

## **Specific Procurement Notice**

# **Request for Bids Goods**

**(One-Envelope Bidding Process)**

**Country: Republic of Serbia**

**Name of Project: Enabling Digital Governance Project**

**Contract Title: Network Operation Center**

**Loan No.: 8947-YF**

**RFB Reference No.: SER-EDGE-RFB-G-21-28**

1. The Republic of Serbia has received financing from the World Bank toward the cost of the Enabling Digital Governance Project (EDGe), and intends to apply part of the proceeds toward payments under the contract for Network Operation Center. For this contract, the Borrower shall process the payments using the Direct Payment disbursement method, as defined in the World Bank's Disbursement Guidelines for Investment Project Financing, except for those payments, which the contract provides to be made through letter of credit.
2. The Office for Information Technologies and Electronic Government (OITeG) now invites sealed Bids from eligible Bidders for Network Operations Center.

Our IT environment is comprised from a complex ICT infrastructure which includes networking, servers, storages, and other IT systems and services. Many of them play a key role in execution of daily operations of our Business and contribute to a stable, quality services provided to the Citizens and our Partners. In the case of fault or malfunction in our infrastructure, it is imperative that the functionality of our systems is restored as soon as possible.

Such approach, along with plans for further development of our ICT infrastructure, dictate the need to establish a centralized System for monitoring of ICT infrastructure, services and applications, which will be a backbone of our future Network Operations Center (NOC).

The use of technologies such as virtual machines, container-based microservices, and shared multi-tenant infrastructure is growing. Noise from such disparate systems makes it difficult to enforce IT policies resulting in draining time from core business focus. The amount of data being created across the enterprise usually exceeds current enterprise capabilities. As more business operations are digitized, growing data volumes becomes more critical and difficult to analyze, especially manually by humans. Therefore, modern IT organizations are turning to AI and Automation to make better decisions more quickly, efficiently utilize and optimize resources, and improve and enhance their IT service delivery.

According to before mentioned, we are not seeking for a traditional monitoring solution to centralize monitoring of ICT infrastructure, services and application but rather the one that is AI and Automation capable as the amount of data being created across the environment will certainly exceed current environment capabilities. According to Gartner research, AIOps platforms are the ones that addresses the need for operations support by combining data storage and analytics functionality to deliver relevant insights to the right personas based on data generated by IT in response to digital transformation. The capability is part of a pipeline that includes data ingestion and storage, followed by data curation and analysis, which leads to a visualization layer. The analytical capability includes a mix of statistical techniques and AI technologies. In such environment more focused outcomes are anomaly detection, diagnostic information, event correlation, and root cause analysis (RCA) to improve monitoring, service management and automation tasks.

Having AIOps solution will shift IT operations from reactive to proactive and with automated and intelligent functionality out teams must work smarter with relevant time savings.

### **Main Goals of NOC**

NOC is typically a separate organizational or functional unit which will feature a central location which will be able to monitor IT infrastructure, services and applications 24 hours a day, to ensure continuous and uninterrupted service of our infrastructure, network, applications, databases, external services and overall IT services provided by our organization.

Main goals of this system are:

- Stable operation of the overall ICT infrastructure managed by our Organization
  - 24x7 monitoring of Data Centers, Infrastructure and Applications with the aim to timely identify or even prevent the outage or failure of critical parts of the ICT infrastructure and applications. Be proactive rather than reactive
  - Consolidation of monitoring activities – efficient use of employee time and faster resolution of incidents; transparency of relevant events and issues in the system
  - Prevention of Incidents or, when they do happen, faster identification of root cause and affected systems
  - More efficient control of ICT systems functionality and performance
  - Avoidance of system outage and minimization of resolution time, improving overall ICT service availability and quality for end users
  - Improvement in hardware resource consumption through more granular control over their state and usage
  - Better alignment of available technical staff with ICT system needs faster information exchange during critical situations
- Monitoring of links to external systems and networks
- Support to local ICT teams in all locations
- Reduction of labor and efforts in monitoring systems and resolving incidents
- Reduction of maintenance labor and equipment costs
- Improved productivity
- Improved Organization image

Main functions performed by this System are:

- Planning and Monitoring of use of ICT infrastructure
- Monitoring and maintenance of ICT infrastructure, services and applications, including supporting systems (IP telephony, video surveillance, power supplies and other infrastructural services).
- Providing help and insight to local ICT teams
- Providing valuable information for planning and coordination of expansion of ICT infrastructure and systems

Currently we do not have a centralized system for monitoring of the entire ICT infrastructure, including services and applications. Point solutions are available on the level of specific locations or subsystems, but they are mostly incomplete in functionality, often incompatible with each other, inconvenient for fast information searching during critical incidents, and they are only providing a part of the picture.

This calls for implementation of the AIOps platform as a centralized system for Monitoring of ICT Infrastructure.

### **Monitored Infrastructure**

Our IT environment is comprised from a complex ICT infrastructure which includes networking, servers, storages, and other IT systems and services. In the initial phase of the project, only subset of the equipment should be covered by the system for consolidated monitoring of IT Infrastructure, services and applications. The following should be monitored:

- Server infrastructure that consists of virtual and physical servers on which middleware components and business applications are running.  
**20 nodes** should be covered by Infrastructure and Application discovery and monitoring. They should be covered by Event Management module for event centralization/collection perspective as well.
- Networking equipment that consists of: switches, routers, firewalls and other network devices.  
**600 devices** should be covered by Event Management module for event collection/centralization and by Network Topology Discovery module for discovery.

During project initiation, concrete list of Servers, network devices and other IT Equipment that should be monitored will be provided.

All the necessary licenses needed for functioning and advanced functionality included.

3. Bidding will be conducted through international competitive procurement using a Request for Bids (RFB) as specified in the World Bank's "Procurement Regulations for IPF Borrowers" (July 2016 Revised November 2017 and August 2018) ("Procurement Regulations"), and is open to all eligible Bidders as defined in the Procurement Regulations.

4. Interested eligible Bidders may obtain further information from the Central Fiduciary Unit of the Ministry of Finance and inspect the bidding documents from 09:00 to 15:00 hours at the address given below.
5. The bidding document in English only may be purchased by interested eligible Bidders upon the submission of a written application to the address below and upon payment of a nonrefundable fee of EURO 40.00 or equivalent in Serbian Dinars (RSD) based on the selling exchange rate published by the National Bank of Serbia on the date of payment.

Domestic Bidders shall make payment to the Government Treasury Account no.:

840-745128843-36- Other budget revenues of the Republic, with reference to the model approval number 97 41601, payment code 253 with obligatory Purpose of payment: SER-EDGE-RFB-G-21-28.

Foreign bidders shall make payment according to following payment instructions:

FIELD 32A: VALUE DATE-EUR-AMOUNT  
FIELD 50K: ORDERING CUSTOMER  
FIELD 56A: DEUTDEFFXXX  
(INTERMEDIARY) DEUTSCHE BANK AG., F/M  
TAUNUSANLAGE 12  
GERMANY  
FIELD 57A:  
(ACC.WITH BANK) NBSRRSBGXXX  
NARODNA BANKA SRBIJE(NATIONAL BANK OF SERBIA-NBS)  
BEOGRAD,KRALJA PETRA 12  
SERBIA  
FIELD 59: /RS3584000000000273086  
(BENEFICIARY) REPUBLIC OF SERBIA-BUDGET  
KRALJA MILANA BR.14  
BEOGRAD  
SERBIA  
FIELD 70: DETAILS OF PAYMENT Ref: SER-EDGE-RFB-G-21-28  
Bank/transfer charges are on bidder's account. Kindly mark in instruction for payment.

The document will be sent by e-mail.

6. Bids must be delivered to the address below on or before **January 31, 2022, 12:00 Noon, local time**. Electronic Bidding will not be permitted. Late Bids will be rejected. Bids will be publicly opened in the presence of the Bidders' designated representatives and anyone who chooses to attend at the address below **January 31, 2022, 12:15 p.m. local time in the Conference room at the 1<sup>st</sup> floor**.
7. All Bids must be accompanied by a Bid Security of **EURO 23,000.00**
8. The addresses referred to above are:

**Office for inquiry and issuance of the bidding document:**

Ministry of Finance  
Attn: Ljiljana Krejović, CFU  
3-5 Sremska St, 7 floor  
Room 708

Tel: +381 11 2021587

11000 Belgrade

To: [ljiljana.krejovic@mfin.gov.rs](mailto:ljiljana.krejovic@mfin.gov.rs)

Cc: [ljiljana.dzuver@mfin.gov.rs](mailto:ljiljana.dzuver@mfin.gov.rs)

Cc: [edge@ite.gov.rs](mailto:edge@ite.gov.rs)

**The Bid submission address is:**

Ministry of Finance

3-5 Sremska St, 7 floor

Registry Office 701

11000 Belgrade

Republic of Serbia