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INDIVIDUAL CONSULTANT PROCUREMENT NOTICE

Date: **05 September 2017**

Country: Republic of Moldova

Description of the assignment: National IT Expert on Semantic Catalogue

Project name: Enhancing democracy in Moldova through inclusive and transparent elections

Period of assignment/services: 210 working days during October 2017 – December 2018

Proposals should be submitted online by pressing the "Apply Online" button, no later than 19 September 2017

Requests for clarification only must be sent by standard electronic communication to the following e-mail: Diana Zaharia <diana.zaharia@undp.org>. UNDP will respond by standard electronic mail and will send written copies of the response, including an explanation of the query without identifying the source of inquiry, to all applicants.

1. BACKGROUND

"Enhancing democracy in Moldova through inclusive and transparent elections" (EDMITE Project) is a newly approved project that sets the overall goal to achieve an enhanced transparency and inclusiveness of the electoral process in Moldova through a modernized IT system, improved legislation and intensified public participation, addressing the root causes of the current challenges hampering the further development of the democracy and the advancement of the electoral process in the Republic of Moldova.

The Project aims to contribute to: (1) achieving a more accurate State Register of Voters (SRV), improving the quality and accessibility data by re-engineering the Civil Status Service (CSS) systems, fully developing the State Address Register and facilitating data exchange and interoperability between different central public institutions via governmental platform for data exchange MConnect; (2) enhancing the inclusiveness of the electoral process through developing a remote voting tool and adjusting the State Automated Information System "Elections" (SAISE) to keep up with the technical and political developments; (3) legal reform in the area of elections to erase ambiguities and respond to the technical developments; and (4) enhancing political participation of citizens by setting up and implementing the voter information and civic education programmes.

Except for the CEC which is the main Beneficiary of the Project, EDMITE will continue to expand the previously partnering set-up with other central public institutions, like the Agency for Public Services (Cadastre Department, Population Registration and Documentation Department), the Electronic Government Center. These are different state actors that center the population registration process and are responsible for important data sets necessary for fair and credible Elections. Specific interventions are aimed to improve their systems and processes in order to enable them to supply the required data in a reliable quality and a required time frame, thus achieving an inclusive and transparent electoral process.

In the past years, the Electronic Government Center (EGC) made significant progress in modernizing governance using ICT, establishing a robust world-class core ICT infrastructure for electronic services, including MCloud reliable hosting facility, MConnect innovative interoperability and data exchange Platform, MSign digital signature, MPay electronic payments system, etc.

The new draft legal and regulatory framework on data exchange and interoperability, currently in the process of approval, is one of the major activities that positively marks the collaboration between UNDP and EGC. The establishment of a Semantic Catalogue is one of the most important provisions of the new draft Law. The Semantic Catalogue is going to be an Information System, operational for a free of charge, accurate and coherent use of the data exchange and interoperability Government Platform MConnect. The Semantic Catalogue will describe the definitions of data structures and will represent a source of semantic assets to be used exclusively for electronic data exchange and for the harmonization of electronic data format for future adjustments or development of

information systems in the public area.

The Semantic Catalogue will be part of the MConnect data exchange and interoperability government platform administered by the EGC. The data structures, elements and definitions included in the Semantic Catalogue will be linked to a semantic inventory, officially called Semantic Assets, which will be applied and shared by all the producers or consumers of data via MConnect.

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

The project intends to contract a National Expert (hereafter the Consultant) to develop the Semantic Catalogue (IT System) and establish the inventory of the Semantic Assets for electronic data exchange and interoperability platform. The Consultant will provide support to the EGC and the UNDP Project as it follows:

a) Technical expertise in developing the IT System - Semantic Catalogue, in accordance with the existent ToR for this system;
b) Technical expertise in defining the metadata for Semantic Assets;
c) Technical expertise in determining the Semantic Assets for the government entities that supply data for electoral processes (as per the list indicated below);
d) Technical expertise in identifying the validation rules for the Semantic Assets;
e) Technical advice for the Semantic Catalogue adaptability and accessibility for the needs of the persons with different types of disabilities, linguistic minorities (where relevant), other targeted and vulnerable groups.

The Consultant will have the following responsibilities:

- Support the development of the IT System Semantic Catalogue;
- Define the metadata for semantic assets;
- Define the Semantic Assets for the government entities that supply data for electoral processes: Agency for Public Services/ Department of Cadaster, Department of Population Registration and Documentation, Ministry of Justice, Ministry of Internal Affairs, Ministry of Defence, Ministry of Health and Social Affairs, Ministry of Education, Culture and Research);
- Establish the validation rules for the Semantic Assets;
- Assist the EGC and the UNDP Project to ensure that the Semantic Catalogue is adaptable to the use of the persons with different types of disabilities, linguistic minorities, targeted and vulnerable groups of people, in accordance with the current existent regulations, and where possible, respond to the WAI (Web Accessibility Initiative) recommendations (http://www.w3c.org/WAI).

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

3. REQUIREMENTS FOR EXPERIENCE AND QUALIFICATIONS

1. <u>Qualifications and Skills required</u>

<u>Academic Qualifications:</u>

- University degree with 3 years of continued studies (BA degree in ICT), data analysis. MA would be a strong advantage.

- <u>Experience:</u>
  - At least three (3) years of developing web applications, using .NET technologies;
  - At least three (3) years of working experience dealing with domain modeling and data structure definitions;
  - At least two (2) years of working experience in XML/JSON and related technologies, especially XSD/JSONSchema and good data validation rule practices;
  - Experience in working with Unified Modeling Language (the applicant should describe in detail this experience in his/her CV);
  - Experience in electronic data exchange and interoperability (the applicant should describe in detail this experience in his/her CV);
  - Proven experience of working with central public administration institutions of the Republic of Moldova is an asset.

Competencies:

- Familiarity with the Government Interoperability Framework Program (Government Decisions No. No. 404 and No. 656);
- Familiarity with semantic-related technologies and standards, such as ISO/IEC 11179, NIEM, RDF, OWL or others;
- Knowledge about the Semantic Catalogue for data exchange and interoperability;
- Knowledge of the EU Interoperability Framework for Pan-European Services;
- Understanding of the web/software accessibility issues and ways to insure web/software accessibility for persons with different type of disabilities, linguistic minorities, vulnerable and targeted groups;
- Knowledge of English, Romanian and Russian languages for the purposes of the assignment;
- Knowledge of one or more additional languages relevant for Moldova, including Bulgarian, Gagauzian, Romani, Ukrainian or sign language is an asset.

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;
- Responsibility, creativity, flexibility and punctuality, ability to meet deadlines and prioritize multiple tasks.

UNDP Moldova is committed to workforce diversity. Women, persons with disabilities, Roma and other ethnic or religious minorities, persons living with HIV, as well as refugees and other non-citizens legally entitled to work in the Republic of Moldova, are particularly encouraged to apply.

4. DOCUMENTS TO BE INCLUDED WHEN SUBMITTING THE PROPOSALS

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

- Offeror's Letter confirming Interest and Availability
- Proposal: explaining why they are the most suitable for the work including previous experience in similar Projects (please provide brief information on each of the above qualifications, item by item);
- Financial proposal (in USD, specifying a total requested amount per working day, including all related costs, e.g. fees, phone calls etc.);
- Duly completed and signed Personal History Form (P11), personal CV and at least 3 references.

5. FINANCIAL PROPOSAL

- Contracts based on daily fee

The financial proposal will specify the daily fee, travel expenses and per diems quoted in separate line items, and payments are made to the Individual Consultant based on the number of days worked.

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 with 3 years of continued studies (BA degree in ICT), data analysis
- At least three (3) years of developing web applications, using .NET technologies;
- At least three (3) years of working experience dealing with domain modeling and data structure definitions;

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 210 points would be considered for the Financial Evaluation.

Criteria	Scoring	Maximum Points Obtainable
Technical		
University degree with 3 years of continued studies (BA degree in ICT), data analysis	Bachelors' degree – *5 pts*., Master's Degree – *10 pts.*	10
At least three (3) years of developing web applications, using .NET technologies;	3 years – *25 pts.,* each additional year of experience – *5 pts.* up to a maximum of 30 points.	30
At least three (3) years of working experience dealing with domain modeling and data structure definitions;	3 years – *25 pts.,* each additional year of experience – *5 pts.* up to a maximum of 30 points.	30
At least two (2) years of working experience in XML/JSON and related technologies, especially XSD/JSONSchema and good data validation rule practices;	Less than 2 years – 0 pts., 2 years – *10 pts.,* each additional year of experience – *5 pts.* up to a maximum of 20 points.	20
Experience in working with Unified Modeling Language	Yes – 20 pts., No – 0 pts.	20
Experience in electronic data exchange and interoperability	Yes – 20 pts., No – 0 pts.	20
Interview	• Familiarity with the Government Interoperability Framework Program (Government Decisions No. No. 404 and No. 656) - *up to 35 pts.;* • Familiarity with semantic-related technologies and standards, such as ISO/IEC 11179, NIEM, RDF, OWL or others - *up to 40 pts.;* • Knowledge about the Semantic Catalogue for data exchange and interoperability; - *up to 40 pts.;* • Knowledge of the EU Interoperability Framework for Pan-European Services - *up to 20 pts.;* • Knowledge of Romanian, Russian and English. Knowledge of one or more additional languages relevant for Moldova, including Bulgarian, Gagauzian, and Romani, Russian, Ukrainian or sign language will be a strong advantage *(Romanian, Russian and English – 3 pts. each, any of the mentioned languages – 2 pts. each, max – 15 pts.)*	150
Belonging to the group(s) under-represented in the UN Moldova and/or the area of assignment*	(no – 0 pts, to one group – 10 pts, to two or more groups – 20 pts)	20

Maximum Total Technical Scoring	**300**

* Under-represented group in the area of assignment (IT industry) are women. Under-represented groups in UN Moldova are persons with disabilities, LGBT, ethnic and linguistic minorities, especially ethnic Gagauzians, Bulgarians, Roma, Jews, people of African descent, people living with HIV, religious minorities, especially Muslim women, refugees and other non-citizens.

Financial	
Evaluation of submitted financial offers will be done based on the following formula: **S = Fmin / F * 200** **S –** score received on financial evaluation; **Fmin –** the lowest financial offer out of all the submitted offers qualified over the technical evaluation round; **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