



Republic of Serbia

MINISTRY OF FINANCE

Department for Contracting and Financing of EU Funded Programmes (CFCU)

Belgrade, October 8, 2021

CONTRACTING AUTHORITY'S CLARIFICATIONS No. 2

Construction and upgrading of municipal waste water collection and treatment system in Kraljevo

Publication reference/Tender ID: NEAR/BEG/2021/EA-OP/0098 - 17SER01/05/51

Disclaimer: All requests for additional information must be made in writing through the TED eTendering website accessible from the F&T portal at <https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/home> ; and in line with other provisions for submission of the request for additional information specified in the Additional information about the Contract Notice. Contracting authority shall not accept any responsibility or liability in case of requests for additional information which are not submitted fully in line with applicable provisions for submission of the request for additional information.

No.	Question	Answer
1.	<p>Ref: Volume 3.2 Particular technical requirements, Chapter 4.13.3 Gas desulphurization</p> <p>In Chapter 4.13.3 Gas desulphurization both biological trickling filter for biogas desulphurization and desulphurization by addition of Ferric chloride solution are mentioned.</p> <p>Please clarify required desulphurization method.</p>	<p>Please refer to Clarifications No. 1, answer to the question no. 25:</p> <p>Biogas desulphurization shall be completed by biological trickling filter.</p>



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2.	<p>In the BoQ > Sheet “9. Derok, Imlek, Makedonska itd” >Wastewater Network Reconstruction Pionirska, Sarajevska, Vojvođanska>HYDROTECHNICAL WORK > 4. Installation works > Pos. 4-2 (Excel row No. 171)</p> <p>Description of works is for HDPE pipes and Technical Specification reference number is for Polypropylene Pipes. Please clarify.</p>	<p>The correct technical specification reference should be for PE pipes (9.2 corrugated PE pipes)</p>
3.	<p>Please send us the drawings in PDF form as we cannot open the .DS_Store extension.</p>	<p>All drawings included in tender documents published on TED-eTendering, Lot 1 Volume 5 and Lot 2 Volume 5 are in .pdf format. Exceptionally, site topography in Lot 1 Volume 5 is in editable, .dwg format.</p>
4.	<p>Dear Sir/Madam, Please clarify the following inquires:</p> <p>1. Please clarify the meaning of the following: „Contractor shall obtain... all permits, licenses, and approvals, as required by the Laws in relation to the design, execution and completion of the Works.” (Particular Conditions of Contract, s/c 4.27 Licenses). Which specific licenses need to be provided, and whether they can be provided through subcontractors? Should they be submitted in tender documents, or shown after signing the Contract?</p> <p>Please clarify if tenderers are obligated to prove their technical and professional capacity in relation to available experts to</p>	<p>At the moment of Tender submission, the Tenderers shall present licenses of relevance for the Works under this Tender in accordance with legislation of the country in which they are established. Only successful Tenderer will be required to obtain all necessary licenses in accordance with the laws of the Republic of Serbia. (ITT 12.2.1 b) 2).</p> <p>The Contractor shall have obtained licenses for Design (Π073Γ3, Π073M2, Π073T1) and Construction (Π073Γ3, Π073M2) of the WWTP as stipulated in the Rulebook on the procedure and evidence required for evaluation of compliance with the requirements for issuing the License for preparation of technical documentation and the License for construction</p>



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	be engaged in the contract in the tender phase or after signing the contract. In the current tender Employer did not give such requirements for experts, but only for the company (ITT 12.2.b).	<p>for the facilities that are subject to Construction Permit issued by the Ministry or Autonomous Province as well as conditions for their cancelation (O.G. RS no. 2015).</p> <p>Nominated Subcontractor for preparation of design documentation may be carrier of the Licence for WWTP design.</p> <p>Tenderers are not required to submit CV's of their key Experts. Only technical and professional capacity of the company/JV will be evaluated.</p>
5.	Could you please specify the characteristics of the pipes used for construction of the existing main gravity sewer DN1200 (at the entry in the existing inlet chamber), and for construction of the effluent conveyance main DN1200. Please provide specification on the following: material, wall thickness, manufacturer, class, etc.	Material of the effluent conveyance pipe DN 1200 is concrete
6.	LOT 1 - WWTP Kraljevo_Volume 3.2 Particular Technical Requirements: Chapter 4.9.2 By-pass In TD, Volume 3.2 Particular Technical Requirements, Chapter 4.9.2 By-pass, it is stated that the Contractor is required to ensure undisturbed wastewater flow from the inlet works towards the outfall until completion of the Works (new WWTP put in operation). For the purpose of finding most adequate solution for new by-pass, please clarify what is the current solution for the situation when the inlet pumping station at the existing WWTP is out of order, for any reasons. In case if there isn't any existing solution, please explain what effects is that situation having on the objects upstream the main gravity sewer and the rest of sewerage system of the City of Kraljevo	There is no by-pass around a WWTP. In the events of power failure, emergency power (diesel) generator is put in operation. The pump operation is controlled by level in the inlet chamber. Interruption in operation of the inlet pumping station causes backflow to the collector and floods in the area upstream of the WWTP.
7.	Final sedimentation tanks shall be constructed and equipped for final project phase, i.e for year 2045. Kindly please confirm our understanding.	Confirmed



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8.	Kindly please advise material of the existing effluent pipeline DN1200.	Please refer to answer No. 5.
9.	<p>Volume 3.2 Particular requirements, Chapter 4.12.4. Anaerobic Digester.</p> <p>Construction of one Anaerobic digester is allowed for the first project stage and space provisions for additional digester capacity shall be made for the second project stage. Kindly please confirm our understanding.</p>	Confirmed.
10.	<p>When downloading the files for the tender "Construction and Upgrading of Municipal Wastewater Collection and Treatment system in Kraljevo", NEAR/BEG/2021/EA-OP/0098, specifically files TD LOT 1-Empty file (filename: EN-TD+LOT+1) and TD LOT 2-Empty file (filename: EN-TD+LOT+2), we get the message: "Error. Failed to load PDF Document".</p> <p>Please ensure that these files are replaced by operational versions of these documents.</p>	<p>Please disregard the following files: TD LOT 1-Empty File and TD LOT 2 Empty File.</p> <p>Complete Tender documentation is included in the subsequent zip files: EN-TD+LOT+1+Vol+1-4 EN-TD+LOT+2+Volumes+1+to+4 EN-TD+LOT+2-Volume+5-Part+1 EN-TD+LOT+2-Volume+5-Part+2 EN-TD+LOT+2-Volume+5-Part+3 EN-TD+LOT+2-Volume+5-Part+4 EN-Volume+5+Part+2 EN-Volume+5+Part+3 EN-Volume+5-Part+1 EN-Volume+5-Part+5</p>
11.	<p>Volume 3.2 Particular Technical requirements, chapter 5.2.2 Control Philosophy Inlet Pumping Station,</p> <p>It is requested that Electromagnetic flow meters shall be installed on each pressure pipe of inlet pumps. Additionally one inlet flow meter measuring complete flow is requested in Chapter 5.2.5. Influent flow and Quality measurement.</p> <p>Kindly please confirm that both flow measurement on pressure pipes and one common inlet flow measurement shall be included.</p>	<p>Depending on Tenderer's design a flow meter shall be installed either on a discharge main of the pumping station or downstream of the aerated grit chamber. VFD of the inlet pumps may be controlled by level in the pumping sump.</p> <p>There is no need for both flow measurement units.</p>
12.	With reference to Volume 1, Section 1, Instruction to Tenderers, article 8, article 9, sub-article 9.3 and article 18, please find below our requests for clarification.	There will be no extension of time for submission of Tenders



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	<p>1. Request for Time</p> <p>Extension We have carefully read the Documentation of the Contract “Construction and Upgrading of Municipal Wastewater Collection and Treatment system in Kraljevo” and we are interested to participate to the Tender Process and to submit our Offer for the execution of this Contract. Formalities and agreements are hampered by the existing worldwide pandemic emergency, summer holiday and reduced activity of our partners, which brings additional constraints to travelling and for the direct meetings and negotiations between partners. Beside what above mentioned, the price of raw materials is increasing and manufacturers face cascading challenges through the supply chains. As prices continue their upward climb, manufacturers are still dealing with the two supply chain headwinds, plaguing the industry throughout the pandemic: slowing supplier deliveries and labour availability. Related to the aspects mentioned above and taking into account the high impact and complexity of the contract as well as the contractual specific requirements, we kindly ask the Employer to grant, in accordance with the Sub-article 9.3 MODIFICATIONS TO TENDER DOCUMENTS, a 6 weeks extension of the deadline for submission of Applications: from 26 October 2021, to 13 December, 2021, sufficient for enable all participants to prepare a well round competitive Offer for the benefit of the Promoter and of the Funders. We look forward for your positive response.</p>	
13.	<p>Within Lot 1 we have received a Geotechnical Report for the Treatment Works. However, we have not received one for Lot 2 Networks. We request copies of any Geotechnical Surveys undertaken for this works.</p>	<p>Geotechnical Survey was not conducted for the Works included in Lot 2</p>
14.	<p>Ref: Volume 3.2 Particular technical requirements, Chapter 4.11.7.</p>	<p>RAS flow shall be directed to the distribution chamber of ASTs under Phase 1 and Phase 2</p>



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	<p>Return and excess sludge pumping Station. Acc to Tender specifications RAS shall be return to AST distribution box and additionally to distribution chamber of Primary sedimentation tanks. Kindly please confirm that connection shall be made for RAS flow to be returned to distribution chamber of Primary sedimentation tanks. Also please advise when this connection shall be used.</p>	<p>and in addition a future connection to the distribution chamber of the PST shall be considered.</p>
15.	<p>i) At document "Additional information about the Contract Notice" @Artical 17 – Period of implementation of tasks; it is written, inter alia: Lot 1: 1085 days from the Commencement date until the Taking Over and 365 days Defect Notification Period.</p> <p>ii) At Tender documentation TD LOT 1 / VOLUME 3/ Volume 3.1 - General Requirements/ Article 8.1 – Provisional Time Schedule; it is written, inter alia: <input type="checkbox"/> The completion period for all works under the Contract shall be 1300 days from the Commencement Date; <input type="checkbox"/> Defects liability period shall be 365 days upon issuing the Taking-over Certificate.</p> <p>iii) At Tender documentation TD LOT 1 / VOLUME 1/ SECTION 2/ TENDER FORM FOR A WORKS CONTRACT; ANNEX 2 – APPENDIX TO TENDER FOR A WORKS CONTRACT (related to LOT1), at the enclosed table it is written, inter alia: Time for Completion of the Works 1.1.3.3 1085 days Defects Notification Period 1.1.3.7 365 days Based on these, above mentioned, inconsistencies in the documentation, please for your clear answers to the following questions, in relation to LOT 1:</p> <p>1) Does the term "Commencement Date" (in context at mentioned Article 8.1 and at the document "Additional information about the Contract Notice") means the date of the execution (signing) of the Contract?</p>	<p>1) Please see first paragraph of the Sub-Clause 8.1 of the GCC</p> <p>2) As it is stated in the Tender Form (relate to LOT1) Period of implementation of tasks for Lot 1 is 1085 days from the Commencement date until the Taking.</p> <p>3) Please see GCC Sub-Clause 1.1.3.7 for definition of the DNP</p>



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	<p>2) What is the number of days from the Commencement date until the Taking Over Certificate?</p> <p>3) Does DNP/DLP period start right after the date of the Taking Over Certificate?</p>	
16.	<p>We acknowledge confirmation at the site visit that there is no geotechnical information for Lot 2. Could you please confirm that, in line with FIDIC Red Book, the works are re-measurable and the Contractor is able to make a claim for a variation should unknown/differing ground conditions be encountered during the execution of the works?</p>	<p>Confirmed. In case of discrepancy between quantity stated in the BoQ and measured on site payment, as well as any additional works thereof shall be paid per unit price for the works stipulated in Contractor's BoQ. In order to be entitled for variation precondition mentioned in the GCC Sub-Clause 4.12 shall be fulfilled.</p>
17.	<p>We kindly ask the Client to confirm whether proposals with modifications of the biological treatment, based on activated sludge, are acceptable (flow device – primary and final sedimentation tanks as rectangular clarifiers, MBR, SBR or modifications of SBR technology).</p>	<p>In accordance with the Volume 3.2 Chapter 4.3.1 Standards to be used for Process Design and Chapter 4.8 Wastewater Treatment Concept, proposed technology shall be any technology based on suspended growth activated sludge process with anaerobic sludge stabilization as far as being in compliance with the Employer's Requirements.</p>
18.	<p>Dear Sir/Madam, Please clarify the following inquiries: 1. In Section 1 Contract Form is written: The following documents shall be deemed to form and be read and construed as part of this contract, in the following order of precedence: (a) the Contract Form, (b) the Tender Form and Appendix to Tender, (c) the Particular Conditions, (d) the General Conditions of Contract (FIDIC 1999, Yellow Book), (f) the Drawings, (g) the Schedules (after arithmetical corrections), (h) the Tender including clarifications during evaluation stage, (i) any other documents forming part.. Please clarify which documents exactly are considered under point (f) Drawings, and under point (h) the Tender including clarifications during evaluation stage. Shall also clarifications from tendering stage be included in Contract Form?</p>	<p>a) The list of Drawings will be known after evaluation will be finalized, and will be based on successful tenderer offer.</p> <p>b) Clarification will be included as it is written in the Section 1 Contract form under point h).</p>
19.	<p>Please clarify the following:</p>	



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	<p>1. Primary Sedimentation Tank</p> <ul style="list-style-type: none">• Please confirm that the surface loading of 2.5-3.5 stated in Volume 3.2, Section 4.10.8, Table 16 are the maximum limits.• Volume 3.2, Section 4.10.8, Table 16: The defined retention times and the requirement of number of operational tanks for phase I and phase II are impossible to fulfill at the same time. Please confirm that the bidder is free to dimension the Primary Sedimentation Tank according to DWA-A131:2016.• In Volume 3.2, Section 4.10.8, Table 16, Page 45 is stated that the removal efficiency must be based on DWA-A131:2016. However, in Section 4.11.2, Table 18 the removal efficiencies for Primary Sedimentation Tank are fixed in the table and are the same for both phases and inconsistent with retention times given in table 16 and DWA-A131:2016. Please confirm that DWA-A131:2016 prevails. <p>2. In Volume 3.2, Section 4.12.4, Table 32. Recirculation rate for Anaerobic digester is defined with 3-Fold digester volume. According to DWA-M-368-2014 a minimum of 1-Fold per day recirculation is sufficient to maintain heat in the digester. Considering the continuous operation of an agitator in the digester for mixing, 3-Fold recirculation is excessive and leads to unnecessarily high-power consumption. We suggest reduction of the required recirculation rate to 1 or 1.5 folds.</p>	<p>1. Surface load to the Primary Sedimentation Tank shall not exceed 4 m/h at peak hour dry weather flow. Tenderers are free to dimension Primary Sedimentation Tanks in accordance with recommendations given by DWA-A131:2016.</p> <p>2. Digester sludge recirculation pumps shall be dimensioned in accordance with Volume 3.2 Particular technical Requirements, Table 32</p>
20.	<p>Please clarify the following:</p> <p>1. Section 4.12.5, Volume 3, in the text it is stated that the digested sludge thickener must be designed and constructed for phase I but in table 33 the same requirements are given for both phases (unlike table 28 in section 4.12.1). If 1 digested sludge thickener is to be built in phase I according to table 33, this thickener will not fulfill the requirements of the table 33 in phase II, and it should later be replaced by a bigger thickener by the time of</p>	<p>1. Confirmed. Digested gravity thickener should be constructed for the Phase I capacity</p> <p>2. Please refer to answer No. 11</p> <p>3. Confirmed. Ultrasonic level measurement in the Activated Sludge Tanks is not required.</p>



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	<p>execution of Phase II. Please confirm that 1 digested gravity thickener must be constructed for phase 1.</p> <p>2. In Volume 3.2, Section 4.10.7 Influent flow measurement shall take place downstream of the aerated grit chamber however in Section 5.2.2 electronic flow meters (EFM) on the individual pressure pipes in Inlet Pumping station are required. Please confirm that influent flow measurement in one of these locations is sufficient.</p> <p>3. In Volume 3.2, Section 5.3.1 Ultra Sonic level measurement is required in the Activated Sludge Tanks (ASTs). Since the water level in ASTs is controlled by outflow weir this measurement is not necessary.</p>	
21.	<p>1) In Volume 3.2 Particular Technical requirements regarding WWTP Kraljevo , in paragraph 4.10.8 Primary Sedimentation Tanks (PST), Table 16 is mentioned that the number of operational tanks for Phase I is two (2) pieces and for Phase II is one (1) piece. As the surface load requirement for only one tank in operation for Phase II is identical with Phase I with two tanks in operation, this leads to considerable tank size increase for both Phases. As such please confirm whether the surface load requirement is identical for both phases, and if not, please specify the surface load requirement for one tank in operation at Phase 2.</p> <p>2) For the sizing of the primary sedimentation tanks at Volume 3.2 Particular Technical requirements regarding WWTP Kraljevo , in paragraph 4.10.8 Primary Sedimentation Tanks (PST), Table 16. please clarify whether the surface load requirement should be calculated for peak wet weather flow or peak dry weather flow conditions.</p> <p>3) In Volume 3.2 Particular Technical requirements regarding WWTP Kraljevo, in paragraph 4.12.4 Anaerobic digestion, Table 32 is mentioned that the sludge age in the</p>	<p>1) Hydraulic retention time and surface load of the Phase I shall be considered as the main design criteria for the Primary Sedimentation Tanks.</p> <p>2) Surface loads shall be calculated based on peak dry weather flow</p> <p>3) The minimum sludge retention time in anaerobic digester is 18 days. Tenderers may propose longer retention times in accordance with Tender design.</p>



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	anaerobic digester shall be 18-20 days. Please clarify if this requirement is binding or if the Contractor can propose a higher retention time (above the specified limit of 20days).	
22.	<p>4) In Volume 3.2 Particular Technical requirements regarding WWTP Kraljevo , in paragraph 4.10.8 Primary Sedimentation Tanks (PST), Table 16 it is specified that removal efficiency should be adopted according to DWA A131, whereas in paragraph 4.11.2 Activated sludge tanks, Table 18 specific removal percentages in primary treatment are set. Please clarify whether the removal percentages at the PST's should be as specified at table 18 or calculated according to DWA A131 according to the adopted retention time at the PST tanks.</p> <p>5) In Volume 1 Section 4 Form 4.6.9.1 Tender Design, regarding WWTP Kraljevo, it is specified that the annual power consumption shall be determined for 100% of nominal flows and loads as specified in the Employers requirements. Please confirm that the nominal flows are the specified average flows as defined in Volume 3.2 Particular Technical requirements. Also, given that the design is based on three distinct design temperatures 10,12 and 25oC (for the design of the aeration system), please define the annual operating temperature for the calculation of the power consumption or alternatively define the temperature values for a set number of days or months/per operating year for the calculation of the power consumption.</p>	<p>4) Please note that referent values for removal efficiency in primary sedimentation tanks presented in 4.11.2, Table 18 correspond to DWA A131, Table 2, hydraulic retention time in primary sedimentation tank between 0.75 h-1 h.</p> <p>Having considered subsequent implementation phases i.e. extension of the WWTP to achieve nutrient removal hydraulic retention time in primary sedimentation tank should not exceed 1.5 h.</p> <p>5) Confirmed. 100 % of nominal hydraulic and organic loads means the loads stipulated in Volume 3.2 Particular Technical requirements, 4.7 Design criteria, Table 7 and Table 8. Reference temperatures shall be in accordance with the Employer's Requirements, i.e., 10, 12 and 25°C.</p>