







# Terms of Reference (TOR) Web Developer Firm to Design, Development and Maintenance of an E-Learning Platform for Dnet

# A. BACKGROUND

The action "Foster responsible digital citizenship to promote freedom of expression in Bangladesh" is being implemented jointly by Friedrich Naumann Foundation for Freedom and Dnet, funded by the European Union. This action is targeted to address the better practice of freedom of expression in Bangladesh by promoting knowledge on digital citizenship. This is applicable for citizens, especially for youth who are mainly active and express themselves through social media and digital platforms.

This project aims to capacitate the targeted youth to freely and safely express themselves in the digital space. It will support them to learn about the national and international norms, etiquettes and laws pertaining to uses of the digital spaces and will make them aware of responsible interaction in digital media. The action will also address the challenges to Freedom of Expression (FOE) in the country posed by the Digital Security Act.

Enhancing knowledge and supporting the youth (particularly university students at Dhaka and Rajshahi) to have a positive experience in the digital world will be the focus of this action. It will emphasize on education, awareness and sensitization of relevant stakeholders to support and guide the youth for a responsive digital existence while practicing the right to freedom of expression.

### A.1 OBJECTIVES OF THE ACTION

The **overall objective** of this action is to contribute to a safe and secure digital environment for Freedom of Expression and critical thinking in Bangladesh, especially for young people from disadvantaged groups and remote areas who, when they become students and move to cities, are expected to know how to operate in the digital world.

The **specific objective** of this action is to capacitate young citizens in Bangladesh to express themselves freely, appropriately, lawfully and safely in the public sphere and to create an enabling and supportive environment for them to do so.

Young citizens in Bangladesh need to be supported in their desire to express themselves responsibly. At the same time their environment, both on a more personal level (teachers and parents) as well as the political and legislative level (policy-makers and decision-makers) needs to have an increased awareness of how to create a balance between the need to protect citizens' human rights and the right to freedom of expression and how young people can be supported in their quest for good digital citizenship.

#### A.2 TARGET GROUP OF THE ACTION

This action is targeted mainly to capacitate university students. Besides, it will work with university teachers and aware parents to guide the youth on responsible digital citizenship. The action will also work with, journalists to spread knowledge about responsible digital citizenship, advocacy with decision and policymakers to support the youth.

#### A.3 OPERATIONAL MODALITIES OF THE ACTION

The action is designed following the rights-based approach (RBA). Hence, all the activities of this project, as explained above, will follow different steps of the RBA during implementation. The research, capacity building, awareness-raising, dialogue, interaction, and engagement will be carried out following participatory processes using relevant methods and tools. The project is taking a holistic approach for addressing complex issues of internet freedom and digital literacy in Bangladesh.

This action encompasses three key components, these are: a) capacity building of the targeted youth, b) raise awareness among targeted stakeholders and c) advocacy with policy and decision-makers. Besides, this action will follow a systematic approach for monitoring, evaluation and learning.

# B. PURPOSE AND OBJECTIVES OF THE E-LEARNING PORTAL

**Purpose:** The purpose of this e-learning portal are:

- a) A Massive Open Online Course (MOOC) style e-Learning platform for the youth to enhance their knowledge and awareness on the use of digital space for freedom of expression complying the relevant existing laws in the country;
- b) A hub of information for parents to aid their children on internet related issues;
- c) A collection of project-related information, data, reports, news, photos, videos, knowledge materials, related articles, etc.
- d) A medium to connect the project's social media platforms with youths and
- e) A platform for engaging face to face learners in the website through pre-registration and peer learning sessions;

Main objective: The main objective of this e-learning website is to capacitate university students on digital citizenship and freedom of expression by offering various courses in MOOC style. In addition to that, it will help to work with university teachers and aware parents to guide the youth on digital issues, in addition, it will enable journalists to spread the knowledge about responsible digital citizenship, advocacy with decision and policymakers to support the youth. It will be the first point of reference to learn about digital citizenship and freedom of expression in Bangladesh.

**Specific objectives:** The specific objectives of this e-learning portal are:

- 1. To capacitate users about digital citizenship and freedom of expression through online courses.
- 2. To increase awareness among mass people of Bangladesh about common digital etiquettes and various internet safety issues.
- 3. To display regular project updates like; news, reports, workshops, seminars, events, photos, videos, documents. etc.
- 4. To conduct pre-registration for participating in the face to face learning sessions and peer learning sessions.
- 5. To incorporate learners on the website through the registration process.
- 6. To disseminate project related information, data, learning materials, articles, etc.

# C. SCOPE OF WORK

#### Research:

• National and International trends on e-learning platform will be studied before starting the design to find out the most interactive layout for the website.

- Findings from the project baseline study and formative research will be examined closely to reflect those findings on the online portal.
- Conduct a realistic study to find a feasible strategy for making the website more accessible, attractive and popular among young learners.

# Design:

- The design will include a Massive Open Online Course (MOOC) based e-learning platform as per the requirements. The website should have cross-browser compatibility and user-friendly interface.
- Modern design approaches will be follow for example custom illustrations, soft shadows, layers, and floating elements, etc.
- The web design should be fully responsive to maximize users' experience on mobile devices. The firm must follow the Web Content Accessibility Guidelines (WCAG) and the World Wide Web Consortium (W3C) standards.
- The website should be lightweight and the firm must ensure faster load performance for better user experiences.
- The Open Web Application Security Project (OWASP) standards should be followed to ensure that the website is free from any vulnerabilities, threats and risks.
- The core components of the platform will include automated feedback through objective, online assessments, e.g. quizzes and exams, leader-boards, certifications and profile for facilitators and users. The website will contain different types of online courses and the contents can be in flipbook, audios, videos, info-graphs, documents, and text format.
- Social media sharing options should be designed in an attractive way.
- Videos can be integrated with server videos and YouTube videos as well. There will be a share option to link content with social media.
- There will be an option for online course completion certificate and it will be integrated to the website for users to download under their respective profile names.
- The website will offer an interesting reward collection procedure for the youths using QR codes or any other interactive and fun activities.
- Website needs to offer general accessibility features for persons with disabilities.

### Development:

- Contents on the website should be visualised and presented in interactive ways. The text contents of the website will be in Bangla which will be provided by Dnet. The firm will work in close collaboration with the Dnet's content team.
- To manage all contents, a separate user-friendly content management system should be provided with the following general features but not limited to:
  - a. Admin users should be able to create, publish and delete contents.
  - b. Admin users should have access to User Management with GIS data.
  - c. Admin users should be able to sort, search and download the data.
  - d. Content Management System (CMS) should be protected using the HTTPS for secure access to the application.
  - e. A dashboard should be design to present user data.
- There should be mechanism to assess users existing knowledge and recommend courses based on their knowledge. System will also filter the users who have unfinished courses.

• A chatbot will be incorporated in the website to provide general information and answer simple queries about the online courses.

#### Modification:

- The firm must participate in the workshops with target groups (arranged by Dnet) for a dry run of the website features and collect feedback to improve the features of the mock website.
- Feasible modifications will be done based on the user feedback collected about the website over the project period.

#### Maintenance:

- Assist in developing and implementing Search Engines Optimization strategies to increase website visibility.
- Train project staff on the developed website through training/workshop and develop a user manual.
- Designate a person as a point of contact to provide administrative and technical support along with domain and hosting for the project period.

# Reporting:

- The firm should handover all source code including all developed libraries, contents, templates and layouts to Dnet. The design files should be handed over in raw format or editable options.
- The firm must provide periodical analytical reports on live usage, monitoring & analysing statistics and visitors' experience.
- The firm must provide a project completion report at the end of the project period.

#### D. DELIVERABLES:

- Inception Report including draft and finalized requirements document based on user design validation and testing.
- Study report on making the website more accessible, attractive and popular.
- Software Requirement Specification (SRS).
- A massive open online course (MOOC) based website with device compatibility including visualization of contents for the e-Learning platform.
- A user manual for the platform.
- Knowledge transfer to Dnet's staff members through workshop/training with training report.
- API Specification of the website.
- Software deployment on Live Server.
- Software source code and database with resources in a keep repository form.
- Functional and non-functional technical specification.
- Periodical project reports with analytical data (including upcoming challenges if any).
- Provide support and maintenance service with minor developments over the years.
- Project completion report.

# E. SUPERVISION, WORK RELATIONS & OVERSIGHT

The firm will report to the Project Manager of the project for direct supervision and will work in close cooperation with the Communication Officer and Program Officers. All contents and branding components need to be prepared by following communication and visibility plan of the project. All

project deliverables need to be reviewed regularly with the project team and approved by Dnet before finalization.

#### F. ACTION TIMELINE

The duration of the contract will be until January 2023, by when the active development of the website should be completed in 60 days after signing the agreement and the remaining months for quality control and technical support from the firm. The user manual, training and the maintenance of the new website will be done from the second month of the contract. The contract period will start approximately from the last week of December. 2020.

# G. PROPOSAL GUIDELINE

**G.1 Guidelines for technical Proposal Submission:** Applicants are requested to submit their proposal which should include an understanding about the assignment, detailed work plan and time frame in no more than Seven (07) pages. In addition, short profile of key team members should be submitted within four (04) pages, along with a list of recent clienteles and related work samples with two references of the parties.

**G.2 FINANCIAL PROPOSAL GUIDELINE:** Applicants should submit a detail budget outlining major heads within two (2) pages. The budget should include all relevant costs applicable for this assignment. No compensation will be provided in addition to the agreed budget. Relevant and applicable legal documents (including agency or organization's registration paper, Tax/TIN certificate, VAT certificate and bank solvency with detail) should be submitted.

#### H. SELECTION PROCESS

Proposal will be evaluated and scored based on the following criteria:

- o Technical proposal Score: 70%
  - Understanding of the TOR: 20%
  - Ideation and plan completeness: 20%
  - Professional capacity and experience of professional(s) assigned: 10%
  - Firm profile and financial strength: 10%
  - Quality of previous similar assignments: 10%
- o Financial Proposal: 30%

### I. ELIGIBILITY

#### Work experience:

- Minimum 5 years of demonstrated expertise and proven experience in the graphic design and technical implementation of an international standard web-based environment.
  - Having vast experience using GIS-based analytics websites, network maps, pivot tables, graph charts to portray the visual common summary data at a glance and analyse different types of reports.
  - o Having proven experience in the content management system.
  - o Having expertise for designing and developing an online course-based learning portal.
- The firm must have experience in conducting online real-time learning examination and/or competition.

- The developer should have a record of accomplishment of developing websites on time and as
  per the plan. The website should respond to contemporary global design trends, is user friendly
  and easy to maintain.
- Previous experience of making 'persons with disability'-friendly websites.
- Work practice of developing websites with research-based data will be an asset.

# Technical skills and expertise:

The firm will follow widely open source-based technologies, frameworks, platforms, and guidelines. The following are some required technical skills and expertise that the firm must have in order to implement the website.

- Solid understanding of the concepts of MOOC website, user experience and conceptual design.
- Expertise and experience in using different web content management systems.
- Expert knowledge in GIS map, Network map, pivot table charts.
- Expert knowledge of open source PHP, Laravel framework.
- Expert knowledge in HTML, CSS and JavaScript.
- Knowledge of Bootstrap, jQuery and Angular.
- Solid knowledge on flipbook JS, Lodash (JS utility library), Slick (jQuery plugin), Animate CSS (CSS library)
- Expert knowledge of MYSQL or any other open-source RDBMS.
- Knowledge of industry-standard design tools such as Adobe Photoshop, Illustrator and Dreamweaver.
- Knowledge of the Content Management System (particularly for page template design) will be considered an asset.

#### Membership and others:

- Must have membership of BASIS. Membership of renowned similar associations will add additional value.
- Must have valid CMMI Level 3 certification.
- Preferred CSM/CSPO certification for the team leader, and have agile project management experience.

# J. CONDITIONS

# J.1 PAYMENT

The applicant will be paid an agreed amount including VAT & TAX for the total assigned service. Full payment will be made upon completion of the assignment. The payment mode will be in the following instalments for the entire assignment against invoices issued by the applicant:

Instalment	Amount	Terms of conditions for disbursement
1 <sup>st</sup>	15% of the contract	After submission and acceptance of the Software
		Requirement Specification (SRS) along with the work plan.
2 <sup>nd</sup>	40% of the contract	Study report on making the website more accessible,
		attractive and popular.
		After the satisfactory launch of the website.
3 <sup>rd</sup>	15% of the contract	After submission of the operation manual and training
		report.

4 <sup>th</sup>	20% of the contract	After delivery of source code and all technical
		documentation and resources.
		After submission and acceptance of the project
		completion report
Final	10% of the contract	After satisfactory maintenance support throughout the
		project period.
		After submission and acceptance of the project
		maintenance report

The payment will be disbursed within 30 days of the successful disbursement request.

# J.2 INTELLECTUAL PROPERTY RIGHTS/ COPYRIGHT AND CONFIDENTIALITY

- a) Dnet will have copyright of all the documents prepared by the firm. None of the materials should be reproduced or published or shared with any parties in any manner without prior written approval from Dnet;
- b) Confidentiality of all the information should always be assured. This project is being co-funded by the European Union (EU), no individual will have any right to claim the contents of the website once developed. The EU has a royalty-free, non-exclusive and irrevocable license to use the final products under this assignment.

#### J.3 COMPLIANCE AND SAFETY

The selected firm should comply with principles of gender equity; prevention of sexual harassment; maintaining privacy and confidentiality of information; prevention of any kind of conflicts including any conflict of interest; and take appropriate actions based on the situation. The firm is obliged to maintain necessary preventive health safety measures to address the risks resulting from COVID-19.

# J.4 TERMINATION AND SETTLEMENT

Dnet has the right to terminate the contract with a 15 days' notice to the assigned party if the party materially breaches a warranty or covenant or there is a failure to deliver the deliverables within time, or reach the targeted outcome. In such case, the parties will agree upon a mutual settlement or further action depending on the situation.

# J.5 SUB-CONTRACTING

Sub-contracting is not allowed under any condition.

#### K. CONTACT

Interested firms are requested to send both the technical and financial proposal along with other required documents on or before 14 December 2020, at procurement@dnet.org.bd. Please use 'Proposal on Design, Development and Maintenance of an E-Learning Platform' as an email subject line. For any queries, email at *procurement@dnet.org.bd*.

An online clarification session will be held on 10 December 2020, 3:00 PM- 4:00 PM. Kindly email to procurement@dnet.org.bd if you want to attend the session. A separate calendar invitation will be shared.

\*\* Dnet holds the authority to cancel this order/advertisement anytime without notice, without any compensation if the proposal/deliverables do not match with the requirement, the promised quality; and or sample provided by the firm.