

**MINUTES OF THE PRE-BID CONFERENCE**  
**on the technical and procedural issues of preparation and submission of bids under ITB**  
**No.BLR/300/2017**

**TENDER:** ITB No.BLR/300/2017 “Turnkey Project for the Supply of Sapropel Processing Line and Performance of Related Services (Installation, Precommissioning and Commissioning, Training of Operators)”.

**DATE:** 10 May, 2017 (11.00-12.30 hours Minsk time).

**PLACE:** UNDP in Belarus (17, Kirova str., Minsk, Republic of Belarus).

**SUBJECT:** Provision of explanations to the representatives of prospective Bidders on the procedural issues of preparation and submission of bids under the ITB and clarifications of the ITB document. The representatives of the prospective Bidders who attended the Pre-bid conference were familiarized with the contents, requirements, terms and conditions of the ITB document and the bidding procedures. In the course of the Pre-bid conference the following enquiries were made by the representatives of the prospective Bidders and clarifications provided:

**1. Question:** It is indicated under item “Payment Terms” of Section 3b “Related Services” that 80% of the Goods price less advance shall be paid within 15 bank days upon acceptance of the Goods at the Purchaser’s warehouse (intermediate acceptance). Is it allowed to supply the Goods to the Purchaser’s warehouse in lots (consignments) under the schedule approved by both parties, and, respectively, to pay for each separate lot (consignment)? Is the following mode of payment allowed: advance payment in the amount of 20% of the whole contract amount, supply of equipment in lots (consignments) following manufacture of its components and payment of 70% of the amount of the shipped lot (consignment) of Goods, payment of the remaining 10% of the contract amount after commissioning of the line?

**Answer:** Supply of Goods to the Purchaser’s warehouse as per the schedule approved by the Purchaser is allowed. The delivery schedule should be sent to the Purchaser not later than 14 calendar days prior to shipment of the first lot (consignment). In addition to the payment conditions under item “Payment terms” of Section 3b it is allowed to pay for each lot (consignment) of Goods upon acceptance of each lot at the Purchaser’s warehouse (intermediate acceptance) in the amount of 80% of the price of each lot (consignment) of Goods less advance.

**2. Question:** It is indicated under item “Ex-factory/ Pre-shipment inspection” of Section 3b “Related Services” that the Purchaser (or inspection agent appointed by the Purchaser) shall have the right to conduct pre-shipment inspection of the equipment at its own cost. Is it necessary to demonstrate functioning of the assembled line during such inspection?

**Answer:** Demonstration of functioning of the assembled line (or individual elements and sections of the line) is desirable but not mandatory. The pre-shipment inspection is intended to check compliance of the equipment to be shipped with the specifications of the contract and technical documentation according to the provisions of item “Documents to be submitted under the contract” of ITB Section 3b, the conditions of the equipment, surface treatment and painting according to the provisions of item “Surface treatment and painting requirements” of ITB Section 3b as well as equipment marking according to the provisions of item “Packing requirements” of ITB Section 3b.

**3. Question:** It is indicated under DS No.30 of the Instructions for Bidders Data Sheet (page 22 of ITB document) that commissioning of the line and acceptance by the Purchaser of the line and the related services shall be not later than 90 calendar days from the date of contract signing. Can a Bidder propose the schedule of commissioning of the line exceeding 90 calendar days and will the Purchaser consider such schedule? Will the schedule be revised if the delay in implementation is not caused by the Supplier (for example the site is not ready or it is necessary to amend the project design documentation)?

**Answer:** If the expected period of commissioning and acceptance of the line and the related services by the Purchaser exceeds 90 calendar days from the date of signing the contract, the Supplier can indicate this period in the Project Implementation Schedule of item 2.5 of ITB Section 6. Bids with alternate schedule of line commissioning may also be considered by the Purchaser if found acceptable to the Purchaser and if there are no bids with the period complying with the requirements of DS No.30 of the Instructions for Bidders Data Sheet. UNDP and the End-user will make every effort to timely implement the project and timely provision of drawings by the Supplier is very important in this respect. In the case of delay the schedule will be revised, provided that such delay is not caused by the Supplier.

**4. Question:** Is it necessary to include after-sales servicing of the line in the price proposal?

**Answer:** After-sales servicing shall be provided in accordance with the provisions of item “Technical Support Requirements” of sub-item “Servicing requirements, service center” of ITB Section 3b. The Supplier shall also provide training of the staff on the sapropel processing line operation, servicing and maintenance according to provisions of item “Training of operators on operation and maintenance of equipment” of ITB Section 3b.

The Bidder shall include in the bid as a separate document the list of mandatory scheduled maintenance/servicing for the first year of the line operation and preventive technical maintenance of the equipment with indicated cost of such maintenance and servicing. If required, an agreement on after-sales servicing of the line will be signed between the Supplier and the End-user of the sapropel processing line.

**5. Question:** When it is required to submit the drawings indicated under item “Documents to be submitted under the contract” of ITB Section 3b? Are they to be submitted with the bid or in the period following award of contract and signing of the contract and prior to manufacturing?

**Answer:** The below paragraph of item “Documents to be submitted under the contract” of Section 3b (page 37 of ITB document) is amended to read as follows: “Documents and drawings to be submitted to the Purchaser prior to manufacturing of equipment.”.

The below paragraph of item “Documents to be submitted under the contract” of Section 3b (page 37 of ITB document) is amended to read as follows: “Documents and drawings to be submitted to the Purchaser prior to assembly and erection of equipment.”.

The Supplier shall provide the Purchaser with the drawings as specified in item “Documents to be submitted under the contract” of Section 3b, paragraph “Documents and drawings to be submitted to the Purchaser prior to manufacturing of equipment”, within the period after signing the contract and prior to manufacturing of equipment. The aforesaid documents are to be submitted not later than 30 calendar days after the date of signing the contract.

**6. Question:** It is indicated in Technical Specifications of ITB Section 3a that the material of the lower cone shall be two-layer steel; internal part of the lower cone – stainless steel (polished), the external part of the lower cone – steel plate. Is it allowed to use other type of material?

**Answer:** The use of any other type of material is not allowed.

**7. Question:** Please provide the specific properties of sapropel to be processed (raw product).

**Answer:** The specific properties of sapropel to be processed are as follows:

- moisture content 50 – 60%;
- uniform material with presence of lumps up to 12 cm in diameter;
- occurrence of vegetation (grass);
- ash content 40-50%.

**8. Question:** The size of sapropel lumps to be crushed, according to our data, may reach 100mm with moisture content up to 60%. It is not feasible to crush such suspension (60% and even 40%) theoretically as due to the difference in densities (real) of sapropel and water the volume of water

in the unit of mass to be crushed at 60% of moisture content will be approximately 3 times more than the volume of sapropel. Therefore, the parameters of crushed sapropel are required to be changed by decreasing to 15-20% or to include a drying machine in the list of equipment.

**Answer:** Sapropel with moisture content up to 60% can be crushed which is proved by practice. The dryer is not required.

**9. Question:** Is it possible to inform us on the purchase starting price and possibility to offer price reduction (price reduction procedure)?

**Answer:** The bidding procedure for this procurement does not provide for a purchase starting price and possibility to offer price reduction (price reduction procedure).

**10. Question:** It is not feasible to perform starting-up, adjustment, precommissioning and commissioning of the system if there are no erected metal structures (service platforms) required for the above works with the equipment. The tender assignment does not provide for the supply of metal structures. How will this issue be tackled?

**Answer:** All metal structures, stairs, service platforms required for installation, starting-up, adjustment, precommissioning and commissioning of equipment will be provided by the Purchaser (End-user) by the time of performance by the Supplier of respective works.

**11. Question:** Who shall perform construction works at the installation site? Will the certificate of readiness of the site to installation of sapropel processing line (the certificate of transfer of the site to the Supplier for installation of the line) be drawn up and signed by the parties?

**Answer:** Preparation of the premises for the installation of equipment and performance of construction works required for the installation of equipment at the installation site shall be carried out by the Purchaser (and the End-user of the equipment) in line with provisions of item "Installation, precommissioning and commissioning" of ITB Section 3b. The certificate of transfer of the site to the Supplier for the performance of installation works can be issued if requested by any party to the contract (it shall be signed by the Supplier, the Purchaser and the End-user).

**12. Question:** Locations of foundations are indicated on the design drawings posted at the website with the ITB document. Will there be any changes and modifications made in the design drawings and project design documentation regarding locations of foundations in order to match them with the equipment of the successful Bidder? Who will make the foundations?

**Answer:** Following award of contract under this ITB all requisite amendments will be made in the design drawings and project design documentation, including changes in the locations of foundations, in order to match them with the equipment of the successful Bidder. The foundations and pits will be constructed by the Purchaser (End-user) at the Purchaser's cost as stated under item "Documents to be submitted under the contract" of ITB Section 3b.

**13. Question:** Please specify whether the centralized automation (semi-automation) control system is required. If it is required, please, specify the requirements to the system and "the scope of responsibility" at the time of its installation.

**Answer:** The centralized automation (semi-automation) control system is mandatory. Installation of the system shall be done by the Supplier.

**14. Question:** Which type of the processes automation is required? Is the automation of equipment as it is indicated under item 3.26 and sub-items 3.26.1 – 3.26.5 of Technical Specifications of Section 3a sufficient? Should we consider that what is indicated is the technical assignment for the line automation? Is an integrated equipment control panel required?

**Answer:** According to item 3.26 and sub-items 3.26.1 – 3.26.5 of Technical Specifications of Section 3a the required automation system shall ensure:

- protection from roll-off (order of switching on from the end of line and switching off from the beginning of the line);
- control of operation and protection from overflow of screws and conveyor by means of movement sensors;
- control of weight of product in hoppers;
- emergency stop of equipment in case of emergency (conveyor belt break, screws overflow, conveyors overflow) as well as emergency stop from control posts;
- control of hoppers filling (lower and upper levels);
- control of electric drives of screws, conveyors and mixer;
- control of equipment as per the technological program (dosing of each product as per formula);
- remote centralized start and stop of electric engines of the process and conveying equipment;
- emergency stop of all electric engines;
- local control for each unit of process equipment (machine);
- automatic blocking of electric engines of machines or groups of machines in such a manner that the sequence of start and stop modes as well as emergency stop of any one of the machines shall exclude possibility of rolls-off and overfills;
- control of functioning of conveying equipment by installing overflow sensors, belt break control sensors, switching off conveyor in case of overflowing of box or breaking of the belt.

Everything indicated under item 3.24 as well as under item 3.26 and sub-items 3.26.1 – 3.26.5 of Technical Specifications of Section 3a is the technical assignment for the line automation. The integrated equipment control panel is required (ref. item 3.24 of Technical Specifications of Section 3a).

**15. Question:** The “moving bottom” is required under ITB document. Also, the ITB document provides for the supply, start-up and adjustment, precommissioning and commissioning of the equipment. Does the Purchaser guarantee normal functioning of the “moving bottom” with the used sapropel? Will adhesions, stickings, etc. be avoided?

**Answer:** The Purchaser shall ensure and guarantee quality of material supplied for the line processing, and the Supplier shall ensure and guarantee normal functioning of the line.

**16. Question:** Which Technical Regulations of the Customs Union should the supplied equipment comply with?

**Answer:** The supplied equipment shall comply with the Technical Regulations of the Customs Union TP TC 010/2011 “Safety of Machines and Equipment”.

Sub-item 2.18: “The supplied equipment shall comply with the Technical Regulations of the Customs Union TP TC 010/2011 “Safety of Machines and Equipment” is added to item 2 “Technical Requirements” of Schedule of Requirements, ITB Section 3a.

**17. Question:** What is the maximum size of the material coming from the hopper to the sapropel crusher.

**Answer:** The maximum size of the source coming from the hopper to the sapropel crusher is 5 cm in diameter.

**18. Question:** Which stage of the project design has been implemented? Is it possible to study the project design technological section? We mean the note with description of the technological process.

**Answer:** The note with description of the technological process will be posted at the same websites and links as the ITB document.

**19. Question:** DS No.26 of the Instructions to Bidders Data Sheet “Required Documents that must be Submitted to Establish Qualification of Bidders...”. Is it essential for a Bidder to have the certificate of environmental compliance?

**Answer:** DS No.26 of the Instructions to Bidders Data Sheet “Required Documents that must be Submitted to Establish Qualification of Bidders...”, section “Environmental Compliance Certificates...”: availability of environmental compliance certificate and other evidences of the Bidder’s practices which contributes to the ecological sustainability, either in its business practices or in the goods it manufactures, is desired but it is not a mandatory requirement.

**20. Question:** Is it possible to agree the list of high-wear parts at the contract signing stage?

**Answer:** Yes, the list of high-wear parts can be agreed with the successful Bidder at the contract signing stage.

**21. Question:** In which cases is it necessary to submit export license?

**Answer:** The export license is to be submitted in line with the provisions of item 15.2 of Section 2 of ITB Instruction to Bidders. Submission of the export license under this Invitation to bid is not required.

**22. Question:** It is mentioned under DS No.35a of the Instructions to Bidders Data Sheet that the electric diagrams of the equipment are available with the ITB document. However, there are no electric diagrams among the documents posted under the ITB notice.

**Answer:** The electric diagrams as well as automatization and connection of the equipment drawings are posted at the same websites and links as the ITB document (for example, <http://www.by.undp.org/content/belarus/en/home/operations/procurement/ITB-300-2017.html> ).

**23. Question:** The overall size of the sapropel crusher, in our opinion, is underestimated even with the moisture content equal to 20 % and production capacity of 7 tons per hour. For example, in the developed by...design of crusher with the capacity of 8 tons per hour for crushing the parts of peat sized up to 10 mm and having moisture content up to 10%, the engine power is 45kW and its overall size (LxWxH) is 2,721 x 1,513 x 1,513 mm. Peat density is ~ 400 – 430 kg/m<sup>3</sup>, sapropel density is ~ 1,800 – 2,000 kg/ m<sup>3</sup>. We think that the requirements for the overall size of the crusher should be the following:

- length 1,500 – 2,500 mm;
- width 1,500 – 1,800 mm;
- height 2,700 – 3,000 mm.

**Answer:** The overall size of the sapropel crusher according to item 3.2 of Technical Specifications of Section 3a is established on the basis of parameters of the equipment ensuring the production capacity designed for the sapropel processing line. Changes of parameters (including the overall size) for the crusher would have resulted in modification and adjustment of the sapropel processing line (installation of an additional conveyor), increase of electric power, amendment of the design documentation.

The requirements and specifications of item 3.2 of Technical Specifications of Section 3a remain unchanged.

**24. Question:** According to item 3.1.6 of Technical Specifications of Section 3a engine power (storing hopper with chain-and-slat feeding conveyor) is to be not more than 5 kW. We suggest to increase the power up to 5.5 kW, because a number of manufacturers of power engines from the Eurasian Economic Union countries do not produce such engines. There are engines with the power of 4 kW which are followed by 5.5 kW range of engines.

For this reason, we offer to increase the engine power in the following way:

- measuring hopper (item 3.16.4 of Technical Specifications of Section 3a) from 2 kW to 2.2 kW;
- horizontal mixer (item 3.18.7 of Technical Specifications of Section 3a) from 13 to 15 kW;
- feeding drag-chain conveyor (item 3.21.6 of Technical Specifications of Section 3a) from 1 kW to min. 5.5 kW (due to width of 120 mm, which is, in our opinion, 3-4 times larger than it should

be);

- automatic packer (item 3.22.10 of Technical Specifications of Section 3a) from 5 kW to 5.5 kW.

We do not exclude that the real power consumption will be higher than the power indicated in the Technical Specifications due to lack of, in our opinion, exact calculations for shape, slope, width of the conveyor (belt, chain, etc.); a wide range of sapropel moisture content and its composition are not accounted for.

**Answer:** In case single-phase motors are used, the power values indicated in the ITB document (items 3.16.4, 3.18.7, 3.21.6, 3.22.10 of Technical Specifications of Section 3a) can be increased within the range of up to 1 kW. If three-phase motors are used, the indicated power values can be increased within the range of up to 2 kW.

**25. Question:** According to item 3.2.5 of Technical Specifications of Section 3a the engine power (sapropel crusher) should be not more than 30 kW. Could you specify what is the basis for calculating the requirement of 30 kW, as we believe that with the engine power of 30 kW it is hardly possible to ensure all the requirements to the crusher (capacity, size of crushed material, reliable and safe operation, etc.) (the used impact (cutter) crusher has the power of 37 kW with lower capacity than 7 tons per hour and sapropel moisture content (visually identified) of 15-20 %).

**Answer:** The designed engine power is established on the basis of parameters of the equipment ensuring capacity and operation safety for the sapropel processing line. Sapropel is crushed at moisture content of 50-60% (moisture content is determined in laboratory, not visually). The production capacity of this crusher is regulated by pulleys. The power of the electric engine remains unchanged, not more than 30 kW.

**26. Question:** Are safety and protection devices measures stipulated by occupational safety regulations? Is it right that it is not related to the automation system?

**Answer:** According to item 3.27 of Technical Specifications of Section 3a the safety and protection devices are guard railings required by occupational safety rules and related to the automation system (for example, when there is no safety casing on a box joint the equipment will not start).

23 May, 2017