REQUEST FOR EXPRESSIONS OF INTEREST
(CONSULTING SERVICES – FIRMS SELECTION)

Republic of Moldova
Moldova Water Security and Sanitation Project
Credit No.: 7027-MD
Assignment Title: The technical expertise of the existing buildings, the geotechnical study and the topographic survey for the project "Construction of the wastewater treatment plant and the sewerage infrastructure in the municipality of Soroca"
Reference No.: MD-PIU-NORLD-346201-CS-CQS
Date: June 16, 2023

The Government of the Republic of Moldova has received financing from the World Bank toward the cost of the Moldova Water Security and Sanitation Project (MWSSP), and intends to apply part of the proceeds for consulting services. **The objective of the assignment** is to provide services for technical expertise of buildings, geotechnical study and topographic survey for the project "Construction of the wastewater treatment plant and the sewerage infrastructure in the municipality of Soroca".

The detailed Terms of Reference (TOR) for the assignment can be found at the following website: https://www.ondrl.gov.md or can be obtained at the address given below.

The Moldova Water Security and Sanitation Project now invites eligible consulting firms ("Consultants") to indicate their interest in providing the Services. Interested Consultants should provide information demonstrating that they have the required qualifications and relevant experience to perform the Services. The shortlisting criteria are: core business and years in business, relevant experience, technical and managerial capability of the firm. Key Experts will not be evaluated at the shortlisting stage.

The attention of interested Consultants is drawn to Section III, paragraphs, 3.14, 3.16, and 3.17 of the World Bank's "Procurement Regulations for IPF Borrowers" November 2020 ("Procurement Regulations"), setting forth the World Bank's policy on conflict of interest.

Consultants may associate with other firms to enhance their qualifications, but should indicate clearly whether the association is in the form of a joint venture and/or a sub-consultancy. In the case of a joint venture, all the partners in the joint venture shall be jointly and severally liable for the entire contract, if selected. A Consultant will be selected in accordance with the **Consultant's Qualification-based Selection** method set out in the Procurement Regulations. Further information can be obtained at the address below during office hours 09.00 to 17.00 hours (Moldova Time).

Expressions of interest must be delivered in a written form to the address below (in person, or by mail, or by e-mail) by **June 27, 2023, 16:00 o'clock, Moldova time, indicating the assignment title in subject line (when sent by e-mail).**

P.I. National Office for Regional and Local Development,
Moldova Water Security and Sanitation Project
Address: Str. Alexandru cel Bun 51 A, Floor 2, MWSSP Office,
Mun. Chișinău, Republic of Moldova.
Tel/fax: 022 27-91-21, 069265292
E-mail: **tender@ondrl.gov.md**

See below the Annex 1: Terms of Reference

TERMS OF REFERENCE (ToR)
Implementation of the Moldova Water Security and Sanitation Project
(P173076)

Consultant Qualification Selection (CQS)

For services:
The technical expertise of the existing buildings, the geotechnical study and the topographic survey for the project "Construction of the wastewater treatment plant and the sewerage infrastructure in the municipality of Soroca"

within the
P.I. National Office for Regional and Local Development

I. MOLDOVA WATER SECURITY AND SANITATION PROJECT BACKGROUND

The Government of Moldova (GoM) is currently implementing a project supported by the World Bank (IDA) financing the **Moldova Water Security and Sanitation Project (MWSSP).** The Moldova Water Security and Sanitation Project directly supports the Government's commitment to Sustainable Development Goal No.6: to achieve universal and equitable access to safe and affordable drinking water, sanitation, and hygiene by 2030 through its Action Program and the National Water Supply and Sanitation Strategy 2014-2028.

The World Bank's Water Security Diagnostic and Future Outlook[1] showed that there are several pressing challenges to Moldova's water security, such as (i) inequalities in access, inadequate quality of water supply in small towns and weak performance of service providers; (ii) poor environmental health and environmental pollution due to lack of sanitation and wastewater collection and treatment; (iii) weak institutions, fragmented financing streams and unresolved reform areas which hinder programmatic delivery of services.

Access in water supply and sanitation (WSS) is constrained by large coverage gaps in rural areas, compounded by income status. Compared to other countries in the Danube region, the share of population with access to basic water and sanitation services in Moldova is low. The gap between urban and rural remains one of the largest in Europe and is one of the key water security issues the country is facing. Based on JMP-data[2], gains were made in rural water supply access to drinking water services from piped networks, from 33 percent in 2000 to an estimate 40 percent in 2017, while urban piped service remained almost stable at 85 percent.

Household Budget Survey (HBS) (2018) data provides the picture on national access to a public piped water supply being 70 percent, with urban access at 92.4 percent and rural access at 52.2 percent. However, the water quality of rural piped system is often compromised and below drinking water quality standard. Those not served by public centralized systems rely on so-called self-supply, through private shallow wells. Around one in three people rely on self-supply for their drinking water with 80 percent of wells not compliant with drinking water norms (e.g. nitrates, e-coli). The poorest quintile of the rural population faces the largest obstacles to get connected to a public system and is least able to invest in private piped supply by wells (9 percent), with 42.2 percent of the poorest households collecting water with buckets or carts. In 2018, out of a total of 1,220 centralized water systems, 1,168 were functional, although performance data is not systematically available.

In response to these challenges, the Project Development Objective (PDO) of the MWSSP is **to increase access to safely managed water supply and sanitation services in selected rural areas and towns, and to strengthen**

[1] https://openknowledge.worldbank.org/handle/10986/34809
[2] Joint Monitoring Program data is derived based on linear extrapolations using national survey data and JMP population estimates; discrepancies between nationally reported data can be found due to differences in estimation methods and definitions. See also: https://washdata.org/data

institutional capacities for water supply and sanitation service delivery. Strengthening institutional capacities for water supply and sanitation service delivery refers to both national level planning and sector development capacities, as well as to improved operational efficiency and delivery at utility level.

The Project will have four components:

Component 1: Increasing access to safely managed WSS services in selected rural areas and towns This component will develop new and rehabilitate existing WSS infrastructure and WASH facilities in rural areas and towns, thus expanding access and quality of services for households, businesses, and public institutions and supporting resilience. Component 1 supports climate adaption through (a) providing reliable centralized water supply protecting vulnerable households from drought and poor water quality; (b) improving wastewater systems, sanitation, and WASH facilities, reducing environmental exposure to pathogens exacerbated by flooding, particularly in towns facing frequent flooding; and (c) ensuring climate-resilient design of all infrastructure for robust functioning under extreme weather events. It consists of two subcomponents:

Subcomponent 1.1: Expanding access and quality of WSS services. This subcomponent will finance climate-resilient investments in towns and rural areas. This includes the following:

(a) **Water supply investments:** Expansion and rehabilitation of the regional water systems for water supply production and distribution, and service connections for LPAs in selected districts, including the preparation of relevant technical studies and management documents; technical supervision; and citizen engagement activities. This refers to water supply infrastructure in two preliminarily identified subprojects, that is, regional water system expansion for LPAs in Cahul District and the ATU of Gagauzia and a regional water supply system with a surface water treatment plant in Riscani District. Many LPAs, particularly in the south (Cahul) as well as in the northern part along the Prut (Riscani), face shortages of water in the summer, with shallow wells/springs posing a challenge such as in the Prut cluster villages, in the Vulcanesti town, and other villages in Cahul District.

(b) **Wastewater investments:** Expansion and rehabilitation of wastewater systems in selected towns, including the construction and rehabilitation of sewer networks and service connections, and the construction of new wastewater treatment plants, including the preparation of relevant technical studies and management documents; technical supervision; and citizen engagement activities. This refers to two preliminarily identified subprojects in Soroca and Comrat towns. There are areas in the Comrat town that face frequent flooding, and the Soroca town is also vulnerable directly on the right bank of the Dniester. The project will support the assessment of flood risk and impact at the household level and, in addition to ensuring resilient design of infrastructure, provide measures to reduce the impact of floods where possible.

(c) **Pilot for on-site household sanitation:** selected rural or peri-urban villages, will benefit from the improvement of on-site household sanitation following a demand-led approach through the provision of technical assistance, the implementation of information campaigns, and the carrying out of civil works. The pilot will be co-financed through the ADA grant. This pilot will demonstrate the use of climate-resilient low-cost technologies for rural sanitation.

Subcomponent 1.2: Improving resilient WASH facilities in public social institutions. This subcomponent will finance works, goods, consulting services, non-consulting services and training/workshops to realize climate-resilient WASH facilities in HCFs and education institutions and implement hygiene education and behavior change communication program.

Component 2: Strengthening institutional capacity at national and local levels for WSS service delivery. This component focusses on institutional capacities of national and subnational entities and WSS operators for management, planning, regulation and reform implementation, and performance improvement of service providers for green, resilience, and inclusive service delivery. At the national level, development of plans, policies, and regulatory documents will support climate adaptation through climate-resilient planning, and at the local level, performance improvements will deliver climate benefits through reduction of NRW and improvement of energy efficiency. It consists of two subcomponents:

Subcomponent 2.1: Building national institutional capacity for WSS. This subcomponent aims to strengthen critical functions of facilitating and implementing WSS sector reform, investment planning and monitoring, and sector modernization and build capacities to this end of the assigned lead unit/entity within MIRD's structure. It finances goods, non-consulting services, consulting services, and training/workshops for activities that strengthen institutional capacities for planning, financing, economic regulation, performance monitoring, professional development, and the revision and development of new policies and normative documents.

Subcomponent 2.2: Improving performance of WSS service providers. Subcomponent 2.2 will finance works, goods, consulting services, non-consulting services, and training to support the implementation of a prioritized rolling multiyear PIP of selected WSS operators involved under Subcomponent 1.1. WSS operators will carry out annual assessments on PIP implementation and KPIs, including publication of results and feedback rounds with customers. The financing for selected WSS operators will be allocated based on results. Investments and TA activities identified in the PIPs are based on utility diagnostics and include, but are not limited to, the following: improving technical and commercial operations, improving financial management (FM), HR management, and organization and strategy aspects, including improving asset management systems and inventories, energy efficiency, NRW reduction programs, water metering practices and equipment to improve climate resilience, water safety, and business continuity, and enhancing responsiveness to customers.

Component 3: Project management and coordination. This component will finance operational costs, consulting services, non-consulting services, goods, and training to finance the overall project management cost, including the project team at the Project Implementation Unit (PIU), implementation support consultants at the regional level within MIRD's RDAs for environmental and social standards implementation, and, at the national level, MIRD as the project implementing entity (PIE). It will finance training costs, including for capacity building in procurement, environmental, and social standards, specialized short-term implementation support consultants, financial audits, project communication and citizen consultations, and monitoring and evaluation (M&E).

Component 4: Contingent emergency response component (CERC). A provisional zero-amount component is included, which will allow for rapid reallocation of credit/loan proceeds from other components during an emergency under streamlined procurement and disbursement procedures. This component allows the Government to request the World Bank to recategorize and reallocate financing from other project components to cover emergency response and recovery costs.

II. GENERAL DATA

II.1 **Investment:** Services for technical expertise of buildings, geotechnical study and topographic survey for the project "Construction of the wastewater treatment plant and the sewerage infrastructure in the municipality of Soroca".

II.2 **Beneficiary:** National Office for Regional and Local Development (NORLD).

II.3 **Location:** The works that are the subject of this specification will be executed on the road segments in the municipality of Soroca.

III. OBJECT OF THE ASSIGNMENT

The sewerage network of the municipality of Soroca is divided into 4 main basins, connected to the Centre wastewater pumping station (CPS). Two other wastewater pumping stations are located respectively in the northern part (North wastewater pumping station - NPS) and in the southern part of the city (South wastewater pumping station - SPS), with small catchment areas to pump the wastewater to the main network.

Raw wastewater is currently discharged into the Dniester River through two main discharge points:

- The first is close to the CPS, discharging most of the city's wastewater volume (part of basin 1 and basins 2b, 3 and 4). This underground drain is close to Soroca Castle, which is the main tourist attraction of the city;

- The second discharge point is located near the SPS, through which only wastewater from accumulation area 2a is discharged. As the SPS is damaged, the pipe upstream of the station has been perforated so that the wastewater can flow into the river.

According to the Feasibility Study elaborated in August 2021 by SEURECA company, the short-term construction works include:

- SPS must be rebuilt and the respective pressure pipe to the main sewer network must be rehabilitated.
- CPS must be rebuilt. A new pressure pipe must be constructed to direct the pumped wastewater to the designed wastewater treatment plant (WWTP).

The selection of the pumps will be done taking into account the future connection rate to the network in the year 2035.

Therefore, the development of the sewerage system in Soroca was considered a national priority and is part of the World Bank's "Moldova Water Security and Sanitation" project.

IV. SCOPE OF WORK

The work includes the following programs:

Program (1): Technical expertise
Program (2): Topographical survey
Program (3): Geotechnical study

Program (1): Technical expertise

The technical expertise will be drawn up according to the regulations in force to comply with the content requirements of Law no. 721 of 02.02.1996 on quality in constructions and the Regulation on technical expertise in constructions, approved by Government Decision No. 936 of 16.08.2006.

The technical condition of the SPS (municipality of Soroca, str. Bechir 8, cadastral no. 78011120058.01) and CPS (municipality of Soroca, str. Alhionie 16, cadastral no. 78011180342.01), of the wastewater disposal system of the municipality of Soroca, will be examined and later expertized at the State Service for the Verification and Expertise of Designs and Constructions.

The evaluation of the technical condition of the above-mentioned constructions will be carried out based on visual examinations and detailed on-site research, accompanied by opening works of the constructive elements (structural walls, pillars, plinth, roof, etc.).

When drawing up the Expertise Report, the following acts and normative documents in construction will be used:

- Law on quality in constructions No. 721-XIII of 02.02.1996;
- Government Decision no. 936 of 16.08.2006 regarding the approval of the Regulation on technical expertise;
- SNiP 11-7-81* "Строительство в сейсмических районах", 1991 edition (equivalent "Construction in seismic districts");
- SNiP 2-01-07-85 "Нагрузки и воздействия" (equivalent "Loads and impacts");
- NCM E.02.02-2016 „Reliability of construction elements and foundation. Basic principles";
- other normative documents in construction.

The content of the Expertise Report will include but not be limited to (according to the Government Decision no. 936 of 16.08.2006):

"26. The framework content of the technical expertise must include:

a) the documents on the basis of which the technical expertise was carried out, the purpose of the expertise, its necessity etc.;

b) the characteristic of the construction from an architectural, functional and structural point of view; the beneficiary, the designer, the executor, the stage at which the construction is;

c) the scheme and construction solutions, the geotechnical conditions of the land, the urban situation;

d) the technical condition of the constructive elements and the construction as a whole, the detected non-conformities, their causes and consequences, the estimation of degradations;

e) the conclusions and recommendations for consolidation, their substantiation and optimization from a technical, economic, technological, functional, etc. point of view;

f) sketches, execution details and other graphic materials;

g) reasonable calculations.

With regard to the specified framework content, the technical expertise report can be completed with other aspects/investigations/analyses considered indispensable by the technical expert to substantiate the decision.

27. Each technical expertise report is completed with conclusions and recommendations regarding the further exploitation of the construction, which must be technologically achievable.

28. Recommendations and conclusions regarding the total demolition of the construction can be submitted only if the construction cannot be rehabilitated, does not ensure operational safety and the security of people, or presents a danger (which cannot be avoided) for the environment and neighboring objects."

The Expertise Report must be signed and stamped by a certified technical expert, with the relevant certificate up to date.

The technical expert has the obligation to verify and draw up analysis reports of the reports developed based on the solutions proposed by the expert. These must be appropriated by the author of the technical expertise from the point of view of compliance with the proposed solutions and measures.

Chapter of the report	Location	Site data
(1) I	CPS	Cadastral no.: 7801118.342, Soroca raion, mun. Soroca, str. Alhionie, 16
(1) II	SPS	Cadastral no: 7801112.058.01, Soroca raion, mun. Soroca, str. Bechir, 8

Program (2): Topographical survey

Based on the requirements of the PIU Engineer, the existing features will be mapped for a minimum width of 30 m from the center line on each side of the road (i.e., 60 m total) along the cca. 6.3 km road taking into account the sites for CPS, SPS and WWTP, as well as the connection points to the electrical network.

Survey will be made according to the list of codes provided by the Contractor:

a. Electric power poles, telephone poles, and any other private/unauthorized utility poles with their routing network.
b. Water / wastewater / gas pipes with the diameter and material of the pipe.
c. All utility lines, both above ground and underground.
d. Manholes – with their actual dimensions and shapes (e.g., rectangular, square or circular), the depth of the gutter and pipes entering the house.
e. Trees with a girth greater than or equal to 0.3 m - during tree survey, trees must be accurately classified according to their girth.
f. Building lines indicating the types of buildings (shops or houses), the limit of the right of way if available on the site by the presence of the boundary wall.
g. Sufficient road center points, carriageway width should be taken to define the existing road layout.
h. Road structure (asphalt, gravel, pavement, etc.).
i. The description and symbol to be indicated in the legend of the drawing must be identical to those in the drawing.
j. Topographical map will be prepared based on field data using Cad software like AutoCad.
k. Drilling and operation wells.

Location of the topographical survey	Note
CPS	Cadastral no.: 7801118.342, Soroca raion, mun. Soroca, str. Alhionie, 16
SPS	Cadastral no: 7801112.058.01, Soroca raion, mun. Soroca, str. Bechir, 8
WWTP	Cadastral no.: 7857210.028, Soroca raion, com. Vasilcău, extravilan
The route of the main pressure sewer line	From CPS up to WWTP
Topographical survey for the SPS connection to the electrical network	According to the technical connection notice No. 869 of March 9, 2023 (see **Annex 2**)
Topographical survey for the WWTP connection to the electrical network	According to the technical connection notice No. 972 of March 20, 2023 (see **Annex 3**)

Program (3): Geotechnical study

The requested geotechnical study will be an analysis and research document elaborated by a geotechnician and/or economic operators specialized in the field of geotechnical engineering. This report will be submitted by the Contractor to the State Fund of Information on the Subsoil to verify the correspondence of the geological information data to the requirements of the normative acts regarding the preparation and completion of the geological reports.

The geotechnical study must contain the following:

The name and address of all the units that participated in the investigation of the foundation site, specifying the category of works in which they were involved:

- presentation of field works performed;
- the methods, tools and equipment used;
- the period in which the field and laboratory works were carried out;
- the methods used for taking, transporting and storing samples;
- the level of ground water and the character of the aquifer layer (free level or under pressure);
- the aggressiveness characteristics of the ground water and, possibly, of some soil layers;
- the possible existence of excess water pressures in the pores of the earth (compared to the hydrostatic pressure);
- the name of the authorized/accredited laboratory that performed the soil and water tests/analyses in the case of drilling investigations, with the presentation of a copy of the laboratory's authorization and the annex with the authorized/accredited laboratory tests;
- reports on tests in the laboratory and in the field including test reports, diagrams, graphs and tables regarding the results of the experimental works;
- synthetic sheets for each drilling or open survey, including: description of identified layers, synthetic results of geotechnical laboratory tests, results of standard penetrations - SPT (if applicable), occurrence and stabilization levels of ground water;
- sheet of chemical analyses;
- situation plans with the location of the investigation works, maps with the geological, geotechnical, geophysical and hydrogeological particularities of the site or a wider area (if applicable);
- geological, geotechnical, geophysical, hydrogeological sections, block diagrams;
- other data resulting from the executed works;
- analysis and interpretation of field and laboratory work data and test results, taking into account the methods of sampling, transportation and storage of samples, as well as the characteristics of the equipment and test methods;
- characteristic sections (profiles) of the land, with the delimitation of different formations (layers) for which the characteristic values and calculation values of the main geotechnical parameters are established;
- recommended depth and foundation system, determined by geotechnical, hydrogeological and seismic conditions;
- evaluation of the conventional base pressure and bearing capacity (in the case of direct foundation), as well as the bearing capacity of the pillars or bars (in the case of indirect foundation);
- submission of recommendations regarding soil drying;
- submission of recommendations regarding the protection of building foundations.

Chapter of the report	Location area	Site data	Drilling depth	Minimum number of boreholes for geological survey
I	CPS (see **Annex 4**)	Cadastral no.: 7801118.342 Soroca raion, mun. Soroca str. Alhionie, 16	12 m*	1
II	SPS (see **Annex 4**)	Cadastral no.: 7801112.058.01, Soroca raion, mun. Soroca str. Bechir, 8	12 m*	1
III	WWTP	Nr. cadastral: 7857210.028, Soroca	12 m*	2

Chapter of the report	Location area	Site data	Drilling depth	Minimum number of boreholes for geological survey
		raion, com. Vasilcău, extravilan		
IV	The route of the main pressure sewer line in the urban area	From CPS up to WWTP	3 m/6 m	7 (4 units of 3 m and 3 units of 6 m)
V	The route of the main pressure sewer line in the forest area	From CPS up to WWTP	3 m	3

*if the drilling depth reaches the subsiding soil, it is necessary to drill through the entire subsiding layer.

V. GENERAL REQUIREMENTS

The work requested for the technical expertise services of the buildings, the geotechnical study, the topographical survey under this Contract (hereinafter referred to as "***Work***") will be carried out as part of the "Design & Build Terms of Reference" regarding the construction of the wastewater system and the wastewater treatment plant for the municipality of Soroca. The results of the Work will be used by the team from the Implementation Unit of the " Moldova Water Security and Sanitation" project (hereinafter referred to as the "***PIU Engineer***") for the development of the "Design & Build Terms of Reference" of the priority project and will serve as a basis for the preparation preliminary technical designs of the main wastewater installations, such as the main sewerage pressure pipe, two wastewater pumping stations and a wastewater treatment plant.

The contractor will comply with the following requirements in carrying out the Work.

(1) All measurements and results of the Work shall be in SI (International System of Units).

(2) The locations of benchmarks (see **Annex 1**) for the Work shall be confirmed by the Contractor and shall be approved by the PIU Engineer prior to the commencement of field inspection work.

(3) Before starting the Work, the Contractor will present an Inception Report drawn up in English and Romanian languages, which will describe:

- Work methodology;
- The collection and investigation methods to be used by the Contractor;
- Work program;
- Staff allocation schedule.

(4) The Contractor shall provide, and therefore include the associated costs in his bid, all inspection equipment, personnel, transportation and others for the execution of the Work.

(5) The Contractor shall not commence the Work without receiving a written Notice from the PIU Engineer.

(6) The drawings will be prepared using the AutoCad software. The drawings and reports to be submitted by the Contractor shall be dimensioned, unless otherwise requested by the PIU Engineer. All documents and reports provided will be in English and Romanian languages, as follows:

- All drawings; One (1) A1 size set and two (2) A3 size sets including one (1) memory stick file set.
- All reports; Two (2) sets of A4.

(7) The execution of the Work will be described in the form of a weekly report and sent to the designated address of the PIU Engineer by e-mail at the end of each week throughout the duration of this Contract.

(8) The accuracy of the inspection and investigation shall be according to the requirements of the PIU Engineer.

VI. QUALIFICATION REQUIREMENTS AND EVALUATION CRITERIA

- Minimum 3 years of company's experience in topographical survey, geotechnical investigations and construction expertization;
- Minimum 5 implemented similar company's assignments in the last 3 years;
- Qualified and certified (in accordance with legislation of Republic of Moldova) technical staff with at least 5 years of experience in the above-mentioned works;

- The Contractor is strongly encouraged to involve qualified female candidates for this activity.
- At least 5 similar assignments implemented by technical staff.

VII. DELIVERABLES

Time Schedule - Activities

Nr.	Work description	Result / Format	Date of completion
1	Topographical survey (scale 1:500, 1:1200)	**Results**: Report on topographical survey: (1) the textual part, (2) the cartographic part. **Format**: Microsoft Word, electronic version, including diagrams (English and Romanian languages). The graphic part - vector plans, DWG format	3 months from the moment of signing the contract until the submission of the preliminary version of the report. If necessary - correction within 1 week from the date of receipt of comments.
2	Geotechnical study	**Results**: Report on the execution of geological investigations: (1) the textual part, (2) the cartographic part. **Format**: Microsoft Word, electronic version, including diagrams (English and Romanian languages).	3 months from the moment of signing the contract until the submission of the preliminary version of the report. If necessary - correction within 1 week from the date of receipt of comments.
3	Taking and analyzing the samples from the drilled boreholes	**Results**: Report on the groundwater samples analysis: (1) the textual part, (2) the cartographic part. **Format**: Microsoft Word, electronic version, including diagrams (English and Romanian languages).	3 months from the moment of signing the contract until the submission of the preliminary version of the report. If necessary - correction within 1 week from the date of receipt of comments.
4	Technical expertise of the buildings	**Results**: Technical expertise report: (1) the textual part. **Format**: Microsoft Word, electronic version, including diagrams (English and Romanian languages).	3 months from the moment of signing the contract until the submission of the preliminary version of the report. If necessary - correction within 1 week from the date of receipt of comments.

After the acceptance of the deliverables, the Contractor shall submit a power point presentation of the activities performed and the results obtained to the local administration of Soroca municipality and other relevant stakeholders.

VIII. TIMING

Term of execution: 3 months from the date of contract sign or other date agreed in the contract.

IX. RECEPTION OF WORKS

The documents will be approved within 15 days of their delivery.

X. INSTITUTIONAL ARRANGEMENTS

The consultant's activity will be carried out in close collaboration with and under the guidance of the delegated persons from Project Implementation Unit, under the Public Institution National Office for Regional and Local Development.

The consultant's deliverables will be approved for financing only as a result of the signing of an acceptance certificate signed by P.I. National Office for Regional and Local Development in the role of institution with fiduciary responsibilities, North Regional Development Agency, Soroca Town Hall, Ministry of Infrastructure and Regional Development and the Consultant as a service provider.

For the required Deliverable, the Consultant shall organize a meeting or a Video-Conference, where the document is first presented and then discussed. The Consultant is obliged to present the final version of any report not later than 2 weeks after receiving the Client’s comments.

Annex 1. Location of the main benchmarks

Annex 2. Connection notice Nr. 869

RED-Nord BĂLȚI

Anexa nr.1,
la Regulamentul privind racordarea la reţelele electrice şi prestarea serviciilor de transport şi de distribuţie a energiei electrice aprobat prin Hotărîrea ANRE, nr.168/2019 din 31 mai 2019

AVIZ DE RACORDARE

Nr. 869 din "09" martie 2023

Valabil până la "09" martie 2024

S.A. "REŢELELE ELECTRICE DE DISTRIBUŢIE NORD"
Nr. de ieşire STP/ 869
"09" martie 2023

Către S. A. " REGIA APĂ-CANAL SOROCA ".
tel. 0230-26-283.

Pentru proiectare.

1. Solicitantul: **S. A. " REGIA APĂ-CANAL SOROCA ".**
2. Adresa: **mun. Soroca, str. Uzinelor, nr. 9.**
3. Locul de consum, centrala electrică pentru care se solicită racordarea: **„ Staţie de pompare a apelor uzate " în mun. Soroca, str. Bechir, nr. 8. Bun imobil cu nr. cadastral: 7801112.058.01.**
4. Categoria de fiabilitate: **III (trei).**
5. Condiţii referitor la sursa autonomă de alimentare cu energie electrică: **în caz de necesitate de instalat sursă autonomă de alimentare cu energie electrică.**
6. Punctul de racordare la reţeaua electrică este: **Stâlpul nr. 1/2, LEA 0,4 kV, PT13ZS7F1.**
7. Tensiunea nominală în punctul de racordare: **0,4 kV.**
8. Puterea electrică aprobată prin aviz: **5 kW.**
9. La cererea solicitantului operatorul de reţea va realiza instalaţia de racordare după încheierea contractului pentru montarea instalaţiei de racordare cu operatorul de reţea şi achitarea cheltuielilor pentru montarea instalaţiei de racordare.

   La realizarea instalaţiei de racordare este necesar de prevăzut:

   9.1. Pe stîlpul nr. 1/2, LEA 0,4 kV, PT13ZS7F1 de montat, reglat şi conectat la conductoare un aparat de comutaţie şi protecţie analogic cu SZ-51 complectat cu siguranţe conform sarcinii solicitate.

   9.2. De la stîlpul nr. 1/2, LEA 0,4 kV, PT13ZS7F1, până la locul de consum, de montat LE -0,4 kV cu cablu integru. În caz de executare aeriană, de utilizat stîlpi de beton-armat şi conductor torsadat de tip. „CIP-2".
10. Solicitantul achită costul de proiectare şi tariful de racordare iar operatorul de sistem organizează proiectarea şi montarea instalaţiei de racordare.
11. În cazul în care solicitantul angajează un proiectant şi un electrician autorizat să proiecteze şi să execute instalaţia de racordare, după executarea şi recepţia instalaţiei de racordare solicitantul achită tariful de punere sub tensiune.
12. În cazul consumatorilor noncasnici/producătorilor, după admiterea în exploatare a instalaţiei, părţile (solicitantul şi operatorul de sistem), de comun acord, stabilesc punctul de delimitare a instalaţiilor electrice şi semnează Actul de delimitare. Procesul verbal de dare în exploatare a echipamentului de măsurare şi Convenţia de interacţiune, care se prezintă de către operatorul de sistem în ziua finalizării instalaţiei de racordare, conform contractului de racordare.
13. Cerinţe referitor la valoarea factorului de putere: **cos φ nu mai mic de 0,92, în caz de necesitate, să fie instalat utilaj pentru compensarea energiei reactive, dotat cu reglare automată.**
14. Cerinţe de protecţie contra fulger: **Conform NAIE şi "Directivelor cu privire la protecţia contra fulgerului".**
15. Valoarea minimală a curentului de scurtcircuit în punctul de racordare la reţeaua electrică: **Stâlpul nr. 1/2, LEA 0,4 kV, PT13ZS7F1 (250 kVA): I s.c. = 1070 A.**
16. Valoarea maximală a curentului de scurtcircuit în punctul de racordare la reţeaua electrică:
17. Cerinţe de protecţie prin relee: **Conform NAIE** (Norme de amenajare a instalaţiilor electrice).
18. Cerinţe faţă de izolaţie şi protecţia contra supratensiuni:

    18.1. De prevăzut conform p. 7.1.22, NAIE, ediţia VII, limitatoare a supratensiunilor de impuls (atmosferice) şi de comutaţie.

    18.2. Se recomandă utilizarea declanşatoarelor independente sau relee cu funcţii de protecţie împotriva variaţiilor lente şi rapide (supratensiuni) ale tensiunii.
19. Cerinţe faţă de automatizare: **Conform NAIE.**

"Regia Apă Canal Soroca" S.A.
INTRARE
Nr. 238 din 10.03.2023

Nr. 869 din "09" martie 2023. Valabil până la "09" martie 2024

Pentru proiectare, „ Staţie de pompare a apelor uzate " în mun. Soroca, str. Bechir, nr. 8. Bun imobil cu nr. cadastral: 7801112.058.01, P = 5 kW.

20. Cerinţe faţă de echipamentul de măsurare:

20.1. Echipamentul de măsurare a energiei electrice de montat în cutie de protecţie omologată, dotată cu întrerupător conform sarcinii solicitate şi constructiv executată cu două uşi: uşa exterioară, dotată cu lacăt tipizat, având accesul liber a furnizorului/distribuţie şi a clientului; uşa interioară cu lacăt tipizat, având accesul liber numai a furnizorului/distribuţie şi posibilitatea sigilării lacătului.

20.2. Cutia de protecţie a echipamentului de măsurare a energiei electrice de instalat, în incinta clientului, partea exterioară a proprietăţii (lotului de teren), sau încorporată, ori alipită la partea exterioară a gardului/zidului în loc accesibil pentru control şi exploatare.

20.3. Cerinţe privind utilizarea contorului:

20.3.1. Se recomandă utilizarea contoarelor electronice care corespund prevederilor secţiunii 10 din Regulamentul privind măsurarea energiei electrice în scopuri comerciale aprobat prin Hotărârea ANRE nr. 74 din 25.02.2022;

20.3.2. Se recomandă completarea contoarelor de măsură a energiei electrice cu modul de telecomunicaţie GSM/GPRS,RS-485, producător Landis+Gyr, Elveţia, după caz.

20.3.3. In caz de procurare a echipamentului de măsurare de la alt furnizor decât operatorul reţelei de distribuţie, la momentul coordonării întregului proiect se va coordona şi echipamentului de evidenţă;

20.3.4. Contorul trebuie să fie legalizat şi verificat metrologic in modul stabilit de Sistemul Naţional de Metrologie;

21. Alte cerinţe:

21.1 De executat elaborarea proiectului în conformitate cu cerinţele Hotărîrii de Guvern nr. 361 din 25.06.1996 „Cu privire la asigurarea calităţii construcţiilor".

21.2 Coordonarea corespunderii cerinţelor de racordare, conform avizului dat, cu operatorul de sistem, este obligatorie. O copie a proiectului coordonat rămâne la operatorul de sistem. Coordonarea corespunderii cerinţelor de racordare, conform avizului dat a proiectului respectiv se efectuează de către operatorul de sistem, în termen de cel mult 10 zile de la data solicitării. În cazul proiectelor pentru racordarea la reţelele electrice cu tensiunea mai mare sau egală cu 35kV a centralelor electrice, termenul de coordonare a proiectului este de 30 de zile.

21.3 Legarea la pământ şi îndeplinirea măsurilor contra electrocutării să se efectueze în conformitate cu Normele de amenajare a instalaţiilor electrice (NAIE).

21.4 Se interzice conectarea şi folosirea aparatelor electrice de sudat şi a altor receptoare electrice care influenţează negativ la calitatea energiei electrice.

În atenţia solicitantului

1. În cazul în care solicitantul (potenţial utilizator de sistem) nu este de acord cu condiţiile indicate în aviz, el este în drept să se adreseze la Agenţia Naţională pentru Reglementare în Energetică.
2. După obţinerea avizului de racordare solicitantul (potenţial utilizator de sistem) este in drept să solicite, operatorului de sistem proiectarea şi executarea instalaţiei de racordare după încheierea contractului de racordare şi achitarea de către solicitant a costurilor de proiectare şi a tarifului de racordare.
3. După îndeplinirea condiţiilor incluse în avizul de racordare solicitantul (potenţial utilizator de sistem):

A. procedează conform art.48 din Legea cu privire la energia electrică în vederea obţinerii actului de corespundere a instalaţiilor electrice ale solicitantului;

B. stabileşte împreună cu operatorul de sistem în baza actului de corespundere a instalaţiilor electrice ale solicitantului (potenţial utilizator de sistem), punctul de delimitare a instalaţiilor electrice, prin întocmirea de către operatorul de sistem a actului de delimitare şi semnarea lui de către părţi;

C. achită tariful de punere sub tensiune.

4. Racordarea şi punerea sub tensiune a instalaţiilor electrice ale solicitantului se efectuează în termen de cel mult 2 zile lucrătoare din momentul achitării tarifului de punere sub tensiune.

Notă: Pentru consumatorii casnici nu este obligatorie întocmirea şi semnarea actului de delimitare şi Convenţiei de interacţiune.

A aprobat: Director tehnic S.A. "RED - Nord" *Viorel Corbu*

A verificat: Şef SDR S.A. „RED-Nord" *Pulbere Ed.*

A eliberat: _____
/semnătura/ /numele, prenumele/

A primit: _____
/semnătura/ /numele, prenumele/

Termenul de valabilitate al avizului extins până la „ " 202

Annex 3. Connection notice Nr. 972

RED-Nord BĂLȚI

Anexa nr. 1
la Regulamentul privind racordarea la reţelele electrice şi prestarea serviciilor de transport şi de distribuţie a energiei electrice aprobat prin Hotărîrea ANRE, nr.168/2019 din 31 mai 2019

AVIZ DE RACORDARE

Nr. 972 din "20" martie 2023
Valabil până la "20" martie 2024

S.A. "REȚELELE ELECTRICE DE DISTRIBUȚIE NORD"
Nr. de ieșire STP/ 942
„20" martie 2023

Către S. A. " REGIA APĂ-CANAL SOROCA ".
tel. 0230-26-283.

Temporar

1. Solicitantul: **S. A. " REGIA APĂ-CANAL SOROCA ".**
2. Adresa: **mun. Soroca, str. Uzinelor, nr. 9.**
3. Locul de consum, centrala electrică pentru care se solicită racordarea: **„ Staţie de epurare " în r-nul. Soroca, com. Vasilcău, extravilan. Bun imobil cu nr. cadastral: 7857210.028.**
4. Categoria de fiabilitate: **III (trei).**
5. Condiţii referitor la sursa autonomă de alimentare cu energie electrică: **în caz de necesitate de instalat sursă autonomă de alimentare cu energie electrică.**
6. Punctul de racordare la reţeaua electrică este: **ID-0,4 kV, PT712ZS17F5, separatorul de sarcină nou montat.**
7. Tensiunea nominală în punctul de racordare: **0,4 kV.**
8. Puterea electrică aprobată prin aviz: **100 kW.**
9. La cererea solicitantului operatorul de reţea va realiza instalaţia de racordare după încheierea contractului pentru montarea instalaţiei de racordare cu operatorul de reţea şi achitarea cheltuielilor pentru montarea instalaţiei de racordare.

   La realizarea instalaţiei de racordare este necesar de prevăzut:

9.1. La PT712ZS17, de schimbat transformatorul de putere de tip TM 100 kVA pe TM 250 kVA.
9.2. În ID-0,4 kV, PT712ZS17F5, de montat, reglat şi conectat la bare un separator, de tip. NH, completat cu siguranţe, conform sarcinii solicitate.
9.3. De la ID-0,4 kV, PT712ZS17F5, până la locul de consum, de montat LE-0,4 kV. În caz de executare aeriană, de utilizat stâlpi de beton-armat şi conductor torsadat de tip „CIP-2".
9.4. Lucrările menţionate în p. 9.1. o să fie executate din contul şi de către personalul SA „RED-Nord".
9.5. Lucrările menţionate în p. 9.2 pot fi executate de către personalul SA „RED-Nord" din contul şi cu materialele solicitantului, ca prestare de servicii.

10. Solicitantul achită costul de proiectare şi tariful de racordare iar operatorul de sistem organizează proiectarea şi montarea instalaţiei de racordare.
11. În cazul în care solicitantul angajează un proiectant şi un electrician autorizat să proiecteze şi să execute instalaţia de racordare, după executarea şi recepţia instalaţiei de racordare solicitantul achită tariful de punere sub tensiune.
12. În cazul consumatorilor noncasnici/producătorilor, după admiterea în exploatare a instalaţiei, părţile (solicitantul şi operatorul de sistem), de comun acord, stabilesc punctul de delimitare a instalaţiilor electrice şi semnează Actul de delimitare. Procesul verbal de dare în exploatare a echipamentului de măsurare şi Convenţia de interacţiune, care se prezintă de către operatorul de sistem în ziua finalizării instalaţiei de racordare, conform contractului de racordare.
13. Cerinţe referitor la valoarea factorului de putere: **cos φ nu mai mic de 0,92, în caz de necesitate, să fie instalat utilaj pentru compensarea energiei reactive, dotat cu reglare automată.**
14. Cerinţe de protecţie contra fulger: **Conform NAIE şi "Directivelor cu privire la protecţia contra fulgerului".**
15. Valoarea minimală a curentului de scurtcircuit în punctul de racordare la reţeaua electrică: **ID-0,4 kV, PT712ZS17F5 (250 kVA): Is.c. = 2075 A.**
16. Valoarea maximală a curentului de scurtcircuit în punctul de racordare la reţeaua electrică:
17. Cerinţe de protecţie prin relee: **Conform NAIE (**Norme de amenajare a instalaţiilor electrice**).**
18. Cerinţe faţă de izolaţie şi protecţia contra supratensiuni:

Nr. 972 din "20" martie 2023. Valabil până la "20" martie 2024.

Temporar, „ Stație de epurare " în r-nul. Soroca, com. Vasilcău, extravilan. Bun imobil cu nr. cadastral: 7857210.028, P = 100 kW.

18.1. De prevăzut conform p. 7.1.22, NAIE, ediţia VII, limitatoare a supratensiunilor de impuls (atmosferice) şi de comutaţie.

18.2. Se recomandă utilizarea declanşatoarelor independente sau relee cu funcţii de protecţie împotriva variaţiilor lente şi rapide (supratensiuni) ale tensiunii.

19. Cerinţe faţă de automatizare: **Conform NAIE.**

20. Cerinţe faţă de echipamentul de măsurare:

20.1. Echipamentul de măsurare a energiei electrice de montat în cutie de protecţie omologată, dotată cu întrerupător conform sarcinii solicitate şi constructiv executată cu două uşi: uşa exterioară, dotată cu lacăt tipizat, având accesul liber a furnizorului/distribuţie şi a clientului; uşa interioară cu lacăt tipizat, având accesul liber numai a furnizorului/distribuţie şi posibilitatea sigilării lacătului.

20.2 Cutia de protecţie a echipamentului de măsurare a energiei electrice de instalat, în incinta clientului, partea exterioară a proprietăţii (lotului de teren), sau încorporată, ori alipită la partea exterioară a gardului/zidului în loc accesibil pentru control şi exploatare.

20.3. Cerinţe privind utilizarea contorului:

20.3.1. Tipul, parametrii şi caracteristicile tehnice a contorului de energie electrică trebuie să corespundă prevederilor Regulamentul privind măsurarea energiei electrice în scopuri comerciale aprobat prin Hotărârea ANRE nr. 74 din 25.02.2022.

20.3.2. Se recomandă completarea contoarelor de măsură a energiei electrice cu modul de telecomunicaţie GSM/GPRS,RS-485, producător Landis+Gyr, Elveţia, după caz.

20.3.3. In caz de procurare a echipamentului de măsurare de la alt furnizor decât operatorul reţelei de distribuţie, la momentul coordonării întregului proiect se va coordona şi echipamentul de evidenţă.

20.3.4. Contorul de energie electrică trebuie să fie legalizat şi verificat metrologic in modul stabilit de Sistemul Naţional de Metrologie.

21. Alte cerinţe:

21.1 De executat elaborarea proiectului în conformitate cu cerințele Hotărîrii de Guvern nr. 361 din 25.06.1996 „Cu privire la asigurarea calității construcțiilor".

21.2 Coordonarea corespunderii cerințelor de racordare, conform avizului dat, cu operatorul de sistem, este obligatorie. O copie a proiectului coordonat rămâne la operatorul de sistem. Coordonarea corespunderii cerințelor de racordare, conform avizului dat a proiectului respectiv se efectuează de către operatorul de sistem, în termen de cel mult 10 zile de la data solicitării. În cazul proiectelor pentru racordarea la rețelele electrice cu tensiunea mai mare sau egală cu 35kV a centralelor electrice, termenul de coordonare a proiectului este de 30 de zile.

21.3 Legarea la pământ și îndeplinirea măsurilor contra electrocutării să se efectueze în conformitate cu Normele de amenajare a instalațiilor electrice (NAIE).

În atenţia solicitantului

1. În cazul în care solicitantul (potenţial utilizator de sistem) nu este de acord cu condiţiile indicate în aviz, el este în drept să se adreseze la Agenţia Naţională pentru Reglementare în Energetică.
2. După obţinerea avizului de racordare solicitantul (potenţial utilizator de sistem) este in drept să solicite, operatorului de sistem proiectarea şi executarea instalaţiei de racordare după încheierea contractului de racordare şi achitarea de către solicitant a costurilor de proiectare şi a tarifului de racordare.
3. După îndeplinirea condiţiilor incluse în avizul de racordare solicitantul (potenţial utilizator de sistem):

A. procedează conform art.48 din Legea cu privire la energia electrică în vederea obţinerii actului de corespundere a instalaţiilor electrice ale solicitantului;

B. stabileşte împreună cu operatorul de sistem în baza actului de corespundere a instalaţiilor electrice ale solicitantului (potenţial utilizator de sistem), punctul de delimitare a instalaţiilor electrice, prin întocmirea de către operatorul de sistem a actului de delimitare şi semnarea lui de către părţi;

C. achită tarifl de punere sub tensiune.

4. Racordarea şi punerea sub tensiune a instalaţilor electrice ale solicitantului se efectuează în termen de cel mult 2 zile lucrătoare din momentul achitării tarifului de punere sub tensiune.

Notă: Pentru consumatorii casnici nu este obligatorie întocmirea şi semnarea actului de delimitare şi Convenţiei de interacţiune.

A aprobat: Director tehnic S.A. "RED - Nord" ***Viorel Corbu*** _____

A verificat: Şef SDR S.A. „RED-Nord" ***Pulbere Ed.*** _____

A eliberat: _____
/semnătura/ /numele, prenumele/

A primit: _____
/semnătura/ /numele, prenumele/

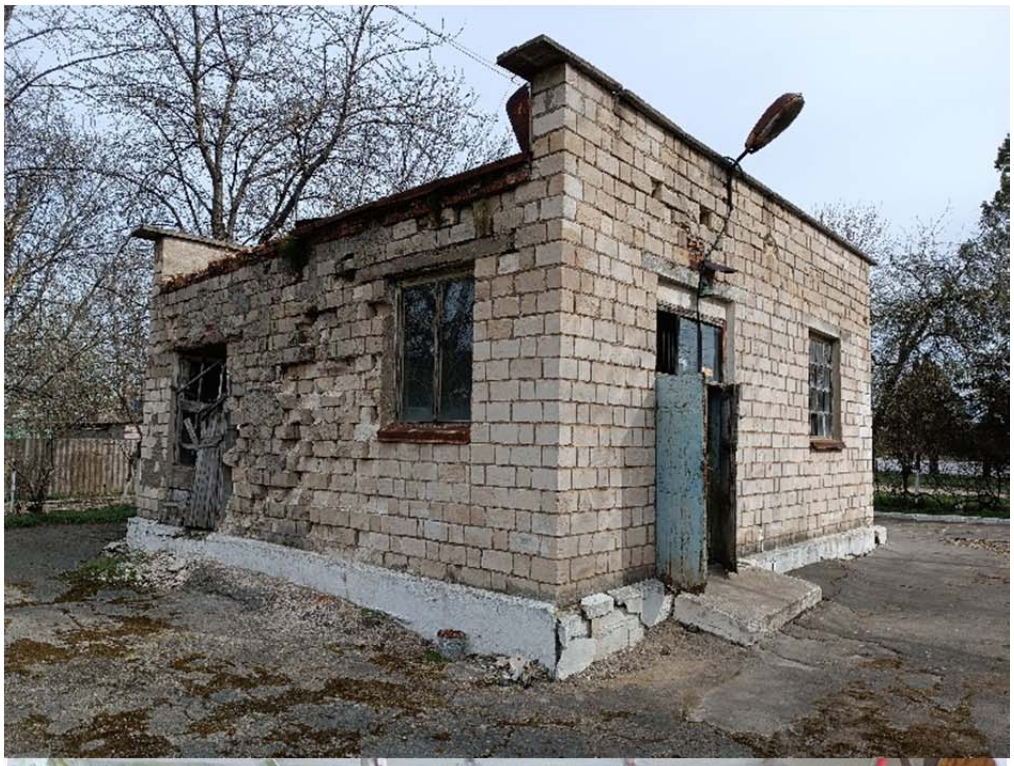
Termenul de valabilitate al avizului extins până la „ " 202

A aprobat: _____ _____ _____
/Funcţia/ /semnătura/ /numele, prenumele/

Executant: Grosu Mihail (0-231-599-24)

Annex 4. CPS and SPS photos

CPS



SPS