United Nations Development Programme

TERMS OF REFERENCE

Job title:	International Expert to support the CEC in the conceptualization of an electoral data warehouse and business intelligence solution
Duty Station:	Republic of Moldova, Chisinau
Reference to the project:	Enhancing democracy in Moldova through Inclusive and Transparent Elections (EDMITE / phase II)
Contract type:	Individual Contract (IC)
Assignment type:	International Consultant
Contract duration:	July – December 2021
Expected workload:	47 working days
Indicative starting date:	01 July 2021

1. BACKGROUND

Electoral support and capacity development are part of UNDP's democratic governance assistance worldwide, through which UNDP helps nations build democratic frameworks to improve representation, accountability, and transparency for the benefit of citizens.

UNDP has a long-standing partnership with the Central Electoral Commission (CEC) aiming at advancing the democratic electoral processes in Moldova by consolidating the transparency and efficiency of elections' management, modernization of electoral IT solutions and enhancing the inclusiveness and participation of voters. This partnership, which spans over 10 years, resulted in the establishment of a strong professional institution, development of a modern State Automated Information System "Elections" (SAISE), the enhancement of the State Register of Voters' accuracy and the design and implementation of effective long-term civic and voter education instruments.

Since 2017, the Project "Enhancing democracy in Moldova through inclusive and transparent elections" supports the Central Electoral Commission to enhance the transparency and inclusiveness of the electoral process in Moldova by ensuring a more independent and credible electoral administration and better informed and pro-active citizens. With the continuous UNDP assistance, the CEC demonstrated a high capacity of carrying out transparent, safe and "well-administered" elections (as attested by OSCE/ODIHR Observation Mission) throughout challenging electoral cycles, particularly the 2020 Presidential Elections, organized in the context of the COVID-19 pandemic.

Building on the sustainable results achieved during its first phase of implementation (2017 – 2020), the objectives of the current Project phase (2020 – 2023) are:

▪ Enhance the inclusiveness of the electoral process by increasing the functional and technical capacities of the State Automated Information System "Elections" (SAISE);

▪ Enhance the political participation of citizens by setting up and implementing the voters' information and civic education programs;

▪ Improve the legal and regulatory framework to respond to the EOM recommendations; and

▪ Strengthen the capacity for effective and coherent oversight and monitoring on political party financing.

Since 2014, UNDP's support for the CEC informational ecosystem was aimed at enhancing IT structures and processes, particularly of the Commission's core informational platform for elections management - SAISE.

For the past decade, the CEC and UNDP have come up with new useful tools for voters and electoral officials, but also for a smooth running of the electoral process. The long-term strategic IT expertise, provided by the Project, contributed to the expansion of the SAISE, currently a complex system with multiple modules that continuously collect valuable electoral data from multiple sources.

The historical and temporary datasets aggregated by the SAISE represent a valuable asset for the electoral management, forecasting and decision-making process, as well as for academic research of electoral trends and big data analytics.

In this sense, the UNDP Project will support the CEC in the conceptualization, design and implementation of an electoral data warehouse, aimed at delivering enhanced business intelligence, as well as increasing the quality, consistency and accessibility of electoral data and reporting.

2. OBJECTIVE AND EXPECTED OUTPUTS

UNDP intends to contract an experienced International Expert (hereinafter "the Expert") to support the Central Electoral Commission in the conceptualization of an electoral data warehouse and related business intelligence solution that is sustainable across all electoral cycles and fully compliant with international standards.

Overall, the Expert shall have the following responsibilities:

- Consult the CEC and relevant public institutions (e.g. Public Service Agency, e-Governance Agency and Information Technology and Cyber Security Service) and elaborate an As-Is / To-Be report on the CEC's inventory of electoral data sets, key performance indicators and statistical reporting options;

- Offer expertise and recommendations for the optimization of the CEC's data inventory, interoperability, and reporting, based on international best practices and technology trends in data analytics and business intelligence.

- Conceptualize an electoral data warehouse model, based on assessment findings, feasibility options and requirements of the CEC, with due consideration to data security and the transparency of the electoral process;

- Elaborate Technical Specifications required for the implementation of the CEC data warehouse and business intelligence solution, with due consideration to feasibility options and the "value-for-money" principle. The Technical Specifications shall include (but are not limited to):
    - the architecture of the Relational Database System and Operational Data Store;
    - the format of the metadata repository, data warehouse and data marts components;
    - the requirements for the Extract - Transform - Load (ETL) transfer mechanism.

- Present the options for the new technical solutions to the representatives of the Central Electoral Commission, UNDP Project, e-Governance Agency and Information Technology and Cyber Security Service, as well as other key stakeholders.

The CEC and UNDP Project will provide the Expert the necessary information (incl. core data) and materials for the fulfillment of the assignment. The data to be provided to the Expert will include core information related to the current SAISE status, including of its (a) ICT governance framework, (b) application/data/technological architecture and management practices, (c) technical concept of SAISE and (d) information security management.

Note: for the purposes of the assignment, it is suggested that the Expert conducts on-site assessments and interviews with the representatives of the CEC, UNDP Project, relevant public institutions and other stakeholders. In this sense, the Expert is recommended to undertake 1 (one) mission to the Republic of Moldova, tentatively in August – September 2021 (up to 5 days).

3. KEY DELIVERABLES AND TENTATIVE TIMETABLE

Key deliverables	Tentative timetable
Deliverable #1: Detailed Work Plan - developed and approved by the UNDP Project.	by 16 July 2021 2 WDs
Mission to Moldova **Deliverable #2:** Set of consultation meetings with the representatives of the CEC and the UNDP Project, relevant public institutions, and other stakeholders – conducted.	by 10 September 2021 5 WDs
Deliverable #3: As-Is / To-Be Report on the CEC's inventory of electoral data sets, key performance indicators (KPI) and statistical reporting – developed and submitted for approval by the CEC and UNDP Project.	by 30 September 2021 10 WDs
Deliverable #4: Presentation of the As-Is / To-Be Report on the CEC's inventory of electoral data sets, KPI and statistical reporting – delivered to the CEC Management and key institutional stakeholders.	by 08 October 2021 1.5 WDs
Deliverable #5: Technical Specifications for the development of the CEC electoral data warehouse – developed and submitted for approval by the CEC and UNDP Project.	by 28 October 2021 10 WDs
Deliverable #6: Technical Specifications for the development of the SAISE business intelligence solution that will use the CEC data warehouse – developed and submitted for approval by the CEC and UNDP Project.	by 08 November 2021 10 WDs
Deliverable #7: Technical Specifications for infrastructure equipment required for the implementation of the CEC data warehouse and business intelligence solution – developed and submitted for approval by the CEC and UNDP Project.	by 18 November 2021 6 WDs
Deliverable #8: Presentation of the conceptualized CEC data warehouse and business intelligence solution – delivered to the CEC Management and key institutional stakeholders.	by 26 November 2021 1.5 WDs
Deliverable #9: Final Activity Report *(incl. information on lessons learned, conclusions and further recommendations)* submitted and approved by the UNDP Project.	by 01 December 2021 1 WDs

Note: Deliverables and the activity timeline can be amended or further specified for the purpose of the assignment.

4. INSTITUTIONAL ARRANGEMENTS

The timeframe for the work of the Expert is planned for the period July – December 2021. During this time, the Expert is expected to work up to 47 working days.

The assignment shall be performed in close coordination with the IT Department of the CEC, under the supervision of the UNDP Senior Project Officer.

The UNDP Project will provide support for organizing the necessary meetings/ interviews and interacting with the relevant institutions and stakeholders, as well as will offer the required logistical support for organizing the presentation sessions with the participation of public institutions and service providers.

All activities under this assignment shall be conducted in accordance with the COVID-19 health safety measures. Except the on-site mission to the Republic of Moldova (tentatively scheduled for August - September 2021), priority shall be given to remote collaboration and online meetings / interaction.

5. FINANCIAL ARRANGEMENTS

Payments will be disbursed in tranches upon submission and approval of deliverables by the Project Manager, certifying that the services have been satisfactorily performed.

The Expert shall reflect in his/her financial proposal one (1) mission to Moldova as specified above.

However, in case of increased restrictions due to the COVID-19 pandemic, the approach for the Deliverable 2 will be tailored to the online/remote framework.

6. QUALIFICATIONS AND SKILLS REQUIRED

Academic Qualifications:

- Master's degree or equivalent (University degree with at least 7 years of experience) in Computer Sciences, Data Analytics, Applied Statistics, Engineering or another field relevant for the current assignment.

Experience and knowledge:

- At least seven (7) years of progressively responsible experience related to data analysis, database design and implementation of data warehouse and business intelligence software solutions;
- At least three (3) business analysis documents elaborated for governmental or corporate IT systems;
- At least three (3) technical specifications documents elaborated for the implementation data warehouse and/or business intelligence solutions;
- At least 1 (one) similar assignment, successfully completed in the past 3 (three) years;
- Previous professional experience of working with electoral informational systems will be an advantage;
- Previous professional experience of working with Moldovan public institutions will be an advantage;
- Previous professional experience of working with international organizations, including UN Agencies, will be an advantage.

Competencies:

- Demonstrated interpersonal and diplomatic skills, as well as the ability to communicate effectively with all stakeholders and to present ideas clearly and effectively;
- Excellent research, analytical and writing skills;
- Certification(s) in IT Governance (e.g. ITIL, COBIT, TOGAF, etc.) or Business Intelligence (e.g. MCSA: BI Reporting, MCSE: Data Management and Analytics) will be considered a strong asset;
- Knowledge of English language is a must. Knowledge of Romanian and/or Russian will be considered an advantage.

Personal qualities:

- Proven commitment to the core values of the United Nations, in particular respecting differences of culture, gender, religion, ethnicity, language, age, HIV status, disability, and sexual orientation, or other status;
- Responsibility, creativity, flexibility and punctuality, ability to meet deadlines and prioritize multiple tasks.

The 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.

7. 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 for the Individual Contractor assignment;
- Duly updated CV with at least 3 references;

- Proposal, explaining why he/she is most suitable for the assignment, including past experience in similar assignments, providing a brief information on above qualifications, and methodology on how he/she will approach and conduct the work;
- Financial proposal *(lump sum in USD, specifying a total requested amount per working day, including all related costs, including daily fee, travel expenses and per diems - quoted in separate line items).*

  The travel costs to Moldova shall be indicated separately and will be covered only if the travel will be allowed in the COVID-19 context.

Incomplete applications will not be considered.

Note: *Please, refer to the Individual Procurement Notice of this recruitment for a more detailed information on the application and selection process.*