AMENDMENT NO.1

Date: 31 May 2019

Subject: Amendment Nr.1 To ITB for "Construction of Greenhouse Solar Sewage Sludge Dryer in Kilis/Turkey"

within the scope of Turkey Resilience Project in Response to the Syria Crisis; Municipal Service

Delivery

Ref: UNDP-TUR-ITB(MC2)-2019/04

Dear Madam/Sir,

Please find attached "Answers to Questions from Prospective Bidders" and "Minutes of Pre-Bid Conference and

Site Visit" in the context of subject ITB issued on 10 May 2019 for "Construction of Greenhouse Solar Sewage

Sludge Dryer in Kilis/Turkey" within the scope of Turkey Resilience Project in Response to the Syria Crisis:

Municipal Service Delivery.

You are kindly requested to prepare and submit your bids in response to our subject ITB with the consideration of

this amendment, with all other clauses of the ITB remaining valid.

Please be sure that your bids are physically submitted on or before the amended submission deadline on 24 June

2019, 14:00 PM (GMT +3, Local time-Turkey) via courier or hand delivery.

Attachment-1: Answers to Questions from Prospective Proposers

Attachment-2: Minutes of Pre-Bid Conference and Site Visit

Yours Sincerely,

Sukhrob Khojimatov

Deputy Resident Representative

## ATTACHMENT 1- ANSWERS TO QUESTIONS FROM PROSPECTIVE BIDDERS

Question 1: Is it possible to extend the submission deadline of the bids?

Answer 1: The submission deadline of the ITB is amended as; 24 June 2019, 14:00 PM (GMT +3, Local time-Turkey)

Question 2: In the tender dossier we have noticed some drawings for solar drying halls and dried sludge storage area. There is note on the drawings which is stated that "design of greenhouse is under the contractor's responsibility" therefore we assumed these drawing only given for information purposes and we will design the drying halls (greenhouses) according to the tender specification.

Answer 2: As per the Statement of Works/Technical Specifications, the design of the greenhouse solar sewage drying facility including all structures is within the scope of the contract. The prospective contractor will design the facility in accordance with the Statement of Works/Technical Specifications and the applicable standards, specifications and legislations. The drawings were given only as a guidance for the bidders and can be modified in line with technical solution of the bidder.

Question 3: Could you please share General Layout (Autocad version) which shows the construction area for solar sludge drying halls and sludge storage area?

Answer 3: Please refer to the enclosed drawings in dwg format.

Question 4: Referring to the tender dossier, Volume 2 Technical Specification, item 1.6.4, page 76 it is stated that "the energy supply system equipment such as MV cells, transformer, main distribution panel and generator shall be located in the monoblocks concrete kiosk". and Volume 2 Technical Specification, item 3.1, page 89 it is stated that "the contractor shall supply the energy to the GSD system from the main distribution panel in the monoblocks concrete kiosk to the installed next to the existing transformer and generator building. The energy of the GSD system will be provided by the power line from the thermal magnetic switch to be installed to the main distribution panel by Contractor.

In order to review the existing transformer and generator building we have to receive General Layout of the Plant (which is also shows the solar sludge dryers construction area)

Could you please provide General Layout of the Plant?

Answer 4: The location of the existing transformer and generator building is indicated by number B103 in the General Layout of Kilis WWTP (Autocad version). Please refer to the enclosed drawings in dwg format.

Question 5: Referring to the tender dossier, Volume 2 Technical Specification, item 3.3.6, page 91 it is stated that "The cable shall be transported from the new main distribution panel by the existing concrete cable channel which continues from the side of the tanks. After R9 manhole located at the corner of the road around the T-112/B second clarifier tank, the cable channel shall be made in the section shown in the layout plan.

Could you please provide the manhole plan of the WWTP?

Answer 5: The Cable Duct Plan of Kilis WWTP is attached to the notice. Please refer to the enclosed drawings.

Question 6: Referring to the tender dossier, Section 6, Returnable Bidding Forms/Checklist, Form F Price Schedule Forms, Schedule No.4 –Electrical Works, E.1.1 Main Transmission Line it is stated that "The MV cable connections with existing MV cells will be disconnected and new MV cables will be connected to the new cells". We have understood that the MV cables between existing MV output cell to existing 800 kVA transformer will be disconnected and new MV cables will be connected between existing MV output cells to new MV cells. Besides that, MV cables will be connected between new MV cells to the existing 800 kVA transformer. Could you please confirm it?

Answer 6: The existing MV cell will not be used after the new MV cell has been installed. Therefore, the new MV Cells shall have 2 output cells for both the existing transformer for Kilis WWTP and the new transformer to be installed for the GSD facility. As a result, the connection of existing MV output cell to existing 800 kVA transformer will be cancelled and the new MV cables will be connected between new MV output cells to existing 800 kVA transformer.

Question 7: Referring to the tender documents, Volume 1 General Requirements, Technical Specification for Mechanical Works, item 2.3.3 Conveyors, page 81 it is stated that "the removal of dried sludge out of greenhouse will be done by an automatic conveyor system" therefore we have few points to ask. Could you please clarify how will be the dried sludge transfers to the trucks on normal operation conditions? Could we assume all the dried sludge firstly conveyed to the sludge storage area and then loading to the trucks via conveyors? Could you please clarify that do we need to provide wheel loader to load the trucks with the dried sludge already poured to the sludge storage area?

Answer 7: It was planned to make inter transfer via trucks that are not under the scope of this works contract. As mentioned, in the General Specification; .... Kilis WWTP, sludge conveying from sludge dewatering building to GSD Facility halls shall be done via trucks that shall be provided by the Kilis Water Works Directorate. "

The Contractor is responsible for transfer of sludge to be moved within the halls, during drying process and also before and after drying.

Question 8: The File UNDP-ITB-TUR(MC2)-2019-04-(5)-1 Page 40 of 134, Section Green Halls, paragraph 2 as stated Roll-up door for truck entrance shall be provided for each hall. By the way page 75 of 134 section 1.6.3 says that truck door shall be folding shutter door. Q- does the truck entrance door be folder door or roll up door? Please clarify.

Answer 8: Hall doors for truck entrance shall be roll up type doors.

Question 9: Where is the existing transformer station and existing pole on the project? What type medium voltage cell is in the existing station? (3. Technical Specification for Electrical Works, 3.3.8 Energy Supply Systems)

Answer 9: The location of the existing transformer and generator building is indicated by number B103 in the General Layout of Kilis WWTP (Autocad version). The existing pole is located outside the fence border and is directly behind the transformer building. The existing MV cell will be cancelled. For more locations and technical information, the Work Contractor should do his own study on site.

Question 10: What is the exact route of the existing concrete cable channel on the Project? (3. Technical Specification for Electrical Works, 3.3.6 Energy Supply)

Answer 10: Please refer to the enclosed drawings.

Question 11: Does the transformer required as copper windings or aluminium windings? (3. Technical Specification for Electrical Works, 3.3.10 Transformer)

Should the systems in the GSD facility and storage facility (for examle lighting fixtures, cameras) be explosion proof?

Answer 11: The copper-windings type should be selected.

The use of the ex-proof equipment shall be determined according to the report where the accounts are made and classified for the explosive or ex-zone areas that the Contractor shall be submitted to the approval of the Engineer.

Question 12: How many watts of lighting fixtures should be mounted on the steel construction at the top of GSD facility and outdoor lighting fixtures on the road lighting poles? (3. Technical Specification for Electrical Works, 3.3.15.1 Lighting System)

Answer 12: The selection and design of the power of armatures will be determined by to the Contractor according to the conditions specified in the technical specification. However, the lighting account should be submitted to the approval of the Engineer.

Question 13: Is the construction site extendable, is there any flexibility for the construction site boundaries? Answer 13: It is not allowed to make this type of changes within the WWTP. Area allocated for the GSD facility and necessary units are clearly given in the ITB.

.Question 14: Is displacement of the existing pipes and manholes on the site required?

Answer 14: No, as per the conceptual design, this kind of changes were not deemed as necessary. Nevertheless, these types of changes are under the responsibility of the Work Contractor and subject the approval of the Engineer and the Final Beneficiary.

Question 15: Regarding dried sludge storage facility, shall the side walls concrete? Is it acceptable to use materials such as bricks for side walls?

Answer 15: As mentioned in the specifications, the drawings are given for informative purpose. According to allocated area, the Contractor shall give his own design. The prospective contractor will design the facility in accordance with the Statement of Works/Technical Specifications, his own technical solution and the applicable standards, specifications and legislations. The drawings were given only as a guidance for the bidders and can be modified in line with technical solution of the bidder.

Question 16: Can you identify the site drainage connection point and elevation?

Answer 16: This type of information should be defined by the Work Contractor in accordance with his technical solution.

Question 17: Is the expected 85% dry ratio for the average of all seasons?

Answer 17: 85 % drying ratio is the minimum value for the whole year regardless of the season.

Question 18: Is hall area less than 3500 m2 acceptable in case of meeting all the other design parameters?

Answer 18: Hall area of 3500 m2 is required as minimum, hall areas less than 3500 m2 will not be accepted regardless of the technical solution.

Question 19: "Contractor's Key Personnel" is required by the ITB, these key personnel shall be full time employee of the Contractor? Are subcontractor's personnel acceptable as key personnel? When will the key personnel start to work? Will all of the key personnel work full time (during the 150 days) on the site?

Answer 19: Contractor shall assign the required key personnel on site in accordance with his/her programme of work. The project manager shall be on site on a full-time basis for 150 days construction period. The pother key personnel shall be on site on a part-time basis.

Question 20: Please clarify the requirement for contractor's staff during Defects Liability Period, such as working programme, employment status?

Answer 20: GSD Facility shall be operated by the Final beneficiary's staff (Kilis Municipality Water Works Directorate & Kilis WWTP) after the substantial completion of the GSD Facility. The Contractor shall provide the following staff during Defects Liability Period (DLP).

Table 1: Profile of Cor	tractor's Staff for [	Defects Liability	Period
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No	Profile	Experience	Minimum Allocated Duration During DLP
1	Mechanical Engineer	10 years	3 months/ year
2	Electrical & Electronics Engineer	6 years	2 months/ year

This staff will be responsible to support the staff of municipality, they will be on site when required by the Municipality. They will not be on site on a fulltime basis, they will be on site for DLP period intermittently. Their working programme will be determined according to the technical solution of the Contractor with consent of the Engineer. They can be contractor's staff, subcontractor's staff or free-lance experts.

Question 21: Can the roof slope of the greenhouse halls be revised in accordance to greenhouse standards? Answer 21: As per the Statement of Works/Technical Specifications, the design of the greenhouse solar sewage drying facility including all structures is within the scope of the contract. The prospective contractor will design the facility in accordance with the Statement of Works/Technical Specifications

and the applicable standards, specifications and legislations. The drawings were given only as a guidance for the bidders and can be modified in line with technical solution of the bidder.

Question 22: Is it acceptable to propose different materials for roof covering of the greenhouse, such as 0,8 mm corrugated polycarbonate?

Answer 22: For superior technical solution, the Works Contractor can propose different materials by approval of Engineer. In all circumstances, efficiency of the drying halls is under the responsibility of the Works Contractor, specified as 85% drying ratio.

Question 23: It is stipulated by technical specifications as; "In all the openings mosquito nets shall be installed." Shall we install mosquito nets for all the apertures including the 30 cm aperture between side walls and the beginning of the side panels?

Answer 23: As per the ITB, the contractor shall install mosquito nets for all the apertures.

Question 24: It is stipulated by technical specifications as; "Truck movement and truck loads shall be considered for the design of halls." What are the specifications of the truck to be used as design basis?

Answer 24: H30-S24 type of truck shall be considered for the load calculations.

Question 25: Design basis for the facility is stipulated as minimum 24 tonnes per day for the capacity. Please provide the maximum capacity for the facility.

Answer 25: The capacity of the first stage of the facility shall be 24 tonnes per day. That is the design basis, the facility has the capability of processing 24 tonnes/day. The maximum capacity of the facility shall be minimum 24 tonnes per day.

Question 26: Design basis for the facility is stipulated as minimum 24 tonnes per day for the capacity. Please provide the maximum capacity for the facility.

Answer 26: The capacity of the first stage of the facility shall be 24 tonnes per day. That is the design basis, the facility have the capability of processing 24 tonnes/day. The maximum capacity of the facility shall be minimum 24 tonnes per day.

Question 27: Will a weighbridge be provided to conduct the tests for performance of the facility?

Answer 27: A weighbridge is not available, the calculation for test results would be made by sampling of the sludge and dried sludge.

## ATTACHMENT 2- MINUTES OF PRE-BID CONFERENCE AND SITE VISIT

Pre-bid conference was conducted on 29 May 2019, 10:00 am, at the premises of Kilis Waste Water Treatment Plant, as stipulated by the Bid Data Sheet. UNDP held the conference with participation of representatives of prospective bidders, final beneficiary Municipality of Kilis.

The prospective bidders were firstly informed that no verbal statement made during the conference shall modify the terms and conditions of the ITB, unless specifically incorporated in this Minutes of the Pre-Bid Conference or issued/posted as an amendment to ITB.

The following provisions of the ITB were emphasized prior to getting questions from the prospective bidders.

- The Bid, as well as any and all related correspondence exchanged by the Bidder and UNDP, shall be written in English.
- Bid validity period shall be minimum 90 days starting from the submission deadline.
- The currency of the bid shall be United States Dollar. The currency of payment is as follows; if the Contractor is registered and operating in Turkey, the payment shall be realized in Turkish Liras (TRY). Otherwise, the payments shall be affected in United States Dollar.
- A Bid Security shall be provided in the amount of USD 30,000 using the template given in Section 6
  of ITB without any change from the template. The Bid Security shall be valid for a minimum of thirty
  (30) days after the final date of validity of the Bid.
- UNDP General Conditions of Contract for Civil Works will be applied, which can be accessed at <a href="http://www.undp.org/content/undp/en/home/procurement/business/how-we-buy.html">http://www.undp.org/content/undp/en/home/procurement/business/how-we-buy.html</a>.
- UN and its subsidiary organs are exempt from all taxes. Therefore, bidders shall prepare their Bids excluding Value Added Tax (VAT). It is the Bidder's responsibility to learn from relevant authorities (Ministry of Finance) and/or to review/confirm published procedures and to consult with a certified financial consultant as needed to confirm the scope and procedures of VAT exemption application as per VAT Law, Ministry of Finance's General Communiqués. The Contractor to be selected shall not be entitled to receive any amount over its Bid price in relation to VAT, Special Consumption Tax and any other applicable taxes.
- UNDP's tax exemption is not automatically extendable to its vendors.
- As the minimum qualification criterion, The Bidder must have successfully completed minimum one contract with the scope of construction of a greenhouse solar sewage sludge dryer and/or similar works, and a minimum value of USD 500,000 over the last three years. If the value of the previous experience is in a different currency than USD, the value of the contract shall be converted to USD through use of UN operational rate of exchange which was effective on the date of contract for the previous experience. UN operational rate of exchange are available at the following website: https://treasury.un.org/operationalrates/OperationalRates.php#E
- As the minimum qualification criteria, the bidders shall have minimum average annual turnover of USD 1,500,000 for the last three years. The prospective bidders were reminded that the USD amount pertaining to each of three years (2016, 2017 and 2018) shall be calculated through use of UN operational rate of exchange which was effective for December of each corresponding year. UN operational rate of exchange are available at the following website: <a href="https://treasury.un.org/operationalrates/OperationalRates.php#E">https://treasury.un.org/operationalrates/OperationalRates.php#E</a>.

- Bidders shall provide descriptive responses in line with the sections of Form E: Format of Technical Bid, failure to provide the descriptive responses will be viewed as non-responsive.
- The prices inserted in price proposal are to be the full inclusive, including all costs and expenses which may be required in and for the construction of the works described together with any temporary works and installations which may be necessary, and all general risks, liabilities and obligations set forth or implied in the documents on which the tender is based. It will be assumed that establishment charges, profit and allowances for all obligations are spread evenly over all the price schedules.
- The contract will be fixed-lump sum price, and the price is not subject to any adjustment or revision because of price or currency fluctuations or the actual costs incurred by the Contractor in the performance of the Contract.
- For mechanical and electrical works, the payments will be realized as follows;
  - Twenty percent (20%) of the price stated in the corresponding Schedule item, upon approval of design by the Engineer.
  - o Thirty percent (30%) of the price stated in the corresponding Schedule item, upon delivery of materials, machinery and equipment to site within the period agreed by the Engineer.
  - o Fifty percent (50%) of the price stated in the corresponding Schedule item, upon the Engineer's approval of the pre-commissioning test report.
- The scope of the requirement also includes design of the works, and 150 days duration includes both design and construction period. By partial approval of design by the Engineer, the prospective contractor may start the construction of the sections of the facility whose design is approved by the Engineer.

In the second session of the pre-bid conference, the questions of the prospective bidders were responded by representatives of UNDP and Municipality of Kilis. Each questions and answer are given below:

Question: Will the subscription fees of services such as electricity be borne by the Contractor? Answer: As per Article 6.2 of the Statements of Work/Technical Specifications, the subscription fees of any service such as electricity, potable water and wastewater shall be supplied by the Final Beneficiary, but the administrative/technical works of the subscription shall be made by the Contractor. All necessary documents should be provided by the Works Contractor, all costs related with this shall be paid by the Final Beneficiary.

However, provision of all the necessary utility requirements on site, such as electricity, water, gas, etc. during the execution of the works shall be under the responsibility of the Contractor as per Article 6.2 of the Statements of Work/Technical Specifications.

Question: Is it mandatory to attend the pre-bid conference?

**Answer**: Non-attendance will not result in disqualification of an interested Bidder.

Question: Will there be any deduction from the monthly progress payments, such as retention money? Answer: There will be no deduction from the monthly progress payment such as retention money.

Question: Is it mandatory to take a construction permit, or this construction has the exemption from the construction permit requirements?

Answer: Please refer to the related legislation for the requirement of the construction permit. In case of need for construction permit, all necessary documents shall be provided by the Works Contractor, all costs related with construction permit shall be borne by the Final Beneficiary.

Question: Will the automation system of the facility be connected to the current automation system of the wastewater treatment plant?

Answer: The SCADA and automation system of the GSD facility will be independent of the automation system of Kilis WWTP.

## Question: Who will cover the costs of the tests foreseen by the Statements of Work/Technical Specifications?

Answer: All costs related to the tests including tests during construction, tests on completion and tests after completion will be borne by the Contractor. The Contractor is responsible for the costs of all tests. It is mentioned clearly as "The Contractor shall provide all labor, plant, materials and services required for testing and inspection of the works." and "The Engineer may require additional tests to prove compliance with the specifications. All such tests shall be at the Contractor's expense."

Question: What type of a vehicle will be used for transferring the sludge to the facility? Answer: A tractor with a trailer will be used.

Question: Please confirm that compliancy with TS EN 13031 - Greenhouses Design and Construction is required by the Statement of Works/Technical Specifications.

Answer: Work Contractor shall use in his design and construction works, the most recent and applicable standards and norms and all the design shall be controlled by the Engineer accordingly.

## Question: Is a screw conveyor acceptable for transferring sludge to the greenhouse halls?

Answer: Technical solutions meeting or exceeding the requirements defined by the Statement of Works/Technical Specifications will be accepted. The bidders shall be informed that the Statement of Works/Technical Specification defines the design basis and minimum requirements for execution of works.

Transfer of sludge to the greenhouse halls was planned to be handled by a tractor with a trailer due to current layout of WWTP and the long distance between the current decanter of WWTP and the halls. Supply of the tractor is not in the scope of this contract.

Spiral type conveyors might be used in the GSD hall area depending on the Work Contractor's design. As seen in the layout of the WWTP, it is not applicable to transfer the sludge from sludge dewatering building to GSD halls with any type of conveyor.

Question: What kind of roof covering material shall be selected for the dried sludge storage facility? Answer: All kind of materials meeting or exceeding the requirements defined by the Statement of Works/Technical Specifications will be accepted. The bidders shall be informed that the Statement of Works/Technical Specification defines the design basis and minimum requirements for execution of works.

The Works Contractor shall give his own design considering the maximum life time and functionality. Design of all items within the scope of this project shall be controlled by the Engineer.