

Kosovo: Kosovo Digital Economy (KODE) Project

TERMS OF REFERENCE

KREN Infrastructure Network Manager for KODE Project

(Ref. No. KODE/IC/2.2.4.1/2020)

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 Environment (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 Manager for the KODE Project Implementation Unit (PIU) who will be responsible for managing, monitoring and supporting development of KREN network operations in line with the objectives outlined Financing Agreement signed between IDA (World Bank) and the Government of Kosovo and in compliance with the Project Operations Manual (POM). The accomplishment of these activities shall be done in coordination with 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 Manager will participate in all activities related to planning, executing, configuring, managing, developing, 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 Manager** will include but are not limited to:

- Design and implement short- and long-term strategic plans to make certain network capacity meets existing and future requirements.
- Maintain communications and make certain agreements with HEIs.
- Contribute to the development and update of the KREN service portfolio that will be offered to its users.
- Helping to drive the development and communication of KREN current and future network architecture and strategy.
- Follow and understand of the organization's goals and objectives.
- Manages, monitors and maintains the network operations. Leads all aspects of the network service including design, engineering, security, implementation, and operations for the KREN's network.
- Support and coordinate installation of in-house and remote hardware and software across the organization's network.
- Admission, approve, and administer all equipment, hardware, and software upgrades.
- Conduct research and make recommendations on network products, services, protocols, and standards in support of network procurement and development efforts.
- Delivers the Network Operations Strategy.
- Practice network asset management, including maintenance of network component inventory, life cycle management and related documentation.
- Provides "ownership" of problem through final resolution.
- Manage and ensure effectiveness of servers, including e-mail, print, and backup servers, and their associated operating systems and software. Responsible for on-site and off-site data centers.
- 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. Establish and maintain regular written and in-person communications with the organization's executives, decision-makers, stakeholders, department heads, and end users regarding pertinent network activities.
- Manage operational costs; conduct near- and long-term financial forecasts for expanded functionality/user base.
- Oversee the administration of user accounts, permissions, and access rights in AD.
- Provide guidance to junior members of the team.
- To be ready to work on ad-hoc emergency requests and out of working hours - if there will be an emergency situation.
- Manage and operate the cloud on premise solution.
- 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.
- Other duties related to the above-mentioned activities which can be related to the daily work.

REPORTING OBLIGATIONS

KREN **Infrastructure Network Manager** will report to and work under the direction of 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 Manager** to perform the tasks assigned.

QUALIFICATONS

- Bachelor's degree in relevant field (master's degree is preferable) required in the field of Telecommunications, Computer Science or other related academic fields.
- CCNA certified, CCNP certification is preferable.
- Certification in ITIL is preferable.
- At least 6 years of relevant work/management experience as demonstrated through relevant references.
- At least 2 years successful leadership of an infrastructure team.
- Experience in project management.
- Demonstrated experience of current protocols and standards, including Active Directory (AD), Group Policies, MS Exchange, Core Switching/Routing, SSL/IPSec, Business Continuity, and Disaster Recovery.
- Demonstrated experience in management of Cloud Services.
- Good understanding of firewall features and technologies.
- Advance skills to communicate and draft various kinds of project documentation and reports.
- Hands-on experience troubleshooting hardware such as servers, routers, bridges, switches, hubs, modems, network interface cards, and so on.
- 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 Manager** 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 Manager will have the opportunity to attend various trainings, workshops, technical forums alongside other GEANT community members. It is required that the Infrastructure Network Manager would assume its position immediately;
- The KREN **Infrastructure Network Manger** 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).