Terms of Reference (ToR) for Seismic Assessment of Building

The main objective of the Seismic Assessment of Building is to assess the existing condition of structure and provide recommendations. The independent observers from DUDBC will also be accompanied during the assessment period.

**Site** : Former Child Health Division Building Department of Health Service, Ministry of Health and Population, Teku, Kathmandu.

**Building** : Column Beam Structural System Building, 3 Storey Building
(Approx Total size : 9,000 sq.ft)

**Duration** : One month

**Scope of Work**

The following work to be performed for the seismic assessment of Building.

1. Site visit and taking measurement of the entire building entering each room
2. Verification of as built drawing after completion of site measurement
3. Chipping structural elements (columns beam) min. 100x100 size exposing concrete surface using nondestructive testing equipment like SCHMIDT hammer, rebar detector and pulse velocity tester
4. Taking photographs of each detail from outside and inside using digital camera
5. Interview with designer or concern person, if exist for building history and construction workmanship
6. Geo technical investigation of the site to identify the susceptibility of liquefaction, type of soil and water level, shear wave velocity etc.

**Office work**

1. 3D model analysis in computer to check the capacity of the existing building.
2. Verification of the building structural capacity and demand by numerical calculation based on 3D model analysis (this will be done only if structural drawing for the building is made available to the assessment team).
3. Identification of seismic deficiencies of the building structure
4. Verification of the building with the seismic safety codes NBC, IS and other relevant codes and standards
5. Identification of vulnerable and less vulnerable places inside the building and will be shown in the floor plans
6. Tentative cost for seismic strengthening if require. (only budgetary purpose)
7. Preparation of detail seismic vulnerability assessment report incorporating all the output of the field and office work including conclusion, recommendations
Requirements

- At least 3 years of working experience in the related field
- Work experience on seismic assessment of building with list of clients

Documents requirement

- Organizational Profile along with methodology and CVs of proposed team
- PAN/VAT Registration Certificate

Deliverables

The terms of the assignment shall be effective from the date of signature by both the Parties. The proposed deadlines to carry out the assignment are:
- Progress report by first week after contract agreement with ToC of Final report;
- Final report and recommendation within one month of contract agreement.

All deliverables should be submitted in hard and workable e-copies. The final assessment report with recommendation will be a single document, whereas some supplementary information could be annexed separately, as applicable.

For further administrative information, please contact Mr Narendra Tandukar, Administrative Associate-Procurement, WHO Nepal at tandukarn@who.int

NOTE: All the damages that made for testing shall be repaired as existing as much as possible.