

TERMS OF REFERENCE

For

**Strengthening Web Based Integrated Education Management Information System (IEMIS) for
effective use of data at local, provincial and federal level**

A. General Background

Until 2011, schools provided educational data on papers. After 2011, schools started entering data in electronic based IEMIS that provided detailed information of each student, teacher, non-teaching staff, and other information on schools. Since 2018-19, a web site has been established (<https://iemis.doe.gov.np>) for schools/local levels/district level to upload the electronic based IEMIS information from their own computers instead of carrying and submitting data in pen drives. Login credentials have been provided to all the schools, local levels, district levels, provincial government and the federal government so that they can view the required reports, outputs and other information from the web based IEMIS.

The current web based IEMIS only has the functionality to generate grade wise student details disaggregated by gender, caste/ethnicity, mother tongue status, disability and the type of the school. This system is not in a position to generate, for example, the number of students by disadvantaged communities and is also not in a position to generate much required physical infrastructure details of the students. In this context, this system is incomplete and therefore needs further efforts not only to sustain the system but also to strengthen the system. This TOR therefore 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 TOR

- Automate outputs that are needed for Flash I, Flash II and Consolidated reports.
- Strengthen the existing web based IEMIS by incorporating required outputs, procedures and tables related to Grade VIII Examination System
- Develop automated production of regional, district, school profile cards using IEMIS data and prepare tools to support analysis of district and school profile cards design and implement the EMIS verification scheme and corrective measures
- Link teachers training to EMIS so that relationship between training and student's learning outcomes can be assessed.

In order to achieve the objectives of the TOR, the consulting firm/individual should also ensure that the following tasks are completed:

- Remove the data redundancies that exist in the server and also ensure that such redundancies do not occur in the future.
- The tables are currently unstructured with no Indexes and therefore such tables need to be structured and Indexed. The required reports stated in the objectives should be generated through these structured and Indexed tables.
- The database query is static and therefore reports cannot be generated very quickly. Therefore, the database query should be made dynamic.
- The used framework should have multiple cardinality condition check on join condition in order to retrieve reports needed in web based IEMIS.

B. Working Hours and Place

The consulting firm/individual will work in its own premise with necessary consultations and site inspection for anticipated period of 45 person-days.

C. Deliverables

- The Web based EMIS with optimized server and data base including profile information viewable to the public.
- A CD with the manuals and videos associated with the WEB based IEMIS.

D. Requirements

- The consulting firm and proposed individual should have 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