

REQUEST FOR PROPOSALS

**Finland Ukraine Trust Fund
FI05/06/2020/KVC-013-TA Opportunities for Demand Response in Ukrainian
Irrigation and lift pumping stations (Scoping Study)**

Country: Ukraine

**Client: NEFCO, represented by Elomatic Ltd. as the Coordination and
Management Consultant (CMC) for the Finland Ukraine Trust Fund**

11.11.2020

Section 1 – Letter of Invitation

Section 1 – Letter of Invitation

Helsinki, 11.11.2020

Dear Sir/Madam,

Funds of up to EUR 120,000 (one hundred twenty thousand euros) will be allocated from the Finland Ukraine Trust Fund, administered by NEFCO for consulting services to the development “FI05/06/2020/KVC-013-TA Opportunities for Demand Response in Ukrainian Irrigation and lift pumping stations (Scoping Study)” (SS). This amount includes a five (5) % provision for contingencies.

The overall objectives of the assignment are as follows:

- Assess the possibility of the practical implementation of the Demand Response in the irrigation and water supply pumping stations in Ukraine
- Estimate the electrical capacity of the demand response which can be used by the Ukrenergo
- Provide the recommendations for the further development

In order to meet the objectives above, the Consultant shall carry out the following tasks:

- Engage Stakeholders
- Study Technical Applicability of DR for Irrigation and Water/wastewater infrastructure
- Collect and analyse data for main irrigation infrastructure
- Analyse the Ukrainian grid situation
- Carry out an analysis of potential impacts of the Demand Response
- Identify the regulatory gaps
- Prepare a high-level roadmap

We refer to the Terms of Reference for more detailed information about the objectives and tasks.

The Consultant is supposed to establish (with the assistance of Ukrenergo and SAEE) the connections with the relevant water utilities and State Agency of Water Resources, pro-actively convince them in cooperation in the present study and in the providing the Demand Response services.

Elomatic Ltd. (“Elomatic”) as the Coordination and Management Consultant (hereinafter referred as to “CMC”) now invites proposals to provide their services for following consulting services: “Opportunities for Demand Response in Ukrainian Irrigation and lift pumping stations (Scoping Study)”. The details of the required services are provided in the attached Terms of Reference. Contract negotiations will be carried out and an eventual consulting contract will be signed by NEFCO.

Section 1 – Letter of Invitation

Eligibility

Funding is tied to **Finnish content**, meaning that each project financed by the FUTF must have a Finnish interest in the form of consulting, supplies or investment. The level of the Finnish content is **at least 30%** of the total value of expert fees in the proposal. The consultants selected shall be mainly firms registered in Finland.

Indication of Interest

Any questions on the Terms of Reference or the other documentation in the RFP shall be provided in writing to Elomatic by e-mail: Jarkko.olkinuora@elomatic.com with copy to andrew@u-t-a.co.uk no later than **3.12.2020** after which all questions will be compiled by Elomatic without any editing in the form they are sent to Elomatic. Answers to the questions are submitted by e-mail to all Consultants that have confirmed their intent to prepare a proposal.

Please inform Elomatic by e-mail: Jarkko.olkinuora@elomatic.com with copy to andrew@u-t-a.co.uk, not later than 23.11.2020:

- (a) whether you intend to submit a proposal.
- (b) whether you will submit a proposal alone or intend to enhance your experience by associating with other firm(s).

Submission of Proposals

Proposals must be submitted to Elomatic no later than at **16:00 (Helsinki time) on 16.12.2020** (submission date). Elomatic may at its discretion extend the deadline for submission of proposals. Belated proposals will be rejected and returned unopened.

The proposal shall be divided into two parts: a technical proposal and a financial proposal. The requirements for the proposals are described in detail in Section 2 – Instructions to Consultants. The attached standard forms are to be used for the purpose.

Proposals shall be submitted in English and must remain valid for 90 (ninety) days after the proposal submission deadline. Consultants willing to prepare and submit a proposal are responsible for all associated costs.

The proposals shall be sent to Elomatic using secure encrypted e-mails, in two separate emails:

Email A: Technical Proposal

The Technical Proposal shall be sent to the email Jarkko.olkinuora@elomatic.com with copy to andrew@u-t-a.co.uk with title “FI05/06/2020/KVC-013-TA Opportunities for Demand Response in Ukrainian Irrigation and lift pumping stations (Scoping Study); Technical Proposal”.

Email B: Financial Proposal

The Financial Proposal shall be sent as a reply to the email from Elomatic with title “FI05/06/2020/ KVC-013-TA Opportunities for Demand Response in Ukrainian Irrigation and

Section 1 – Letter of Invitation

lift pumping stations (Scoping Study); Financial Proposal”. This email will be sent only to the Bidders that have confirmed that they will submit their proposal. The passcode shall be sent to as a SMS to number +358 400 805056.

A consultant will be selected under **quality and cost-based selection method** and procedures described in this RFP, in accordance with NEFCO’s Procurement Guidelines available at www.nefco.org.

This RFP includes the following documents:

Section 1 - Letter of Invitation

Section 2 - Instructions to Consultants

Section 3 - Technical Proposal - Standard Forms

Section 4 - Financial Proposal - Standard Forms

Annex 1: General Conditions of Contract for Consultant’s Services

Annex 2: Terms of Reference

Yours sincerely,



Jarkko Olkinuora
Project Director
Elomatic Ltd



Andriy Levkonyuk
Team Leader
UTA Ltd

Section 2 – Instructions to Consultants

Section 2 – Instructions to Consultants

1. Rules concerning nationality of consultants

The funds used for this consultancy assignment are made available from the Finland Ukraine Trust Fund through NEFCO. According to the terms and conditions on the operation of the Finland Ukraine Trust Fund, there are some provisions that shall be taken into account when preparing the proposals, namely:

- Procurement is to be tied to Finnish content, meaning that each project must have a Finnish interest in the form of consulting, supplies or investment. The level of the Finnish content is at least 30% of the total value of the project. The consultants selected shall be mainly firms registered in Finland.

2. Preparation and Submission of Proposals

- 2.1. Consultants submitting proposals are expected to examine carefully and respect all instructions, forms, General Terms and Conditions, Terms of Reference and specifications contained in this Request for Proposals. Failure to submit a proposal containing all the required information and documentation within the deadline specified in the Letter of Invitation may result in rejection of the proposal. The standard forms in Sections 3 and 4 of this Request for Proposals shall be used as applicable.
- 2.2. Consultants shall submit technical and financial proposals in separate emails marked **“Technical Proposal”** and **“Financial Proposal”**, as appropriate. No financial data of any sort shall be included in the technical proposal. Only emails containing technical proposals shall be opened at the time of submission of proposals. The financial proposals will be kept unopened and in safe custody until the technical evaluation is completed. **Elomatic is keeping a log concerning opening of the emails containing proposals.**
- 2.3. **Technical Proposal** (not exceeding 20 pages, excluding CVs)
Consultant’s technical proposal shall demonstrate the firm’s knowledge of the requirements of the assignment and its understanding of the requisite tasks set forth in the scope of work of the Terms of Reference. Information must be provided on the firm and any subconsulting firm associated with for the purpose of the assignment. Provision of the requested information, in full, must be presented as follows:
 - (a) A brief description of the firm, an outline of the firm’s recent experience of assignments of a similar nature and specifically the firm’s previous work, especially in the project country. Information on the current workload of the firm in the relevant areas of this assignment shall also be presented.
 - (b) Comments or suggestions, if any, on the Terms of Reference designed to improve performance in carrying out the assignment.

Section 2 – Instructions to Consultants

- (c) Comments and elaborations on general approach and methodology.
- (d) Composition of the team which the firm proposes to provide in the field and in the home office, together with curricula vitae of each individual team member and the specific task(s) to which each team member would be assigned. The team leader and the key experts listed in the evaluation criteria table (section 3.6 of the Instructions to Consultants) shall be specifically identified. Members of the team shall have requisite experience outside their own country, preferably under conditions similar to those prevailing in the project country. A good working knowledge of English is essential for the staff. Proficiency in Ukrainian and/or Russian is an additional merit. The language conditions for the assignment are stated in the Terms of Reference. If the firm proposes to have a member of the consultant's home office responsible for the supervision of the team in the field, similar details shall be given with the curricula vitae of that member.
- (e) Work programme including a bar chart and a staffing schedule. The bar chart shall indicate estimates of the duration and total staff days, weeks or months that would be provided for each task. The staffing schedule shall indicate clearly the estimated duration (in both the home office and in the field) and the probable timing of the assignment of each professional (both foreign and local).
- (f) Description of office space, vehicles, equipment, local counterpart support etc. required in the field for carrying out the proposed services.

2.4. Financial Proposal

- (a) The firm's financial proposal shall be denominated in EUR. The costs shown shall include a detailed breakdown of (i) *remuneration* for the number of days/weeks/months of each team member to be assigned and the related unit rates, (ii) *direct expenses* in respect of subsistence costs and housing allowances and (iii) *all reimbursable expenses*.
- (b) Financial proposals as submitted by the firm will be considered in the evaluation and selection of consultants. However, each element of the financial proposal of the selected firm will be reviewed during contract negotiations for determining the final contract price.
- (c) **Audit.** NEFCO retains the right to audit, both during and after the assignment, the selected firm's accounts and time and cost records relevant to the services provided, including such accounts and records as will enable verification of the costs related to the assignment.
- (d) **Funds.** The amount of funds allocated for this assignment is stated in the Letter of Invitation, exclusive of VAT. The financial proposal shall cover all foreign and local costs of services for this assignment including costs of staff in the field and in the home office. The financial proposal shall be based on a minimum of home office contribution during the assignment. It shall also cover international travel (economy class or

Section 2 – Instructions to Consultants

equivalent), preparation of final reports, equipment, insurance, office supplies, subsistence, local transport, facilities, equipment, and all related expenses. The consultant shall be responsible for all direct and indirect tax liabilities (if any) arising out of or connected to the performance of the services wherever they arise.

The rates and prices shall be fixed for the duration of the assignment and no currency fluctuation or other adjustments will be made.

- (e) **Contract.** A lump-sum contract will be concluded for the assignment.

3. Evaluation of Proposals

- 3.1. Evaluation of the proposals will be carried out by an evaluation committee appointed by Elomatic.
- 3.2. A two-stage procedure is adopted for evaluating the proposals. The technical proposals will be evaluated first, merit points awarded and the proposals ranked in order of their respective merit points, prior to the opening and evaluation of financial proposals. Quality of the technical proposal, particularly that of the staff proposed, shall be the principal criterion for evaluation of proposals and selection of consultants.
- 3.3. **Technical proposals** shall be evaluated and merit points awarded based on the following factors:
 - (a) The firm's experience in the disciplines forming part of the total assignment, with specific reference to experience in Ukraine in general;
 - (b) The approach to the assignment, the suggested work programme and organisation and composition of the proposed team of experts, plus comments, if any, on methodology in response to the Terms of Reference; and
 - (c) The qualifications, experience and competence of the experts proposed for the assignment.

See further the scoring table below. All evaluations will be made relating to the Required Qualifications in the Terms of Reference.

- 3.4. A technical proposal may be treated as non-responsive if information with respect to any of the factors (a), (b) or (c) as requested above in section 3.3 is omitted. Only firms (i) awarded a minimum of 70 technical proposal merit points and (ii) having technical merit points within 15 points of the highest technical score will be considered for the second stage (financial evaluation). If no firm scores the required minimum of technical points, Elomatic reserves the right to negotiate with the firm scoring the highest technical points, or to reject all proposals.
- 3.5. A firm will be excluded from the evaluation if, at the discretion of Elomatic, the firm has been, or might be placed, in a conflict of interest position in the procurement process or the performance of the contract. Firms, which believe such a situation may exist, shall seek guidance from Elomatic prior to preparing the technical proposal.

Section 2 – Instructions to Consultants

3.6. The specific evaluation criteria are listed below:

PRINCIPAL FACTORS IN EVALUATION		Maximum points
1. Experience of Consulting firm		
a) Experience from similar projects		10
b) Experience from Eastern Europe and Ukraine		5
Subtotal 1		15
2. Approach and methodology		
a) Relevance to the Terms of Reference		20
b) Suggested work programme		5
c) Staffing plan		5
Subtotal 2		30
3. Qualifications and competence of key experts		
a) Project Manager		20
b) Water expert		15
c) Technical Expert in pumping/automation systems		10
d) Local Experts		10
Subtotal 3		55
TOTAL		100

3.7. *The financial proposals* will be opened and evaluated only after the technical evaluation has been completed and merit points awarded to each proposal. The financial proposal envelopes of only those firms that have qualified for the financial evaluation in accordance with section 3.4 above will be opened for financial evaluation. The financial proposals of the remaining firms will remain unopened and will be deleted, after NEFCO has awarded a contract to the selected firm.

3.8. **Correction of Errors.** Activities and items described in the technical proposal but not priced in the financial proposal shall be assumed to be included in the prices of other activities or items, and no corrections are made to the financial proposal.

Lump-sum contract. The consultant is deemed to have included all prices in the financial proposal, so neither arithmetical corrections nor price adjustments will be made. The total price, net of VAT, specified in the financial proposal (Form FIN-1) will be considered as the offered price.

3.9. The financial proposal representing the lowest evaluated price will be given the score 100; others are rated as follows:

$$\text{Financial score of firm A} = \text{lowest evaluated price} / \text{price of firm A} \times 100;$$

If the financial proposal exceeds the indicated available funds, it may be rejected at the discretion of Elomatic.

Section 2 – Instructions to Consultants

- 3.10. In the final evaluation combining the technical and financial scores, the technical merit score will be given a weight of 80 percent and the financial score shall be given a weight of 20 percent. The firm with the highest evaluated weighted score will be invited to contract negotiations.

4. Contract Negotiations and Award

- 4.1. Elomatic and NEFCO reserve the right to reject all proposals.
- 4.2. The consultancy services are expected to commence no later than within 14 days after the conclusion of the consultancy agreement. Contract negotiations will be carried out by representatives of NEFCO.
- 4.3. The costs of preparing a proposal and of negotiating and concluding a contract including the costs of travel to participate in possible pre-bid meeting are not reimbursable as costs of the assignment.
- 4.4. NEFCO expects to conclude a contract on the basis of the experts named in the proposal and will require, in the contract negotiations, assurances that these experts can, in fact, be made available. NEFCO will, at its sole discretion, consider substitutions only in case the commencement of the assignment would otherwise be delayed, for reasons unrelated to selected consultant, or, exceptionally, because of incapacity of an expert for reasons of health. The desire of a firm to use an expert on another project will not be accepted as a reason for substitution of staff and may result in the rejection of the firm in question.
- 4.5. The firm that submitted the first-ranked proposal will be invited to discuss technical and financial details of the proposal and the terms of the contract without delay. Discussions will commence with a review of the technical proposal, the proposed approach and work plan, staffing and any suggestions the consultant may have made to improve the Terms of Reference. Agreements will be reached, first, on the final Terms of Reference, work plan, time schedule, the staff to be employed, their periods of work in the field and in the home office, frequency and timing of home travel, housing costs, budget to be allocated for the provision of office equipment, and next, on the facilities and services to be provided by local counterparts. Thereafter, financial negotiations will begin with discussions of the proposed fee rates for each team member, and of other costs as indicated by the consultants. In subsequent negotiations, the reasonableness of each item included in the Financial Proposal of the selected firm will be assessed. Consultants shall be prepared to disclose during negotiation data backing up the consultant fees and other costs and be aware and accept that the proposed rates and other costs will be subject to scrutiny and possible negotiation.
- 4.6. The representatives of the consulting firm invited for contract negotiations must be authorised (on behalf of all bidding partners) to discuss and agree on the technical and financial aspects of the proposal as well as the terms and conditions of contract and to conclude a binding agreement. Should the discussions with the first invited firm prove unproductive and/or unsatisfactory, the firm submitting the next-ranked proposal will be invited instead (and so on, if necessary, until an agreement is concluded). As soon as the contract is signed with the

Section 2 – Instructions to Consultants

finally selected consulting firm (the “Consultant”), other short-listed firms will be informed accordingly by Elomatic.

4.7. Payments will be made to the Consultant from the “Finland Ukraine Trust Fund”. The Consultant will be paid only for work performed based on the payment schedule finalised at the contract negotiations. Payments will be made in 30 days after receiving the Consultant’s invoice.

4.8. The payment schedule-based milestones of the lump-sum contract are the following:

- Inception Report (20%);
- Acceptance of Draft Scoping Study Report (60%);
- Acceptance of Final Scoping Study Report (20%).

Section 3 – Technical Proposal – Standard Forms

FORM TECH-1 TECHNICAL PROPOSAL SUBMISSION FORM

[*Location, Date*]

To: Elomatic

Dear Sirs,

We, the undersigned, offer to provide the consulting services for development “FI05/06/2020/ KVC-013-TA Opportunities for Demand Response in Ukrainian Irrigation and lift pumping stations (Scoping Study)” in accordance with your Request for Proposals dated [*insert date*] and our Proposal. We are hereby submitting our Proposal, which includes this Technical Proposal, and a Financial Proposal sealed under a separate envelope.

[We are submitting our Proposal in association with: [*insert a list with full name and address of each associated Consultant/member of Consortium*].]

We hereby declare that all the information and statements made in this Proposal are true and accept that any misinterpretation or misrepresentation contained in it may lead to our disqualification.

If negotiations are held during the period of validity of the Proposal as defined in the Letter of Invitation, we undertake to negotiate on the basis of the proposed staff. Our Proposal is binding upon us during this period, and subject to the modifications resulting from Contract negotiations.

We undertake, if our Proposal is accepted, to initiate the consulting services related to the assignment not later than the date indicated in Clause 4.2 of the Instructions to Consultants.

We understand that you are not bound to accept any proposal you receive.

We hereby accept the General Conditions of Contract for Consultant’s Services attached as Annex 1 to your RFP.

Yours sincerely,

Authorized Signature [*In full and the original copy initialized*]:

Name and Title of Signatory:

Name of Firm:

Address:

Section 3 – Technical Proposal – Standard Forms

FORM TECH-2 CONSULTANT'S ORGANISATION AND EXPERIENCE

A - Consultant's Organisation

Provide here a brief (max 2 pages) description of the background and organisation of your firm/entity as well as of each subconsultant for this assignment.

B - Consultant's Experience

Please provide information on each assignment, relevant for this assignment, for which your firm and each joint venture/consortium partner and subconsultant was/were legally contracted either individually as a corporate entity or as one of the major companies within a consortium, for carrying out consulting services similar to the ones requested under this assignment (max 1 page per project and 5 pages in total) including information on contract value, contracting entity/client, project location/country, duration (months and years), expert months provided (if different from duration), main activities and objectives.

Section 3 – Technical Proposal – Standard Forms

FORM TECH-3

COMMENTS AND SUGGESTIONS ON THE TERMS OF REFERENCE

TECH-3 shall be limited to three (3) pages max.

A – Comments and Suggestions on the Terms of Reference

Present and justify here any modifications or improvement to the Terms of Reference you are proposing to improve performance in carrying out the assignment (such as deleting some activity you consider unnecessary, or adding another, or proposing a different phasing of the activities). Such suggestions shall be concise and to the point, and incorporated in your Proposal.

Section 3 – Technical Proposal – Standard Forms

FORM TECH-4

DESCRIPTION OF APPROACH, METHODOLOGY AND WORK PLAN FOR PERFORMING THE ASSIGNMENT

TECH-4 shall be limited to twelve (15) pages max.

Technical approach, methodology and work plan are key components of the Technical Proposal. You are suggested to present your Technical Proposal (max 15 pages, inclusive of charts and diagrams) divided into the following three chapters:

- a) Technical Approach and Methodology,
- b) Work Plan, and
- c) Organisation and Staffing.

a) Technical Approach and Methodology. In this chapter you shall explain your understanding of the objectives of the assignment, approach to the services, methodology for carrying out the activities and obtaining the expected output, and the degree of detail of such output. You shall highlight the problems being addressed and their importance, and explain the technical approach you would adopt to address them. You shall also explain the methodologies you propose to adopt and highlight the compatibility of those methodologies with the proposed approach.

b) Work Plan. In this chapter you shall propose the main activities of the assignment, their content and duration, phasing and interrelations, milestones, and delivery dates of the reports. The proposed work plan shall be consistent with the technical approach and methodology, showing understanding of the Terms of Reference and ability to translate them into a feasible work plan. A list of the final documents, including reports, drawings, and tables to be delivered as final output, shall be included here. The work plan shall be consistent with the Work Schedule of Form TECH-8.

c) Organisation and Staffing. In this chapter you shall propose the structure and composition of your team. You shall list the main disciplines of the assignment, the key expert responsible, and proposed technical and support staff.

Section 3 – Technical Proposal – Standard Forms

FORM TECH-6 CURRICULUM VITAE (CV) FOR PROPOSED PROFESSIONAL STAFF

CVs for each of the experts should be limited to four (4) pages max.

CVs may be provided in any format you prefer, but shall as a minimum clarify the following issues for every member of the proposed professional staff:

1. Proposed Position [*only one candidate shall be nominated for each position*]:
2. Name of Firm [*insert name of firm proposing the staff*]:
3. Name of Staff:
4. Date of Birth:
5. Nationality:
6. Education:
7. Membership of Professional Associations:
8. Other Training:
9. Countries of Work Experience:
10. Languages [*for each language indicate proficiency: good, fair, or poor in speaking, reading, and writing*]:
11. Employment Record Relevant to the Assignment:
12. Adequacy for the Assignment: Detailed Tasks Assigned [*list all tasks to be performed under this assignment*] and Reference to Prior Work/Assignments that Best Illustrates Capability to Handle the Assigned Tasks:

Expert's contact information: (e-mail, phone.....)

Certification:

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes myself, my qualifications, and my experience, and I am available to undertake the assignment in case of an award.

Section 3 – Technical Proposal – Standard Forms

I understand that any misstatement or misrepresentation described herein may lead to my disqualification or dismissal by NEFCO, and/or sanctions by NEFCO.

{day/month/year}

Name of Expert

Signature

Date

{day/month/year}

Name of authorized
Representative of the Consultant
(the same who signs the Proposal)

Signature

Date

Section 3 – Technical Proposal – Standard Forms

FORM TECH-7 STAFFING SCHEDULE

For professional staff the input shall be indicated individually; for support staff it shall be indicated by category. Weeks are counted from the start of the assignment. Indicate home and field work separately - field work means work carried out at a place other than in the home office.

No	Name of Staff	Staff input (in the form of a bar chart)														Total staff-day input			
		1	2	3	4	5	6	7	8	9	10	11	12	n	Home	Field	Total		
Foreign																			
1		(Home)																	
		(Field)																	
2																			
n																			
														Subtotal					
Local																			
1		(Home)																	
		(Field)																	
2																			
n																			
														Subtotal					
														Total					

Section 3 – Technical Proposal – Standard Forms

**FORM TECH-8
WORK SCHEDULE**

No.	Activity	Weeks												
		1	2	3	4	5	6	7	8	9	10	11	12	n
1														
2														
3														
4														
5														
n														

Indicate all main activities of the assignment, including delivery of report (e.g inception, interim, and final reports) and other relevant benchmarks. Duration of activities shall be indicated in the form of a bar chart.

Section 3 – Technical Proposal – Standard Forms

FORM TECH-9 COVENANT OF INTEGRITY

**to the Purchaser/Client/Employer/NEFCO
from a Tenderer/Contractor/Supplier/Service Provider/Consultant
to be attached to its tender
(or to the contract in the case of a negotiated procedure)**

“We declare and covenant that neither we nor anyone, including any of our directors, employees, agents, joint venture partners or sub-contractors (“the **Parties**”), where these exist, acting on our behalf with due authority or with our knowledge or consent, or facilitated by us, has engaged, or will engage, in any Prohibited Practices (as defined below) in connection with the tendering process or in the execution or supply of any works, goods or services for [*specify the contract or tender invitation*] (the “**Contract**”) and covenant to so inform you if any instance of any such Prohibited Practices shall come to the attention of any person in our organisation having responsibility for ensuring compliance with this Covenant.

We shall, for the duration of the tender process and, if we are successful in our tender, for the duration of the Contract, appoint and maintain in office an officer, to whom you shall have full and immediate access, having the duty, and the necessary powers, to ensure compliance with this Covenant.

If any of the Parties, where these exist and as applicable, (i) have been convicted in any court of any offence involving Prohibited Practices in connection with any tendering process or provision of works, goods or services during the five (5) years immediately preceding the date of this Covenant, or (ii) have been dismissed or resigned from any employment on the grounds of being implicated in any Prohibited Practices, or (iii) have been excluded from participation in a tendering procedure on the grounds of Prohibited Practices by Nordic Environment Finance Corporation (NEFCO) or by any national or EU Institutions or any international financial institution, or (iv) is under any investigation in relation to Prohibited Practice, we shall give details of any event in (i)-(iv) above together with details of the measures that we have taken, or shall take, to ensure that no Party will commit any Prohibited Practices in connection with the Contract [*give details if necessary*].

In the event that we are awarded the Contract, we grant the Purchaser/Client/Employer/NEFCO and auditors appointed by either of them, as well as any authority or body having competence under relevant legislation, the right of inspection of our records and those of all our sub-contractors under the Contract. We accept to preserve these records generally in accordance with applicable law but in any case for at least six (6) years from the date of performance of the Contract.”

For the purpose of this Covenant, “Prohibited Practices” includes:

- **Corrupt Practice** is the offering, giving, receiving or soliciting, directly or indirectly, anything of value to influence improperly the actions of another party.

Section 3 – Technical Proposal – Standard Forms

- **Fraudulent Practice** is any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation.
- **Coercive Practice** is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of any party to influence improperly the actions of a party.
- **Collusive Practice** is an arrangement between two or more parties designed to achieve an improper purpose, including influencing improperly the actions of another party.
- **Obstructive Practice** is (a) deliberately destroying, falsifying, altering or concealing of evidence material to an investigation related to the Contract; and/or threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to such investigation or from pursuing the investigation, or (b) acts intended to materially impede the exercise of NEFCO's contractual rights of audit or access to information or the rights that any relevant authority has in accordance with any law, regulation or treaty.
- **Money Laundering** is (i) the conversion or transfer of property, knowing that such property is derived from criminal activity or participation in such activity, for the purpose of concealing or disguising the illicit origin of the property or of assisting any person who is involved in such activity to evade the legal consequences of his action;
 - (ii) the concealment or disguise of the true nature, source, location, disposition, movement, rights with respect to, or ownership of property, knowing that such property is derived from criminal activity or from participation in such activity;
 - (iii) the acquisition, possession or use of property, knowing, at the time of receipt, that such property was derived from criminal activity or from participation in such activity;
 - (iv) participation in, association to commit, attempts to commit and aiding, abetting, facilitating and counselling any of the actions mentioned in the foregoing points.
- **Financing of terrorism** is the provision or collection of funds, by any means, directly or indirectly, with the intention that they should be used or in the knowledge that they are to be used, in full or in part, in order to carry out any of the offences within the meaning of Articles 1 to 4 of the Council of the European Union Framework Decision 2002/475/JHA of 13 June 2002 on combating terrorism.

Date:

Signature:

[Name and position]

for and on behalf of

[Name of the firm or joint venture]

Note: When so required by NEFCO this Covenant must be sent to NEFCO together with a copy of the contract documents. In other cases, it must be kept by the Beneficiary and available upon request from NEFCO.

Section 4 – Financial Proposal – Standard Form

FORM FIN-1 FINANCIAL PROPOSAL SUBMISSION FORM

[Location, Date]

To: Elomatic

Dear Sirs:

We, the undersigned, offer to provide the consulting services for development of “FI05/06/2020/ KVC-013-TA Opportunities for Demand Response in Ukrainian Irrigation and lift pumping stations (Scoping Study)” in accordance with your Request for Proposals dated [insert date] and our Technical Proposal. Our attached Financial Proposal is for the **Total Cost of [insert currency and amount(s) in words and figure]**. This amount is exclusive of the applicable VAT].

Our Financial Proposal shall be binding upon us subject to the modifications resulting from the contract negotiations, up to expiration of the validity period of the Proposal as defined in the Letter of Invitation. We understand that any final rates and prices resulting from the contract negotiations will remain fixed until the end of the assignment.

Commissions and gratuities paid or to be paid by us to agents relating to this Proposal and execution of contract, if we are awarded the contract, are listed below:

Name and Address, Amount and Purpose of Commission of Agents, Currency or Gratuity

We understand you are not bound to accept any Proposal you receive.

We remain,

Yours sincerely,

Authorized Signature [*in full and the original copy initialized*]:

Name and Title of Signatory:

Name of Firm:

Address:

Section 4 – Financial Proposal – Standard Forms

FORM FIN-2 SUMMARY OF COSTS

Type of cost	Costs	
	EUR	[currency]
Remuneration		
Reimbursable Expenses		
Subtotals		
Grand total in EUR		

The relevant grand total must coincide with the Total Costs of the Financial Proposal given in Form FIN-1. For each currency, Remuneration and Reimbursable Expenses must respectively coincide with the relevant Total Costs indicated in Forms FIN-3, and FIN-4.

Section 4 – Financial Proposal – Standard Forms

FORM FIN-3 BREAKDOWN OF REMUNERATION

When used for lump-sum contract assignment, information to be provided in this form shall only be used to demonstrate the basis for the calculation of the contract’s ceiling amount and, if needed, to establish payments to the Consultant for possible additional services requested by Elomatic / NEFCO. This form shall not be used as a basis for payments under lump-sum contracts.

A. Remuneration _____								
No.	Name ¹	Position (as in TECH-6)	Person-day Remuneration Rate ²	Time Input in Person/Day (from TECH-6)	{Currency # 1- as in FIN-2}	{Currency # 2- as in FIN-2}	{Currency# 3- as in FIN-2}	{Local Currency- as in FIN-2}
Key Experts								
K-1			[Home]					
			[Field]					
K-2								
Non-Key Experts								
N-1			[Home]					
N-2			[Field]					
Total Costs								

¹ from TECH-5

² indicate number of working hours per day

Section 4 – Financial Proposal – Standard Forms

FORM FIN-4 BREAKDOWN OF REIMBURSABLE EXPENSES

When used for lump-sum contract assignment, information to be provided in this form shall only be used to demonstrate the basis for calculation of the contract ceiling amount and, if needed, to establish payments to the Consultant for possible additional services requested by Elomatic / NEFCO. This form shall not be used as a basis for payments under lump-sum contracts.

B. [Reimbursable] _____								
Nº	Type of [Reimbursable Expenses]	Unit	Unit Cost	Quantity	{Currency # 1- as in FIN-2}	{Currency # 2- as in FIN-2}	{Currency# 3- as in FIN-2}	{Local Currency- as in FIN-2}
	{e.g., subsistence costs**}	{Day}						
	{e.g., International flights}	{Ticket}						
	{e.g., In/out airport transportation}	{Trip}						
	{e.g., Communication costs between Insert place and Insert place}							
	{ e.g., Reproduction of reports}							
	{e.g., Office rent}							
							
	{Training of the project owner's personnel – if required in TOR}							
Total Costs								

NEFCO'S GENERAL TERMS AND CONDITIONS FOR CONSULTANCY SERVICES

1 **RESPONSIBILITY, PROFESSIONAL PRACTICE, INTEGRITY, IMPARTIALITY AND INDEPENDENCE**

- 1.1 The Consultant shall be fully responsible for the Services and perform them in an objective and professional manner in compliance with best industry practice for similar services.
- 1.2 While providing the Services, the Consultant shall protect NEFCO's interests and act dutifully and transparently towards NEFCO.
- 1.3 The Consultant shall not receive or request instructions for the performance of the Services from any other party than NEFCO (unless otherwise explicitly instructed by NEFCO).
- 1.4 The Consultant shall during the Assignment remain financially and otherwise independent of other consultants, manufacturers, suppliers, contractors and other actors and/or factors that may prejudice the Consultant's objectivity. In particular the Consultant shall not accept any referral fee or other compensation from other consultants, manufacturers, suppliers, or contractors recommended by the Consultant.
- 1.5 The Consultant shall promptly inform NEFCO of any assignment or relation with a third party which might affect or be seen to affect the Consultant's impartiality or create a potential conflict of interest in relation to the Assignment.
- 1.6 The Parties are independent parties and the Parties agree that the Agreement shall not be deemed as an employment agreement and that the Consultant is not, nor any other person performing services under this Agreement, engaged by NEFCO as an employee but as an independent consultant and that relevant provisions of the Swedish Employment Protections Act (1982:80) shall not be applicable on the Parties' arrangement under this Agreement.

2 **TIME SCHEDULE, INFORMATION, ASSIGNED PERSONNEL AND COOPERATION WITH THIRD PARTIES**

- 2.1 The Services shall be provided in accordance with the time schedule in the Special Terms and Conditions and as possibly described in more detail in the annexes. The Consultant shall ensure that the agreed time schedule is adhered to.
- 2.2 The Parties shall keep each other timely informed about events or matters relevant for the performance of the Services. The Consultant shall without delay inform NEFCO's Responsible person of any events which have had or are likely to have an adverse impact on the Consultant's provision of the Services within the agreed time schedule and/or otherwise negatively impact the Consultant's performance and/or fulfilment of the Services. Any delay or other underperformance in carrying out the Services shall be subject to the remedies set out in Sections 4, 5 and 16.
- 2.3 The Services shall be carried out personally by the Consultant or the personnel of the Consultant as set out in Section 1 of the Special Terms and Conditions and as possibly described in more detail in the annexes (the "**Assigned Personnel**"). If the Consultant should wish to engage a subcontractor to perform a certain part of the Services, the matter shall be discussed with NEFCO, including its possible effects on the Consultant's remuneration, and can only be done subject to NEFCO's prior written approval. Notwithstanding such approval, the Consultant shall remain fully responsible and liable for the performance of the Services,

including any Services provided by its subcontractors as if they had been carried out by the Consultant.

- 2.4 The Consultant shall, without unreasonable delay and at no cost to NEFCO, be obliged to replace any Assigned Personnel performing the Services, who NEFCO reasonably considers is lacking the necessary competence, whom NEFCO finds it manifestly difficult to collaborate with or whose conduct is inconsistent with what NEFCO reasonably expects. The identity of such replacing personnel as well as any other changes of the Assigned Personnel and any possible effects on the Consultant's remuneration, shall be subject to NEFCO's prior written approval (except if triggered by a *force majeure* situation). If approved by NEFCO, the replacing personnel shall become Assigned Personnel. Any changes in the Assigned Personnel shall not affect the agreed time schedule, in the absence of NEFCO's prior written consent.
- 2.5 If and to the extent relevant, the Consultant shall while providing the Services co-operate with other parties as may be determined by NEFCO.

3 CHANGE REQUEST

- 3.1 NEFCO and/or the Consultant may request the other Party to make changes to the Services to be provided.
- 3.2 In such case, the requesting Party shall submit a written request (the "**Change Request**"). The Change Request shall contain a description of the content of the proposed change as well as the reasons for the change and the effect the change is deemed to have on the Services.
- 3.3 The receiving Party shall within reasonable time review the Change Request in terms of its possible impact on the agreed Total Fee, time schedule and/or other agreed terms and conditions, and each Party shall be entitled to either approve or reject the Change Request.
- 3.4 If the Change Request is accepted by the other Party, the change shall be formalized through both Parties approving it in writing and the change shall thereafter be considered as an amendment to the Agreement.
- 3.5 The Parties agree and acknowledge that comments to form or substance, revision, adjustment, correction and/or supplemental requirements to bring the Services to a final and acceptable/agreed form (including all reasonable incidental work related thereto, such as meetings, telephone calls, correspondence etc.) shall not be considered as changes to the Services in terms of Sections 3.1 to 3.4 above.

4 ERRORS, OMISSIONS AND DELAY

- 4.1 The Consultant shall, at no cost to NEFCO, assume responsibility for correcting any errors and/or omissions in the performance of the Services.
- 4.2 In the event that the Consultant is delayed in performing the Services or a material error, defect and/or non-conformity occurs in the Services, and the situation upon NEFCO's request is not remedied or corrected within 30 (thirty) days to NEFCO's satisfaction, NEFCO shall (without prejudice to NEFCO's other rights under the Agreement, including, without limitation, the right to liquidated damages in accordance with Section 5) have the right to:
- (i) accept the Services in their then current form at a reduced price which corresponds to the value of the actually delivered part; or alternatively;

- (ii) complete itself or appoint a third party to complete the Services at the Consultant's sole cost and expense; or alternatively;
- (iii) terminate the Agreement in whole or in part with immediate effect, while reserving all other rights available to it under the Agreement and applicable law; and in addition to (i) - (iii)
- (iv) seek damages from the Consultant.

5 LIQUIDATED DAMAGES IN CASE OF DELAY

- 5.1 If the Consultant is not able to provide the Services within the agreed time schedule and this is not caused by *force majeure* or circumstances related to NEFCO, then the Consultant shall pay liquidated damages to NEFCO in compensation for the delay.
- 5.2 The liquidated damages shall amount to 0.2 percent of the agreed Total Fee excluding VAT, for each working day the Services are delayed, but in any circumstances limited to a maximum of 50 (fifty) working days. NEFCO shall be entitled to deduct such liquidated damages from any amounts owed by NEFCO to the Consultant under the Agreement.
- 5.3 If only parts of the agreed Services are delayed, the Consultant may request NEFCO to reduce the liquidated damages in such way that the compensation is proportional to the ability of NEFCO to utilise those parts of the Services that have been performed and delivered to NEFCO.
- 5.4 Any claims for liquidated damages shall be presented by NEFCO in writing to the Consultant at the latest 90 (ninety) days from the day on which the Assignment was completed or the Agreement was terminated. If NEFCO should not present a claim to the Consultant within this time limit, NEFCO's right to liquidated damages shall be deemed forfeited.

6 REMUNERATION

- 6.1 The remuneration to be paid by NEFCO to the Consultant in return for the Services shall consist of the fee agreed in the Special Terms and Conditions.
- 6.2 The Total Fee can be either fixed or variable. Variable fees shall be based on performance on a time and material basis.
- 6.3 If agreed in the Special Terms and Conditions, NEFCO shall, against receipts or written clarification, in addition to the Total Fee, pay compensation for the costs listed below:
 - (i) reasonable travel costs in economy class including airport transfers;
 - (ii) reasonable accommodation costs in a standard hotel room including breakfast only; and
 - (iii) other expenditures required for providing the Services.
- 6.4 Notwithstanding Section 6.3, NEFCO will not reimburse (i) travel time, or (ii) travel costs within the Helsinki metropolitan area (meaning a range of sixty (60) kilometres measured from the centre of Helsinki).
- 6.5 NEFCO will not pay any daily allowances to the Consultant.

7 TERMS OF PAYMENT

- 7.1 Payment(s) will be made by NEFCO in accordance with the payment schedule agreed in the Special Terms and Conditions. If no payment schedule is agreed, the Consultant shall invoice NEFCO monthly in arrears after the Services have been performed by the Consultant and accepted by NEFCO.
- 7.2 According to Article 9 of the Agreement concerning NEFCO¹, NEFCO is in the Nordic countries exempted from taxation, including VAT, in relation to its official activities. Also, as an international organization, NEFCO is exempted from VAT within the European Union².
- 7.3 Invoices specifying the nature and extent of the Services performed will be paid by NEFCO within 30 (thirty) days from the date of receipt, subject to NEFCO's acceptance of the Services as satisfactory. Should an invoice or a part thereof be disputed by NEFCO, NEFCO will up-front pay the undisputed part.
- 7.4 For NEFCO to be able to make the first payment, the Consultant shall submit an original written confirmation issued by the account-holding bank confirming that the Consultant is the legal owner of, and has sole access to, the bank account to which the payment is requested to be made.
- 7.5 At the latest within 90 (ninety) days after completion of the Assignment, the Consultant shall submit a final invoice specifying any outstanding payments with respect to the Services provided under the Assignment. NEFCO's payment of the final invoice will only take place once NEFCO has agreed to that the Assignment has been completed. Any subsequent claim for payment shall entail no more than the right of set-off of any payments owed by NEFCO to the Consultant, unless the Consultant, within the specified time, gives written notification to the effect that an outstanding payment, unknown to him at that time, may lead to a further claim, or can show that the claim is based on the outstanding sum that was unknown to him at the time.
- 7.6 If NEFCO should not make an undisputed payment on time, the Consultant shall be entitled to request interest on the overdue amount if the claim is presented within reasonable time not exceeding 45 (forty-five) days after the overdue date, at an annual interest rate of 9% p.a. (nine per cent per annum) from and including the due date to but excluding the date of actual payment.

8 LIABILITY AND LIMITATION OF LIABILITY

- 8.1 The Consultant shall, subject to the limitations specified below in this Section 8 and any additional provisions agreed in the Special Terms and Conditions, be liable for any damage that the Consultant, its subcontractors or any other party engaged by the Consultant for the performance of the Services, may cause NEFCO to incur as a consequence of the Consultant's wilful misconduct, negligence or breach of the Agreement.
- 8.2 NEFCO's acceptance of the Services shall not release the Consultant from liability.

¹Agreement between Denmark, Finland, Iceland, Norway and Sweden concerning the Nordic Environment Finance Corporation, available at NEFCO's webpage.

² On the basis of Article 151(1), point b, of Directive 2006/112/EC on the common system of value added tax (as amended by 2009/162/EC) and Article 12(1), point b, of Directive 2008/118/EC concerning the general arrangements for excise duty.

8.3 The total aggregate liability of both Parties under or in relation to the Agreement shall be limited to the higher of (i) 50,000 euro; or (ii) the value of the Total Fee and possible costs compensation paid or payable by NEFCO to the Consultant under the Agreement.

8.4 The limitation of liability set out in this Section 8 shall not apply in case of gross negligence, fraud, wilful misconduct, death or personal injury, material breach of the Agreement or breach of the Agreement in relation to the intellectual property rights or indemnification provisions set out in Section 9 or in relation to the confidentiality provision in Section 12. Further, the limitation of liability set out in this Section 8 shall not apply in case the Consultant is liable for payments to any third party in accordance with Section 4.2.

9 RIGHTS OF OWNERSHIP, INTELLECTUAL PROPERTY RIGHTS AND INDEMNIFICATION

9.1 All rights, title, interest and all intellectual property rights in and to any pre-existing material, information, data, programs, models, methods and/or work created by a Party outside the scope of this Agreement or prior to the execution of this Agreement, shall vest in and remain the sole and exclusive property of that Party.

9.2 All rights, title, interest and all intellectual property rights in or relating to the Services shall vest exclusively in NEFCO. The Consultant may retain copies of documents and data, but shall not be entitled to use this material for purposes unrelated to the Services without NEFCO's prior written consent.

9.3 Equipment, vehicles and materials made available to the Consultant by NEFCO, or purchased by the Consultant wholly or partly with funds supplied or reimbursed by NEFCO under this Agreement shall be the property of NEFCO and shall be marked as such. Upon completion of the Services or termination of the Agreement, the Consultant shall make available to NEFCO an inventory of such equipment, vehicles and materials and shall dispose of same equipment, vehicles and materials in accordance with NEFCO's instructions.

9.4 For the avoidance of doubt, nothing in this Agreement shall limit a Party's right to use the general professional skills, experience and know-how acquired and/or applied by it under or in relation to this Agreement for the benefit of itself or a third party.

9.5 The Consultant shall indemnify, defend and hold NEFCO harmless from any and all claims, suits, actions or demands asserted against NEFCO world-wide, and against all liabilities, damages, losses, costs and expenses (including but not limited to attorney's fees) which NEFCO may incur when arising directly or indirectly from any infringement or alleged infringement of any patent, trademark, copyright or design or any other intellectual property right of a third party, if such claim, demand, suit or action may be attributable to the Consultant's provision of the Services. Should an intellectual property claim, or threat for such claim, arise, the Parties shall seek to agree on appropriate measures to address the matter. The cost for the defence against any such claim shall be entirely borne and covered by the Consultant as set out above.

9.6 No limitation(s) of liability set out in the Agreement or otherwise shall apply to the indemnification undertaking to hold NEFCO harmless as set out in Section 9.5 above.

10 INSURANCE

- 10.1 The Consultant shall maintain adequate insurance for any liability under this Agreement, including for safeguarding of the documents and other property of NEFCO, which may be in the Consultant's possession during the Assignment.
- 10.2 Unless otherwise agreed between the Parties, the Consultant shall maintain adequate professional liability insurance throughout the entire period of the Assignment.
- 10.3 The Consultant shall be responsible for insuring its Assigned Personnel, and for ensuring that any subcontractor(s) is similarly insured, against death, injury, loss of property and illness. The Consultant shall also be responsible for ensuring that adequate travel insurance is in place.
- 10.4 Upon NEFCO's request, the Consultant shall provide evidence demonstrating that sufficient insurance is in place.

11 LEGAL STATUS OF NEFCO

- 11.1 The Consultant expressly acknowledges NEFCO's legal status as an international organisation, vested with certain immunities and privileges, and the impact this special legal status has on NEFCO's contractual obligations as follows:
- (i) NEFCO is a legal person under international law and is governed solely by and operates under its constituent documents;
 - (ii) NEFCO enjoys immunity from jurisdiction, which means that the chosen dispute resolution mechanism shall be arbitration and only a final arbitral award is binding upon NEFCO;
 - (iii) NEFCO itself, its property and assets (wherever located and by whomsoever held) are immune from search, requisition, confiscation and expropriation by executive and legislative actions (including any interim court orders, injunctive reliefs etc.);
 - (iv) NEFCO's premises, archives, and all documents belonging to NEFCO or held by NEFCO are inviolable and the communications of NEFCO are protected by bank secrecy and are confidential; and
 - (v) NEFCO has its own established governing and supervisory bodies and, therefore, NEFCO is exempted from audit inspections and disclosure requirements under national laws or as otherwise may be imposed on a party through a contractual relationship.
- 11.2 Nothing in this Agreement shall be construed as a waiver, renunciation or other modification of any immunities, privileges or exemptions accorded to NEFCO pursuant to the Agreement concerning NEFCO, any international convention or any applicable law. Notwithstanding the foregoing, NEFCO has made an express submission to arbitration under Section 15 and accordingly, and without prejudice to its other privileges and immunities (including, without limitation, the inviolability of its archives), it acknowledges that it does not have immunity from suit and legal process in respect of the enforcement of a final arbitral award duly made against it as a result of its express submission to arbitration pursuant to Section 15.

12 CONFIDENTIALITY

- 12.1 The Consultant understands and agrees that as part of the Assignment, the Consultant may get access to information (in hard copy, electronic format or verbally) that relates to NEFCO's or NEFCO's clients' and cooperation partners' past, present or future operations, businesses, research, development, finances, services and technical know-how or knowledge (the "**Confidential Information**"). Any information related to NEFCO and its activities is protected by bank secrecy and shall therefore be treated as Confidential Information and be subject to the confidentiality obligation set out in this Section 12. Furthermore, all information contained in this Agreement shall be deemed Confidential Information.
- 12.2 The Consultant undertakes to keep confidential any Confidential Information it may receive from NEFCO, a client of NEFCO or any third party under or in connection with this Agreement and, save as specifically permitted below, not to divulge this information to any third party without NEFCO's prior written consent. The Consultant undertakes to use the Confidential Information solely for the purposes of this Agreement.
- 12.3 Save as may follow from statutory obligations of confidentiality, the above shall not apply to any information that:
- (i) is in the public domain at the time of disclosure or later becomes a part of the public domain through no breach of this Agreement;
 - (ii) is received by the Consultant in good faith from a third party who is under no obligation of confidentiality with respect thereto;
 - (iii) is known to the Consultant without any obligation of confidentiality prior to disclosure by NEFCO;
 - (iv) is independently developed by the Consultant without utilizing the Confidential Information as evidenced by the Consultant's written records;
 - (v) is expressly authorised to be disclosed by NEFCO in writing; or
 - (vi) is required to be disclosed by law or in accordance with the requirement of a supervisory or regulatory authority to which the Consultant is subject to. For the sake of clarity, the Consultant expressly acknowledges that NEFCO enjoys inviolability of its archives and communication, including any data, information and material, and therefore any disclosure in accordance with this subsection shall always be subject to NEFCO's prior written consent. Any such authorised disclosure shall only be made to the extent required.
- 12.4 The Consultant may give access to Confidential Information received from NEFCO to its Assigned Personnel and/or subcontractors (if any) only on a need-to-know basis, and provided that there is always a clear understanding of the confidential nature of the information as set out in this Section. The Consultant further represents and warrants that it will ensure that the Assigned Personnel and/or subcontractors (if any) will agree to be bound and adhere to the confidentiality obligations set out in this Section. The Consultant also accepts that all Assigned Personnel performing the Services shall, at NEFCO's request, be obliged to sign a separate confidentiality agreement.
- 12.5 The Consultant shall exercise its utmost care in safeguarding that the Confidential Information is appropriately processed, stored, handled and protected.

- 12.6 The rights and obligations set out in this Section shall survive the expiry or termination of this Agreement. Upon expiry or termination of the Agreement for any reason, the Consultant shall immediately cease using the Confidential Information and, upon NEFCO's request, destroy or promptly return all concerned material (and all copies thereof) to NEFCO and confirm to NEFCO, within 15 (fifteen) days after NEFCO's request, that all of the Confidential Information has been destroyed or returned.

13 AUDITING, ANTICORRUPTION AND ETHICAL CONDUCT

- 13.1 The Consultant shall (i) keep accurate and systematic accounts and records with respect to the Services provided under the Agreement, in accordance with internationally accepted accounting principles and in a form and detail which clearly identifies all relevant charges and costs, and their basis; and (ii) upon request up to two (2) years from the expiration or termination of the Agreement, permit NEFCO or its designated representative to inspect these accounts and records and to make copies thereof as well as to have them audited by auditors appointed by NEFCO.
- 13.2 The Consultant acknowledges and confirms that it is aware of and undertakes to comply with NEFCO's Policy on Anticorruption and Compliance, available at NEFCO's website (the "**Anticorruption Policy**"), which includes specifically an undertaking to (i) not engage directly or indirectly in any abuse, coercion, collusion, corruption, fraud, obstruction, money laundering or financing of terrorism as defined in the Anticorruption Policy (the "**Prohibited Practices**"), and (ii) promptly, upon becoming aware of any suspected or alleged Prohibited Practices in relation to the Services or the Agreement, notify NEFCO in writing.
- 13.3 The Consultant acknowledges and confirms that it is aware of and undertakes to comply with NEFCO's Policy on Prevention of Sexual Exploitation, Sexual Abuse and Sexual Harassment, available at NEFCO's website (the "**SEAH Policy**"), which includes specifically an undertaking to (i) refrain from directly or indirectly participating or engaging in any form of sexual abuse, sexual exploitation or sexual harassment as defined in the SEAH Policy, and (ii) promptly, upon becoming aware of any suspected or alleged SEAH in relation to the Services or the Agreement, notify NEFCO in writing.
- 13.4 The Consultant undertakes while performing the Services to observe the highest ethical standards and to follow all applicable laws, including but not limited to those relating to payment of taxes and/or social security contributions in accordance with the laws of the country in which the Consultant is domiciled, operates or where the Services are performed.
- 13.5 The Consultant shall provide NEFCO or any designated NEFCO representative its full and timely cooperation during any integrity due diligence process or investigation relating to an suspected or alleged breach of the Anticorruption Policy or the SEAH Policy, and shall require its agents, attorneys, accountants or other advisers, to cooperate as reasonably required during any due diligence, audits or investigations carried out by NEFCO. The Consultant shall also make relevant personnel available for a meeting with the NEFCO representative.
- 13.6 NEFCO shall, in its sole discretion, have the right to terminate the Agreement with immediate effect, should it become apparent in the reasonable opinion of NEFCO that the Consultant, the Assigned Personnel or any other parties involved in the provision of the Services have engaged in Prohibited Practices or in SEAH, and/or have not adhered to the obligations under this Section 13.

14 REFERENCE RIGHT

- 14.1 The Consultant shall be entitled to use NEFCO name as a reference for marketing or other purposes subject to NEFCO's prior written consent in each individual case.

15 GOVERNING LAW AND DISPUTE RESOLUTION

- 15.1 This Agreement shall be governed by and construed in accordance with the substantive laws of Sweden.
- 15.2 Any dispute, controversy or claim arising out of or in connection with this Agreement, or the breach, termination or invalidity thereof, which has not been settled amicably by mutual agreement of the Parties within 60 (sixty) days after the other Party's receipt of a written request for negotiations by either Party to such effect, shall be finally settled by arbitration administered by the Arbitration Institute of the Stockholm Chamber of Commerce (the "SCC").
- 15.3 The Rules for Expedited Arbitrations of the SCC (the "**Expedited Rules**") shall apply where the amount in dispute does not exceed EUR 300,000. Where the amount in dispute exceeds EUR 300,000, the Arbitration Rules of the SCC (the "**Arbitration Rules**") shall apply. The arbitral tribunal shall be composed of a sole arbitrator appointed in accordance with the Expedited Rules or Arbitration Rules, as relevant. The amount in dispute shall be calculated as including the claims made in the request for arbitration and any counterclaims made in the answer to the request for arbitration. With reference to points 11.1 (ii) and 11.1 (iii) in Section 11, Article 32 (Interim measures) of the Expedited Rules and the Arbitration Rules shall not be applicable to NEFCO during the arbitral proceeding.
- 15.4 The legal seat and place of arbitration shall be Stockholm, Sweden. The arbitrator may, at /her discretion, hold hearings, meetings and deliberations at any other convenient geographical place in order to secure the efficient and cost-effective conduct of the proceedings.
- 15.5 The language to be used in the arbitral proceedings (including the documentation) shall be English.
- 15.6 The arbitral award shall be final and binding upon the Parties.

16 TERM AND TERMINATION

- 16.1 The Agreement shall become effective and binding upon signing by both Parties and shall remain effective until both Parties have fulfilled their respective obligations under the Agreement, unless terminated earlier in accordance with this Agreement.
- 16.2 NEFCO shall be entitled to terminate the Agreement with 30 (thirty) days prior written notice. In such case the Consultant shall be entitled to compensation, in accordance with this Agreement, (i) for the Services carried out until the notice of termination was made and (ii) for occurred verified necessary expenses which have not yet been reimbursed.
- 16.3 NEFCO shall be entitled to terminate the Agreement with immediate effect upon written notice, if the Consultant files for bankruptcy or is put into liquidation, receivership or becomes insolvent. In such case the Consultant shall be entitled to compensation, in accordance with this Agreement, (i) for the Services carried out until the notice of termination was made and (ii) for occurred verified necessary expenses which have not yet been reimbursed.

16.4 Either Party shall be entitled to terminate the Agreement with 30 (thirty) days prior written notice, if there is a *force majeure* event that continues for more than 30 (thirty) days or if the other Party is in material breach of its obligations under the Agreement and the breaching Party fails to remedy such breach within the notice period. Any unpaid fee that is disputed by NEFCO shall not constitute a material breach under this Section.

16.5 Upon termination, the results of work carried out shall immediately be handed over to NEFCO, unless otherwise agreed between the Parties.

17 AMENDMENTS TO THE AGREEMENT

17.1 Any amendments to the Agreement shall be made in writing and accepted and signed by the authorised representatives of both Parties.

18 TRANSFER OF THE AGREEMENT

18.1 The Consultant may not assign or transfer this Agreement or any of its rights or obligations under the Agreement without NEFCO's prior written consent.

19 NOTICES

19.1 Any notice to be given by one Party to the other shall be made in writing and deemed properly given or made when delivered to the recipient by hand, registered mail, courier or email during normal business hours to the address and contact person specified in Section 1 of the Special Terms and Conditions (or to such other address as may be notified in writing from time to time by either Party). If given by email, any notice shall promptly be confirmed by registered letter or courier.

20 SURVIVING TERMS

20.1 The following Sections of NEFCO's General Terms and Conditions for Consultancy Services shall survive any termination or expiry: Section 8. Liability and Limitation of Liability; Section 9. Rights of ownership, intellectual property rights and indemnification; Section 11. Legal status of NEFCO; Section 12. Confidentiality; Section 13. Auditing, Anticorruption and Ethical Conduct; Section 14. Reference right; Section 15. Governing law and dispute resolution.

OPPORTUNITIES FOR DEMAND RESPONSE IN UKRAINIAN IRRIGATION

Scoping Study Terms of Reference

1. BACKGROUND

1.1. Introduction

The Finland Ukraine Trust Fund (FUTF) provides grant financing to promote cooperation between Finland and Ukraine and to identify opportunities for projects, both consultancy services and investments, in the fields of energy efficiency (EE), renewable energy (RE) and alternative types of energy sources in power and heat generation and in district heating networks. The Trust Fund is financed by the Ministry for Foreign Affairs of Finland and managed by Nordic Environmental Finance Corporation (NEFCO). The local coordinator is the State Agency on Energy Efficiency and Energy Saving of Ukraine (SAEE).

While the share of Renewable Energy (RES) in Ukrainian Power system is still relatively low in terms of electric energy generated - but probably higher in terms of generation capacity - concerns have been raised regarding electric grid stability. The condition of the transmission network, large share of “rigid” nuclear capacity combined with uncontrolled variations in solar and wind generation set high requirements for balancing which currently relies heavily on interconnections with the Russian grid.

Besides investing in balancing power plants, the another possibility to improve the situation is so-called Demand Response¹ “DR”. Among different power consumers, one of the most potential sector for demand response (hereinafter referred as “DR”) is water supply, either for the irrigation system or municipal water supply.

1.2. Beneficiaries

Final beneficiary: State Enterprise "National Power Company "Ukrenergo". NPC “Ukrenergo” (hereinafter – TSO, Ukrenergo) is a power company responsible for operational and technological control

¹ Demand response is a change in the power consumption of an electric utility customer to better match the demand for power with the supply. Until recently electric energy could not be easily stored, so utilities have traditionally matched demand and supply by throttling the production rate of their power plants, taking generating units on or off line, or importing power from other utilities. There are limits to what can be achieved on the supply side, because some generating units can take a long time to come up to full power, some units may be very expensive to operate, and demand can at times be greater than the capacity of all the available power plants put together. Demand response seeks to adjust the demand for power instead of adjusting the supply.

Annex 2: Terms of Reference

of the Integrated Power System (IPS) of Ukraine and electricity transmission via trunk power grids from generating plants to the distribution networks of the regional electricity suppliers (oblenergos).

The Company's network includes eight regional power systems, covering the entire territory of Ukraine and employing over 8000 people. The employees operate a unique hi tech equipment at 137 high-voltage (220-750 kV) substations with the aggregate installed capacity up to 78000 MVA and over 21 000 km of trunk and cross-border high-voltage (220-750 kV) power transmission lines.

Other state level stakeholders who will be benefiting from the study and potentially participate in the events and comment on the final deliverables: Ministry of Energy and Environment, SAEE, State Agency of Water Resources of Ukraine.

The Consultant is supposed to establish (with the assistance of Ukrenergo and SAEE) the connections with the relevant water utilities and State Agency of Water Resources, pro-actively convince them in cooperation in the present study and in the providing the Demand Response services.

1.3. Background

As per estimations of the Transmission System Operator (State Enterprise "National Power Company "Ukrenergo", or "TSO", the beneficiary in this study), the Ukrainian Integrated Power System ("IPS" could absorb approximately 3-4 GW installed Variable Renewable Energy (VRE) capacity without the need of significant modifications. However, as TSO reports, already now just above 5.2 GW of VRE is connected to the grid, while as per SAEE's data, over 6 GW is constructed and received feed-in tariff. As per TSO's forecast, by the end of 2020, installed RES capacity may increase up to 7.4 GW.

Starting in November 2019, the Ukrainian power system faced the issues with balancing (see Figure 1 below) resulting in curtailment of VRE sources. In March 2020, Wind Farms and Solar PV generation is up to 863 GWh, which is 37% of thermal power plants generation and 11% of nuclear generation. This tendency is being strengthened by consumption reduction caused by the season warming and covid-19 quarantine. In the first five days of April 2020, RES restrictions were applied almost on daily basis, duration and amount has also increased. The biggest restriction took place on 5 April – the day when the general consumption level reached the lowest point from the beginning of the year – 344.2 GWh. RES restrictions amounted to 1656.7 MW and were applied from 10:41 a.m. to 17:00 p.m., that is in the middle of the day, when the consumption decreases comparing to morning and evening peak hours, and on the contrary, RES generation is the highest due to the peak solar activity.

By the end of the year, the volumes of restriction will have increased due to power consumption reduction (natural seasonal factors, consequences of the quarantine and lowering of economic activity), as well as due to rapid growth of RES capacity with increased amounts of RES power production. It may amount in total to 1000 GWh. Consumers will have to pay for this power, although they do not use it.

Annex 2: Terms of Reference

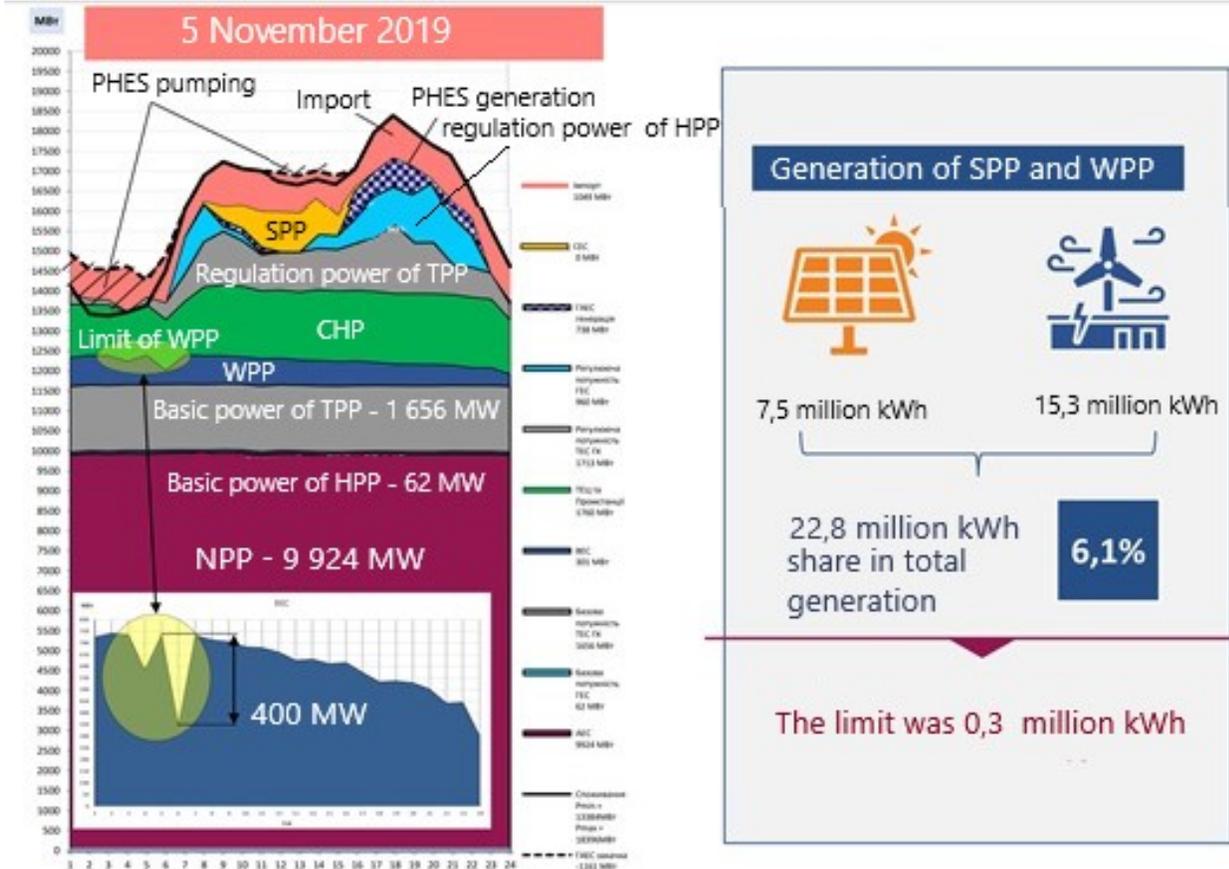


Figure 1. Data on power curtailment in 5.11.2019.

According to Generation Adequacy Report², the Ukrainian energy grid today does not comply with requirements of adequacy of the generation capacities. With continuing increase of solar and wind, the issues with operational security will become more urgent. The solution can come from 2 GW of new high-maneuver capacities having the control range of at least 80 per cent of the installed capacity and capable of supporting the startup and stoppage up to 8 times a day with the time to reach the rated capacity not exceeding 15 minutes. They should be supplemented by at least 2 GW of energy storage. These capacities will give the grid an opportunity to create enough reserves to safely function until 2030.

According to earlier developed Feasibility Study funded by World Bank, Smart grid solutions (Virtual Power Plans, Demand Response, Vehicle-to-Grid and other technologies) could contribute to the balancing of the grid and reduce the curtailment of the VRE.

The present load capacity of the 1st lift pumping stations (water supply) as well as irrigation pumping stations is app 3-3.5 GW in Ukraine. Taking in mind the global experience (e.g. California), it may be a significant source of balancing capacity and thus an option to increase the share of grid-connected renewable energy sources.

² <https://ua.energy/wp-content/uploads/2019/10/Zvit-z-otsinky-vidpovidnosti-vid-31.10.19.pdf>

Annex 2: Terms of Reference

Ukrenergo is currently developing a high level strategy for the Demand Response system.

Finland on the other hand is very advanced in DSR issues. Electricity production must be equal to electricity consumption at all times. The balance between production and consumption is indicated by the frequency of the electricity grid which has a nominal value of 50.0 Hz. The market operators plan and balance their consumption and production in advance, but in practice there are deviations during each hour. To balance these deviations, the Finnish TSO Fingrid procures different kinds of reserves from reserve markets. Reserves are power plants and **consumption resources** which either increase or decrease their electric power according to the need of the power system. The whole Finnish system including procurement and payment principles is described in https://www.fingrid.fi/en/electricity-market/reserves_and_balancing/#reserve-obligations-and-procurement-sources. There are many industrial applications, and for instance Helsinki Energy is actively seeking customers for DSR.

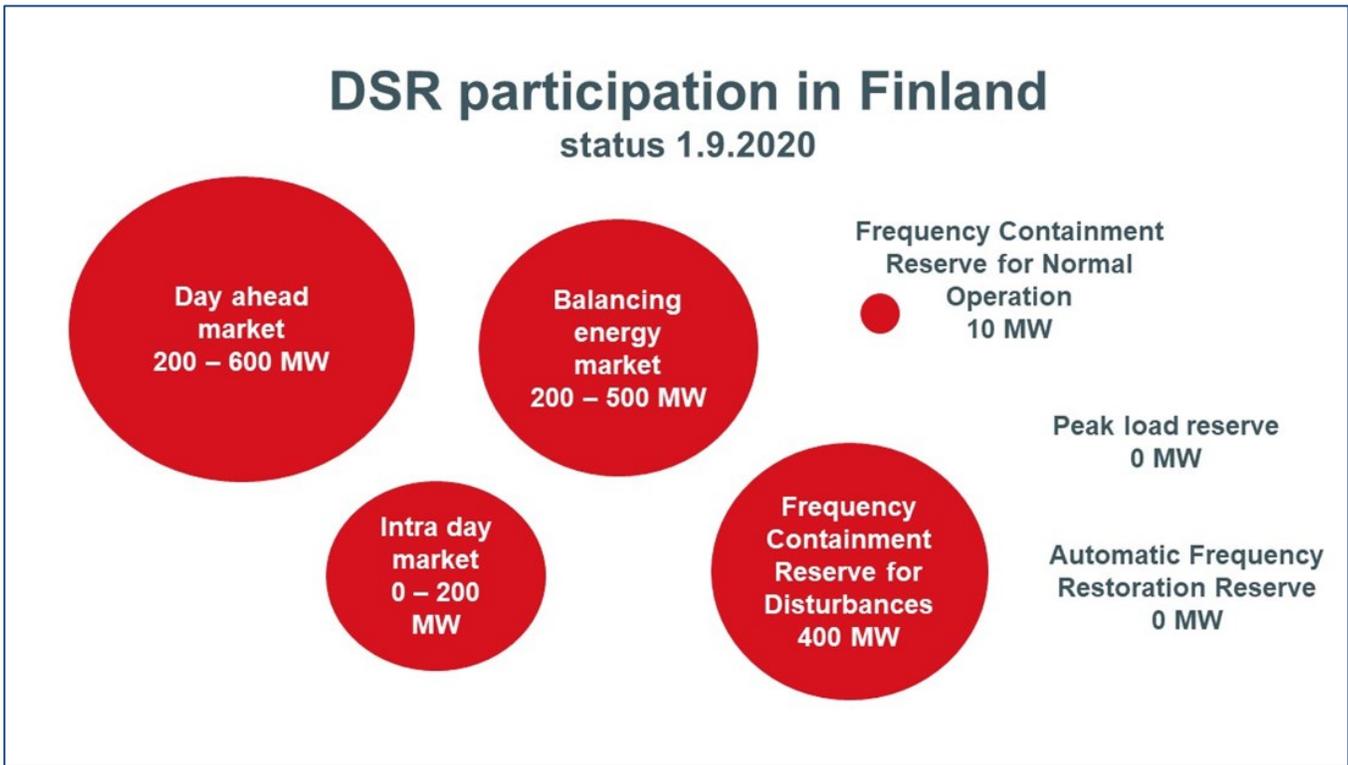


Figure 2. Demand SideResponse status in Finland (source: Fingrid).

According to SmartEnergyTransition’s survey, Finnish Smart Demand Response Systems have the highest export potential out of the energy products.

The FUTF has approved the application by NPC Ukrenergo to carry out a scoping study regarding the demand response opportunities in irrigation and water supply sectors (pumping stations). These Terms of Reference (ToR) define the objectives and scope of work for the Consultancy Services requested for preparing the study.

Annex 2: Terms of Reference

2. OBJECTIVES

The overall objectives of the assignment are as follows:

- Assess the possibility of the practical implementation of the Demand Response in the irrigation and water supply pumping stations in Ukraine
- Estimate the electrical capacity of the demand response which can be used by the Ukrenergo
- Provide the recommendations for the further development

The Consultant is supposed to pro-actively work with the potential market participants (State Agency for Water Resources who is the manager of the irrigation pumping stations and water utilities being municipally owned) to engage them and motivate to allow access to the initial data and cooperate on the topic of the study. The substantial support on the engagement of low-level stakeholders will be provided by Ukrenergo, as well as CM Consultant and SAEE.

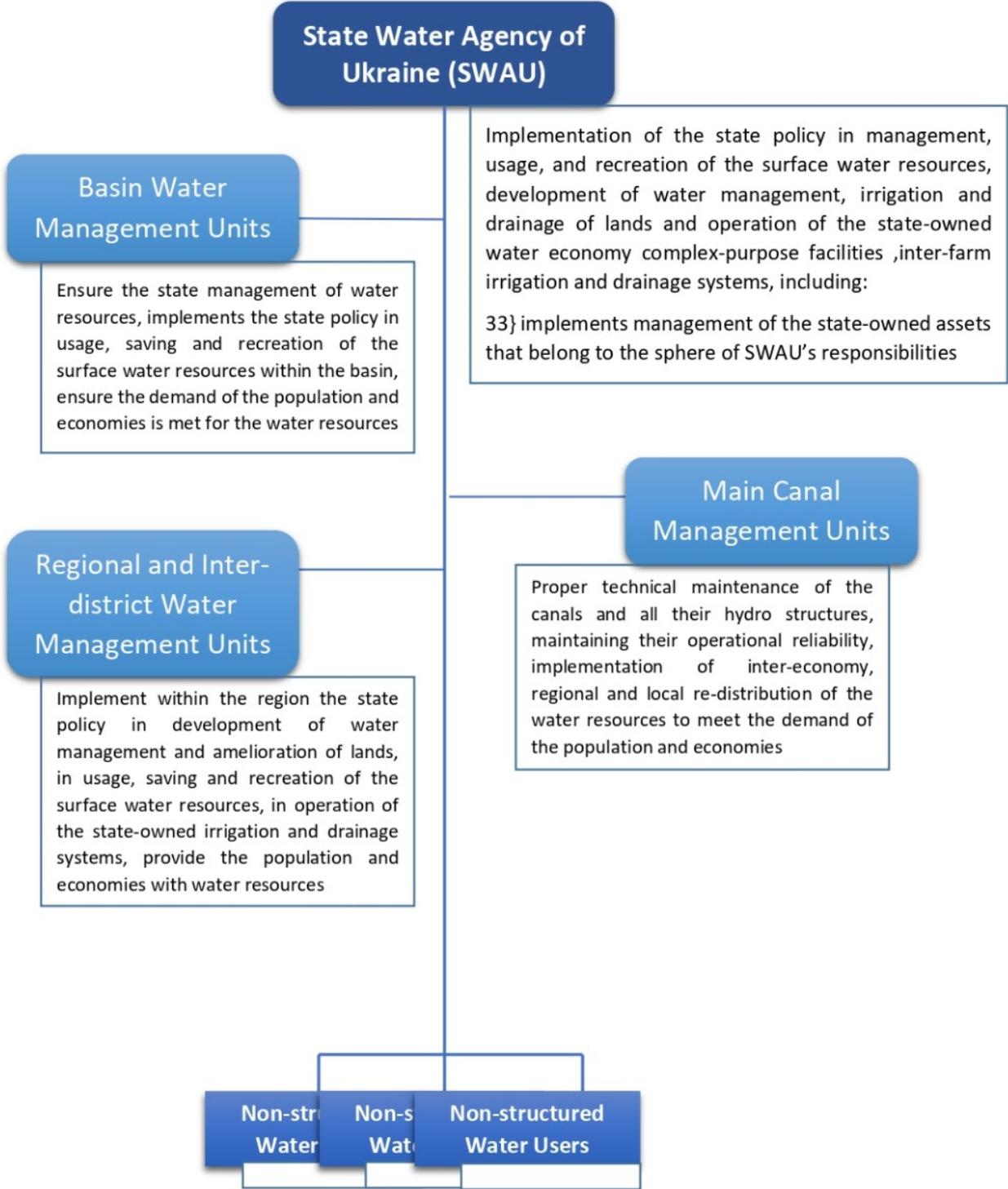
3. SCOPE OF WORK

In order to meet the objectives above, the Consultant shall carry out the following tasks:

3.1.Task 1: Stakeholder Engagement

The current structure of Ukrainian Water Management System is shown below. Both irrigation and municipal water systems are integrated.

Annex 2: Terms of Reference



Annex 2: Terms of Reference

The objective of Task 1 is to engage the relevant stakeholders of DR:

1. State Agency of Water Resources of Ukraine (SAWR)
2. Selected municipally-owned water/wastewater utilities
3. Farms/collectives/enterprises that have irrigation pumps

Ukrenergo, together with SAEE will assist in establishing the contacts with State Agency of Water Resources of Ukraine, who is the operator of the puping stations for irrigation infrastructure.

The Consultant should preliminary study the available information (annual reports of Regulator - NEURC, and Ministry – Minregion, which are available in Internet for open usage). Based on the available information about the water/wastewater sector, the Consultant should identify the utilities which should be approached.

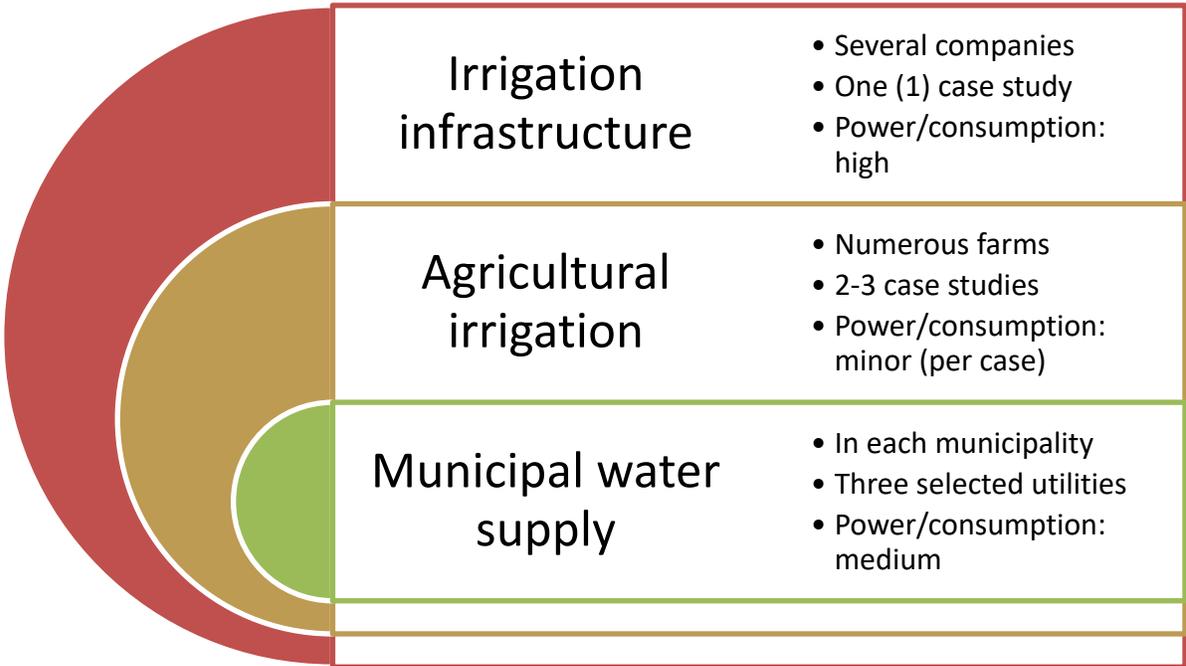
Ukrenergo and SAEE will intensively support the Consultant in approaching the water/wastewater utilities. Preliminary communications confirmed the interest from Kyiv and Kharkiv water utilities (two of the biggest in Ukraine).

It is already agreed to cooperate on the subject matter with the State Agency of Water Resources of Ukraine and a number of municipal water/wastewater utilities (in Kharkiv, Rivne, Lutsk, Ternopil). The Consultant shall work closely with the Agency and at least three (3) representative water/wastewater utilities (mentioned earlier or other selected) for the effective performance under the present study.

3.2.Task 2: Technical Applicability of DR for Irrigation and Water/wastewater infrastructure

The assignment will cover three (3) different water utilisation processes:

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3.2.1. Main irrigation infrastructure³

The largest irrigation system is the Kakhovskaya system. The following figure outlines the stakeholders and process flow of the system. The aggregated pumping capacity of this systems is 500+ MW. Other systems have the same components.

³ water storages and supply to the farmers

Annex 2: Terms of Reference

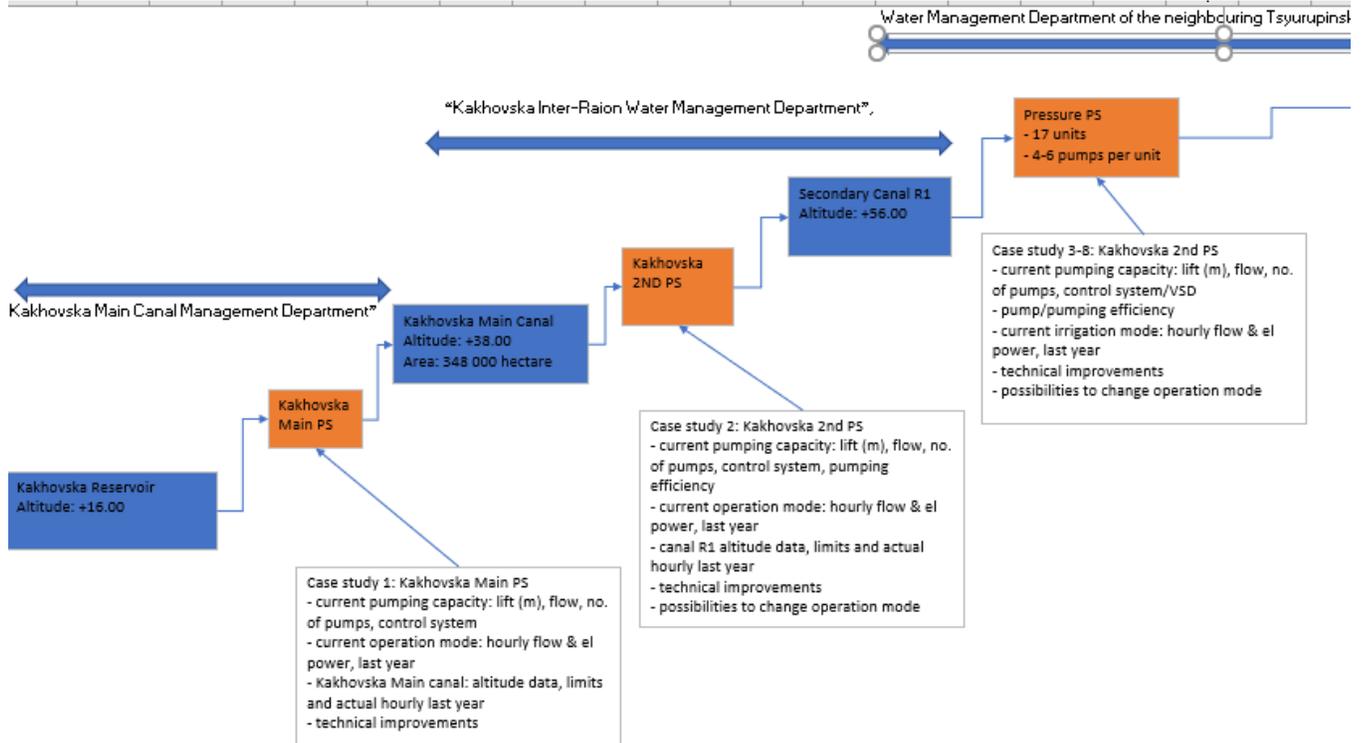


Figure 3. Kakhovskaya Irrigation system. Stakeholders and process diagram.

The Consultant shall collect and analyse data of Kkhovskaya Irrigation system. The following information shall be analysed:

- operational method of water storages and pumps in different process stages
- assessment of current pumps (type, efficiency, possibilities for VSD)
- current energy consumption (hourly data for one year)
- possibilities for DR

3.2.2. Agricultural irrigation⁴

Agriculture directly generates 10 % of GDP, 20 % of exports and 5 % of employment, with significant additional impact in input supply, processing and marketing. Irrigation covers 1 % of all agricultural land but is much more important for certain crops (e.g. 15 % of potatoes, almost all tomatoes & rice) and regions (e.g. 14 % Kherson oblast), contributing to the rural economy in these areas.

⁴ at the farms

Annex 2: Terms of Reference

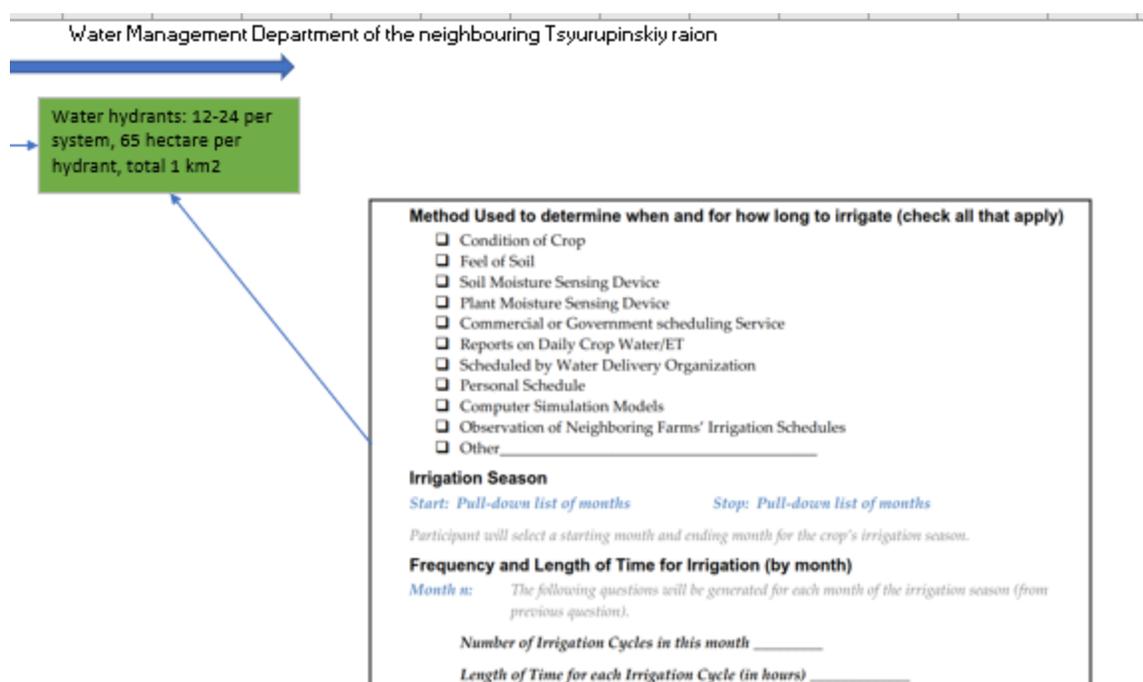


Figure 4. Agricultural irrigation in the Kakhovskaya irrigation system.

The Consultant shall collect and analyse data of the current irrigation systems in Ukraine. The following information shall be analysed:

- growing regions
- water sources
- irrigation methods
- pumps
- crop types
- potential for demand response: limitations, automatic controls
- growing regions
- irrigation sources
- irrigation methods
- pumps, VSDs, storages, automation

3.2.3. Municipal water supply

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Municipal water utilities use pumping to supply water from the water source to the consumers. Typically there are several storages in the system that facilitate interrupted pumping (see the following figure).

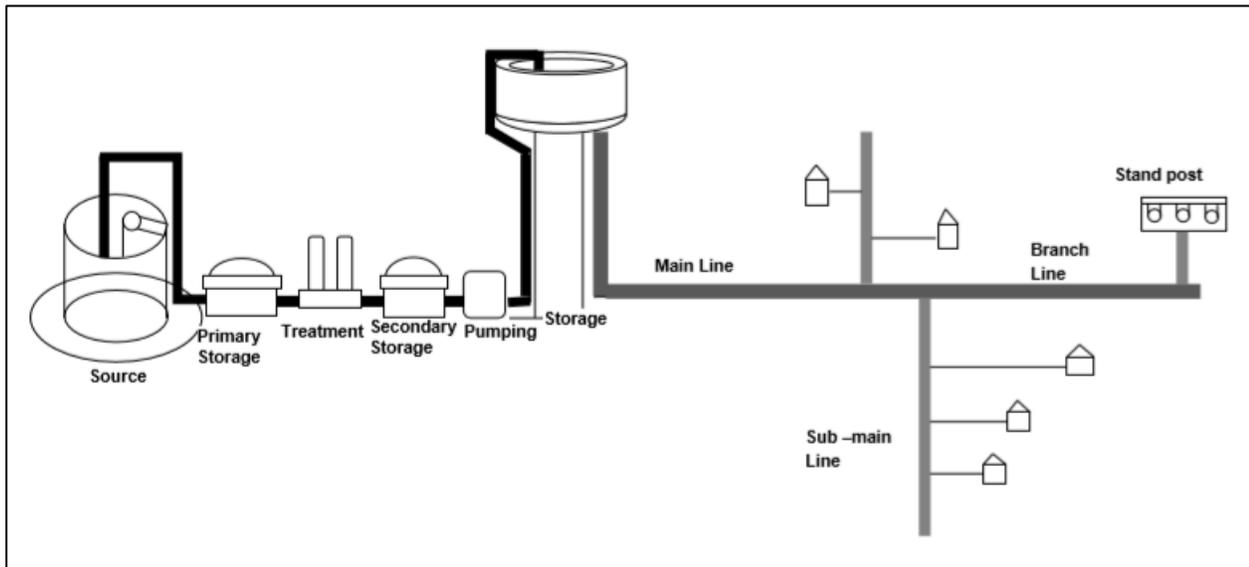


Figure 5. Typical schema of municipal water supply.

The Consultant shall collect and analyse data of selected three (3) municipal water supply systems. The following information shall be analysed:

- operational method of water storages and pumps in different process stages
- assessment of current pumps (type, efficiency, possibilities for VSD)
- current energy consumption (hourly data for one year)
- possibilities for DR

3.3.Task 3: Grid needs

The Consultant shall analyse the Ukrainian grid situation and what kind of DR service types are needed. The situation during one day might be as follows.

Annex 2: Terms of Reference

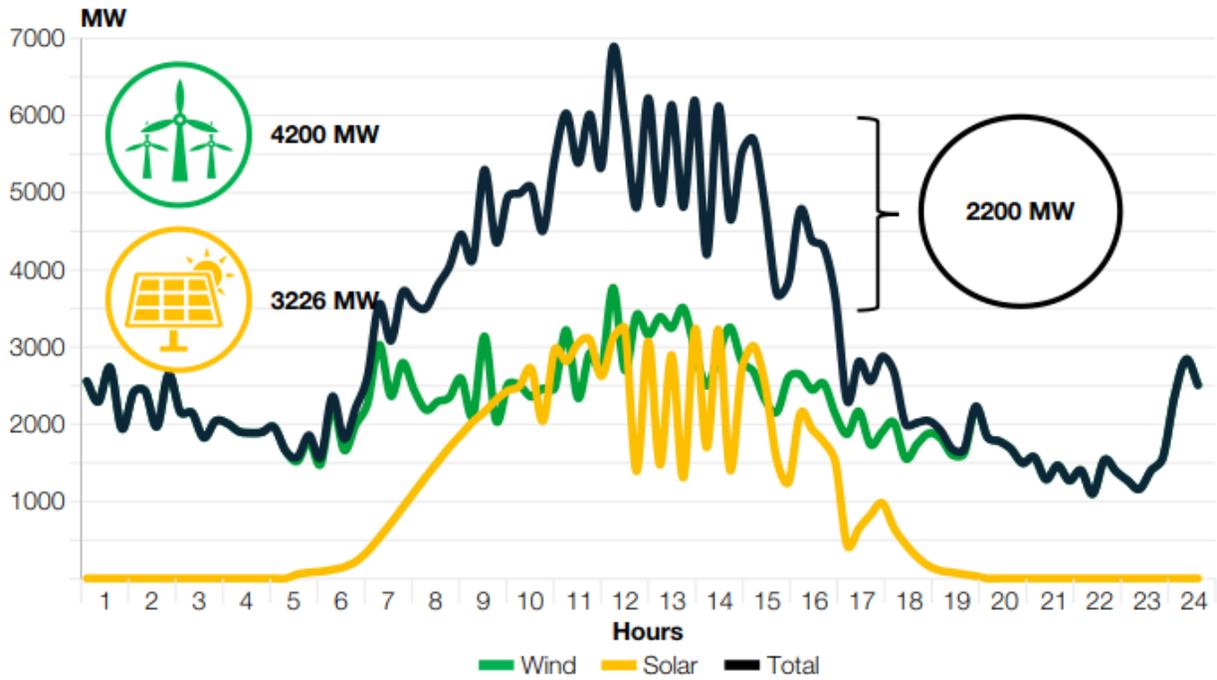
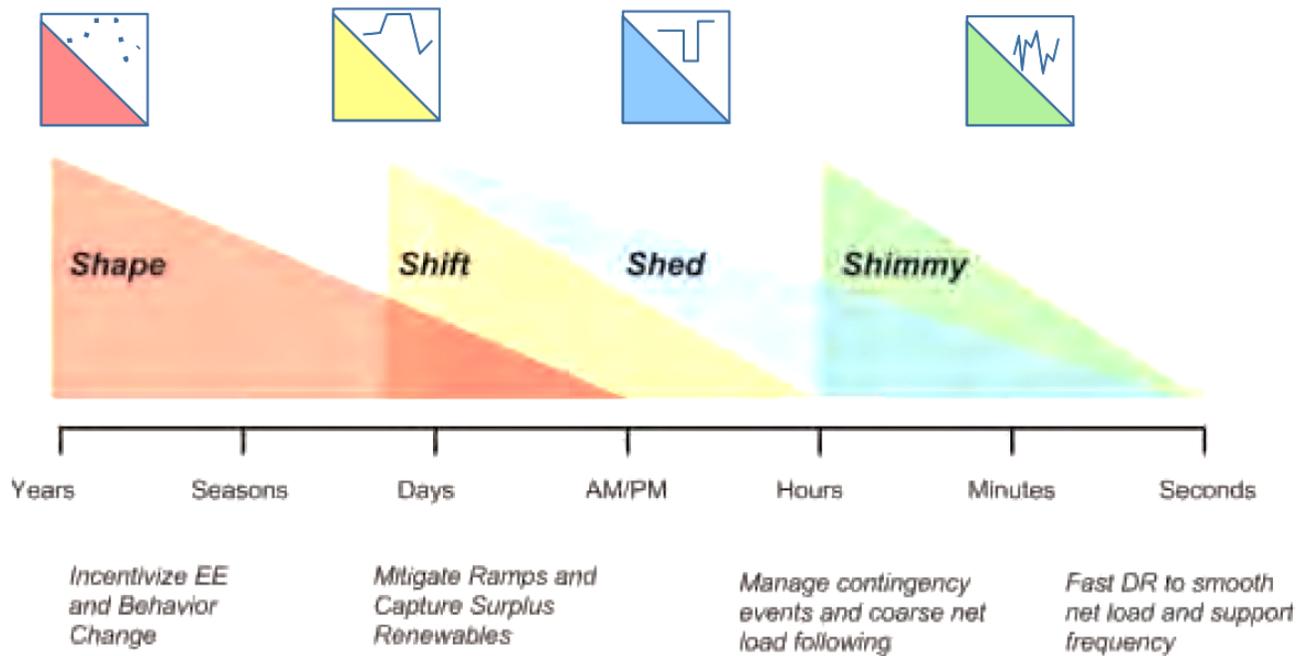


Figure 6. Wind and solar power during one day. Illustrative figure (source: TSO).

In the US the following four DR types have been recognized.



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	DR Service Product	California Market
Shed	Peak Capacity	System and Local Resource Adequacy Credit
	Economic DR	Economic DR / Proxy Demand Resource
	Contingency Reserve Capacity	Ancillary Services- spinning
	Contingency Reserve Capacity	Ancillary Services- non-spin reserves
	Emergency DR	Emergency DR / Reliability DR Resource
	DR for Distribution System	Distribution
Shift	Economic DR	Combination of Energy Market Participation
	Flexible Ramping Capacity	Flexible Resource Adequacy -- energy market participation w/ ramping response availability
Shimmy	Load Following	Flexible Ramping Product (similar)
	Regulating Reserve Capacity	Resource Adequacy - Regulation
Shape	Load modifying DR - Event-based	Capacity Peak Pricing
	Load Modifying DR - Load shaping	Time of Use

The Consultant shall collect relevant technical information from the stakeholders (irrigation infrastructure, water/wastewater infrastructure, power infrastructure) via submitting the questionnaires and conducting the site visits. The amount of the information collected should be sufficient to reach the objectives of the study.

The technical assessment shall address the following parameters/information:

- Identification of the potential electrical consumers within the irrigation and water infrastructure which can be connected to the DR
- Studying the technological processes of the irrigation and water infrastructure and the possible changes to the benefit of the DR
- Evaluation of the IT infrastructure of the TSO and irrigation and water infrastructure operators and identification of the gaps for the DR implementation
- High level screening of the environmental & social risks caused by the application of the DR

The Consultant shall also describe the international experience of the DR application for the irrigation and water infrastructure.

3.4.Task 4: Potential Impacts of Demand Response

The Consultant shall carry out an analysis of potential impacts of the Demand Response for the irrigation and water/wastewater infrastructure within the Ukrainian power system. It is assumed that the Consultant's own experience, as well as international experience together with the benchmarking methods will be applied.

The following components shall, in particular, be studied:

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- Electrical capacity of the consumers within the irrigation and water infrastructure which can be connected to the DR system
- Timeframe when DR can be applied in the irrigation and water infrastructure (timeframes within the day and seasonal, if applicable)
- Possible reduction of the electricity price for the consumers connected to the DR
- Cumulative impact of the irrigation/water supply DR on the Ukrainian power system in terms of VRE balancing
- Possible environmental and social impact which can be caused by application of the DR

While studying the impacts, the Consultant shall actively use the collected data from the State Agency of Water resources of Ukraine, as well as from the water utilities, but also apply the reasonable extrapolation to the whole relevant infrastructure within Ukraine applying the available aggregated sector data as well as international experience & benchmarking.

3.5.Task 5: Regulatory Gaps

The Consultant shall identify the regulatory gaps for the irrigation/water DR implementation, if any.

The following documents should be followed during the performance of this task, as well as the respective secondary legislation:

- Law of Ukraine "On the electricity market";
- Transmission System Code, Resolution of the National Commission for State Regulation of Energy and Utilities dated March 14, 2018 № 309;
- Market rules, resolution of the National Energy and Utility Regulatory Commission Ukraine dated March 14, 2018 № 307;
- Code of Distribution Systems, Resolution of the National Commission for State Regulation of Energy and Utilities dated March 14, 2018 № 310;
- Water Code of Ukraine;
- Law of Ukraine "On Land Reclaiming";
- Law of Ukraine "On Environmental Protection";
- Law of Ukraine "On drinking water, drinking water supply and drainage".

3.6.Task 6: High-level Roadmap

The Consultant shall prepare a high-level roadmap (basically, a set of conditions and next steps) of irrigation/water DR implementation. The roadmap shall be focused on the Ukrenergo actions, as well as for irrigation and water infrastructure owner (State Agency of Water resources of Ukraine and water/wastewater utilities).

Such a high level roadmap shall be based on long-term development and development needs for **5-10** years horizon and identify remediation, rehabilitation, replacement measures as well as propose operational improvements to cope with short, medium and long-term service demands and requirements.

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The outline of the roadmap shall focus on strategic development, as well as the advice on the specific next steps to be applied. It is not meant to include an extensive planning or detailed studies. Thus, the steps and recommendations should be based on the international experience and identified specific of the irrigation and water infrastructure and power infrastructure of Ukraine.

4. Implementation Arrangements and Deliverables

The overall duration of the assignment is planned to be **20** weeks. The assignment is expected to begin in January, 2021.

All communication with NEFCO shall be in English, and with the local stakeholders in Ukrainian or in Russian, unless otherwise agreed.

It is assumed that the travel limitations caused by COVID-19 will be removed before the commencement, otherwise the project start may be postponed if such agreed with NEFCO during contract negotiations.

4.1. Data, local services, personnel, and facilities to be provided by the Client

Ukrenergo shall provide to the Consultant all related and available data (which should be normally available within the Transmission System Operator). Additionally, the Consultant may rely on the support of Ukrenergo and SAEE in terms of the stakeholder engagement and support in data collection.

During the contract period, the Consultant shall obtain support and resources from the Ukrenergo as specified below:

- Workplace for three (3) people equipped with telephone (local calls only) and internet; access to a meeting room, photocopier, printer and scanner;
- Senior officials will be appointed to be the primary contact persons with specific responsibility for assisting the Consultant and coordinating activities;
- The information, documents, existing IT infrastructure description, technical regulations and other relevant information on the power system and other information in the Ukrenergo's possession and necessary for the completion of Consultants services will be made available free of charge. However, the Consultant will be responsible for translating these documents, if necessary;
- Access to all of their facilities and employees for questioning or assistance relative to understanding of the functioning of systems and facilities will be provided;
- Providing to the Consultant all the possible support of Ukrenergo and SAEE in stakeholders engagement for the assignment completion (incl. getting in touch with the stakeholders, information collection etc)
- necessary permits to obtain further documents, maps and aerial photographs.

If the Consultant requires more space it shall be the Consultant's responsibility to provide it elsewhere at its own cost. Also, it shall be the Consultant's responsibility for data collection from the Stakeholders, thus it is crucially important to engage a proper national sub-contractors/individual experts.

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The Consultant shall be responsible for paying for all international telephone calls and connections (including the connection to the internet), office supplies, external printing. The Consultant shall pay for all local transportation required by the Consultant's staff throughout the duration of the assignment.

The Consultant shall be responsible for providing suitably qualified interpreters/translators to work with his staff.

4.2. Inception Report

Within four (4) weeks from the commencement of the Assignment, the Consultant shall present a draft Inception Report presenting its initial findings, with focus on findings having impacts on time schedule and factors affecting the Terms of Reference of the Assignment as well as propose further approach to the Tasks.

The Final Inception Report, incorporating comments of project's stakeholders, shall be submitted latest 6 weeks from the commencement date. The Final Inception Report shall i.a. include Table of Contents for the Scoping Study.

In addition, it is expected that the Consultant will significantly progress with the Task 1 during the Inception period.

4.3. Workshop

Within 12 weeks from the commencement of the Assignment, the Consultant shall organize a **Workshop** with all stakeholders to present the Demand Response benefits for the Irrigation/Water infrastructure and its possible impact on the power system and VRE curtailment. The Consultant will incorporate the views and observations of the participants of the Workshop in the Draft Report.

4.4. Dissemination

At the beginning (within the Inception Phase, focused mainly on Task 1) and at the end (after submission of Draft Final Report) of the project the Consultant shall organize a Dissemination session (jointly with Ukrenergo) to present the Demand Response opportunities for Water supply / Irrigation infrastructure, as well as the relevant impact on the power system (with the potential attendees – Ministry for Communities and Territories Development, Regulator, Water utilities, SWAU, distribution system operators, electricity traders etc). The Consultant shall incorporate the views and observations of the attendees into the Final Report.

A stand alone Presentation for Water Utilities about Demand Response opportunities shall be developed as a part of the Final Report.

Annex 2: Terms of Reference

4.5. Draft Final Report

By the **16** week since the commencement date, the Consultant shall circulate to the Ukrenergo, NEFCO and other involved financiers the Draft Scoping Study Report covering in detail all tasks as specified above. For practical reasons the report can be split in several reports as per tasks.

The Consultant will request the above-mentioned stakeholders to submit their comments/suggestions on the Report in **2** weeks.

4.6. Final Scoping Study Report

The Consultant will then incorporate the comments and suggestions of the reviewers in the Final Scoping Study Report, which should be submitted no later than **20** weeks from the commencement date.

All reports, in English and in Ukrainian shall be submitted Ukrenergo and to NEFCO electronic format, such as PDF or MS Word, to interested stakeholders. Supporting data in the Ukrainian language in the appendices need not be translated for English versions of the document.

5. CONSULTANT'S PROFILE AND QUALIFICATION REQUIREMENTS

It is envisaged that the following expertise will be needed for the purposes of this assignment:

- Prior experiences from Demand Response studies
- Technical specialists: smart grids (Demand Response), Water & Irrigation, Pumps and Automation.

All key personnel shall be fluent in English. If the Consultant's personnel do not speak Ukrainian/Russian, the Consultant will ensure that a sufficient number of competent interpreters will be available on site during all working hours.

It is recommended that a part of the assignment is carried out by local sub-Consultants.

Note that civil servants and other staff of the public administration, of the partner country or of international/regional organisations based in the country, shall only be approved to work as experts if well justified. The justification should be submitted with the tender and shall include information on the added value the expert will bring as well as proof that the expert is seconded or on personal leave

5.1. Key Experts

The following key experts are foreseen to be required for the assignment:

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Project Manager

- Master level degree in Engineering or Science, Power Systems background would be an advantage;
- 10+ years of international experience related to power systems (preferably Smart Grids);
- Experience working in international projects;
- Team Leader for similar assignments, size and complexity;
- Fluent English, proficiency in Ukrainian or Russian would be an advantage

Water Expert

- Engineering degree in the water, civil or other related;
- 5+ years of experience in water sector and/or irrigation sector
- Experience working in international projects;
- Fluent in English, proficiency in Ukrainian or Russian would be an advantage

Technical Expert in pumping/automation systems

- Engineering degree;
- 7+ years of experience in engineering of pumps and automation systems;
- Experience in performing similar studies
- Fluent in English, understanding of Ukrainian or Russian would be an advantage

Local Expert(s)

- Experience from Power Systems, Smart Grids (and Demand Response), Water&Irrigation or other related issues
- Fluent Ukrainian/Russian, proficiency in English would be an advantage

The Consultant shall provide inputs of other experts' sufficient home office backstopping to achieve objectives and complete the Tasks with good results and on time. The Consultant shall provide the best possible work schedule for its staff to ensure that sufficient resources are allocated to field works. This shall be clearly envisaged in the technical proposal of the Consultant.

The Consultant is encouraged to engage on its team national experts as well as short-term experts with other profiles as relevant. The national experts shall possess several years of specific experience in energy technology for instance from boilers and fuels and shall promote the full transfer of information and experience provided within the tasks.

Note that civil servants and other staff of the public administration, of the partner country or of international/regional organisations based in the country, shall only be approved to work as experts if well justified. The justification should be submitted with the tender and shall include information on the added value the expert will bring as well as proof that the expert is seconded or on personal leave.