

TERMS OF REFERENCE
For Consulting Services (Individual Consultant)
**“IT Architect and Information-Communication Technologies
Development Manager”**

Contract No. MoES-IC-06
Ukraine Improving Higher Education for Results Project
World Bank Loan No. 9238-UA

I. BACKGROUND

Ukraine and the International Bank for Reconstruction and Development (IBRD; the World Bank) have signed the Loan Agreement No. 9238-UA in the amount of US\$200 million for the Project ‘Ukraine: Improving Higher Education for Results’ (hereinafter referred to as the Project). The Project is implemented in Ukraine by the Ministry of Education and Science of Ukraine (MoES) with support of the World Bank Group. The Project implementation period is 2021-2026.

The Project Development Objective (PDO) is to improve efficiency, conditions for quality, and transparency in the higher education system of Ukraine.

The Project includes four components:

- Component 1: Sector-Wide Improvements to Governance, Financing, Quality, and Transparency;
- Component 2: Alliances/Partnerships for Improved Efficiency and Quality;
- Component 3: Capacity Building and Education Environment Enhancement;
- Component 4: Project Management, Monitoring & Evaluation

The Project supports two categories of expenditures: (i) traditional investments in goods, works, and services, for which disbursements are made against eligible expenditures; and (ii) defined performance-based conditions (PBCs), for which disbursements are also made against eligible expenditures conditional on the achievement of the PBCs as defined in the Loan Agreement and Project Operational Manual.

As a requirement of the Loan Agreement, MoES established a Project Implementation Unit (PIU) to conduct day-to-day Project management and coordination in disbursement, procurement, financial management, compliance with environmental and social standards, reporting and other Project-related activities. In order to ensure efficient implementation of the Project, MoES shall engage individual consultants for the PIU.

II. OBJECTIVE

The objective of this assignment is to provide assistance and advice to MoES on the selection of optimal solutions (IT architecture, other technical solutions, implementation solutions, etc.) in the process of development of information and communication technologies in the field of higher education within the framework of this Project. The IT Architect and Information-Communication Technologies Development Manager shall provide consulting services as specified in this Terms of Reference.

III. SCOPE OF SERVICES

The Consultant shall provide the following services and tasks:

Supporting Design and Implementation of Technical Audit of HEIs' ICT

- 1) provision of consulting services and recommendations for the audit of the current state of information and communication technologies in the field of higher education in Ukraine, and selected technical solutions;
- 2) support the MoES in preparing the Terms of Reference for a firm to conduct the above-mentioned audit and in management of the firm;

Advising MOES on ICT Solutions Needed for HEIs and for MoES

- 3) provision of consulting services on the selection and final selection of architectural solutions and technologies in the development of information and communication technologies in the field of higher education in Ukraine;
- 4) analysis and development of proposals for determining the methods and technologies of integration of individual components of information systems of the MoES in order to ensure adaptation of IT infrastructure to the business needs of the MoES;
- 5) monitoring of modern information technologies and providing consulting services on the optimal choice of information technologies and technological solutions for the development of information and communication technologies in the field of higher education in Ukraine, in order to build a productive, flexible and efficient architecture;
- 6) provide consulting services and participate in processes related to the configuration and installation of servers and server equipment in the field of higher education in Ukraine, including those intended for the establishment of data centers;
- 7) supervising processes of supply of servers and server equipment for compliance with the terms of contracts;
- 8) advising MoES specialists in the process of development of information and communication technologies in the field of higher education in Ukraine;
- 9) coordination between the participants of individual projects for the development of information and communication technologies in the field of higher education in Ukraine and the MoES, ensuring the solution of problematic issues related to the implementation of such projects;

Supporting Procurement and Implementation of ICTs under Components 1, 2 and 3 of the Project

- 10) participation in the preparation of technical specifications for procurement of IT equipment, software, and related goods and services financed by the Project, including under Component 1 (for MoES) and under Components 2 and 3 (for HEIs);
- 11) participation in the evaluation of Bids (Quotations, etc.) received by the MoES in the procurement for various elements of information and communication technologies in the field of higher education in Ukraine, providing explanations to Bidders, preparing draft responses to complaints of Bidders, negotiating contracts with recommended for contract award;
- 12) participation in the preparation of contracts on various elements of the development of information and communication technologies in the field of higher education in Ukraine, amendments to contracts, supervision of the implementation of contracts;
- 13) coordination of all contracts related to the construction of the information system, including the examination of information materials, reports and relevant draft regulations, methodological and instructional materials, etc;
- 14) provide technical support during software testing period(s) to ensure that procured software is functioning according to technical specifications;
- 15) organization and participation in the acceptance of software from relevant providers or service providers, including source texts as well as acceptance of contract deliverables resulting from procurement of IT goods, works and services under the Project;

- 16) control over the process of implementation of information and communication technologies in the field of MoES and in bodies and institutions belonging to the sphere of management of the MoES;
- 17) ensuring a coherent policy on hardware and software solutions, solutions in the field of communications, information security, policies in the field of developing the necessary software and technologies, etc., which will correspond to and ensure interoperability with the defined architecture of information systems;
- 18) assessment and conclusion on compliance with the selected technical solutions (including architecture) of draft specifications and technical specifications of hardware, software, network and telecommunications equipment, etc., which will be purchased in the development of information and communication technologies in the field of higher education in Ukraine;

Analysis, Reporting, and Records Management

- 19) preparation of reports and analytical materials on the development of information and communication technologies in the field and implementation of the Project as a whole;
- 20) storage of documents executed during the provision of services in accordance with the Terms of Reference, in the manner specified by the MoES;

Other Support to the Project (as needed)

- 21) participate (if necessary) in amending the Project Operational Manual;
- 22) carry out other assignments and activities related to the Project implementation within his/her competence upon request of the Project Coordinator(s) and/or the Project Manager – Lead of group of consultants.

IV. REPORTING

The IT Architect and Information-Communication Technologies Development Manager will report to the Project Coordinator(s) and Project Manager – Lead of group of consultants. The Consultant shall submit monthly reports in hard copy. The reports shall include description of services provided by the Consultant during the reporting period.

The IT Architect and Information-Communication Technologies Development Manager shall transfer (submit a work completion and acceptance certificate) any research, reports or other materials, schedules, software, etc., developed or prepared by him for the Customer during the entire period of services to the Project Manager – Lead of group of consultants on the last working day.

V. PROVIDED RESOURCES

MoES shall provide the Consultant with information necessary to carry out his/her assignment in a timely manner. MoES shall provide the Consultant with a workplace, including necessary equipment to carry out his/her functions (e.g. PC, communications and office equipment).

VI. QUALIFICATIONS REQUIREMENTS

Minimum requirements (mandatory):

- Master Degree or complete higher education Degree in Information Technology, Automated Control System, Computer Sciences, or other relevant field;
- At least 10 years of proven professional experience in project management in the field of information technology (project management, software development, etc.);
- Confirmed experience in participating in the audit of information systems;

- Fluency in Ukrainian;
- Upper intermediate or higher level of spoken and written English confirmed by a certificate or during contract negotiations including ability to freely process technical documentation and specifications in the field of IT.

Desirable qualifications and competences

- Participation in international and/or donor-funded projects that have included IT components;
- Knowledge of the Ukrainian education system, particularly in the higher education sphere
- Proven experience in at least 5 complex IT projects in management or key positions (architect, team lead, project manager, or similar roles);
- Experience of participation in creating technologies (software) for data processing and storage, highly loaded information systems, management of large data sets;
- Experience of participation in projects on creation of information security systems (in particular, complex information protection systems);
- Experience in designing at least 3 (three) IT systems, which include designing system architecture, selecting the necessary equipment for smooth system operation, selecting storage systems, selecting corporate networks, virtual infrastructure, infrastructure software, creating application software systems at the enterprise level with a large load;

VII. PERIOD AND LOCATION OF EMPLOYMENT

The Consultant shall provide his/her services for 2 years (24 months) with 3 months probation period and possibility to extend the contract for the Project implementation which lasts until December 31, 2026 in case of successful performance. The Consultant shall provide his/her services on a full-time basis.

The incumbent will be based at the premises of the Project Implementation Office, in Kyiv, Ukraine. The Consultant should be required and expected to take business trips to other regions of Ukraine to support implementation of the Project.

VIII. APPLICATION PACKAGE

Interested persons should submit their CVs in Ukrainian and English at the following e-mail address: uiherp@mon.gov.ua indicating subject of the letter: «P171050: IT Architect and ICT Development Manager». The deadline for submission of the documents is 17:00 local time February 17, 2022.

The consultant shall be selected according to the applicable World Bank Procurement Regulations.