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Resilient nations.

# INDIVIDUAL CONSULTANT PROCUREMENT NOTICE

Date: **14 August 2015**

**Country:** Republic of Moldova

**Description of the assignment:** National mathematics consultant to support Moldova Social Innovation Lab (MiLab) in organising the EduSoft Hackathon

**Project name:** Moldova Social Innovation Hub (MiLab)

**Period of assignment/services**: up to 15 working days during August – October 2015

Proposals should be submitted by by pressing the "Apply Now" button no later than August 21, 2015.

Requests for **clarification only** must be sent by standard electronic communication to the following e-mail: cristina.lisii@undp.org.

## 1. BACKGROUND

There is a fast shift taking place in the realm of public policy and development program design around the world. Rise of democracy, spread of new technologies and knowledge, but also shrinking resources of the public and development organizations in the face of increased complexity and interconnectedness of the social challenges, mean that design and implementation of public policies and development programs has seized to be under the exclusive remit of the selected few.

Along with the opening up of the public policy space, the rise of civic activism have changed the way the Governments approach public policy development, service delivery and engage with the citizens. The Government has increasingly looked to tap into expertise and solutions from other sectors and wants to move towards 'networked governance' solutions to the issues it faces daily.

UNDP Moldova itself, through MiLab - joint project with the E – Government Center, has supported national counterparts in embarking on several innovative projects that seek to apply new approaches to engage with citizens and enable people to contribute stronger to the country's development. Some previous examples include: gaming for youth employment; applying behavioral insights for TB treatment; Modern School Open Challenge, etc.

MiLab acts as a multilateral platform serving to engage actors from different sectors (public, private, non-profit, etc.) to seek and experiment with innovative approaches to the society's problems. Its work is structured around three interlinked components, i.e. public services redesign, applying people's solutions, and mainstreaming social innovations. The **public participation component** includes creating the

channels or outlets for engagement, setting the rules, specifying the issues that would engage people to participate in solving them. Also screening the horizon, and subsequently connecting social innovation initiatives with government and private sector counterparts that could enable the implementation of those initiatives.

Under this component falls the **EduSoft** hackathon initiative, which aims to involve university students in developing applications for a more effective and motivating study of mathematics in school.

According to the Ministry of Education, in 2014 only 50.74% of high school students have passed the baccalaureate in mathematics. At the same time, during the past three years the Ministry has advanced in computerizing the science classrooms in about 100 schools with the support of private sector partners such as Intel, Microsoft, StarNet, Soros, and others.[1] However, the production of educational software aligned with Moldovan curricula is still lagging behind. The implementation of localized and engaging IT applications for the study of mathematics could be a solution to increase both the quality of education as well as the students' performance.

**EduSoft** is planned as a month-long contest that will take place between September and October 2015. University students from IT specialties, but not limited to, will form teams with school teachers of mathematics and with the assistance of experienced mentors will develop educational apps. The Hackathon will be organised as follows:

1. Will be launched with the presence of partners from the Ministry of Education, E-Government and IT companies, followed by kick-off training sessions. Participating teams will receive training that will enhance their capacity to work as teams, manage their time and produce qualitative products. Each team will be provided with instructions for building their apps and 5 TORs for scoping them, from which they will be able to pick one.

2. During the first two weeks' time, the teams will meet each Saturday for a Working Day, and will develop an Alfa version of their apps. During Saturday working day they will have the chance to meet and get feedback or instructions from their mentors and math teachers.

3. The first part of the hackathon will end with a reality check (user acceptance testing) by the potential users (teachers, pupils).

4. The next two weeks, teams will continue developing their apps and will incorporate the feedback from users. The working schedule will be flexible, but students will continue meeting for Saturday working days, during which they will interact with their mentors and math teachers.

5. Finally the teams will present their products to an Evaluation Jury that will decide on the winning apps. The winning teams will be invited to finish up the work and prepare their final products at a two-day Hack camp.

## 2. SCOPE OF WORK, RESPONSIBILITIES AND DESCRIPTION OF THE PROPOSED ANALYTICAL WORK

The **national consultant** is expected to provide support to MiLab in organising the EduSoft hackathon through:

[1] "Connect! Information technology for learning success "(2013), http://www.edu.gov.md/en/evenimentele-saptaminii/14725/

- Ensuring the development of hackathon instruction and scoping materials in collaboration with the Hackathon coordinator
- Creating a team of mathematics teachers that will assist the students' teams in development of educational applications

**For detailed information, please refer to Annex 1 – Terms of Reference.**

## 3. REQUIREMENTS FOR EXPERIENCE AND QUALIFICATIONS

I. Education:

- University degree in Mathematics, Information Technology or related areas. Additional training and certification in IT or alternative educational tools is an asset.

II. Years of experience:

- At least five (5) years of experience is required in teaching gymnasium and high school students the mathematics subject.
- Proven experience in developing educational software or applications is a strong advantage.
- Working experience using IT, multimedia applications and educational hardware such as smart boards is an advantage.
- Previous experience in development assistance or related work for a donor organization, governmental institutions, NGO/think-tank or private sector / business consulting firm is a strong advantage.

III. Competencies:

- Fluency in both oral and written Romanian and Russian is a must; knowledge of English is an asset.
- Working knowledge of one or more additional languages relevant for Moldova, including Bulgarian, Gagauzian, Romani, Ukrainian or sign language is an asset.

IV. Personal qualities:

- Proven commitment to the core values of the United Nations, in particular, respecting differences of culture, gender, religion, ethnicity, nationality, language, age, HIV status, disability, and sexual orientation, or other status;
- Excellent communication and teamwork skills;
- Responsibility;
- Flexibility.

## 4. DOCUMENTS TO BE INCLUDED WHEN SUBMITTING THE PROPOSALS

Interested individual consultants must submit the following documents/information to demonstrate their qualifications:

1. Proposal: explaining why they are the most suitable for this position;
2. Financial proposal: in (USD, specifying a total lump sum amount and the number of anticipated working days).
3. Personal CV including past experience in similar projects and the contact details of at least 3 reference persons;

## 5. FINANCIAL PROPOSAL

The financial proposal shall specify a total lump sum amount, and payment terms around specific and measurable (qualitative and quantitative) deliverables (i.e. whether payments fall in installments or upon completion of the entire contract). Payments are based upon output, i.e. upon delivery of the services specified in the TOR. In order to assist the requesting unit in the comparison of financial proposals the financial proposal shall include a breakdown of this lump sum amount (including fee, taxes, travel, per diems, and number of anticipated working days).

**Travel**

All envisaged travel costs must be included in the financial proposal. This includes all travel to join duty station/repatriation travel. In general, UNDP should not accept travel costs exceeding those of an economy class ticket. Should the IC wish to travel on a higher class he/she should do so using their own resources.

In the case of unforeseeable travel, payment of travel costs including tickets, lodging and terminal expenses should be agreed upon, between the respective business unit and Individual Consultant, prior to travel and will be reimbursed.

## 6. EVALUATION

Initially, individual consultants will be short-listed based on the following **minimum qualification criteria**:

- University degree in Mathematics, Information Technology or related areas.
- At least five (5) years of experience is required in teaching gymnasium and high school students the mathematics subject.

The short-listed individual consultants will be further evaluated based on the following methodology:

Cumulative analysis
The award of the contract shall be made to the individual consultant whose offer has been evaluated and determined as:
a) responsive/compliant/acceptable, and
b) having received the highest score out of a pre-determined set of weighted technical and financial criteria specific to the solicitation.

* Technical Criteria weight – 60% (300 pts);
* Financial Criteria weight – 40% (200 pts).

Only candidates obtaining a minimum of 200 points would be considered for the Financial Evaluation.

| Criteria | Scoring | Max. Points Obtainable |
|---|---|---|
| **Technical** | | |
| University degree in Mathematics, Information Technology or related areas. Additional training and certification in IT or alternative educational tools is an asset. | (University degree - 40 pts., Master's – 50 pts.; additional training and certification - 20 pts, up to 70 pts.) | 70 |
| At least five (5) years of experience is required in teaching gymnasium and high school students the mathematics subject. | (5 years – 60 pts, each additional year of experience – 10 pts, up to a maximum of 100 pts.) | 100 |

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|---|---|---|
| Proven experience in developing educational software or applications is a strong advantage. | (no – 0 pts; yes – 35 pts.) | 35 |
| Experience in development assistance or related work for a donor organization, governmental institutions, NGO/think-tank or private sector / business consulting firm is a strong advantage. | (no – 0 pts; 1 year – 15 pts., each additional year of experience -5 pts.; up to a maximum 25 pts.) | 25 |
| Working experience using IT, multimedia applications and educational hardware such as smart boards is an advantage. | (no – 0 pts., 1 year – 25 pts., each additional year of experience -5 pts.; up to a maximum 40 pts.) | 40 |
| Fluency in both oral and written Romanian and Russian is a must; knowledge of English is an asset. | (Romanian – up to 10 pts; Russian – up to 10 pts; English – up to 5 pts, any additional language relevant for Moldova – 5 pts. ) | 30 |
| **Maximum Total Technical Scoring** | | **300** |
| **Financial** | | |
| Evaluation of submitted financial offers will be done based on the following formula:<br>**S = Fmin / F * 200**<br>S – score received on financial evaluation;<br>Fmin – the lowest financial offer out of all the submitted offers qualified over the technical evaluation round;<br>F – financial offer under consideration. | | **200** |

Winning candidate

The winning candidate will be the candidate, who has accumulated the highest aggregated score (technical scoring + financial scoring).

**ANNEXES:**
**ANNEX 1 – TERMS OF REFERENCES (TOR)**
**ANNEX 2 – INDIVIDUAL CONSULTANT GENERAL TERMS AND CONDITIONS**