

TERMS OF REFERENCE

for Development of Civil Engineering Academic Standards

February 2023

1. Purpose:

Ministry of National Planning, Housing and Infrastructure (*Ministry*) is looking to hire an *Institute/Company* to formulate *Technical Approval* standards for Academic programs under the “Academic Regulation on Construction Sector Professional and Technical Programs” - Regulation no. 2019/R-1016 (*regulation*) formulated under Construction Act (Act no. 4/2017) for the following programs:

- a) Diploma in Civil Engineering
- b) Advance Diploma in Civil Engineering
- c) Bachelor’s Degree in Civil Engineering

2. Tasks and Responsibilities:

- a) The *Institute/Company* will be required to carry out the following tasks: -
 - i) Carry out research on similar standards adapted internationally and draft standard as per Section 8 of *the regulation* as well as in consideration of the following points:
 - a. Determine skills, experience, and any other requirements for teaching staff.
 - b. Determine minimum entry criteria including literacy and numeracy requirements and alternative pathways.
 - c. Determine requirements to outline units of competency that can be imported to the course and how exemptions are granted.
 - d. Determine course curricula (including required breadth and depth of course material), contact hours, number of credits, core and elective modules, the competencies that must be acquired, duration, practical requirements, facilities, tools, and other necessary resources to conduct the course.
 - e. Determine how the course should serve national needs and industry requirements.

- f. Clarify internal compliance and oversight mechanisms that needs to be established at institute.
 - g. Identify parts of the program that may be conducted online and limitations to mode of delivery.
 - h. Define exit points.
 - i. Established what may be conferred to the students on completion and the requirements for determining successful completion.
 - j. Determine requirements for work placement and/or simulated assessment.
 - k. Outline requirements to assess competency and progress including vocational competency, the assessment conditions and for the use of external assessors and establish systems for grading.
 - l. Determine how the standard will lead to general recognition of the course both locally and internationally.
 - m. Outline the points of inspections required by accreditation bodies and method for initial accreditation and ensuring continued compliance.
 - n. Determine MQA accreditation levels and identify method of technical assessment of the courses to be undertaken by the MNPHI to gain MQA accreditation as required by Regulation.
 - o. Determine how the course content is reviewed and remain current and relevant during the accreditation period.
 - p. Other relevant aspects of accreditation
- ii. Carry out stakeholder consultations and collect all the relevant information from the stakeholders and applicable authorities.
 - iii. Incorporate national and international commitments. The standards shall be applicable to the context of Maldives.
 - iv. Incorporate local conditions, materials, practices and practicable solutions.
 - v. Prepare any additional documents necessary to discuss with Ministries, departments, other organizations, committees and individuals involved in the coordination process.
 - vi. Carry out further stakeholder consultations and update draft in consultation with the *Ministry*.

- vii. Consult the Assessment Committee on Construction Sector Professional and Technical Programs (*Assessment Committee*) and update draft in consultation with the *Ministry*.
 - viii. Give input on any amendments or updates required to be brought to the regulation and Act to implement the standard.
 - ix. Give input on changes to the draft required during Attorney General Consultations or President Office Consultations to gazette the standard in a timely manner.
- b) The *Institute/Company* must provide the standard after drafting, to present to the stakeholders, *Ministry* and *Assessment Committee* as follow:
- i. Prepare the presentation and any necessary documentation essential for information sessions.
 - ii. Deliver all the necessary information required during the sessions.

3. Deliverables:

- a) The *Institute/Company* shall prepare a work schedule, identifying deliverables as per *Ministry's* instructions (where any changes are required The *Institute/Company* may discuss and amend the work schedule as acceptable to the *Ministry* and the *Institute/Company*)
- b) Deliverables as per follows:

#	Deliverable	% Claimable from total price (where the applicant has not proposed a division)
1	Submission of draft standard	30%
2	Report of the stakeholder feedback on the draft standard	40% (After completion of 2&3)
3	Submission of draft updated after Stakeholder consultation	
4	Finalized document after consultation of the Ministry and Stakeholders	20%
5	Input for the standard up to time of gazette	10%

4. Organizational Setting:

- a) The *Institute/Company* will be contracted and work under the direct supervision of the *Ministry*.
- b) The *Institute/Company* is not required to be stationed in the *Ministry*, but is required to participate in all work-related meetings.
- c) The work-related meetings should be prioritized to be carried out between 9:00am to 14:00pm on public working days and adequate notice shall be given.
- d) *Ministry* shall provide or arrange venues for meetings and consultations and workshops as required.
- e) *Ministry* shall provide stationery and printing facilities for documentation required for meetings, consultations and workshops.

5. Input:

Ministry will provide the *Institute/Company* with necessary information and any relevant available material under the Construction Act required for fulfillment of the tasks.

Ministry will also facilitate the necessary meetings and the secretarial arrangements required to arrange the meetings with Ministry and stakeholders.

6. Minimum Requirements of the Institute/Company:

The Institute/Company should propose a minimum of 3 (three) team members for the work meeting the requirements stated in this section. However, the Institute/Company may fulfill the requirements set out in this section with more than 3 proposed team members.

a) Work Experience of the Institute / Company:

The Institute/Company should have at least 5 years of work / professional experience in the following areas.

- i) Development of Academic Standards
- ii) Development of curriculum of Civil Engineering Courses
- iii) Conducting Civil Engineering Degree level Courses or above

b) Required Professional Experience of team members:

At least 1 *Institute/Company* team member with 5 years of experience in the following areas relevant to the profession after acquiring the academic qualification.

- i) Experience in developing a course program related to construction sector, or a similar experience.
- ii) Experience in Structural/Civil Engineering related field (design and field experience)

c) Required Academic Qualification of team members:

At least 3 members should have the following requirements:

- i) 2 team members with PhD or Master's Degree in Civil / Structural Engineering.
- ii) 1 team member from academia with PhD in Curriculum Development / Teaching or Education

7. Duration of Consultancy:

- a) The initial draft shall be submitted within 1 (one) month of agreement.
- b) The total consultancy period shall not be proposed for a duration of more than 2 (two) months.
- c) Upon completion of the contractual period, if the work remains to be completed, the *Ministry* may seek to extend the contract period for a period of not more than 15 (fifteen) days.
- d) Once the assigned tasks are completed the agreement will be voided even though the contractual period is not completed.

8. Application requirements:

- a) Quotation for the works
- b) Proposed work schedule.
- c) CV of proposed team members (that demonstrates that the applicants are qualified to perform the services including a description of similar assignments, experience in similar conditions, availability of appropriate skills etc.)

- d) Copies of Educational Certificates of proposed team members
- e) Registration certificate of Institute / Company

9. Payments:

- a) The *Institute/Company* can claim for payment upon completion of the total works or upon completion of each deliverable identified in 3b once the deliverables are accepted by the *Ministry*. Whereas the Institute / Company has not provided a breakdown of price, the percentages identified in 3b can be used to give payments upon completion of each deliverable.
- b) Months in this TOR are considered to be months starting from the date of signing of agreement (eg: if agreement signed on 20th January, the first month is from 20th January – 19th February and so forth).
- c) Where the *Institute/Company* is unable to provide a deliverable in 3b as per the submitted work schedule without acceptable reason, 5% of the price for that specific deliverable can be deducted per day delay from that deliverable's payment.

10. Evaluation Criteria:

- a) Selection of applications for evaluation is stated below:
 - i) Whereas one or more than one of the bidding institute/companies meeting all the minimum requirements stated in 6.a), b) and c) participate in the bidding, Ministry will shortlist the parties meeting the minimum requirements and select a winner between the shortlisted parties based on the marks given using the formulas in iii)
 - ii) Whereas none of the bidding institute/company meet the minimum requirements stated in 6.a), b) and c) participate in the bidding, Ministry will select a winner based on the marks given using the formulas in iii)

iii) The bidder with the highest marks from formula 3 will be selected after giving marks via formula 1 and 2.

Formula 1: Marks for Qualifications will be as per the formula below using the marks received in the marking criterion set forth in b), c) and d).

$$\text{Bidder Qualifications} = \frac{\text{Marks from b)+c)+d)}{100} \times 70$$

Formula 2: Marks for Price will be given as per the formula below.

$$\text{Bidder Price} = \frac{\text{Price submitted by the bidder}}{\text{Highest price submitted}} \times 30$$

Formula 3: The bidder total marks will be given as per the formula below.

$$\text{Bidder Total Marks} = \text{Bidder Qualifications} + \text{Bidder Price}$$

b) Work Experience of the Institute / Company (total marks: 30)

Development of Academic Standards or Curriculum Development	5-7 years	3
	7-10 years	7
	10 + years	10
Development of curriculum of Civil Engineering Courses	5-7 years	3
	7-10 years	7
	10 + years	10
Conducting Civil Engineering Degree level Courses or above	5-7 years	3
	7-10 years	7
	10 + years	10

c) Professional Experience of team members (total marks: 40)

Experience in developing a course program related to construction sector, or a similar experience	5-7 years	10
	7-10 years	15
	10 + years	20
Experience in Structural/Civil Engineering related field (design and field experience)	5-7 years	10
	7-10 years	15
	10 + years	20

d) Academic Qualification of team members (total 30)

1 team members having PhD or Master's Degree in Civil / Structural Engineering	Master's Degree	5
	PhD	10
2 nd team member having PhD or Master's Degree in Civil / Structural Engineering	Master's Degree	5
	PhD	10
1 team member from academia with PhD in Curriculum Development / Teaching or Education	PhD	10

- e) Where more than the number of team members requiring minimum requirement fulfill the set our requirements in section 6, the person with the higher qualification for that particular part will be selected to give marks, and another individual having higher qualification in another area can be selected to give marks for the other part, and so forth.
- f) Where experiences or qualifications require further clarifications, Ministry reserves the right to call applicants for an interview to finalize selection.