

Notice of the Commencement of Preliminary Market Consultations – Reverse Pumping of Water at the Orava Water Structure

Slovenské elektrárne, a.s., Pribinova 40, 811 09 Bratislava – Ružinov district, Company ID No.: 35 829 052 (hereinafter referred to as the “Contracting Entity” or “SE”), is conducting, pursuant to Section 25 of Act No. 343/2015 Coll. on Public Procurement (hereinafter referred to as the “Public Procurement Act”), preliminary market consultations concerning the subject matter of the contract Reverse Pumping of Water at the Orava Water Structure (hereinafter referred to as the “PMC”).

I. Basic Information

Contracting Entity: Slovenské elektrárne, a.s., Pribinova 40, 811 09 Bratislava – Ružinov district, Company ID No.: 35 829 052; contact person: Miroslav Blažko; email: miroslav.blazko@seas.sk, telephone: +421 910 805 788

Link: ERANET, <https://seas.eranet.sk/#/tenderPublicDetails/19699>

II. Purpose of the Preliminary Market Consultations

In accordance with the principles of public procurement, the purpose of the PMC is to:

1. Identify the expected range of suitable suppliers on the market;
2. Obtain and evaluate feedback from potential interested parties participating in the preliminary market consultations;
3. Identify existing technical solutions;
4. Identify possible technological alternatives;
5. Identify and assess potential risks during the implementation of the individual technical alternatives;
6. Formulate and verify non-discriminatory conditions for participation;
7. Formulate commercial terms enabling all suitable suppliers to submit a tender;
8. Identify requirements that could prevent the submission of a tender;
9. Determine the estimated contract value.

In addition to the above, the objective and purpose of the preliminary market consultations is to:

- assess the feasibility of a reverse water-pumping system at the Orava Water Structure (hereinafter referred to as the “Orava WS”);
- propose technical alternatives, options and general structural modifications to the existing parts of the Orava WS.

Consultations on this matter are intended to enhance the technical assessment and examine the technical and economic feasibility of the proposed modification to the Orava WS.

SE intends to implement a reverse water-pumping system at the Orava WS. The Orava WS consists of the Orava Reservoir (upper reservoir), the Orava Hydroelectric Power Plant and the Tvrdošín Reservoir (lower reservoir).

Reverse pumping will enable SE to respond more efficiently to changes in electricity prices on the SPOT electricity market. The proposed solution will also have a positive impact on water retention in the landscape.

The purpose of the PMC is to verify the proposed technical design and, at the same time, identify solutions available on the market that use other technical designs. With regard to the reverse

water-pumping option described below, the Contracting Entity welcomes proposals for its modification in view of the technical capabilities of economic operators.

III. Brief Description of the Subject Matter of the Contract and the PMC

Main parts of the Orava Water Structure:

- Orava Reservoir
- Orava Hydroelectric Power Plant
- Tvrdošín Reservoir

Orava Reservoir

Basic structural data for the Orava Reservoir

Maximum water volume	375.5 million m ³
Dam crest elevation	604.44 m a.s.l.
Spillway crest elevation	598.14 m a.s.l.
Dam crest width	8.60 m
Dam length	291.50 m
Dam height	31 m
Maximum retention level	602.44 m a.s.l.
Minimum operating level	586.44 m a.s.l.

Orava Hydroelectric Power Plant

The hydroelectric power plant is equipped with two vertical Kaplan turbines with generators having the following parameters:

Maximum head	Hmax 28.74 m
Installed capacity	21.75 MW; 2 × 10.876 MW
Turbine discharge capacity	2 × 50 m ³ ·s ⁻¹
Spillway sill elevation	598.14 m a.s.l.
Outlet intake sill elevation	574.44 m a.s.l.
Centreline elevation of bottom outlet pipes	575.44 m a.s.l.
Number of bottom outlets	4
Diameter of bottom outlet pipes	2,000 mm
Number of intake pipes to the HPP	2
Diameter of intake pipes to the HPP	4,500 mm
Length of penstocks	45.0 m

Tvrdošín Reservoir

Basic structural data for the Tvrdošín Reservoir

Maximum water volume	4.7 million m ³
Dam crest elevation	578.60 m a.s.l.
Spillway crest elevation	572.40 m a.s.l.
Dam crest width	5.00 m

Dam length	307.00 m
Dam height	9 m
Maximum retention level	577.10 m a.s.l.
Minimum operating level	573.10 m a.s.l.

Expected scope of the PMC includes:

- Preparation of a technical proposal (technical description, site plan, sections, etc.) for implementing the contemplated reverse pumping option
 - For example, reversible Francis turbine or another type of reversible turbine (e.g. a Deriaz diagonal-flow turbine), including accessories (governor unit, lubrication system, and cooling system).
 - Motor-generator with accessories (lubrication and cooling system, excitation system)
 - Design of the necessary modifications to the civil works (spiral casing, draft tube, etc.)
- Preparation of an indicative budget for implementing the technical proposal

IV. Currently contemplated Reverse Water-Pumping Option

The contemplated option involves replacing two Kaplan turbines with reversible Francis turbines while maintaining the original capacity in turbine mode. Implementation of this option will minimise the extent of the necessary civil works, with the aim of reducing construction costs. The existing equipment associated with the turbines to be replaced will be dismantled in the Orava Hydroelectric Power Plant building. This will be followed by demolition and removal of the original turbines and the necessary concrete structures in order to install the new turbines. At the same time, the bottom of the draft tube will be deepened by 4 metres. The outlet wing walls will be extended by approximately 4 metres and will include slots for temporary stoplogs. A second gantry will be provided for installing the stoplogs, running on its own rails mounted on the extended outlet wing walls.

Basic Parameters

Maximum upper design level	600.50 m a.s.l.
Minimum upper design level	597.70 m a.s.l.
Technical minimum pumping level	595.40 m a.s.l.
Maximum lower design level	577.10 m a.s.l.
Minimum lower design level	575.00 m a.s.l.
Gross design head	25.5 m
Design turbine flow rate	$2 \times 50 \text{ m}^3 \cdot \text{s}^{-1}$
Design pumping flow rate	$2 \times 41 \text{ m}^3 \cdot \text{s}^{-1}$
Reversible turbine type / runner diameter	vertical Francis / 4,100 mm
Number of turbines	2
Maximum output at generator terminals	24.15 MW
Maximum input in pumping mode	22.88 MW

For the contemplated option, outflows from the Tvrdošín Reservoir of 5, 10 and $20 \text{ m}^3 \cdot \text{s}^{-1}$ must be considered.

The tenderer may also propose an alternative method of pumping water back or a different type of pump-turbine (e.g. a Deriaz diagonal-flow turbine), with output and input power parameters comparable to those specified in the contracting authority's technical design.

V. Identification of the Subject Matter of the Procurement by CPV Codes

31128000-9 Turbogenerators

42112200-9 – Hydraulic turbines

42113200-6: Parts of hydraulic turbines

45315200-0: Turbine works

VI. Requirements for Interested Parties

1. Economic operators authorised to perform the contract may apply to participate in the preliminary market consultations; the Contracting Entity will verify this fact using available registers. This requirement does not apply to independent experts and independent institutions participating in the preliminary market consultations.
2. In view of the purpose of the preliminary market consultations, the Contracting Entity requires the interested party to appoint a representative with sufficient technical and commercial knowledge of the subject matter of the PMC.
3. Given the complexity of the subject matter, interested parties may, where necessary, be invited to participate in several rounds of the PMC in order to progressively refine the requirements based on consultations with other interested parties. In the case of straightforward supplementary questions, the Contracting Entity reserves the right to consult interested parties in writing; where necessary, consultations may also take place orally or by means of a site visit.
4. If the number of parties interested in participating in the PMC exceeds 5, the Contracting Entity reserves the right to invite to subsequent rounds, or to individual consultations within the PMC, the 5 interested parties that demonstrate the greatest number of references involving the implementation of similar projects during the preceding 15 years (calculated from the date of publication of this PMC).
5. The remaining interested parties that were not invited to the next round of the PMC or to an individual meeting within the PMC will be contacted by the Contracting Entity in writing, by means of an electronic questionnaire containing questions and topics related to the contract, and will be given an opportunity to express their views, comments and proposals for changes.

VII. Participation in the Preliminary Market Consultations

1. Interested parties wishing to participate in the PMC must register their participation by 15 September 2026 at 10:00 p.m. via the ERANET information system at <https://seas.eranet.sk/#/tenderPublicDetails/19699>.
2. After expressing interest in participating in the PMC by registering via the ERANET information system at <https://seas.eranet.sk/#/tenderPublicDetails/19699>, the interested party will automatically be given access, in addition to this notice, to the non-disclosure agreement concerning confidential information (hereinafter referred to as the "NDA"), Appendix No. 2. Once a scanned copy of the NDA signed by the interested party in Slovak or English has been received, the interested party will also be provided with documentation containing further detailed information currently available.

3. Within the above deadline, the interested party shall submit a list of reference contracts, the signed NDA and any supplementary questions concerning the PMC.
4. Interested parties will be informed about the next steps and deadlines via the ERANET information system.
5. Within the specified deadline according to the previous point 4., the interested party shall submit a technical proposal (technical description, site plan, sections, etc.) for implementing the contemplated reverse pumping option, using the completed PMC Form in Appendix No. 1, together with an indicative budget for implementing its technical proposal.
6. If an interested party expresses an interest in participating after the deadline specified in point 1. of this article or submits its proposals after the specified deadline, the Contracting Entity reserves the right to evaluate them only if this is administratively feasible in view of the stage reached in the PMC process.

VIII. Course of the Preliminary Market Consultations

1. All written communication during the consultations will take place exclusively electronically through the ERANET communication interface at <https://seas.eranet.sk/#/tenderPublicDetails/19699>
2. All costs and expenses associated with participation in the PMC shall be borne by the interested party, without any entitlement to financial reimbursement from the Contracting Entity.
3. After expiry of the deadline for submitting responses to the PMC, the Contracting Entity will compile a list of PMC participants and inform them of the next steps, i.e. subsequent rounds and the dates, venue, format and time of the PMC, or of any individual consultation.
4. Where necessary, the Contracting Entity will conduct an individual PMC in relation to any submitted proposal if the Contracting Entity considers this necessary in order to clarify or supplement that proposal. To ensure transparency and avoid distortion of competition, an individual preliminary market consultation will take place at the Contracting Entity's premises (or, where necessary, at the implementation site) or via a video-conferencing application, and minutes will be drawn up. The minutes documenting the entire course of the consultation will form part of the Contracting Entity's documentation. Before the individual consultation begins, the economic operator will give consent to the making of video and audio recordings. The recording and the minutes documenting the entire course of the consultation will form part of the Contracting Entity's documentation. An attendance list will also be drawn up for each meeting and will form part of the Contracting Entity's documentation.
5. After completion of the PMC, the Contracting Entity will publish minutes of the PMC on its contracting profile. Through these minutes, the Contracting Entity will disclose, in particular, information obtained from PMC participants that led to changes or modifications to the procurement documentation.
6. The Contracting Entity reserves the right to modify information concerning the course and content of the PMC at any time during the consultations. In accordance with the principles of transparency and non-discrimination, the Contracting Entity will provide sufficiently advance notice of any changes. All relevant actions taken by the Contracting Entity will be recorded in the minutes of the PMC and will be directed towards achieving the purpose of the PMC.
7. The languages of communication during the consultations will be Slovak, Czech or English.
8. The Contracting Entity will take appropriate measures to protect confidential information that may be provided during the consultations. An interested party participating in the PMC shall identify the information it considers confidential and for which it requires appropriate treatment.

9. By participating in the PMC, economic operators have an opportunity to present their knowledge and proposals concerning the subject matter of the contract. The Contracting Entity intends to uphold the principle of obtaining the best quality for the funds expended and to establish technical and other requirements in a manner that complies with all public procurement principles and allows them to be used in the subsequent public procurement procedure.
10. The Contracting Entity will evaluate the information and knowledge obtained through the PMC and subsequently determine the estimated contract value, technical requirements, delivery period and other terms and tender evaluation criteria so that performance of the contract achieves the stated purpose at the best quality and price. Economic operators participating in the PMC may subsequently participate in the procedure for awarding the planned contract and submit a tender. To ensure that the participation of an interested party or tenderer does not distort competition, the Contracting Entity has established the measures described above to preserve the principles of transparency and non-discrimination.

List of Appendices: Appendix No. 1 – PMC Form
 Appendix No. 2 – NDA (Slovak and English versions)