

Kosovo: Kosovo Digital Economy (KODE) Project

TERMS OF REFERENCE

KREN Infrastructure Network Expert for KODE Project

(Ref. No. KODE/IC/2.2.4.2/2020)

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: Digital Inclusion, Digital Work and Empowerment, and Project Implementation Support. Two substance components of the Project are outlined below.

Component 1: Digital Inclusion component will support digital inclusion through: (a) 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 (b) 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

Provision of training for young people and their connection to online working opportunities. The activities will primarily cater to unemployed or underemployed young men and women with at least some knowledge of English and university education to increase their ability to compete in relevant segments of online work using computers and smartphones.

2.2 Increasing Access to Knowledge, Information, and Services

Provision of support to (i) set up a *Kosovo Research and Education Network (KREN)* to improve access of students, researches and educators of *Higher Educational Institutions (HEIs)* in Kosovo to knowledge, research networks and (ii) connect KREN to the GEANT network. Currently, some important activities related to establishing the physical infrastructure of KREN network are ongoing, i.e. KREN Data Center and dedicated connection with HEIs.

Provision of support to increase use of online labor market information and services to improve information flows about work opportunities, through targeted awareness raising and information sharing activities in underserved or unconnected areas identified in Component 1 of the Project.

The present Terms of Reference concern to the subcomponent 2.2 of the Project - Increasing Access to Knowledge, Information, and Services. More specifically, to the management of KREN network infrastructure.

The KODE will be implemented by the Ministry of Economy and Environmental (MEE) that will provide strategic direction and technical oversight to the entire Project. MEE 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

The MEE intends to hire an Infrastructure Network Expert for the KODE Project Implementation Unit (PIU) who will be responsible for monitoring, maintaining and supporting development of KREN network operations in coordination with network manager, in line with the objectives outlined Financing Agreement signed between IDA (World Bank). The accomplishment of these activities shall be done in coordination with KREN network manager and the Digital Work and Empowerment Coordinator of the Component 2 in a timely, effective, efficient, and results-oriented manner.

SCOPE OF WORK

KREN Infrastructure Network Expert will be responsible for provisioning, monitoring, maintaining and supporting development of network operations in coordination with network manager. This includes configuring, maintaining, supporting, and optimizing all new and existing network hardware, software, and communication links and services.

DUTIES AND RESPONSIBILITIES

Principal functions of the KREN **Infrastructure Network Expert** will include but are not limited to:

- Monitoring and maintaining of the network infrastructure.
- Ensure that security best practices and controls are included and applied across the network infrastructure.
- Ongoing analysis of the current network infrastructure to detect critical deficiencies and define needed improvements
- Support and coordinate installation of in-house and remote hardware and software across the organization's network.
- Support in Developing and Assisting delivery planning for the IT portfolio.
- Support in developing, implementing and maintaining policies, procedures, and associated training plans for network resource administration and appropriate use.
- Practice network asset management, including maintenance of network component inventory, life cycle management and related documentation.
- Monitor effectiveness of servers, including e-mail, print, and backup servers, and their associated operating systems and software.
- Manage and ensure optimal operation of all network hardware and equipment, including routers, switches, hubs, UPSs, and so on.
- Manage and ensure effectiveness of security solutions, including firewalls, anti-virus solutions, and intrusion detection systems.
- Manage user accounts, permissions, and access rights in AD.
- To be ready to work on ad-hoc emergency requests and out of working hours - if there will an emergency situation.
- Present ideas, events and activities in a user-friendly interface/reports - flow charts, data processing concepts and telecommunications principles.
- Execute analytical and problem-solving tasks.
- Prioritize and execute tasks in a high-pressure environment and make sound decisions in emergency situations.
- Conduct research into networking issues and products as required.
- Responsibility to manage and operate the cloud on premise solution.
- Other duties related to the above-mentioned activities which can be related to the daily work.

REPORTING OBLIGATIONS

KREN **Infrastructure Network Expert** will report to and work under the direction the Digital Work and Empowerment Coordinator of the Component 2. S/he will deliver monthly progress reports on her / his activity and any other ad hoc reporting requirements in coordination with the Project Director and Project Coordinator.

MEE'S CONTRIBUTION

The MEE will provide office space and equipment required for the KREN **Infrastructure Network Expert** to perform the tasks assigned.

QUALIFICATIONS

- Bachelor's degree in relevant field (master's degree is preferable) required in the field of Telecommunication, Computer Science or other related academic fields.
- CCNA certified, CCNP certification is preferable.
- At least 4 years of specific experience in managing and configuring enterprise-wide LANs, WANs, WLANs, VPNs, etc. Experience has to be demonstrated through CV and references.
- Strong networking skills.
- Demonstrated Experience of current protocols and standards, including Active Directory, Group Policies, MS Exchange, Core Switching/Routing, SSL/IPSec, Cloud technologies Business Continuity, Disaster Recovery.
- Hands-on experience installing network cabling.
- Hands-on experience troubleshooting hardware such as servers, routers, bridges, switches, hubs, modems, network interface cards, and so on.
- Good understanding of firewall features and technologies.
- Demonstrated experience in Programming/Scripting Languages such as bash, python, go lang etc.
- Good understanding of Cloud infrastructure, products and day-to-day operations;
- Strong interpersonal, written, and oral communication skills, graphical presentation of ideas and data processing concepts.
- Experience working in a team-oriented, collaborative environment with problem-solving tasks and responsibilities.
- Driving license and to be able and willing to travel throughout Kosovo.
- Fluency in Albanian and English. Knowledge of the Serbian language is an advantage.

TERMS OF THE ASSIGNMENT AND DURATION OF THE CONTRACT

- The contract is for an initial period of 1 (one) year with a 3 (three) month probation period, at which time the performance of the consultant shall be evaluated.
- The remuneration will be paid monthly;
- The KREN **Infrastructure Network Expert** will be offered opportunities to develop professionally by attending relevant training events and courses over the duration of the contract;
- KREN is part of the pan-European network GEANT, hence the Network Expert will have the opportunity to attend various trainings, workshops, technical forums alongside other GEANT community members.

- It is required that the Infrastructure Network Expert would assume its position immediately;
- The KREN **Infrastructure Network Expert** shall be engaged on a full-time basis for the duration of the Project;

SELECTION PROCES

The selection of Infrastructure Network Expert will be carried out in accordance with the World Bank's Procurement Regulation for Investment Project Financing Borrowers for Goods, Works, Non-Consulting and Consulting Services, July 2016 Revised November 2017.

PLACE OF EMPLOYMENT

Place of employment is in Prizren at:

Innovation and Training Park (ITP), Ukë Bytyçi str. 20000 Prizren, (ex KFOR Military Base Camp in Prizren).