YOU) Program and increased access to knowledge, information and online services through subcomponents: (2.1) Youth Online and Upward (YOU) Program; and (2.2) Increasing Access to Knowledge, Information, and Services.

The present Terms of Reference (ToR) concern the implementation of the Subcomponent (1.2) of Component 1 of the Project.

The KODE is implemented by the Ministry of Economic Development (MED) that provides strategic direction and technical oversight to the entire Project. MED oversees the Information and Communications Technology (ICT) sector development and executes this mandate through the Department of Post, Telecommunication and Information Technology (the Department), which for the purposes of the Project will act as the lead implementing agency and will carry the primary responsibility for all Components of the Project.

OBJECTIVE OF THE ASSIGNMENT

Subcomponent 1.2: Improving the enabling environment for digital connectivity will finance: (1) Provision of technical assistance to perform the assessment and review of the Technical Specifications for Kosovo NSMS; and (2) will procure the NSMS per updated Technical Specifications. Under present ToR the MED intends to hire a consultant for provision of technical assistance foreseen under part (1) of the Subcomponent 1.2.

Currently, Kosovo does not have NSMS and therefore proper means to efficiently manage spectrum. Spectrum management (the overall process of regulating and administering the use of radio spectrum) is among the key functions of Regulatory Agency for Electronic Communications and Postal Services (ARKEP), per its legal mandate established by Article 97 (4) of the Law on Electronic Communicationsⁱ. Objective of NSMS is to provide ARKEP with the technical means to implement spectrum management nationally in an efficient way.

With donor support, ARKEP has conducted preparatory work to develop technical specifications for NSMS. In 2013-2014 through European Commission TAIEX Instrument (Technical Assistance and Information Exchange), as followed in 2016-2017, ARKEP benefited from the EBRD-funded "ICT Sector Capacity Building for ARKEP" project, which financed the preparation of the NSMS procurement package: (a) overall requirements for the NSMS, (b) request for proposals for NSMS (incl. technical specifications), and (c) compliance matrix template for prospective bidders (altogether hereinafter Package). The prepared Package was endorsed by ARKEP's Board and consists of the following elements: (1) Main Control Center in Pristina, supported by: (2) Remote Fixed Monitoring Stations to cover all monitoring tasks, including Frequency Band Occupancy and Frequency Channel Occupancy and interference handling; (3) Remote Fixed Direction Finding Station; (4) Mobile Monitoring Stations for all type of mobile monitoring operations; (5) Transportable monitoring station for all type of monitoring operations; and (6) Portable Monitoring Equipment to perform monitoring in local situations (e.g. in buildings).

Given that the Technical Specifications were prepared some time ago, the Project will finance the review and update of the prepared Technical Specifications and the Package accordingly to align them with the current situation in terms of wireless technologies in use and forthcoming technical and human capacities of ARKEP, and other important factors that may affect the initial requirements and estimates.

SCOPE OF WORK

To prepare Technical Specifications for the Kosovo NSMS and update the Package accordingly. **Specific duties and Responsibilities:** Principal tasks of the consultant will include, but are not limited to:

- To review the structure for NSMS;
- To estimate the equipment type, technical requirements and its geographical location;
- To propose the suitable location for one fixed monitoring station to cover the city of Mitrovica and one to cover the city of Prizren based on the ITU (International Telecommunication Union) Handbook on Spectrum Monitoring, edition 2011, Chapter 6 section 6.8 and if needed to make a proper EMC (electromagnetic compatibility) measurements (ARKEP will provide the existing radio monitoring equipment and assistance for consultant).
- To analyze and calculate the number of sensors (Time Difference Of Arrival TDOA) needed to cover Prishtina and International Airport as alternative of Second Fixed Monitoring Station (AoA)
- To prepare the technical specification for TDOA (Sensors) technology in case is the proposal as alternative of Second Fixed Monitoring Station (AoA);
- To review and if applicable to prepare new / to update existing Technical Specifications for NSMS;
- To review and align the Package with new / updated Technical Specifications for NSMS;
- To provide additional ad hoc consulting support (incl. written inputs, review, editing, as needed) to support preparation of the Tender process for NSMS.
- During the tendering process for NSMS contract, assisting the PIU in answering the questions raised by the bidders during the bidding process.

While performing the above the consultant among other factors shall consider current and planned usage of radio-frequency spectrum in Kosovo and current and planned human and financial resources of ARKEP.

While performing its assignment consultant shall work closely with MED and ARKEP.

REPORTING OBLIGATIONS

The consultant will report to and work under the direction of the Project Implementation Unit within the Department.

MED'S AND ARKEP'S CONTRIBUTION

MED and ARKEP will provide consultant with the relevant material under the EBRD-funded "ICT Sector Capacity Building for ARKEP" project, including prepared Package and Technical Specifications.

As needed, the MED will provide office space, internet connection for the consultant when on mission in Kosovo. ARKEP will provide the existing radio monitoring equipment and assistance for consultant.

QUALIFICATONS

- Master's degree in Telecommunications Engineering or equivalent;
- At least ten (10) years of practical (hands-on) progressively responsible professional experience in spectrum monitoring / supervision, including regulation and enforcement;
- Out of ten (10) years, at least five (5) practical (hands-on) experience in planning, development and management of national spectrum monitoring system;
- Overall good familiarity with the spectrum monitoring / supervision issues globally and particularly in European Union and Europe;
- Active engagement with the relevant ITU and CEPT (European Conference of Postal and Telecommunications Administrations) activities in spectrum monitoring;
- Advance skills to communicate and draft various kinds of project documentation;
- Computer proficiency (MS Office and other standard business IT tools and relevant IT equipment);
- Fluency in English;
- Be able to travel to Kosovo.

CONTRACT DETAILS

The level of effort is estimated to be 62 working days.

The contract is expected to be started in May 2019. The duration of the assignment is estimated to last for six months from the contract signing.

This assignment will require consultant's travel to Pristina, Kosovo, for up to three separate mission visits lasting up to four days each. Organization and costs of these trips shall be covered by consultant.

TIMELINE AND PAYMENT SCHEDULE

#	Deliverable	Timeline	Payment, % of total budget
1	Mission to Kosovo. Meeting with MED, ARKEP and other stakeholders to explore the current situation in spectrum management and technical supervision, future needs and requirements for NSMS. Provide Mission to Kosovo Report	+ 2 weeks	20%
2	First draft of Technical Specifications	+ 4 weeks	30%
3	Final draft of Technical Specifications and updated Package. Mission to Kosovo upon the necessity.	+ 4 weeks	40%
4	Incorporation of any outstanding comments to ToR from MED and ARKEP. Answering the questions raised by the bidders during the bidding process Concluding mission to Kosovo. Provide the final report.	Subject to the NSMS Contract bid opening	10%

Ministry of Economic Development now invites eligible International individuals ('consultants') to indicate their interest in providing the Services. Interested Consultants should submit their CV accompanied with proof demonstrating that they have the required qualifications and relevant experience to perform the Services.

The Consultant will be selected using Individual Consultancy procedures in accordance with the World Bank's Procurement Regulation for Investment Project Financing Borrowers for Goods, Works, Non-Consulting and Consulting Services, July 2016, as amended.

The selection criteria are:

- (i) General experience in telecommunications or equivalent (30%),
- (ii) Relevant experience with similar assignments (50%) and
- (iii) Relevant experience in region (20%).

Further information can be obtained at the email address below during office hours -09.00 to 16.00 hours.

Expressions of interest (CV and related document's) must be delivered in a written form to the address below (in person) or by e-mail at below address, no later than May 3, 2019 at 16:00 h.

Ministry of Economic Development 1st floor, office no. 107 "Mother Theresa" street, no. 36 10000, Prishtine - Kosove E-mail: mzhe.tik@rks-gov.net

i No. 04/L-109, adopted by the Assembly of Kosovo.