

REQUEST FOR PROPOSAL RFP 017/20

NAME & ADDRESS OF FIRM	DATE: March 5, 2020
	REFERENCE: Development of Edu2Work Website for Armenia National SDG Innovation Lab

Dear Sir / Madam:

We kindly request you to submit your Proposal for **Development of Edu2Work Website for Armenia National SDG Innovation Lab (the detailed TOR is attached as Annex 1a)**.

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

Proposals need to be submitted on or before **19 March 2020, 4:00 pm** local Yerevan time (GMT +4) via email to the following e-mail address: tenders.armenia@undp.org

Proposals submitted by email must be limited to a maximum of 10MB, virus-free and no more than 3 transmissions. They must be free from any form of virus or corrupted contents, or the quotations shall be rejected.

Please note that proposals received through any other e-mail address will not be considered.

Your Proposal must be expressed in the English, and valid for a minimum period of 60 calendar days.

In the course of preparing your Proposal, it shall remain your responsibility to ensure that it reaches the address above on or before the deadline. Proposals that are received by UNDP after the deadline indicated above, for whatever reason, shall not be considered for evaluation. If you are submitting your Proposal by email, kindly ensure that they are signed and in the .pdf format, and free from any virus or corrupted files.

Services proposed shall be reviewed and evaluated based on completeness and compliance of the Proposal and responsiveness with the requirements of the RFP and all other annexes providing details of UNDP requirements.

The Proposal that complies with all of the requirements, meets all the evaluation criteria and offers the best value for money shall be selected and awarded the contract. Any offer that does not meet the requirements shall be rejected.

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/protestandsanctions/

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: http://www.un.org/depts/ptd/pdf/conduct_english.pdf

Thank you and we look forward to receiving your Proposal.

Sincerely yours,

Procurement Unit / UNDP Armenia

Description of Requirements

Context of the Requirement	Development of Edu2Work Website for Armenia National SDG Innovation Lab
Implementing Partner of UNDP	Deputy Prime Minister's Office
Brief Description of the Required Services ¹	As per attached Terms of Reference (TOR), Annex 1a
List and Description of Expected Outputs to be Delivered	As per attached Terms of Reference (TOR), Annex 1a
Person to Supervise the Work/Performance of the Service Provider	Stepan Margaryan, SDG Innovation Lab Lead
Frequency of Reporting	Weekly progress reports
Progress Reporting Requirements	On a regular basis
	☐ Exact Address/es [pls. specify]
Location of work	☑ At Contractor's Location
Expected duration of work	2 months
Target start date	April 10, 2020
Latest completion date	June 10, 2022
Travels Expected	
,	⊠Not Required
	⊠Not Required
Special Security	Errot neganica
Requirements	
·	⊠Not Required
Facilities to be Provided by	
UNDP (i.e., must be	
excluded from Price	
Proposal)	
Implementation Schedule	⊠ Required
indicating breakdown and	
timing of activities/sub-	
activities	
Names and curriculum	⊠ Required
vitae of individuals who	
will be involved in	
completing the services	

¹ A detailed TOR may be attached if the information listed in this Annex is not sufficient to fully describe the nature of the work and other details of the requirements.

	□ United States Dollars				
Currency of Proposal	□ Local Currency □				
Value Added Tax on Price Proposal ²	☐ must be exclusive of VAT and other applicable indirect taxes				
Validity Period of	⊠ 60 days□ 120 days				
Proposals (Counting for the last day of submission of quotes)	In exceptional circumstances, UNDP may request the Proposer to extend the validity of the Proposal beyond what has been initially indicated in this RFP. The Proposal shall then confirm the extension in writing, without any modification whatsoever on the Proposal.				
Partial Quotes	oxtimes Not permitted $oxtimes$ Permitted				
Payment Terms ³	Outputs	Percen- tage	Timing	Condition for Payment Release	
	Development of website layout, design	20%	Two weeks after contract signed	Within thirty (30) days from the date of meeting the	
	Development of website's backend, frontend, integration of APIs and database	40%	Four weeks after contract signed	following conditions: a) UNDP's	
	Development of administration panel	10%	Six weeks after contract signed	written acceptance (i.e., not mere	
	End to end integration and deployment	5%	Seven weeks after contract signed	receipt) of the quality of the outputs;	
	Development of system documentation	20%	Eight weeks after contract signed	and b) Receipt of invoice from the	
	Internal quality assurance	5%	Nine weeks after contract signed	Service Provider.	

_

² VAT exemption status varies from one country to another. Pls. check whatever is applicable to the UNDP CO/BU requiring the service.

³ UNDP preference is not to pay any amount in advance upon signing of contract. If the Service Provider strictly requires payment in advance, it will be limited only up to 20% of the total price quoted. For any higher percentage, or any amount advanced exceeding \$30,000, UNDP shall require the Service Provider to submit a bank guarantee or bank cheque payable to UNDP, in the same amount as the payment advanced by UNDP to the Service Provider.

Person(s) to review/inspect/ approve outputs/completed services and authorize the disbursement of payment	Stepan Margaryan, SDG Innovation Lab Lead Contract Face Sheet (Goods and-or Services) UNDP
Type of Contract to be Signed	Cultifact race sheet (Goods and-of Services) UNDF
Criteria for Contract Award	☐ Highest Combined Score (based on the 70% technical offer and 30% price weight distribution), where the minimum passing score of technical proposal is 70%.
	<u>Technical Proposal (70%)</u>
Criteria for the	
Assessment of Proposal	 Minimum of 2 years' experience in ICT with a focus on the website and web-portal development; Experience in web software design, installation and technical support in web system management, max: 150;
	 Proven success in the establishment of web portal and interactive management systems in recent three years and strong track record in web site design; security and administration; Experience in working with modern hardware server solutions and software platforms; Experience in ensuring systems compatibility to find highly productive and reliable solutions, max: 100; Experience in working with state or government systems, max: 50;
	 ✓ Methodology, Its Appropriateness to the Condition and Timeliness of the Implementation Plan, technical capacity - Maximum obtainable points: 300 The detailed description of implementation methods and organisational approaches, milestones, timeframe and detailed budget breakdown (see budget breakdown template attached)- max 300.
	 ✓ Management Structure and Qualification of Key Personnel - Maximum obtainable points: 400 Project manager (Development Team leader), M.Sc. in Computer Science, Math or related filed as well as Project management with a minimum of 3 years of experience, max: 200 Two Software Engineers with 2 years and more software design and development experience in the design of electronic management systems with the focus on web programming, max: 100 Database specialist, with 2 years and more experience. Should have extensive skills in MongoDB, max: 100
	Financial Proposal (30%) To be computed as a ratio of the Proposal's offer to the lowest price among the proposals received by UNDP.

UNDP will award the contract to:	☑ One and only one Service Provider
Annexes to this RFP ⁴	 ☑ Detailed Terms of Reference (Annex 1a) ☑ Form for Submission of Proposal (Annex 2) ☑ General Terms and Conditions / Special Conditions (Annex 3)⁵
Contact Person for Inquiries (Written inquiries only) ⁶	Procurement Unit, UNDP Armenia procurement.armenia@undp.org Any delay in UNDP's response shall be not used as a reason for extending the deadline for submission, unless UNDP determines that such an extension is necessary and communicates a new deadline to the Proposers.
Other Information [pls. specify]	

_

 $^{^4}$ Where the information is available in the web, a URL for the information may simply be provided.

⁵ Service Providers are alerted that non-acceptance of the terms of the General Terms and Conditions (GTC) may be grounds for disqualification from this procurement process.

⁶ This contact person and address is officially designated by UNDP. If inquiries are sent to other person/s or address/es, even if they are UNDP staff, UNDP shall have no obligation to respond nor can UNDP confirm that the query was received.

Terms of Reference

Scope of services:	Development of Edu2Work Website for Armenia National SDG	
	Innovation Lab	
Duration:	2 months	
Location:	Yerevan, Armenia	
Project title:	"Education to Work" 00121531-00117236	

I. Project Background

The UNDP "Education to Work" (Edu2Work) Project aims at addressing the persisting challenge of labor market demand and supply mismatch in Armenia through data-driven and citizen-centric policies. Through the platform "Edu2Work", the project envisages connecting education to labor market in meaningful ways and reducing the gap between education output and labor market demand, which, in turn, means more people in employment and higher economic growth in the country. The Project is implemented by the Armenia National SDG Innovation Lab.

With its first output, the Project aims at understanding the labor market through three types of labor market data analysis:

- 1. Traditional analysis through surveys (qualitative research with employers)
- 2. Scraped online announcement analysis in real-time
- 3. Foresight analysis looking into the possible futures of the labor market

The "Edu2Work" online platform aims combining and visualizing in a user-friendly manner all the data obtained from the above-mentioned analyses. Considering that 1st and 3rd researches will be one-time exercises in the short term, and the 2nd one will become an automated tool showing the dynamics and trends of the market in real time, the Edu2Work platform will focus mainly on performing a real time analysis of the labor market in Armenia based on online scraped announcements. In other words, the platform will focus on depicting the most demanded professions in Armenia at any given time based on the online announcements, and the skills required for those jobs.

Edu2Work should be a web based, AI powered real-time dashboard that gives information on the labor market based on scraped online announcements.

Edu2Work should become a useful tool for the:

- Government
- Educational institutions
- Students and their career navigators

Government will be empowered to:

- 1. Understand the trends of labour market demand in real-time, at the granularity level of required skills.
- 2. Be able to forecast the future of domestic labour market based on the global trends.
- 3. Develop evidence-based policies in education and employment sectors:
 - a) Strategy development based on analysis of real-time labour market data
 - b) Develop educational programs in line with emerging trends in professions/skills
 - c) Guide students career choices and scholarship programs towards the most demanded professions
 - d) Align sectoral policies in education and employment based on a unified source of data
 - e) Provide students and career navigators with up-to-date information on the labour market
- 4. Join frontrunners (OECD countries, US, etc.) in utilizing innovative methodologies to improve data analysis at state level and improve policy making

Educational institutions will be informed to improve program offerings and curricula (in terms of both technical and soft skills demanded by employers) to better meet the needs and expectations of future employers and future-proof their students' careers.

Students and their career navigators (parents, teachers, career counsellors, career centres, etc) will have opportunity to get grouped and analyzed first-hand information on the labor market in Armenia as depicted in the digital announcements widely accessible to the public for open applications.

II. Scope of Work, Terms and Conditions

The overall objective of the assignment is the development of a website, which will conduct and visualize labor market analysis and classification of online job announcements and relevant skills of multiple online platforms (8-12 main online job announcement platforms in Armenia). The Web Development firm will work with the Data Analytics Task Lead and the project team to ensure that website corresponds to the specified technical and design requirements.

What Edu2Work should do:

- → Integration of the following API codes into the pipeline
 - Data scraping from the web (8-12 main online job announcement platforms in Armenia, sources can be added or changed)
 - Removal of duplicates as per identified rules
 - Classification of online job announcements based on pre-identified international/national standards, this includes classifications based on skill set, industry sectors and sub-sectors, offered contract types, and region. There should be various types of visualization templates available which will enable easy integration of new classification requiring no or minimum source code modification
 - Extracting and clustering of technical and soft skills from the job description, and visualizing top required skills, which later can be filtered down to industry sectors and sub-sectors as well as job titles and other factors

→ Categorization

- Job titles by <u>international standard groupings</u> at the level of job titles and job clusters (occupation grouping)
- Skills by clusters, including division between technical and soft skills

Each of the groups to be categorized by (combined and separated)

- Industry and company/business type
- Degree level requirement
- o Timeframe
- Location
- Employment type full-time/part-time
- Mutual connection skills to jobs and vice versa
- → Visualization of the data from the database with interactive tools (overall number of job vacancies, active job vacancies, requirements etc.)
- → Visualization of hard-to-fill and emerging professions/skills based on pre-identified rules
- → Visualization of results of 2 traditional researches organically integrated into the design and linked to the results of similar findings of live queries from the database of online announcements (e.g. most demanded jobs based on online announcements; research; and foresight with 5-year forecast)
- → Job-to-skill and skill-to-job matching entering job title and identifying the skills required for the job and entering skillset to know what jobs are available
- → Export reports in both presentation (pdf/png) and CSV formats
- → Flexible for future development (e.g. creating a user profile; linking available educational institutions and programs to required/acquired skills; linking acquired skillset with available volunteering or internship opportunities)

Customer journey

Head of the Career Lab at the Ministry of Social Affairs and Labor enters the website and looks at the dashboard with list of most demanded professions at the moment based on digital announcements (preferably with graphics). She decides to see which sectors/industries are demanding those professions, what the technical and soft skills are that the employers have demanded in their announcements (at this point the information is visualized at aggregate level). She notices a new profession in the most demanded list and clicks on it to find out the most demanded technical and soft skills for the job, how many times it was announced in the last month/year. Then she clicks on a list of hard-to-fill professions/skills based on the selected timeframe (ex. last year). She also navigates in between the tabs of visualized data from traditional research and foresight research to see whether the newly emerged profession from the online announcements appeared in employer reviews or expert generated foresight review of the market.

Going back to the homepage dashboard she filters the most demanded ten professions and their relevant skills, the newly emerged profession and its skills, the hard-to-fill professions for the identified timeframe. She exports the report to present to her colleagues to lay down the basis of updating the curriculum and methodology of career orientation classes in high schools.

Website Structure and documentation

Main components of the Edu2Work platform development are:

- System documentation, providing an overview of the underlying technology. including:
 - Software architecture documentation, designed APIs, and diagrammatic representation of the overall system and underlying infrastructure
 - Maintenance documentation, describing limitations and known problems within the system and implemented solutions. Dependencies between system components shall also be presented in this document.
- User manuals:
 - End user manual
 - System installation and administration guide
- Design of the user web interface (website) including:
 - Data visualization capabilities visualization of the results of labor market analysis, domestic and global per country, forecasting results. Visualization capabilities should enable adding new representations without source code modifications. Visualization templates shall enable data manipulation (adding data sources, modifying visualization methods) from administration panel.
 - The website should be bilingual (English & Armenian) and have login page. The design should reflect the main functionality of the website, be intuitive to use and need no or minimal training.
 - Aimed to enhance scalability and ensure easier maintenance, it is recommended to develop the application based on an architecture, which will enable modularity, making it easy to maintain, add features, fix bugs in a short timeframe.
 - Requests sent from the interface should receive response from backend in a timely manner, not making the user wait prolonged periods.

Environment

Web application shall be platform independent, meaning it should be possible to run on any platform, and be self-contained, deploying all external dependencies by itself without requiring extensive manual intervention.

Recommendations:

• It is recommended to use MongoDB as the database since it is the technology used by the data science team within the SDG lab.

The web development firm will be responsible for the following:

- Documentations in a format which will be possible to maintain both paper based (e.g. searchable pdf) an digitally (e.g. Markdown making it possible to maintain on an internal wiki, such as Wiki.js).
- Website responsive design, Implementation of responsive interface for web site to be userfriendly on mobile devices as well
- Website frontend and backend development
- Integration with external third-party APIs and those developed by the SDG Lab team
- Database development
- Development of data exporting capabilities, both raw data and with the visuals available on the website
- Develop data visualization components and templates, enabling various visualizations based on the data source.
- Ensuring implementation of secure coding practices
- Implementation of multi-language functionality (English and Armenian)

- Creation of a Content Management System (admin panel) customized to the needs of the Lab (e.g. user management, customized reports based on available data)
- Supporting the process of content development and updates if/when necessary
- End to end deployment and integration of the web application in a secure environment
- Connecting the domain of the ATC website with the hosting
- Ensuring security of the website
- Work with the Lab's Data Analytics Task Lead and the project team for coordinating actions
- Maintenance and minor development support for at least 2 years.

SDG Lab team will **validate** the selected design including data visualization options. This will ensure that the final product will have:

- An overall well-designed and functional website
- A user-friendly navigation and interface
- A consistent look and feel

Any identified deficiencies in the selected design identified during the validation process will be corrected by the contractor and approved and accepted by SDG Lab.

Certification & Assessment

For the completion of this Task section, close collaboration and guidance of the Lab's Data Analytics Task Lead, as well as the Lab team is anticipated from the Contractor.

III. Expected Outputs

#	Outputs / Deliverables	Cost	Payments	Due Date
1	Development of website layout, design	20%		Two weeks after contract signed
2	Development of website's backend, frontend, integration of APIs and database	40%	60%	Four weeks after contract signed
3	Development of administration panel	10%		Six weeks after contract signed
4	End to end integration and deployment	5%	40%	Seven weeks after contract signed
5	Development of system documentation	20%		Eight weeks after contract signed
6	Internal quality assurance	5%		Nine weeks after contract signed

IV. Institutional Arrangements

- The contractor will work under the overall guidance of the SDG Lab Data Analytics Task Lead,

and in close collaboration with the Project team.

- SDG Lab team will agree on design, server hosting (including duplications and backups) and maintenance arrangement for the website.
- Participate in an initial kick-off meeting to meet with the SDG Lab team, to discuss the task, validate critical objectives, and to develop a task plan to guide the project through completion.
- Continuous updates to the SDG Lab team on progress of assignment.
- Collaborate with SDG Lab Data Analytics Task Lead and the project team to review the website development process.
- The contractor should present the developed website for review of the SDG Lab team, revise, refine and complete the website based on recommendation and feedback of the project team.

V. Required Qualifications and Application Package

The company should demonstrate its capability and thorough understanding of the work to be carried out, as outlined in Terms of Reference and present clear capability for implementing the task, as well as it should be able to mobilize resources and the experts to successfully implement the works as per Terms of Reference.

The supplier qualifications eligible for the services described in this document include:

- Minimum of 2 years' experience in ICT with a focus on the website and web-portal development
- Experience in web software design, installation and technical support in web system management;
- Proven success in the establishment of web portal and interactive management systems in recent three years and strong track record in web site design; security and administration.
- Experience in working with modern hardware server solutions and software platforms;
- Experience in ensuring systems compatibility to find highly productive and reliable solutions;
- Experience in working with state or government systems

Key personnel qualification requirements:

The team should demonstrate:

Understanding of End Users needs to match with adequate technical solutions.

Demonstrated ability to multitask under pressure and to meet strict deadlines.

Excellent organizational skills and ability to work effectively in teams, delivery through

and with others.

- Project manager (Development Team leader), M.Sc. in Computer Science, Math or related filed as well as Project management with a minimum of 3 years of experience.
- Two Software Engineers with 2 years and more software design and development experience in the design of electronic management systems with the focus on web programming.
- Database specialist, with 2 years and more experience. Should have extensive skills in MongoDB.

FORM FOR SUBMITTING SERVICE PROVIDER'S PROPOSAL⁷

(This Form must be submitted only using the Service Provider's Official Letterhead/Stationery8)

[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, licenses, 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.

⁷ This serves as a guide to the Service Provider in preparing the Proposal.

⁸ 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), currency
1	Development of website layout, design	20%	
2	Development of website's backend, frontend, integration of APIs and database	40%	
3	Development of administration panel	10%	
4	End to end integration and deployment	5%	
5	Development of system documentation	20%	
6	Internal quality assurance	5%	_
	Total	100%	

^{*}This shall be the basis of the payment tranches

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

Description of Activity	Remuneration	Total Period	No. of	Total
	per Unit of	of	Personnel	Rate
	Time	Engagement		
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

(Attached separately)

General Terms and Conditions