**Annex 4 – Goods and services specification**

**TERMS OF REFERENCE**

**For**

**Strengthening Web Based Integrated Educational Management Information System (IEMIS) for Effective Use of Data at Schools, Districts, Local, Provincial and Federal Governments (Phase II)**

1. **General Background**

The Government of Nepal approved the School Sector Development Plan (SSDP) for FY 2017-FY2023 to continue its efforts in addressing challenges of school education. It aims to increase participation of all children to quality education by focusing on strategic interventions and new reform initiatives so that access, quality, efficiency, governance, management and resilience of the education system can be further improved. The Ministry of Education, Science and Technology (MOEST) is the executing agency and the Centre for Education and Human Resource Development (CEHRD) is the implementing agency of the SSDP under the Sector Wide Approach (SWAp).

The British Council is implementing Package 1 of TA 9215: Supporting Policies and Implementation in the School Sector for program management, coordination and technical support to the government of Nepal to implement School Sector Development Plan (SSDP). The TA is co-funded by the European Union (EU) and the Asian Development Bank (ADB).

Building on SSDP’s Mid Term Review (MTR), a Capacity and Institutional Assessment (CIA) was carried out for SSDP, and a Capacity and Institutional Development Plan (CIDP) was developed further elaborating priority TA interventions. CIDP is aligned with the priorities of Ministry of Education Science and Technology (MOEST), Center for Educational Human Resources Development (CEHRD), Local Governments and allied institutions for implementing capacity building interventions and Integrated Education Management Information System (IEMIS)has been identified as one of the key thematic areas for support.

The effective implementation of SSDP requires robust data recording and tracking system and therefore Web-based IEMIS has already been built and implemented across the country <https://iemis.doe.gov.np/>. The second round of Independent Verification of IEMIS also showed that there is less discrepancy in the data collected through web-based IEMIS. In this respect, it can be said that Nepal has made remarkable progress in collecting and tracking comprehensive education data that is needed for the effective implementation of SSDP.

In addition, an IEMIS action plan has also been developed to ensure that data collected in EMIS is of high quality and that this information can be used for different levels of plan formulation including the use of data for facility improvement in schools, timely distribution of resources (grants for text-books, scholarships, etc.), and the monitoring of different indicators at various levels.

The M&E system in education depends on a well-established IEMIS and in case of Nepal, the school education system is being monitored by the use of IEMIS that produces Flash I and Flash II reports in an annual basis, and reports progress based on national and international key indicators, and in the form of Disbursement Linked Indicators (DLIs). In this context, the CEHRD has received the first phase of supports from the SSDP TA Facility and successfully added the tables and figures required for Flash I and Flash II reports in the existing web-based IEMIS. However, there is a room for further improvement in web-based IEMIS and therefore, this assignment is an attempt to enrich web based IEMIS with required reports, outputs and information so that necessary documents can be produced and published with the help of these information.

**Objectives of the assignment**

* Upgrade the current https://iemis.doe.gov.np to a full-fledged IEMIS by adding components as given in the detailed tasks
* Improve the current web-based IEMIS by incorporating all possible online functions that provide required tables, figures and outputs
* Secure the Login Credentials so that non-authorized access can be prevented
* Upgrade the database structure so that complex calculation can be generated through the system
* Integrate various database as referred in the detailed tasks
* Upgrade and Web-server by installing new database and other software

**Detailed Tasks**

In order to achieve the objectives of the TOR, the consulting firm should ensure that following tasks are completed. As part of the ongoing federal roll out, there is a likelihood that consolidation and integration of other management information systems will take place at all levels of government including at school level. Currently, these systems are fragmented across different sectors in areas of finance and monitoring & evaluation.

* Integrate the Equity Index calculation in the system so that this score can be produced for all LGs
* Integrate Grade V Examination System with an option for other grades also enabled
* Link the University and Technical and Vocational Education Training Data
* Generate Basic Level School Completion Certificate as issued by National Examination Board
* Introduce Grade 9 and 11 templates in web based IEMIS so that schools can generate the data required for Grade 9 and 11 registration, part of the database linkage between CEHRD and the NEB.
* Develop and add school related financial component in the Web-based IEMIS
* Develop and add Planning and Monitoring components in the Web-based IEMIS
* Enrich web based IEMIS with required reports, outputs and information so that necessary documents can be produced and published within the prescribe time-line.
* Develop and produce the Teacher training report, so that the Training Centres can input data on teacher training status and schools/teachers can get Teacher Report Card as issued by the respective agency.
* As per-the availability of the infrastructure in the Ministry of Social Development, manage the backups of database to be stored outside of National Information Technology Centre (NITC).
* Develop and explore the options to link Vital Registration System at local level.
* Other tasks that are recommended by the CEHRD/EMIS section.

**B. Working Hours and Place**

The anticipated period for completion of the assignment is 11 months or no later than August 2021 with an option for an extension for up to an additional 1 month. The consulting firm/individual will work from its own premise with close coordination and visits to CEHRD EMIS section as required.

**C. Deliverables**

* Upgraded version of the current web-based software "https://iemis.doe.gov.np" with full-fledged IEMIS
* New components added as per the TOR.
* A CD with the manuals and videos associated with the web based IEMIS.

**D. Requirements**

The consulting firm /proposed individual(s) should have:

* At least 2 years working experience in the Flash Reporting, Educational data and information system and their use in the educational planning
* Having excellent knowledge with Programming Languages in MySQL database and its handling
* Extensive experience in developing enterprise information systems using MySQL, PhP, \*.Net
* Experience in data management systems for use in the educational planning and monitoring will be an advantage
* Previous experience of working with MOEST/CEHRD and with Local/Provincial Government Agencies and schools on education data and information management systems will be an advantage