

# **REQUEST FOR PROPOSAL (RFP)**

NAME & ADDRESS OF FIRM	DATE: November 2, 2020		
	REFERENCE: RFP-BD-2020-040		

Dear Sir / Madam:

We kindly request you to submit your Proposal for Hiring a firm for emergency enhancement and maintenance of adolescents' edutainment and life skills development platform 'Konnect'-a2i.

Proposals shall be submitted on or before 4.30 p.m. (local time) on Tuesday, November 17, 2020

Please be guided by the form attached hereto as Annex 2, in preparing your Proposal.

Proposals may be submitted on or before the deadline indicated by UNDP in the e-Tendering system. Bids must be submitted in the online e-Tendering system in the following link: <a href="https://etendering.partneragencies.org">https://etendering.partneragencies.org</a>; using your username and password. If you have not registered in the system before, you can register now by logging in using

**Username:** event.guest **Password:** why2change

and follow the registration steps as specified in the system user guide.

Your Proposal must be expressed in the English, and valid for a minimum period of 90 days.

You are kindly requested to indicate whether your company intends to submit a Proposal by clicking on "Accept Invitation" in the system.

In the course of preparing and submitting your Proposal, it shall remain your responsibility to ensure that it submitted into the system by the deadline. The system will automatically block and not accept any bid after the deadline. Kindly ensure attaching the required supporting documents (<u>with file name less than 60 characters</u>) in pdf format which must be free from any virus or corrupted files. Proposals that are received by UNDP after the deadline indicated above, for whatever reason, shall not be considered for evaluation.

The Financial Proposal and the Technical Proposal files <u>MUST BE COMPLETELY SEPARATE</u> and uploaded separately in the system and clearly named as either "TECHNICAL PROPOSAL" or "FINANCIAL PROPOSAL", as appropriate. Each document shall include the Proposer's name and address. <u>The file with the "FINANCIAL PROPOSAL" must be encrypted with a password so that it cannot be opened nor viewed until the Proposal has been found to pass the technical evaluation stage. Once a Proposal has been found to be responsive by passing the technical evaluation stage, UNDP shall request via email the Proposer to submit the password to open the Financial Proposal. The Proposer shall assume the responsibility for not encrypting the financial proposal.</u>

PLEASE DO NOT PUT THE PRICE OF YOUR PROPOSAL IN THE 'LINE ITEMS' IN THE SYSTEM. INSTEAD PUT 1 AND UPLOAD THE FINANCIAL PROPOSAL AS INSTRUCTED ABOVE.

Any discrepancy between the unit price and the total price shall be re-computed by UNDP, and the unit price shall prevail, and the total price shall be corrected. If the Service Provider does not accept the final price based on UNDP's re-computation and correction of errors, its Proposal will be rejected.

No price variation due to escalation, inflation, fluctuation in exchange rates, or any other market factors shall be accepted by UNDP after it has received the Proposal. At the time of Award of Contract or Purchase Order, UNDP reserves the right to vary (increase or decrease) the quantity of services and/or goods, by up to a maximum twenty-five per cent (25%) of the total offer, without any change in the unit price or other terms and conditions.

Any Contract or Purchase Order that will be issued as a result of this RFP shall be subject to the General Terms and Conditions attached hereto. The mere act of submission of a Proposal implies that the Service Provider accepts without question the General Terms and Conditions of UNDP, herein attached as Annex 3.

Please be advised that UNDP is not bound to accept any Proposal, nor award a contract or Purchase Order, nor be responsible for any costs associated with a Service Providers preparation and submission of a Proposal, regardless of the outcome or the manner of conducting the selection process.

UNDP's vendor protest procedure is intended to afford an opportunity to appeal for persons or firms not awarded a Purchase Order or Contract in a competitive procurement process. In the event that you believe you have not been fairly treated, you can find detailed information about vendor protest procedures in the following link:

http://www.undp.org/content/undp/en/home/operations/procurement/business/protest-andsanctions.html

UNDP encourages every prospective Service Provider to prevent and avoid conflicts of interest, by disclosing to UNDP if you, or any of your affiliates or personnel, were involved in the preparation of the requirements, design, cost estimates, and other information used in this RFP.

UNDP implements a zero tolerance on fraud and other proscribed practices, and is committed to preventing, identifying and addressing all such acts and practices against UNDP, as well as third parties involved in UNDP activities. UNDP expects its Service Providers to adhere to the UN Supplier Code of Conduct found in this link:

https://www.un.org/Depts/ptd/sites/www.un.org.Depts.ptd/files/files/attachment/page/pdf/unscc/con duct english.pdf

Thank you and we look forward to receiving your Proposal.

Sincerely yours,

Krishna Raj Adhikari Senior Operations Manager

02 November 2020

Annex 1

# **Description of Requirements**

Context of the	Today, over 130 million people use mobile phones in Bangladesh while over 90
Requirement	million access internet. Every day the number is increasing and most of the users
	are youths. This mighty youth population aged from 13 and above is spending
	their free time in the cyber world. The absence of formal linkage between
	classrooms and the virtual world where learners can access quality contents,
	exchange thoughts and ideas, enjoy edutainment or be recognized among peer
	leads to unhealthy use of social media and technology by the young learners. This
	problem has been exacerbated due to the lack of available localized and
	contextualized educational multimedia-based contents.  To transform 36 million adolescent and youth into future ready workforce
	through skills, education and counseling, 'Konnect' (www.konnect.edu.bd) stands
	as a platform for all adolescents and youth in Bangladesh. Konnect connects
	adolescents especially aged between 10 to 24 through both online and offline
	activities ensuring collaboration and co-creation within adolescents and
	development partners.
	Konnect organizes various online & offline competition for adolescents
	throughout the year. The competitions come with different theme to cover
	nationally important agenda where participants can showcase their ability &
	talents, compete each other for the championship. More than 5 lac student
	participated various competition titled 'My District, My pride', 'Book Shows the light, It tells the dream!', 'Bangabandhu childhood/ My childhood/ My Freedom',
	'Amar Mujib GemiQuiz', 'Fulbondhu quiz: Liberation war', 'Fulbondhu quiz 2:
	Language' have been organized through this platform.
Implementing	ICT division
Partner of UNDP	
Brief Description	
of the Required	In current pendemic situation government has used the platform 'Konnect' as
Services	one of the major education and life skills based content and capacity
	development space. Therefore to absorb a huge sudden load and upcoming demand from field level it is important to restructure the 'Konnect' platform
	as an emergency basis. So that this platform can be integrated with all other
	educational platforms existed and will be developed. The main purpose of this
	assignment will be:
	Designing and restructuring the national adolescents and youth's life
	skills, soft skills, career skills, mental health service, counseling and
	lifestyle platform accommodating around 45 million target group.
	Design a smart and intelligent platform or solution that will assist
	learners to get desired content, service, information and knowledge's for
	boosting their personalized learning experience and give them optimal guidance for choosing the right academic, lifestyle and career path.
	<ul> <li>To permit Learners, teachers, institutes, concerned stakeholders and</li> </ul>
	interested organizations for getting access into same platform and

receive service accordingly as per their authorization and authentication						
Listand	Sl	using single sign on facility through Web, Mobile A Completed Products Under Each Area and	7			
List and Description of	31	Activity	Delivery Timeline			
Expected Outputs to be Delivered	1.	Inception Report with detailed design, Delivery of SRS of the system	1 month after signing the contact			
	2.	High-Availability of Application Design and Develop new modules:	4 months after signing contact			
	3.	Design and Develop new modules:  • Idea Box Management  • Quiz Management  • Single sign on (SSO)  • Notification Management  • Update User Experience  • Integration  Maintenance support, Support of Existing  System	9 months after signing contact			
Person to Supervise the Work/Performanc e of the Service Provider	to Ir	awarded vendor will be working closely with the Technovate Project. The Team Leader of Technology Tearew and approve the performance/activities.	= -			
Frequency of Reporting	As ir	ndicated in the TOR				
Progress Reporting						
Requirements		ndicated in the TOR				
		xact Address/es [pls. specify]				
Location of work		ndicated in the TOR.				
Expected duration of work	09 Months					
Target start date	Nov	ember 2020				
Latest completion date	August 2021					
As indicated in the TOR.  Travels Expected						
		ecurity Clearance from UN prior to travelling				

Special Security	$\square$ Completion of UN's Basic and Advanced Security Training	
Requirements	☐ Comprehensive Travel Insurance	
	Others [pls. specify]	
	⊠ N/A	
Facilities to be	☐ Office space and facilities	
Provided by UNDP	Land Transportation	
(i.e., must be	☑ Others as per TOR.	
excluded from		
Price Proposal)		
Implementation Schedule		
indicating	☑ Required	
breakdown and	☐ Not Required	
timing of		
activities/sub-		
activities		
Names and		
curriculum vitae of	▼ Paguirod	
individuals who	☑ Required	
will be involved in	□ Not Required	
completing the		
services		
Currency of	☑ United States Dollars	
Proposal	□ Euro	
Value Added Tax	■ must be inclusive of VAT and other applicable indirect taxes	
on Price Proposal		
Validity Period of		
Proposals	■ 90 days	
(Counting for the		
last day of	In exceptional circumstances, UNDP may request the Proposer to	extend the
submission of	validity of the Proposal beyond what has been initially indicated in th	
quotes)	Proposal shall then confirm the extension in writing, without any m	
	whatsoever on the Proposal.	
Partial Quotes	☑ Not permitted	
Payment Terms	Deliverables	% of
		payment
	Inception Report with detailed design, Delivery of SRS of the system	15%
	(1 month after signing the contact)	
	High-Availability of Application	45%
	Design and Develop new modules:	
	Content based gamification	
	Competition Management	
	Health and Psycho-social Content Management	

	Online real-time Communication	
	Online learning management module	
	Event management Module     Contaminated death and	
	Customized dashboard  Maintagana support Support of Suisting Sustains	
	Maintenance support, Support of Existing System	
	(4 months after signing the contact)  Design and Develop new modules:	40%
	Idea Box Management	40/0
	Quiz Management	
	Single sign on (SSO)	
	Notification Management	
	Update User Experience	
	Integration	
	Maintenance support, Support of Existing System (9 months after	
	signing the contact)	
Person(s) to		
review/inspect/	Policy Advisor, a2i	
approve		
outputs/complete d services and		
authorize the		
disbursement of		
payment		
. ,		
Type of Contract	☐ Contract for Professional Services	
to be Signed		
Criteria for	☑ Highest Combined Score (based on the 70% technical offer and 30%)	6 price
Contract Award	weight distribution)	
	■ Full acceptance of the UNDP Contract General Terms and Condition	ns (GTC).
	This is a mandatory criterion and cannot be deleted regardless of the	nature of
	services required. Non-acceptance of the GTC may be grounds for the	e rejection
	of the Proposal.	
Cuitouio for the	Bidder must have adequate technical ability, resources, human res	
Criteria for the Assessment of	processes. As such, following are defined as minimum eligibility criter	ia:
Proposal	Minimum Eligibility Criteria for the Firm:	
Γιοροσαί	Business Licenses – valid trade license, TIN Certif	icate. VAT
	Registration Certificate, Certificate of Incorporation (if	· ·
	and latest income tax return certificate;	, ,
	Company Profile, which should not exceed fifteen (	15) pages
	including any printed brochure relevant to the serv	ices being
	procured;	
	The firm must have proof of minimum BDT 50 lakh work	
	non year and DDT 75 les averses approal trum aver reflect.	ad in lact 2
	per year and BDT 75 lac average annual turnover reflecte years audited financials.	eu III iast 2

- The Firm must submit last two years (2018, 2019) financial audit report.
- Minimum 5 years' experience in ICT business
- Must have proven experience of developing web Solution.
- Minimum 3 experience of design, development and implementation of website in public/private sector. <u>Bidder must submit the</u> <u>Completion certificate of the work.</u>

## Minimum Eligibility Criteria for the Key personnel:

CVs of the Team leader and key team members containing their experiences on relevant issues must be submitted with detailed proposal. Beside that the evaluation team is expected to fulfil the following qualifications:

SI.	Key Position	qty	Required Minimum Qualification			
1	Project Manager	01	<ul> <li>any relevant discipline from any reputed university.</li> <li>5 years professional experience in IT Industry.</li> <li>At least 3 years' working experience in Data Driven System Development (Data Warehouse, ETL, Data Acquisition, Data Visualization).</li> </ul>			
2	Sr. Software Engineer	02	<ul> <li>Minimum B.Sc in Computer Science/ICT or any relevant field.</li> <li>Minimum 5 years' experience in Solution Analysis, design, development and implementation for Web system using PHP, Python, RDBMS &amp; NoSql.</li> </ul>			
3	Software Engineer	03	<ul> <li>Minimum graduate in Computer Science and Engineering/ICT.</li> <li>Must have 03 years' experience in developing web applications.</li> </ul>			
4	UI Designer	01	<ul> <li>B.Sc. in computer engineering/science/mathematics /statistics or any relevant field.</li> <li>Must have 5 years' experience in designing web applications.</li> </ul>			
5	Documentation Expert	01	<ul> <li>Minimum graduate in Computer Science and Engineering/ICT or any relevant field.</li> <li>Minimum 3 years' experience of working with enterprise software development team with the role of documenting requirements, SRS, DFD, ERD etc.</li> </ul>			
6	Database Expert	01	Minimum 5 years' experience in Database design, development and administration			

			using multiple Database including MySql/ORACLE/ SQL Server.  BSc in computer engineering or any relevant field.
7	QA Engineer	01	<ul> <li>Minimum graduate in Computer Science and Engineering or relevant subjects.</li> <li>Minimum 3 years of progressive experience in the sector of software testing and quality assurance</li> </ul>
8	Infrastructure Engineer	02	<ul> <li>Minimum graduate in Computer Science and Engineering or relevant subjects.</li> <li>Minimum 3 years of experience Develop and maintain infrastructure in cloud environments to power different standard networks ensuring the highest security standards and best-practices.</li> </ul>
9	System Analyst and Designer	01	<ul> <li>Minimum graduate in Computer Science and Engineering or relevant subjects.</li> <li>Minimum 5 years of experience in analyzing complex business problems to be solved with automated systems</li> </ul>
10	Security Engineer	01	<ul> <li>Minimum graduate in Computer Science and Engineering or relevant subjects.</li> <li>Minimum 3 years of progressive experience in the related field.</li> <li>Minimum 1 experience in development and implementation of strategic improvements to security controls</li> <li>Minimum 1 experience in Assessments of technology implementations against published standards</li> <li>Minimum 1 experience in Identification and Reporting of security vulnerabilities in associated technologies</li> </ul>
11	Deployment Expert's Remuneration	01	<ul> <li>Minimum graduate in Computer Science and Engineering or relevant subjects.</li> <li>Minimum 5 years of experience in analysing complex business problems to be solved with automated systems</li> <li>Minimum 3 years of experience Develop and maintain infrastructure in cloud environments to power different standard networks ensuring the highest security standards and best-practices.</li> </ul>

1	12	Support	01	•	Minimum graduate in Computer Science and
		Engineer's			Engineering or relevant subjects.
		Remuneration		•	Minimum 3 years of experience in the related
					field.

Note: Necessary document must be submitted to substantiate the above eligibility criteria. Consultancy firm that do not meet the above eligibility criteria shall not be considerate for further evaluation. The firm must provide CV's of all proposed personnel for the assignment, stating name, highest academic qualification, professional certification, length of experience, role/function or other related information.

## **Technical Proposal (70%)**

- ☑ Methodology, Its Appropriateness to the Condition and Timeliness of the Implementation Plan
- ☑ Qualification of Key Personnel

Basis of Technical evaluation:

Criteria	Weight	Max.
		Points
Technical		
1. Overall experience and Expertise of the		15
organization/Firm		
1.1: Experience of developing High-Availability of		10
Application		
1.2: Experience of working with similar technology		5
mentioned in the ToR:		
Open Source PHP Framework		
Python 3.x		
Micro service architecture		
Bootstrap, jQuery	70	
<ul> <li>MySQL or any other open source RDBMS</li> </ul>	/0	
<ul> <li>MongoDB or any other Nosql database</li> </ul>		
Redis, Memcache, CDN or Varnish for caching		
2. Expertise of Key personnel		20
2.1: Relevant experience of project manager		7
2.2: Relevant experience of Development of microservice		6
based application		
2.3: Relevant experience of Development & Support team		7
3. Methodology proposed in the technical proposal		35

	3.1: Overall understanding of the assignment & proposed solution- architecture	12				
	3.2: Proposed work plan and timeline relevant to the assignment as per the Terms of Reference	10				
	3.3: Technology Specification and Methodologies to be followed	6				
	3.4: Handover of the total system procedure	4				
	3.5: Risk Management & Overall flexibility	3				
	Financial Proposal (30%)  To be computed as a ratio of the Proposal's offer to the lowest priproposals received by UNDP.	ice among the				
UNDP will award the contract to:	☑ One and only one Service Provider					
Contract General Terms and	☐ General Terms and Conditions for contracts (goods and/or services)					
Conditions	Applicable Terms and Conditions are available at: http://www.undp.org/content/undp/en/home/procurement/w-we-buy.html	business/ho				
Annexes to this	<ul> <li>✓ Form for Submission of Proposal (Annex 2)</li> <li>✓ Detailed TOR (Annex-3)</li> <li>✓ Written Self Declaration (Annex-4)</li> </ul>					
Contact Person for Inquiries (Written inquiries only)	bd.procurement@undp.org  Please mention the following in the subject while sending any questions are sending this RFP on or before 08 October 2020.  "Queries on RFP-BD-2020-040"  Any delay in UNDP's response shall be not used as a reason for extended the for submission, unless UNDP determines that such an extended in the Proposers.	ending the ension is				
Other Information [pls. specify]	document and ron on tovernoer 2020 at 11.00am asing the ronowing mix.					
	https://undp.zoom.us/j/81663735129?from=addon Join Zoom Meeting					

Annex 2

## FORM FOR SUBMITTING SERVICE PROVIDER'S PROPOSAL<sup>1</sup>

(This Form must be submitted only using the Service Provider's Official Letterhead/Stationery<sup>2</sup>)

[insert: Location].
[insert: Date]

To: [insert: Name and Address of UNDP focal point]

Dear Sir/Madam:

We, the undersigned, hereby offer to render the following services to UNDP in conformity with the requirements defined in the RFP dated [specify date], and all of its attachments, as well as the provisions of the UNDP General Contract Terms and Conditions:

#### A. Qualifications of the Service Provider

The Service Provider must describe and explain how and why they are the best entity that can deliver the requirements of UNDP by indicating the following:

- a) Profile describing the nature of business, field of expertise, licenses, certifications, accreditations;
- b) Business Licenses Registration Papers, Tax Payment Certification, etc.
- c) Latest Audited Financial Statement income statement and balance sheet to indicate Its financial stability, liquidity, credit standing, and market reputation, etc.;
- d) Track Record list of clients for similar services as those required by UNDP, indicating description of contract scope, contract duration, contract value, contact references;
- e) Certificates and Accreditation including Quality Certificates, Patent Registrations, Environmental Sustainability Certificates, etc.
- f) Written Self-Declaration that the company is not in the UN Security Council 1267/1989 List, UN Procurement Division List or Other UN Ineligibility List.

### B. Proposed Methodology for the Completion of Services

The Service Provider must describe how it will address/deliver the demands of the RFP; providing a detailed description of the essential performance characteristics, reporting conditions and quality assurance mechanisms that will be put in place, while demonstrating that the proposed methodology will be appropriate to the local conditions and context of the work.

<sup>&</sup>lt;sup>1</sup> This serves as a guide to the Service Provider in preparing the Proposal.

<sup>&</sup>lt;sup>2</sup> Official Letterhead/Stationery must indicate contact details – addresses, email, phone and fax numbers – for verification purposes

## C. Qualifications of Key Personnel

If required by the RFP, the Service Provider must provide:

- a) Names and qualifications of the key personnel that will perform the services indicating who is Team Leader, who are supporting, etc.;
- b) CVs demonstrating qualifications must be submitted if required by the RFP; and
- c) Written confirmation from each personnel that they are available for the entire duration of the contract.

## D. Cost Breakdown per Deliverable\*

	Deliverables [list them as referred to in the RFP]	Percentage of Total Price (Weight for payment)	Price (Lump Sum, All Inclusive)
1	Deliverable 1		
2	Deliverable 2		
3	Deliverable 3		
	Total	100%	

<sup>\*</sup>This shall be the basis of the payment tranches

# E. Cost Breakdown by Cost Component [This is only an Example]:

Description of Activity	Remuneration per Unit of Time	Total Period of Engagement	No. of Personnel	Total Rate
I. Personnel Services				
1. Services from Home Office				
a. Expertise 1				
b. Expertise 2				
2. Services from Field Offices				
a . Expertise 1				
b. Expertise 2				
3. Services from Overseas				
a. Expertise 1				
b. Expertise 2				
II. Out of Pocket Expenses				
1. Travel Costs				
2. Daily Allowance				
3. Communications				
4. Reproduction				
5. Equipment Lease				
6. Others				
III. Other Related Costs				

[Name and Signature of the Service Provider's Authorized Person]
[Designation]
[Date]

Annex-3

# Terms of Reference

For

Hiring a firm for emergency enhancement and maintenance of adolescents' edutainment and life skills development platform 'Konnect'

## A. Project Title: Aspire to Innovate (a2i)

## B. Project Description

Aspire to Innovate (a2i), a whole-of-government programme of ICT Division, supported by Cabinet Divison and UNDP, that catalyzes citizen-friendly public service innovations, simplyfing government and bringing it closer to people. It supports the government to be on the forefront of integrating new, whole-of-society approaches to achieve the society. The objective of the project is to increase transparency, improve governance, and reduce the time, difficulty and costs of obtaining government services for under-served communities of Bangladesh. This is to be achieved by the following major 3 components of the project:

Component 1: Institutionalizing Public Service Innovation and Improving Accountability

Component 2: Catalyzing Digital Financial Services and Fintech Innovations

Component 3: Incubating Private Sector-enabled Public Service Innovation

## C. Scope of Services, Expected Outputs and Target Completion

#### 1. Background of the work:

Today, over 130 million people use mobile phones in Bangladesh while over 90 million access internet. Every day the number is increasing and most of the users are youths. This mighty youth population aged from 13 and above is spending their free time in the cyber world. The absence of formal linkage between classrooms and the virtual world where learners can access quality contents, exchange thoughts and ideas, enjoy edutainment or be recognized among peer leads to unhealthy use of social media and technology by the young learners. This problem has been exacerbated due to the lack of available localized and contextualized educational multimedia-based contents.

To transform 36 million adolescent and youth into future ready workforce through skills, education and counseling, 'Konnect' (www.konnect.edu.bd) stands as a platform for all adolescents and youth in Bangladesh. Konnect connects adolescents especially aged between 10 to 24 through both online and offline activities ensuring collaboration and co-creation within adolescents and development partners. Konnect organizes various online & offline competition for adolescents throughout the year. The competitions come with different theme to cover nationally important agenda where participants can showcase their ability & talents, compete each other for the championship. More than 5 lac student participated various competition titled 'My District, My pride', 'Book Shows the light, It tells the dream!', 'Bangabandhu childhood/ My childhood/ My Freedom', 'Amar Mujib GemiQuiz', 'Fulbondhu quiz: Liberation war', 'Fulbondhu quiz 2: Language' have been organized through this platform.

## 2. Main Objectives of the assignment:

In current pendemic situation government has used the platform 'Konnect' as one of the major educations and life skills-based content and capacity development space. Therefore, to absorb a huge sudden load and upcoming demand from field level it is important to restructure the 'Konnect' platform as an

emergency basis. So that this platform can be integrated with all other educational platforms existed and will be developed. The main purpose of this assignment will be:

- Designing and restructuring the national adolescents and youth's life skills, soft skills, career skills, mental health service, counselling and lifestyle platform accommodating around 45 million target group.
- Design a smart and intelligent platform or solution that will assist learners to get desired content, service, information and knowledge's for boosting their personalized learning experience and give them optimal guidance for choosing the right academic, lifestyle and career path.
- To permit Learners, teachers, institutes, concerned stakeholders and interested organizations for getting access into same platform and receive service accordingly as per their authorization and authentication using single sign on facility through Web, Mobile Apps and call center

## **Present Status:**

On February 1, 2018 Honorable Prime Minister Sheikh Hasina inaugurated "Konnect" (www.konnect.edu.bd). Since then more than 2.5 million adolescents & youth are active user and its getting popularity among youth. It has been enriched with more than 25000 edutainment contents based on life skills, STEM based Experiments and comics, books, movies etc. developed by adolescent development partners and youths.

## Existing Konnect portal (www.konnect.edu.bd)

- System Configuration
- User Management
- User Registration
- Life-skill
- Comics
- News
- Academic content routine management
- Idea box
- Manage Certificate
- Competition & quiz Management
- Notification Centre
- Mobile version
- Dashboard

### **3. Scope of Work:** The scope of work is mentioned below:

#### **High-Availability of Application**

Vendor need to design and deploy a new deployment architechure to ensure High-Availability of Application. While handling increased system load is a common concern, decreasing downtime and eliminating single points of failure are just as important. Vendor shall ensure a quality of infrastructure design at scale that system that guarantees 99% of availability in a period of one year can have up to 365 days of downtime (1%),minimum 1000 concurrent user for around 45 million target group.

Contructor (a2i program) will provide necessary Datacenter infrastructure support (Physical Server,

Switch, Internet Support etc) and vendor shall ensure High-Availability of application.

## **Design and Develop new modules:**

#### **Content based gamification**

The proposed system will have functionality of Content based gamification ( quiz board, review, bookmark, crop section & share, ask question to author, book reading challenge, invite friends/classmate, content rating)

## **Competition Management**

The proposed system will have a competition module (registration, submission of content, results, leaderboard, points, promotion)

## **Health and Psycho-social Content Management**

The proposed system will provide a content for Blog, video, case study, story, FAQ etc. on physical health & social issues (physical change, hygiene, eve teasing, child marriage, sexual violence, parental dispute, relationship, societal awareness issue). Should have the facility to contact through Hot line/ help line/ call center for expert consultation (333, 109 integration, SMS, email, Q/A). AOSK, Maya apa, MoWCA and relevant partners will be integrated with the portal.

## **Online real-time Communication**

There should have online communication tool that able to pass text message, audio, video call within users as a one to one and groups along with schedule program & meeting for future communication. Learners and teachers for communicating among themselves.

#### Online learning management module

The proposed system will be able to integrate with existing LMS available nationally & internationally and the system will allow to post or create life skills course by particular agencies (ex: EMK center, Dnet, Creative IT, Expert personal, 10 minutes school etc.)

#### **Event management Module**

The proposed system should have functionality to arrange online competition & event with third party organization

#### **Customized dashboard**

System needs to be enhanced in such a way that will device compatible, browse independent and mobile responsive. System's presentation language will be English but data, reports, analytics and values can be of both Bangla and English. Software's color and design fashion will follow a2i's branding scheme and will also comply look and feel of other a2i products developed. Dashboard presentation can be divided in to three types for better experience of different type of user. Strategic dashboards show birds-eye-view visualization based on KPIs. They are linked with balanced scorecard strategic planning and management systems methodology that aligns programme activities to the vision and strategy of the organization, improve internal and external communications, and monitor organization performance against strategic goals. Analytical dashboards offer drill-down functionality to explore data in a granular way and should be accessible to managers. Analytical dashboards can be more complex than strategic or operational dashboards because they focus on gaining insights from a large volume of data collected over time. This kind of business intelligence can used by Management and teams to support decision

making. *Operational dashboard* display real-time data to help management for daily business processes, and are commonly used by department managers and front-line employees who need to know and act on opportunities and issues ASAP.

## **Idea Box Management**

The system will have functionality where anyone can ask question about anything. Will facilitate Learners, teacher and moderator to answer. All question will be categorized based on topic. The system will facilitate users to get notification if question answered or reacted by another user

#### **Quiz Management**

The system will allow user Fifty thousand concurrent user to attend in quiz; Online Competition: The system will have Dynamic Quiz module for online quiz competition (MCQ/CQ/Image/Video/Listening/ spelling/ writing etc.); Question bank: There should have a Configurable Question bank where different type of questions will be archived and managed as per requirement; Result management: The system will have Result management module based on institution, Upazila, Zila, Division and Country; Leaderboard: The proposed system will have Leaderboard, manage points, issue certificate, provide new challenge for Learners; The system will allow social media integration for sharing.

## Single sign on (SSO):

Single Sign On feature will allow a user to access multiple platforms as well as e-governance solutions with their own one set of login credentials. This consolidated login experience will empower the platforms to work together, saving costs and reducing unnecessary delay. Maintaining system and protocol, vendor will be responsible for introducing a middleware-based architecture to simplify the integration of legacy systems within this platform. Different platforms/ systems will be able to use their own IDP to access Konnect platform. User will be able to sign on this platform using their own google, facebook, instragram, Microsoft account.

#### **Notification Management**

The Notification Management needs to be developed in modular based using micro service architecture so that it can be reused by other systems and platform. There will be a separate backend for the Notification Management it will be an independent component. Different system admin will have separate access to the Notification management and enhance/add system specific Notification. Konnect will use the Notification Management as a client. Need to develop integration standard and guideline for the Notification Management to be integrated to all the other systems and platform.

#### **Update User Experience**

Update user experience to meet Improve the user interfaces according to requirements.

## Integration:

- The proposed system must have provision to integrate other large-scale national level software application if required
- Should have facility to integrate with other national frameworks which will be finalized during requirement analysis
- Integration with the relevant systems of BEDU, DSHE, Primary, Secondary and Higher Secondary Education Board, BTEB, BMEB and so on.

- There should be provision to integrate with a2i educational products such Teachers Portal, skills portal, MMCM, Mukthopaath, ISDP++, a2i chat bot, and others.
- Integration with the common components (Identity & Profile, Content Management, Accreditation, Assessment, Networking, Dashboard, Incentive Tokenization, Asset management, Notification Management, Exchanger etc.) of NSEA (National Skills-Education Architecture).
- There should have provision to integrate payment gateway for online payment collection and also payment settlement facilities for respective offices with notification and detailed report
- As the proposed system will act as a central repository, it should have an inter-operable mechanism by setting up a customizable API Manager
- This API Manager will work with other systems or sharing activity of other systems and must ensure security and authentication of every data transaction
- System will provide required coordination between internal and external agencies for service delivery
- System should have the ability to build and publish APIs/Services to a selected set of gateways in a multi-gateway environment
- System should support enforcement of government and system policies for actions like API/Service subscriptions, application creation, etc., via customizable workflows
- Should have provision to manage API/Service visibility and restrict access to specific agencies or systems.

Network/Infrastructure Support: Some important network support services are listed below:

- All sort of deployment support
- Ensure auto failover
- Ensure all sort of co-location support
- Ensure all sort of server management Support

**Post-Hosting Support:** The vendor requested to submit propose their smooth, efficient and effective Post-Hosting Support plan that will include the following:

- Regular database tuning and application configuration support to hosted environment.
- On-demand accountable consultancy support to Data Center in terms of Data Backup Scheduling, Back-end service execution.
- Hosting and server management and regular reporting.
- Apart from the above-mentioned issues, if vendor thinks any other issue to be included in their plan, it would be considered as added value addition

**Support & Maintenance of the Platform:** The selected vendor has to provide maintenance and support which are followings:

- Continuous monitoring of query execution in Database, tuning database and tuning codes
   & queries to minimize response time.
- Fixing all bugs in the system irrespective of its nature and complexities.
- Enhance and/or re-arrange existing feature of extended development of any supplementary feature within the existing technology framework complying with core SRS
- Updating training manual adjusting the changes in the system.
- Adjust and update system in compliance with any security test, load test or IT audit conducted by the client.

• The vendor must propose a Maintenance Plan starting from development to deployment. Apart from the above-mentioned issues, if vendor thinks any other issue to be included in their plan, it would be considered as added value addition

## **Multi-layered Support System:**

The selected vendor also requested to propose their smooth, efficient and effective Multi-Layered Support plan and here in this technical proposal which will include following:

- Support management software must be used, tokenization, date etc should be documented.
- Deploying dedicated Support Engineers to address support issues.
- Any updates must be shared with partners and learners.
- Recording, managing reporting issues and user level application related technical problems received through the method prescribed by a2i.
- Update the existing support management system to scrutinize the raised issue.
- Provide approval based issue fixing facilities at LIVE environment by providing highest level of data security.
- Provide post development support service under structured SLA and Change Management Architecture.
- Apart from the above-mentioned issues, if vendor thinks any other issue to be included in their plan, it would be considered as added value addition.

## **Back-end Processing System and Monitoring:**

The vendor is also requested to submit propose their smooth, efficient and effective Back-end Processing System and Monitoring in this technical proposal which will include following:

- Design and develop back-end processes and process monitoring tools.
- Enable System Admin users to configure and schedule the back-end process.
- Ensure proper monitoring of the back-end processes and necessary notifications
- Apart from the above-mentioned issues, if vendor thinks any other issue to be included in their plan, it would be considered as added value addition

## **Change Management and Version Control**

- Developing, recording and reporting change documents, source code management and version management.
- Incorporating and streamlining the system in compliance with updated versions of development tools/language/DB and ensure availability of APIs as required for integration with other services.
- Ensure all levels of testing prior to execute changes in production environment.

#### **Capacity Management and Knowledge Transfer**

- Facilitating a workshop with client team for knowledge transfer.
- Provide authentic access to client experts to source code and documents.
- Developing text Tutorial for end-users.

## **Technological Specification:**

The vendor will use open source based technologies, frameworks, platforms and guidelines. Following are some technical specification which vendor should consider as reference but not as the ultimate method of implementing this platform. Technology Specification may change in real-time based on the context of the project and future trend.

- Need to use Open Source Development Platform.
- Open Source PHP Framework
- API centric enterprise level design using JSON or other data delivery format.
- Micro service architecture following micro-service design approach.
- Bootstrap, jQuery and Ajax for best UX
- MySQL or any other open source RDBMS
- MongoDB or any other Nosql database as/when required with proper justification
- Redis, Memcache, CDN or Varnish for caching and faster data delivery
- Must ensure load balancing for scalability and failover for high availability of service endpoints
- Code Version Controlling using GIT or Bitbucket in private mode
- GIT issue board or Jira or Asana for issue tracking and feature change management
- Technology and all related design/data should be open to a2i
- Future technology change, iterative prototyping and agility in framework design are the generic expectation

## 3 Institutional Arrangement

The work will closely be overseen by Chief Technology Officer (Technology), a2i.

#### 4 Duration of the Work

Total Duration of the assignment is 9 Months.

System development – 3 months

System maintenance, enhancement and support- 6 Months

Selected Vendor will have to sign separate a SLA and Non-discloser agreement as part of the core agreement for these 9 months.

#### 5 Deliverables:

As per RFP Documents

## **6** Supervision and Performance Evaluation:

The vendor will be working closely with the Technology Team of Aspire to Innovate Project. The Team Leader of Technology Team will be responsible to review and approve the performance/activities.

7 Location of Work: Bangladesh.

## 8 Minimum Eligability Criteria and Team Composition:

As per RFP Documents

#### 9 Evaluation Criteria:

The evaluation process of selecting a firm will be based on technical (70) and financial (30) points. The technical criteria are as follows;

As per RFP Documents

## 10 Payment Schedule:

As per RFP Document

Annex-4
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Declaration
Date:
United Nations Development Programme UNDP Registry, IDB Bhaban, Agargaon Sher-E-Bangla Nagar, Dhaka, Bangladesh
Assignment
Reference: RFP-BD-2020-040
Dear Sir, I declare that is not in the UN Security Council 1267/1989 List, UN Procurement Division List or Other UN Ineligibility List.
Yours Sincerely

Yours Sincerely,