Republic of Serbia
MINISTRY OF FINANCE
Department for Contracting and Financing of EU Funded Programmes
(CFCU)
13/1/2026, Belgrade

CONTRACTING AUTHORITY'S CLARIFICATIONS no. 1

Construction Works for Wastewater Collection and Treatment System in the City of Čačak
Publication ref.: EC-ENEST/BEG/2025/EA-OP/0094

no.	Question	Answer
1.	In Volume 1 – Section 1: Instructions to Tenderers, in point 12.2.2 Technical and professional capacity of candidate, it is stated as follows: "(b) Tenderer must have completed as a sole Contractor, as the Lead Partner of the Joint Venture/Consortium or a Joint Venture/Consortium Member at least one contract comprising process design, construction and commissioning of a municipal waste water treatment plant with capacity of at least 90,000 PE, comprising tertiary treatment of wastewater implemented under design-built or turnkey Contract Condition. The works contracts must have been completed at any moment during the period of the past eight (8) years from the date of submission of tenders. …….. The following will be interpreted as a valid experience instead of 12.2.2(b): e) Extension of the municipal WWTP (covering the process design preparation, construction, installation	Please note that the explanation provided under point e) provides the conditions under which the extension of a WWTP will be considered as the relevant reference. It does not, in any way, modify or replace the requirements set under point (b). Consequently construction or extension will be considered as valid experiences under conditions specified in ITT section 12.2.2.

	and commissioning of additional technological line/train including tertiary treatment) and anaerobic digestion by which the capacity of the WWTP has been increased for at least 90,000 PE, delivered under design-build or turnkey Contract Conditions," Does this mean that only extension is considered as valid experience and not construction and/or rehabilitation? Given that the project is the construction of a new WWTP, we understand that construction or extension or reconstruction / upgrade should be considered as valid experiences. Please confirm. Moreover, in the Tender for Supervision of Works officially published last 3rd September, it is accepted as valid experience the supervision of works for construction or extension or reconstruction / upgrade of municipal WWTP. We would very much appreciate if you could confirm the correct receipt of the present e-mail.	
2.	In Volume 3 EMPLOYER`S REQUIREMENTS - Section 1: General Provisions, in point 3.1.12.3 Contractor's Designer 41, it is stated as follows: "The Design Engineers and Company shall hold all necessary licences as required by the Serbian legislation for the type of works to be designed/constructed. The Contractor shall only employ appropriately qualified and suitably experienced personnel who are familiar with all aspects of the facilities to be built and works in connection with Sewerage systems and also be well acquainted with international design practices and Serbian Planning and Construction legislation." 1. Are the necessary licences	1. Confirmed. For detail information please refer to the Rulebook on the conditions that legal entities and entrepreneurs must fulfill for preparation of technical documentation or construction of structures, for which the construction permit is issued by the Ministry of Construction, Transport and Infrastructure or the competent authority of the Autonomous Province (PRAVILNIK O NAČINU, POSTUPKU I SADRŽINI PODATAKA ZA UTVRĐIVANjE ISPUNjENOSTI USLOVA ZA IZDAVANjE LICENCE ZA IZRADU TEHNIČKE DOKUMENTACIJE I LICENCE ZA GRAĐENjE OBJEKATA | Ministarstvo građevinarstva, saobraćaja i infrastrukture). 2. Please refer to the answer under point 1.

	required according to the Serbian Legislation the following ones? "Design and Construction Licences: • I073G3 • I073M2 • P073G3 • P073M2 • P073T1" Please confirm. 2. In case the licences required according to the Serbian Legislation are different of the above-mentioned, could you please list the required licences exactly? 3. Could you please inform if a foreign company participating in the tender is required to hold the above-mentioned necessary licences, or in the event that there are Serbian companies that form the consortium/joint venture or act as subcontractors are the ones obliged to hold the above-mentioned necessary licences? 4. When should the obliged entities hold the above-mentioned necessary licences, at the submission of the tender offer or before the commencement of the Works?	3. Foreign company that meets the requirements in its own country may be deemed acceptable during the proposal submission and tender awarding process. Subcontractors may be engaged to fulfill licensing requirements according to the Law on Planning and Construction of the Republic of Serbia and relevant bylaws. Any contractor working in Serbia must possess the local licences. Foreign companies may establish a branch company in Serbia and enter into the procedure for licencing. Otherwise, foreign companies can establish a consortium or a Joint Venture with local company(s), which is/are already licenced. 4. Please refer to Sub-Clause 4.1 of the Particular Conditions of Contract – "*The Contractor shall submit to the Engineer, before the commencement of the Works, all appropriate current licenses for the Contractor in compliance with the Law on Planning and Construction and its associated rule books and regulations.*"
3.	In Volume I, Section I, Instructions to tenderers, chapter 12.2.2. Technical and professional capacity of the candidate is stated: (a) The Tenderer must be a registered firm or natural person legally capable of carrying out the specified works. (b) Tenderer must have completed as a sole Contractor, as the Lead Partner of the Joint Venture/Consortium or a Joint Venture/Consortium Member at least one contract comprising process design, construction and commissioning of a municipal waste water treatment plant with capacity of at least 90,000 PE, comprising tertiary treatment of wastewater implemented under design-built or turnkey Contract	The reference period remains unchanged.

	Condition. The works contracts must have been completed at any moment during the period of the past eight (8) years from the date of submission of tenders. (c) Tenderer must have completed as a sole Contractor, as the Lead Partner of the Joint Venture/Consortium or a Joint Venture/Consortium Member at least one contract comprising design, construction and commissioning of sludge anaerobic digestion and energy recovery from biogas for municipal waste water treatment plant with capacity of at least 90,000 PE. In case that references under 12.2.2. b) include anaerobic digestion and biogas utilization the requirement under c) will be considered fulfilled. The works contract must have been completed at any moment during the period of the past eight (8) years from the date of submission of tenders. We are kindly asking Employer to prescribe longer deadline period for proving the technical and professional capacity of the tenderer, respectively to prescribe past 10 years instead of mentioned 8 years from the date of submission of tenders. We consider such request reasonable taking into consideration the specific nature of the requested services and works of the subject procurement which are implemented over a long period of time, and all to ensure adequate level of competition.	
4.	**Volume 3.2, Chapter 3.3.3.24 Primary sedimentation tanks** Maximal surface load for Primary sedimentation tanks is defined as $3 m^3/m^2 \cdot h$. Please confirm whether the specified maximum surface load of 3 $m^3/m^2 \cdot h$ for the Primary Sedimentation Tanks shall be applied to the maximal dry	The maximum surface load to the Primary sedimentation tanks refers to the maximum dry weather flow (Q_{MDWF}).

	weather flow or to the maximum (wet weather) flow conditions.	
5.	**Volume 3.2, Chapter 3.3.3.24 Primary sedimentation tanks** Please confirm whether the double overflow weir arrangement (V-notched weirs at both wall crests of the effluent channel) is a mandatory requirement, or if a single peripheral weir configuration would be acceptable, given that the design criterion of 3 m/h for surface overflow rate can be met.	A single peripheral weir configuration would be acceptable. Please refer to Volume 3.4 – Technical Specifications for Mechanical Works, Chapter 3.4.19.6: *The clarified effluents shall be collected in a peripheral concrete outlet channel fitted with adjustable V-notch outlet weirs and a peripheral scum baffle*.
6.	**Volume 3.2, Chapter 3.3.3.24 Primary sedimentation tanks** Please confirm whether the scum collected from the primary sedimentation tanks must be returned to the grit chamber scum pit for pre-treatment, or if it would be acceptable to convey it directly to the thickened sludge blending tank upstream of the digesters.	Floating materials and scum removed from the Primary sedimentation tanks shall be pumped into the thickened sludge blending tank, upstream of the Anaerobic Digesters.
7.	**Volume 3.2, Chapter 3.2.2.25.2 Activated sludge tank (AST)** Could you please confirm whether a screw blower type is also acceptable in addition to the specified blower types — positive displacement (rotary lobe) and turbo blowers?	Please refer to the Employer's Requirements, Table 3.2.2-16 Design criteria for Activated Sludge Tanks, according to which the type of blowers shall be Positive displacement-rotary lobe, or turbo blowers. Positive displacement - screw blowers would also be acceptable.
8.	**Volume 3.2 Chapter 3.2.2.25.2 Activated sludge tank (AST)** "Operation control of the denitrification process shall be achieved by means of a combined Redox/DO control using an automatic controller. " Considering that ORP-based control is more typical for SBR and intermittent/ alternating systems, could you please confirm whether control of the denitrification process based on online nitrate (NO_3-N) measurement is acceptable, given that it provides a more accurate and stable regulation of nitrate recycle flow and overall denitrification control? Nitrate measurement if furthermore mentioned	Control of the nitrification and denitrification processes may be implemented either through online measurement of NO_3-N, NH_4-N, and DO or through online NO_3-N/ORP and DO measurements.

	in the Table 3.2.2 31: Minimum Water Line Instrumentation List.	
9.	**Volume 3.2, chapter 3.2.2.25.3 Phosphorous removal** "Anaerobic mixing tanks shall be dimensioned for a minimum contact time of 0.5 to 0.75 hours, referred to a maximum flow and the return sludge flow as necessary." Considering recommendations of DWA – A 131 Edition 2016 kindly confirm that the term "maximum flow" refers to the peak dry weather flow (PDWF)	Confirmed. Anaerobic tanks for enhanced biological phosphorus removal are to be dimensioned for a minimum hydraulic retention time of 0.5 to 0.75 hour, in relation to the maximum dry weather inflow and the return sludge flow.
10.	**Volume 3.2, chapter 3.2.2.25.3 Phosphorous removal** Kindly confirm our understanding that volume of FeCl3 storage tank shall be based on calculated monthly demand for chemical P removal only (no enhanced biological P removal).	Confirmed. The $FeCl_3$ storage capacity shall correspond to the monthly demand of the precipitant to ensure Phosphorous removal in case of biological Phosphorous removal failure.
11.	Kindly provide the topographic and cadastral plan of the WWTP site in DWG format, to serve as a basis for the layout preparation, including information on the inlet collectors, existing outfall, and other relevant site features.	Enclosed in Annex 1 to these Clarifications no.1 is the topographic and cadastral plan of the WWTP site in DWG format.
12.	**Volume 3.2, Chapter 3.2.2.29 Excess Sludge Thickening/ Storage** Please confirm whether the WAS buffer tank is mandatory, considering that it is common practice to retain WAS in the aeration tanks during weekends when thickening is not operated. MLSS concentration in the aeration tanks will still remain below 4.0 g/L , and this slight increase can be compensated by adjusting the WAS withdrawal rate during the following working days to maintain the target SRT. Additionally, we would like to highlight that storing WAS in a buffer tank under anaerobic conditions is not compatible with biological P removal as it will cause orthophosphate release from EBPR sludge, resulting in	Provision of a WAS buffer tank shall not be mandatory. Please note that this issue will be remedied by means of Change to Tender Dossier (Change Notice). Please regularly check the F&T Portal at https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/home and CFCU website at http://www.cfcu.gov.rs/tenderi.php. Please refer to Change to Tender Dossier (Change Notice no. 1).

	uncontrolled phosphorus discharge in return line. In view of the above, please confirm that omitting the WAS buffer tank is acceptable, provided that MLSS remains below 4.0 g/L, and weekday WAS removal rates are adjusted to maintain the target SRT and effluent uality..	
13.	**Volume 3.2, Chapter 3.2.2.29 Excess Sludge Thickening/ Storage** In case temporary storage of excess sludge in the excess sludge buffer tank is mandatory, could you please confirm that aeration of this tank shall be provided in order to prevent the development of anaerobic conditions, and consequently avoid sludge degradation and uncontrolled release of phosphorus?	Please refer to the answer no. 12 and Change Notice no. 1 - Change to Tender Dossier.
14.	**Volume 3.2, Chapter 3.2.25.6 Ras and ES pumping station** "Each feeder pipe shall be provided with a magnetic inductive flow measurement device (EFM) with remote control and transmission to the central operation control of the plant for process supervision." Please confirm if it is acceptable to measure the flow on the common discharge pipeline of the RAS pumps, instead of on each individual line from the FSTs, given that the return flow is directed to the distribution chamber upstream of the aeration tanks.	Confirmed. RAS flow measurement on the common discharge pipe of the RAS pumps is acceptable.
15.	**Volume 3.2, Chapter 3.2.2.22.8 Aerated grit chamber and FOG removal** Fo grease collection minimally 3 containers with volume of 5m3 each are required. However it is also mentioned than separated scum and grease shall be discontinuously discharged from the grease pits at the grit chambers to a sludge blending tank where it will be mixed with thickened	Confirmed. Collected grease shall be transferred to the thickened sludge blending tank. Provision of containers for grease is not required.

	primary and excess sludge. Kindly confirm that, if all collected grease is transferred to the sludge-blending tank, the provision of grease collection containers is not required.	
16.	**Volume 3.4, Chapter 3.4.9.1 Fittings and Accessories** It is stated that the nominal working pressure of valves, fittings and accessories shall be 1.0 or 1.6 bar (MPa). It is understood that MPa unit is correct and this requirement corresponds to PN10 and PN16; please also confirm that PN6 valves may be used for large diameters and applications where maximal water pressure is below 4 bar?	The required nominal pressures of the fittings should be defined in the design documentation phase. The minimum required nominal pressure of the fittings should be PN10.
17.	**Volume 3.4, Chapter 3.4.9.2 Tees and Wyes states** ''For connection of all kinds of valves welding neck flanges shall be applied if the nominal diameter of the pipe is greater or equal 150 mm.'' Please confirm if flat flanges besides neck flanges, for stainless steel pipes, are acceptable?	For pipeline installations made of stainless steel, flat flanges are acceptable.
18.	**Volume 3.4, Chapter 3.4.13.2 Crane** It is stated ''Monorail crane with electric hoist with geared hand travel, with four-wheel trolley and rolled steel joist to be installed above pumps, screens and others.''. Since maintenance operation is very rare, please consider if manual hoist operation is acceptable? It is vaguely stated'' Material of crane: ST 37 with prime and final coating''. Please confirm that corrosion protection of rails for monorail and bridge crane shall be applied according to ER with classification C3 per EN 12994.	The installation of single-girder chain hoists with electric drive is mandatory. Corrosion protection class C4 (or C5) according to EN ISO 12944 is acceptable.
19.	**Volume 3.4, Chapter 3.4.14.6 Surge Suppression Measures** It is stated ''Design of pumping systems shall include verification of	It is necessary to carry out the required analyses also for the pumping stations for which only reconstruction and equipment replacement are planned, or to confirm in

	the impact of transients resulting from opening or closing of valves and start-up and stoppage of pumps. Surge suppression measures proposed in the technical requirements shall be reviewed for the actual conditions and equipment to be installed. Surge suppression measures shall be provided where impact of pressure transients is likely to result in malfunction of equipment or pipes.''. Please confirm based on previous operating experience, that the active surge protection is not in scope of works on reconstruction of three sewage pump stations?	another acceptable manner that protective equipment is not required.
20.	**Volume 3.4, Chapter 3.4.14.9 Submersible Pump** • Please confirm that, if vortex impeller pumps are used, the efficiency can be lower than specified. • Please conform that the pump motors are not necessarily Ex rated if the Ex zoning elaborate does not require it (such as RAS pumps, etc)? • This question also holds for other motors (such as Conveyer motors, Grit classifier motors. Please conform that the various equipment motors are not necessarily Ex rated if the Ex zoning elaborate does not require it.	First bullet: Confirmed. The efficiency of submersible vortex pumps is generally lower than standard centrifugal pumps. Second and third bullets: Regarding ATEX requirements, please refer to Volume 3.2: Particular Design and Process Requirements
21.	**Volume 3.2 , Chapter 3.2.2.37 Odour Control Facilities** Kindly confirm that a biofilter with a mineral-based filling (natural volcanic rock) is acceptable as an alternative to a biofilter with a humus-based medium. In practice, the mineral medium has a longevity of more than 20 years, which would significantly reduce maintenance requirements compared to a conventional humus-based filter.	Not confirmed. Please refer to Volume 3.2, Table 3.2.2-30: type of odour removal facility shall be biofilter with chemical pre-washing.
22.	**Volume 3.2, Chapter 3.2.2.35 CHP** The number of duty units without	The co-generation system shall have a minimum one duty unit and another unit

	standby for the first project phase is indicated as 1. Kindly confirm our understanding that, for the first project phase, two units shall be supplied — one duty unit and one standby unit.	which can assist the duty unit units for peak shaving/lopping. The duty units shall be sized for normal operation and automatically rotated.
23.	**Volume 3.2, Chapter 3.2.2.15 Wastewater quantities** In the note below Table 3.2.2-3, it is stated that storm water flow (i.e., flow exceeding WWF_1) shall be bypassed and discharged to the Atenica River at the existing discharge location. Kindly confirm that the discharge point for storm water shall be the Atenica River and that the existing discharge point shall be used.	In accordance with ER, the Contractor shall construct stormwater pumping station of capacity of 600 l/s (covering the difference between Q_{WWF1} and Q_{WWF2}). Overflow structure shall be constructed to operate during the construction works of WWTP and to remain operation during exploitation only for emergency cases. For that purpose, we confirm that existing discharge point at Atenica River for overflow structure shall be used.
24.	**Volume 3.2, Chapter 3.2.2.12 Electricity supply and Load Control** "This scope under this contract includes design, supply and installation of a new transformer station 10/0.4kV including the following components: • Dry energy transformers 1x1250kVA, • MV switchgear 10kV • LV switchgear 0.4kV • Local distribution panels • Other necessary equipment" The usual practice for such a complex waste water treatment plant of the same, even smaller capacity is that the substation is constructed with two transformers, one -on duty and one - stand by. The diesel generator and cogeneration unit together, in case of transformer failure, have limited capabilities to keep the process "live" during the time required to replace the transformer even if it is currently available in storage room. On the other hand in General requirements, Volume 3, Section 5, 3.5.7.2 two transformers are mentioned.	Two transformers shall be provided in accordance with Technical Specifications for Electrical Works, Vol.3, Section 5, 3.5.7.2. The total load shall be distributed between two transformers such that, in case of failure of one transformer, the remaining transformer can take over the entire load (N+1). The transformers are Dry-type and for them it is recommended to install surge arresters on the primary 10kV side.

	Please clarify which information is correct?	
25.	**Volume 3.2, Chapter 3.2.2.12 Electricity supply and Load Control & Volume 3.5 Chapter 3.5.7.2 Power transformer** In the Chapter 3.2.2.12 a dry transformer was mentioned as an obligation, while Volume3 Section 5 also mentions power transformers including oil-immersed type. Please clarify whether it is possible to offer a solution with oil-sealed transformers as well.	Dry transformers should be proposed. Oil-immersed transformer type will not be accepted. .
26.	**Volume 3.2, Chapter 3.2.2.12 Electricity supply and Load Control** In the EPS Conditions – Tender Document Uslovi za projektovanje i priključenje issued by Elektrodistribucija Srbija d.o.o. Beograd, the approved maximum power is 900 kW with a power factor above 0.95. Is it mandatory to choose a power transformer 1250 kW or it could be based on consumers total power calculation?	The connection requirements have expired and need to be renewed. In any case, the power of the transformer is defined by calculations in relation to the power of consumers taking into account parallel operation mode (N+1).
27.	**Volume 3.5, chapter 3.5.7.1 Electricity supply** "A transformer station shall be designed in accordance with Conditions issued by the relevant authority (ref, Volume 5. Conditions obtained from the Power Supply Company EPS)" The documents issued by the Local Electricity Supply company in 2021 are not valid because they were issued in 2021 and have expired. The Electricity company (EPS) has regulated the production of electricity from renewable sources of electrical energy (gas generators) through document "PRAVILA O RADU DISTRIBUTIVNOG SISTEMA". The	The electricity generated from biogas will be for internal use only. It will not be sent to the electricity distribution network. The power of the CHP generator in most cases is not enough to power even a part, especially the whole plant. Accordingly, we will never come to a situation where the energy produced from the CHP unit is returned to the grid. The operation mode of the CHP unit is clearly described in chapter 3.5.12.

	method of connection and apply equipment depends on the production capacity of the generators (CHP) and completely is different from a standard distribution substation. EPS will not accepted their own document-Conditions issued on date 24.05.2021. (probably they didn't have enough information)- USLOVI ZA PROJEKTOVANJE I PRIKLJUČENJE for the plant with gas generators. Note, that the price of such two substations is very different.	
28.	**In Volume 3.2, chapter 3.2.2.11 Flood protection and effluent discharge** it is stated that "flood protection works must be integrated with the planned diversion of the Atenica River and construction of the flood protection along the Zapadna Morava River that is not within the scope of this Contract." What is the status of these works? Is any design documentation available? Are diversion of Atenica and flood protection included in hydrology and hydraulic study? If not, is new study required?	Regarding positioning of the WWTP flood protection embankment in relation to the planned embankment along the Zapadna Morava River between the Atenica and Trnava rivers, please refer to the Location Conditions and Conditions issued by the Public Water Management Company Srbijavode. The positioning of the planned embankment is indicated on the WWTP layout drawing (ref iii-Volume 5.1). Regarding regulation of the Atenica River, please find graphical documentation with cross sections and relevant water levels in Atenica River enclosed in **Volume 5 – Drawings – 3. Access road to WWTP – 3.3 Atenica river regulation drawings.** The relevant water levels in the Zapadna Morava River in 100-year and 1000-year return period are established in the Hydrological-hydrotechnical study. There is a small possibility of coinciding with the emergence of large water levels on the River Atenica and Zapadna Morava as Zapadna Morava is an alluvial watercourse while Atenica River is torrential watercourse.

29.	**In Volume 3.2, chapter 3.2.2.11 Flood protection and effluent discharge** it is stated that *"*The wastewater treatment facilities shall be designed such that it remains fully operational at floods of 1:100 years return period. The discharge of effluent shall continue to be possible at floods of 1:1000 years return period and if necessary, a pumping station for this purpose shall be provided." Kindly confirm for which water level in Zapadna Morava discharge of the effluent shall be provided via pumping station?	The Hydrological and hydraulic study is enclosed within **Volume 5 (5.2 – 1. WWTP – 1.2. Hydrological-hydraulic study for WWTP Prelići).** The relevant water levels are established by the Hydrological-hydraulic study as follows: • $Z(Q_{1\%})$=231.68 masl • $Z(Q_{0.1\%})$= 232.87 masl Criteria for freeboard are defined in Table 3.2.2 -2: Return Period for Flood Protection of the Process Equipment and Structures.
30.	**In Volume 3.2, chapter 3.2.2.11 Flood protection and effluent discharge** it is stated that "Drainage of roads, hardstanding, roof drainage shall be directed to ditches, swales to open grassed areas for ponding and infiltration into the ground." However, water conditions that are part of location conditions, state that oily waters have to be treated with oil separator. Please clarify if the surface water from the road is considered oily water?	Confirmed. Oil separator of adequate capacity shall be envisaged for treatment surface water from the road.
31.	It is assumed that both effluent pipes will go through the flood protection embankment. Please confirm.	Please refer to the Conditions issued by the Public Water Management Company Srbijavode, enclosed with I-Volume 5.2 > 1. WWTP Prelići > 1.1 Location Conditions > Uslovi JP: "*The discharge of treated water from the municipal WWTP into the Zapadna Morava River shall be carried out up to the right bank of the minor riverbed of the Zapadna Morava, with the construction of protective riverbank reinforcement on the bank and foreland in the discharge zone, as well as protection of the pipeline trench in the foreland"* (unofficial translation). It is the tenderer's responsibility to prepare the design documentation and the complete technical solution. The technical drawings included in Volume 5 are provided for information purposes only.

32.	**In Volume 3.2, chapter 3.2.2.22.1 Flow Diversion chamber** it is stated that "Overflow structure shall be equipped with flow measurement provisions for assessment of overflow discharge. Please clarify what kind of measuring devices shall be foreseen. Is it required to provide connection to SCADA? Or shall measuring devices include a data logger?	The type of the overflow measuring unit shall be as proposed by the tenderer.