**SKILLS DEVELOPMENT AND INNOVATION SUPPORT PROJECT (SDISP)**

**TERMS OF REFERENCE**

**for**

**IT Consultant for Microsoft Technologies**

**I. BACKGROUND**

The Government of Republic of North Macedonia has received a loan from the International Bank for Reconstruction and Development- World Bank for implementing the Skills Development and Innovation Support Project (SDISP). The Project supports interventions which foster education and skills relevant to the job market, and enhance the innovation capacity and activity of firms in North Macedonia. The Project Development Objective (PDO) is to improve transparency of resource allocation and promote accountability in higher education, enhance the relevance of secondary technical vocational education, and support innovation capacity in North Macedonia.

The Project’s direct beneficiaries include around students, teaching and management staff from technical vocational education and training institutions who would receive a new curriculum and practical training facilities, as well as training on management, planning, and process improvement capacity; students and staff of universities, research institutions and enterprises will benefit from: (i) the implementation of quality assurance mechanisms and financing reform in higher education (HE); (ii) grants promoting R&D and innovation; and (iii) technology commercialization, global know-how absorption, and industry- university collaboration.

Furthermore, the Ministry of Education and Science is in its final phase of starting implementation of the Primary Education Improvement Project which will focus on three main elements that need to be aligned in order to be complementary to each other. Two are system-level reforms, to do with developing a comprehensive national assessment program and putting into practice professional competences, that would create the necessary enabling conditions, so the school teams are empowered with data on learning and up-to-date training; the third focuses on school-level interventions.

**II. SPECIFIC BACKGROUND**

Ministry of Education and Science (MoES) has recently signed their licensing agreement with Microsoft. The agreement covers K12 institutions with mix of Microsoft 365 Education A3 plan and student benefits. K12 in North Macedonia comprises of about 570 schools, 28,360 teachers and 258,000 students as of November 2020. MoES have an approved design for their e-Education system which has already been deployed for all schools and including the following components:

* Single tenant for all schools – this approach will enable equal access to Office 365 services regardless of school size and local staff capabilities. Compared to multi-tenant, single tenant will offer better collaboration capabilities, and lower operational cost.
* EMIS (Educational Management Information System) – contains information about all teachers, students, schools, teaching plans and courses and their relationships.
* Datasync DB – extracted data from EMIS that contains the set of data needed for provisioning the e-Education system.
* School Data Sync (SDS) – free tool for identity provisioning. It simplifies class management in Office 365.
* Azure Active directory password reset – application for resetting passwords for teachers and students.
* Moodle – open-source Learning Management System (LMS), contains all courses (one per school, subject, class) associated with the teacher and students.
* Moodle integration with Microsoft Teams – the integration will help educators and teachers collaborate around Moodle courses, ask questions about their grades and assignments, and stay updated with notifications within Teams.

MoES have asked Microsoft Consulting Services (MCS) to provide assistance with enabling Office 365

Education using the following approach:

* Support with SDS planning and implementation
* Exchange Online enablement including GAL segmentation
* SharePoint and OneDrive enablement
* Review the existing Teams integration with Moodle and provide advice and guidance
* Review the exiting Teams configuration and provide advice and guidance

**III. OBJECTIVE OF THE ASSIGNMENT**

The purpose of this assignment is to hire a short-term individual consultant, more specifically IT consultant with specific background and experience in Microsoft Technologies for initial support and implementation of services in the current project of Assistance for Office 365.

**IV. SCOPE OF WORK**

* Provide project manager resources to work with the Microsoft project manager and manage customer resources and assigned project activities,
* Participate in the pilot and work with the Microsoft team to provide timely feedback
* Manage scheduling and logistics for project workshops,
* Review the RAID log with the Microsoft project manager and assign appropriate resources to actions, issues, and risks,
* Verify the configuration of, and resolve any problems with, reverse proxies for certificate deployment,
* Participate with the Microsoft team in the setup of pilot solution components to facilitate knowledge transfer,
* Complete all tasks identified in the preparation checklist and procure all required resources for the project within the timelines established for remediation, as documented in General project scope section,
* Participate in the assessment and planning workshop, communicate requirements, provide current environmental information, and make design decisions,
* Prepare SDS CSV containing teachers and students for all schools, and fix data quality issues in case of SDS sync errors
* Configure tenant-level settings for Exchange Online, excluding detailed policy design and configuration,
* Provide guidance related to SPF, DKIM, and DMARC configuration with Exchange Online,
* Provide Microsoft with specific requirements for SharePoint Online and OneDrive for Business usage
* Participate in the configuration of SharePoint Online and OneDrive for Business
* Prepare access to, and verify the health of, the production environment through processes such as Microsoft Services Risk and Health Assessment as a Service for AD DS,
* Resolve any production IP, network, or firewall conflicts,
* Verify configuration of the network firewall, routers, and switches if necessary, to permit standard client-to-server and server-to-server communication,
* Conduct final operations validation of the deployment, configuration, and operations using the test cases included in the test plan,
* Provide first-level and second-level support
* Manage risks, address problems, and take action for resolving those problems

**V. MINIMUM QUALIFICATIONS**

* Bachelor’s degree in Computer Science or Informatics or at least 15 years relevant professional experience,
* Must be fluent in Macedonian and in English

Proven experience in:

* At least of 10 years as a System Administrator, Network Administrator
* Strong technical knowledge and proven experience of Windows Server and SQL Server including installation, administration, troubleshooting, preventative maintenance, and security,
* Strong technical knowledge in Microsoft Azure technologies, Microsoft Active Directory and SDS, Microsoft Exchange Server 2007, 2010, 2013 and 2016, Microsoft Hyper-V, VMware or similar virtualization platforms within a production environment, IIS (Web servers), DHCP, VPN, WINS, WSUS , Cluster services, Web Load Balancers, Group Policy and File Cluster Servers,
* Security analysis, design, and implementation of network firewall, networking and storage configuration, management of virtual machines
* Preparation and implementation on VLAN-based network addressing scheme,
* Professional certification (e.g. Microsoft Certified Systems Administrator (MCSA) or Hyper-V/VMware Certified Professional) is an advantage
* At least 10 years’ experience in load balancing software

**VI. CONTRACT ARRANGEMENTS AND DURATION OF ASSIGNMENT**

The Consultant will work under a time-based contract. The assignment will be full time, working 8 hours a day on the regular business days in North Macedonia. The contract duration shall be until April 30, 2021.