**CLARIFICATION TO TENDER DOSSIER No:2**

**Contract Title:**Rehabilitation Works on Section Virpazar-Sutomore in Tunnel Sozina

**Publication Reference:**EuropeAid/138259/ID/WKS/ME

**QUESTIONS & ANSWERS**

**Question 1:** Could you please provide typical sections of the tunnel including dimensions of the tunnel and position of the different equipment (cable ditches, catenary, other equipment….).

**Answer 1**:On the attached scheme (see Annex 1.Cross section water pipe) is the cross section of the tunnel with position of the water pipe next to the left side of the tunnel abutment, the cable conduct for electrical cable on the opposite side of the tunnel (next to the right side of the tunnel abutment). The top of both channels are at the same level as the bottom of the rail. The drainage channel is on left side of the tunnel under the ballast.

The water pipe (diameter of ~Ø 350 mm) is placed in concrete channel covered with concrete cover thickness of 5 cm (Annex 1\_page 3).

Dimensions of the cable conduct are b=30 cm (width) and h=20 cm (height), max width of channel opening is 40 cm and depth of 40 cm. The channel is covered with the concrete slab of 5 cm thickness (Annex 1\_page 4).

Dimensions of the drainage channel foundation are b=80 cm (width) and h=60 cm (height), max width of channel opening is 40 cm and depth of 40 cm. The channel is covered with the concrete slab with thickness of 5-7 cm. (Annex 1\_page 5).

**Question 2:** Could you please specify the structure gauge that we shall consider for the traffic of works train and railway plants in the tunnel.

**Answer 2**: Structure gauge for traffic of works train and railway plants in the tunnel is in accordance with Code 314. All works train and railway plants in the tunnel have to be inside of loading gauge with the total width 3150mm and height 4280mm.

Please, see Annex 2with inserted scheme from Code 314 below (attached schemes: Structure gauge and Loading gauge).

**Question 3:** Is there any lighting and ventilation system available in the tunnel during the construction works?

**Answer 3**: During the construction works there will not be lighting and ventilation system available.

**Question 4:** What is the railway traffic speed restriction during construction?

**Answer 4**: During works execution (12 months) the railway traffic speed restriction will be on average 10 – 50 km/h, depending of traffic conditions and safety on site. The Contractor is responsible for speed restriction.

**Question 5:** Please clarify interfaces between the operator and the contractor during the project:

a.For implementation of track closures and speed restrictions, who is in charge of:

i. EE devices switch off/on,

ii. adaptations and/ or exclusions of EE, SS and TC devices,

iii. introduction and installation of speed restrictions.

b.For works train (including railway machinery) management, Who is in charge of:

i. managing and authorizing all movement of works train on the railway (train guide officers),

ii. providing pilots for each working trains,

iii. providing signaling operators for switching the turnouts during construction.

**Answer 5**: Communication between operator (RIoM) and the Contractor is done over existing telephone lines. On the section Virpazar - Sutomore there are five railway telephones (three in the tunnel Sozina) and two telephones near the input signals, from both sides. If these phones are not sufficient, the Contractor's obligation is to provide additional resources for communication.

Note: In the tunnel Sozina, there is no signal for mobile phones.

Communication between the Contractor and RIoM during construction works will be carried out exclusively by exhibit communication means which are provided by applicable regulations.

a) For the implementation of line closure and speed restrictions, the responsibilities are as follows:

i. On / off EE devices: at the request of the Contractor`s responsible person, switching on and off electricity performs electricity dispatcher. During execution of works, the speed restriction is the responsibility of the Contractor and the speed restriction is conditioned by the security of traffic operation until acceptance of works.

ii. the sole responsibility of the Contractor is to protect existing equipment and any damage is borne by the Contractor.

iii. Speed restrictions will be introduced by responsible person of Contractor. It is the Contractor's obligations until the handover of works.

b)

i) The management of work trains (including railway machinery) is the responsibility of the train dispatcher within the station.

ii) Management and empowerment for all movements of work train on the railway line (train dispatcher or train movement operator) during closure of line is the responsibility of Contractor who is obliged to provide safe work conditions for its staff and machinery.

iii) The Contractor should provide controller/navigator for each work train, while for provision of train path and handling of the switches during the construction RIoM is responsible, in coordination with the train's movement operator/dispatcher.

**Question 6:** Regarding the track closures:

a. What are the track closure conditions for execution of the embankment works from KP439+032 to KP439+050 and from KP445+220 to 445+550?

b.Are the track closures on day or night shift?

c. The particular conditions states *“the access to site is 7 days per week […] with 4.5 working hours per day for the works which require use of the railway line with interruption of the railway traffic”* And *“The contractor shall consider the access to site as an average per day”*:

i. Is the average time for access to site calculated on the total time for completion? If yes, we therefore understand that we have 1642.5 hours of track closures for completion of the project (365 days x 4.5 hours per day). If no, please clarify the calculation.

ii.In addition to the average time for access to the railway line could you please clarify what is the typical track closure that can be obtained for a normal working day? This information is essential for us in order to define typical production rates for the works. For example, the average production rate PR01 with track closures of 6 hours per day during 5 days per week (total 30 hours per week) will be much higher than an average production rate PR02 with track closures of 4,5 hours per day during 7 days per week (total 31,5 hours per week). This is due to time consumption for track closure procedures, transfers from station to site and deployment of machinery which are not effective times of work but nevertheless included in track closure durations.

**Answer 6**:a) Closure conditions of all type of works are prescribed in Volume1\_Section2\_Tender Form&Appendix to Tender and in Volume2\_Section2\_Particular Conditions\_Sub Clause 6.5. The filling works are envisaged during planned line closure.

b) Track closures are planned to be during the night shift.

c) According to Volume1\_Section2\_Tender Form & Appendix to Tender and Volume2\_Section2\_Particular Conditions, the average time needed for accessing the site is calculated based on the total time for completion. During 12 months, every day average of 4,5 h of closure line is foreseen.

Planned closure time which is designed by timetable booklet for 2017 is from 00:55h to 03:45h and from 04:05h to 05:20h.First planned closure (from 00:55h to 03:45h) depending on the traffic situation (delays or cancellation of the train no. 47670) can be extended until 05:20h. This means that the total time of closure in this situation can be from 00:55h to 05:20h.

Line closure includes all activities of delivery of machinery to the construction site, work on the construction site and return of machinery from the construction site to the station. Possible delays in traffic, which cannot be predicted now, might affect changes in the duration and time of line closure, and the Contractor must adapt to this.

**Question 7: Close of traffic/extension of the construction period?**

In Volume 2-Section 2-Particular Conditions of Contract, page 12, Sub-Clause 6.5, part Working Horus is written:

**”. with 4.5 hours (4 hours and 30 minutes) working hours per day** (including transport from the stations to the work field) **for the works which require use of the railway line with interruption of the railway traffic.**

The time schedule is indicative and subject to the obligations of the regular/constraints traffic on the lines (Freight, passengers, maintenance and other). The time of 4.5 hours (4 hours and 30 minutes) in a day is an average. The access to the site could be restricted and not allowed by the Employer/Engineer for traffic regulation and/or safety, during the day or even for several days (no claim will be receivable for this matter). The Contractor shall consider the access to the site as an average per day. **”**

**If happen that can not access to the site or do not get a close of traffic on the end on account of total amount of hours/days will get extension of the construction period?**

**Answer 7**: Implementation of the Contract is limited to 12 months. Since the Commencement date, RIoM will take care and respect the agreed average time for closure or to compensate it in another time during the contracted period.

**Question 8: Tunnel cross section?**

On page 9, Volume 3-Technical Specifications is drawing of characteristics cross section in tunnel on chainage km 444+242 and on this drawing is concrete tunnel base slab in where there to uplift of slab but on the cross section in tunnel on the Tender attachment is nothing draw and is not clear where is position of concrete slab.

**Which is the length of this uperlift concrete slab and chainages?**

**Answer 8**: The chainage of “uperlift” concrete tunnel base slab is km 444+242 to km 444+342. In BoQ and Technical Specifications the works concerning concrete base slab in tunnel is not required/requested.

**Question 9: Holes in the rails S49E1?**

On page 19, Volume 3-Technical Specifications, part **C1.1 Supply of rails type 49E1 grade R260** is written “The Contractor has to supply the rails 49E1, grade R260 in accordance with EN 13674-1:2003 Standard (CEN) or 900A according to the applicable UIC 860:2008.

Each rail shall be 120m long and manufactured with two holes (one of the both ends of the rail)”

**On which length from the end of rails is hole and diameter of hole and level of hole from bottom of rails and please provide us drawing with this spec.?**

**Answer 9**:The position and diameter of holes from bottom of rails are according to JŽS (Jugoslovenska zajednica željeznica) Code 314. Please, see Annex 3 (scheme from Code 314). Diameter of the hole is 33mm, the distance from the end of rails is 210,5 mm, and level of the hole from the bottom of the rail is 62,5 mm.

**Question 10: Placing of crushed stone and thickness below the sleepers?**

4.1 On page 25, Volume 3-Technical Specifications, part ***Organization of acceptance of crushed stone*** is written “The ballast shall be spread and compacted on the finished formation layer as specified in the design. The ballast bed shall be prepared in two separate layers with thickness **20cm+10cm**” (total thickness 30 cm) but on the page 29, Volume 3-Technical Specifications, part

**C.3.3 Laying and assembling of delivered concrete sleepers with elastic fastenings to the delivered rails** is written ”The track will be laid on the upper surface of the ballast, and a 35 cm thick layer of ballast will be spread over the existing substructure. Thus, the new ballast will be **at least 35cm** thick below the sleepers.”

4.2 If measure thickness of crushed stone below the sleepers on cross section on open line attached to Tender will get thickness ca 28 cm but thickness of sleepers is 16 cm (wooden sleepers).

4.3 On page 20, Volume 3-Technical Specifications, part **C1.3 Supply of concrete sleepers** is written ”height under rail 22 cm” and if use height concrete sleepers on cross section on open line attached to Tender will get thickness below concrete sleepers of crushed stone 23 cm.

4.4 On page 9, Volume 3-Technical Specifications in characteristic cross section in tunnel on chainage km 444+242 and on the middle of track below sleepers is thickness of crushed stone 55 cm and on the left and right side is 63 and 64 cm and this characteristic cross section is in collision with the cross section attached to the Tender.

**On the basis of the above, keeping the designed situation, longitudinal and cross section how perform below concrete sleepers thickness of crushed stone min 30 cm or 35 cm?**

**Answer 10**: Stability of track is calculated based on a minimum thickness of 35cm. Minimum thickness of crushed stone is 35 cm, all according to JŽS Code 314.

**Question 11: Hardness of AT weld?**

On page 26, Volume3-Technical Specifications, part ***Hardness*** is written “AT weld hardness measured on the rail running surface, grade 260 (900A) shall be 290 ±30 HB.”

**The tolerance given above is for rails S49E1 R260 but what is the tolerance (hardness) of at weld for rails S49E1 R350HT (900A) where is grade from 350 to 390, is the same or different?**

**Answer 11**: The tolerance (hardness) of AT weld for rails S49E1 R350HT (900A) is grade 390, ±40 HB.

**Question 12: Final testing of new track?**

On page 6, Volume 3-Technical Specifications, part **3. Final testing of new track** is written “After completion of all works the Contractor has to perform a control and testing of geometry and the other characteristic of new track in tunnel Sozina by EM-SAT 120 Track Survey Car, aspecial instrument vehicle recording all relevant data, fully in accordance with JŽS Instruction 339”.

**Is it possible to use other type of recording vehicle for testing of new track and will be also according with the JŽS Instructions 339 for testing of geometry and the other characteristic of new track?**

**Answer 12**: It is possible to use other type of the recording vehicle, for testing of geometry and the other characteristic of new track. The type of the recording vehicle has to be according to JŽS Instructions 339, and JŽS Code 344.

**Question 13: Drainage ditches?**

In according with the tender documentation on page 19, Volume 3-Technical Specifications, part **B.1.6 Cleaning of drainage ditches**:

The works include cleaning of existing drainage ditches from ballast grains, soil materials or one other debris. The works shall be done by machine or manually.

On page 9, Volume 3-Technical Specifications, figure 2, no drainage ditches on cross section on km 444+242

○On page 5, Volume 4-Bill of Quantity, position:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 7 | B.1.6 | Cleaning of drainage ditches  Cleaning of existing drainage ditches from ballast grains or other debris material, manually or with machines.  Measurement per km of the ditch length. | km | 6,54 |

○ In Main project of Track rehabilitation Station Virpazar-Station Sutomore km 434+504.96 to km 44+577.69, point 8.2 cross section, before and after tunnel exist channels and this channel is necessary clean, deepen or rebuild, but drainage ditches in tunnel do not exist on drawing.

During Site visit on 29.07.2016, in the tunnel only stop 10 min and we not had a opportunities to get additional information for drainage ditches in tunnel.

On the basis of the above, for the purpose of the technical clarification and bringing all participant in tender procedure in equal position, please for answer on following question:

**7.1.1 Question nr.1**

Whether in tunnel Sozina exists drainage ditches? If exists, please provide us cross section with the ditches?

**7.1.2 Question nr.2**

Whether position **B.1.6 Cleaning of drainage ditches** in Bill of Quantity may refer on cleaning ditches through which is conducted water supply pipe?

**Answer 13**: Answer 7.1.1: In tunnel Sozina the drainage channel exists. Dimensions of the channel foundation is b=80 cm (width) and h=60 cm (height), max width of channel opening is 40 cm and depth of 40 cm. The channel is covered with the concrete slab with thickness of 5-7 cm. Please see Annex 4 with drawings.

Answer 7.1.2: Item B.1.6 Cleaning of drainage ditches in BoQ refers to the cleaning channel for drainage of the track, on the left side of the tunnel.

Item’the existing water pipe’ is not part of rehabilitation works.

**Question 14:** Whether our Company China Civil Engineering Construction Corporation Montenegro LTD registered in Montenegro on March 1, 2016 can, while participating as a Bidder, use the experience and references of our mother company China Civil Engineering Construction Corporation from Beijing, which is 100% our Founder?

**Answer 14**: Please, refer to the Instruction to Tenderer (ITT) Article, 12.2.5.Capacity-providing entities:

“An economic operator may, where appropriate and for a particular contract, rely on the capacity of other entities, regardless of the legal nature of the links which it has with them. Some examples of when it may not be considered appropriate by the Contracting Authority are when the tenderer relies mostly on the capacity of other entities or when it relies on key criteria. If the tenderer relies on other entities, it must prove to the Contracting Authority that it will have at its disposal the resources necessary to perform the contract, for example by producing an undertaking on the part of those entities to place resources at its disposal. Such entities, for instance the parent company of the economic operator, must respect the same rules of eligibility and notably that of nationality, as the economic operator. Furthermore, the tender should include a separate document providing data on this third entity for the relevant selection criterion. Proof of capacity must be furnished at the request of the Contracting Authority.

With regard to technical and professional criteria, a tenderer may only rely on the capacities of other entities where the latter will perform the works for which these capacities are required.

With regard to economic and financial criteria, the entities upon whose capacity the tenderer relies become jointly and severally liable for the performance of the contract. Tenders submitted by companies in partnerships forming a joint venture/consortium must also fulfill the following requirements:

• The tender must include all the information required in 12.1 above for each member of the joint venture/consortium and summary data for execution of works by the tenderer.

• The tender must be signed in a way that legally binds all members. One member must be appointed lead member and that appointment confirmed by submission of powers of attorney signed by legally empowered signatories representing all members. See Form 4.6.5 in Volume 1 and the tender form.

• All members of the joint venture/consortium are bound to remain in the joint venture/consortium for the whole execution period of the contract. See the declaration in the tender form".

Please note that with a clarification, the contracting authority cannot give an opinion on the assessment of the application.

**Question 15:** Whether our company ATM BG Ltd registered in Belgrade can participate as a Tenderer together with a state-owned company from Moscow that is specialized in railway infrastructure constructions.

**Answer 15**:Please, refer to the list of the acceptable/eligible countries on the basis of Article 19 ”Rules of participation and origin, eligibility for grants” of the Council Regulation (EC) No 1085/2006 of 17 July 2006, establishing an Instrument for Pre-Accession Assistance (IPA). Document is available on http://eacea.ec.europa.eu/tempus/documents/tempus\_ipa.pdf. Below is the brief summary of the Article 19:

1. Participation in the award of procurement or grant contracts financed under this Regulation shall be open to all natural persons who are nationals of and legal persons who are established in a Member State, a country that is a beneficiary of this Regulation, a country that is a beneficiary of the European Neighbourhood and Partnership Instrument, or a Member State of the European Economic Area.

2. Participation in the award of procurement or grant contracts financed under this Regulation shall also be open to all natural persons who are nationals of and legal persons who are established in any country other than those referred to in paragraph 1, where reciprocal access to their external assistance has been established. Therefore, legal persons who are established in Moscow are not eligible to participate in this procurement procedure.

All tenderers from acceptable/eligible countries on tender procedure have to follow Volume 1 Instruction to Tenderers. Please, check point:

12. Information/Documents to be Supplied by the Tenderer

12.2.1. The selection criteria for each tenderer and

12.2.5. Capacity-providing entities.

**Question 16:**In the Works Contract Notice, point 6. Description of the contract, writes that will be carried out a mechanical sifting of the track. In the Bill of Quantities, the earthworks, it is scheduled excavation of poor quality ballast and excavation of earth material, loading onto trucks and waste removal haulage to a medium distance of 5 km is scheduled.

Please explain whether the Contracting Authority is provided mechanical sifting of the track or excavation thereof?

**Answer 16**: The Contractor has to provide all equipment and to execute the works according to the Technical Specifications and BoQ. It is required that the Contractor provide the appropriate machines in accordance with the conditions on site.

**Question 17:**From the Tender Document the position of individual layers of the earth works is not clear. We ask for the following details:

a) position (kilometer) on which the construction of the embankment will be carried out,

b) position (kilometer) of placement of foundation protective layer,

c) position (kilometer) of placement of layer formation,

d) detail to illustrate the thickness of the individual layers and

e) detailed description of the materials to be installed.

**Answer 17**:The earth works include reconstruction at two sections (placement of foundation protective layer and formation layer): before the entrance to the tunnel, the length of 18,46 m (from km 439+032.00 to km 439+050.46); and after the tunnel exit, the length of 351,15 m (from km 445+220.85 to km 445+572.00).

In Tunnel Sozina, from km 439+050.46 to km 445+220.85, there are no earth works.

On TD Volume 5\_5.1. Drawings on drawing 8.2 (dwg format), there are all cross sections of open line.

On TD Volume 3 Technical Specifications\_B.1.3 Construction of the embankment, page 14: ‘For embankment construction all non-organic material of the defined quality shall be applied. Organic debris, roots, sods, shall not be placed into embankment, being materials that would alternate their physical-mechanical properties during the time, due to bio-chemical action...’. For formation layer, please see B.1.4\_ page 17, and for the foundation layer please see B.1.5\_page 18.

The Module of Compressibility of Ms=30 MN/m2has to be provided, in accordance to Instruction for maintenance of railway superstructure.

**Question 18:**The Technical specifications often refer to the Main Design (eg. dimensions, slopes ...), but the data are not shown in the Main design. Please post detailed design, which will contain all the information to which you refer in the Technical specifications.

**Answer 18**:On TD Volume 5 Section 5.1. Drawings, you can find sets of drawings from Main Design: Superstructure Design of Track in Tunnel Sozina (km 439+032.00 – km 445+572.00) and Main Design for Track Rehabilitation of Railway Track Podgorica-Bar (km 404+418.20-km455+542.78), Section Virpazar-Sutomore (km 434+504.96-km446+418.44).

**Question 19:**The Technical specifications as one of the properties for the supply of concrete sleepers named rail-to-concrete fastening SKL-14, Vossloh W14 (or equivalent). In the requirements for the supply of the fastening material writes that the fastenings must be elastic. Can we offer any type of elastic fastenings?

**Answer 19**: The type of elastic fastenings is not prescribed, only level of quality/standard. You can provide any type of elastic fastenings for concrete sleepers compliant to JŽS Code 314.

**Question 20:** How many CWR control signs should be offer?

**Answer 20**:Please see Volume 3\_Technical Specifications\_C.4.1 Supply and installation of signs. All signs have to be according JZS Code 314.

**Question 21:** Does the works in position N°9, Chapter III - Electrical work in the Bill of Quantities, refer only to replace consoles and existing insulators or is it necessary to replace the existing brackets (X and Y)?

**Answer 21**:In the Bill of Quantities Item No 9, Chapter III - Electrical work “Supply and installation of the new complete consoles in tunnel include the installation of existing insulators and regulation of catenary network”.

Position includes the following works in accordance with the catalog ŽJZ 77/96 valid from 25th of January, 1996: marking of holes, installation of anchors-anchor bolts, (new drilling) mounting profile girders 164100, mounting console bearers, fastener of consoles with all clamps and bolts located on the console. On the new consoles would be mounted existing insulators (with new clamps for new catenery wire ) and registration arms/steady arms. Then, installation of current conductor contact, a new catenery wire, new droppers, new electrical connections is made and network regulation as well.

**Question 22:** Referring to the Tender documentation, Volume 1, Section 1 - Instructions to tenderers, Article 7 - Content of Tender documents, please clarify us the following:

1. Where and in which way is possible to inspect the Main Design and Design documentation for the Tender in subject?

**Answer 22**:In the Section 5.3 List of design/documents available of the Volume 5 DESIGN DOCUMENTS/DRAWINGS, it is stated the following:

”The documents listed above are available for inspection from 1st August 2016 upon request to the Directorate of Public Works, Novaka Miloseva 18, 81 0000 Podgorica, Montenegro

Fax: +382 (0) 20 230 228

Email: [ipa.rr@djr.gov.me](mailto:ipa.rr@djr.gov.me)

Please send your requests two days in advance (on the above mentioned fax or e-mail). All communication must be in official letterhead.”

Therefore, in order to inspect the documents listed in the table in the above mentioned Section 5.3 List of design/documents available of Volume 5, you should send the request in the official letterhead.

**Question 23:** Installation of cantilevers in the tunnel:

- We need a drawing for new cantilever that needs to be installed

- Does it go on the same anchor or do we have to drill a new one? If we have to drill a new one, that means that you have to put in new anchors, install new cantilever, put the catenary wires on new cantilevers, dismantle old cantilevers, because of new positioning install new droppers, do the staggering of catenary at the end. These needs to be done at least for one tensioning field in the time that line is out of current – if not the line cannot be ready for electrical locomotives. The only think that can be done in advance is drilling holes for new anchors. Even drying of adhesive takes in this conditions min. 45 minutes. So it is impossible to do that in line closers that you have predicted.

**Answer 23**:Position includes the following works in accordance with the catalog ŽJZ 77/96 valid from 25.th of January 1996: marking of holes, installation of anchors - anchor bolts, (new drilling) mounting profile girders 164100, mounting console bearers, fastener of console with all clamps and bolts located on the console. On the new console would be mounted existing insulators (with new clamps for new catenery wire ) and registration arms/steady arms. Then, installation of current conductor contact, a new catenery wire, new droppers, new electrical connections is made and network regulation.

NOTE: It is envisaged to replace all metal parts in the tunnel consoles and solid tensions of overhead line, because they are in very poor condition due to continuous use in aggressive and humid environment.

As for any possible problems with the technology of works, it will depend on the methodology of the potential Contractor, within the prescribed line closure.

Please see Annex 5 (drawings of types of consoles and solid tension from Catalog ZJŽ 77/96: Page 1\_Consoles for tunnel of normal profile TR2-551, types 01, 02 and 03; Page 2\_Fastening of tunnel console in tunnel of normal and reduced profile TR1-571, types 01 and 02; Page 3\_Solid tension of conductor in tunnel TR3-551, Page 4\_Fastening of Solid tension of conductor in tunnel TR1-573).

**Question 24:** Does position No 9 of Chapter III - Electrical Works in the Bill of Quantities, with the regulation of catenary network should include the following works: marking and drilling holes, installing anchor bolts M20x150 (150 x 4 = 600 pcs), mounting of profile rail U14 (Catalogue No. 164100), installation of tunnel console (Catalogue No TR2-551), mounting of insulators and insulated steady arm rod and complete delivery of material without insulators and insulated steady arm rod.

**Answer 24**:In the Bill of Quantities Item No 9 of Chapter III-Electrical Works includes the following works in accordance with the Catalog ŽJZ 77/96 valid from 25th of January, 1996: marking of holes, installation of anchors - foundation bolts, (new drillings), mounting profile girders 164100, mounting console bearers, fastener of console with all clamps and bolts located on the console. On the new consoles would be mounted existing insulators (with new clamps for new catenery wire) and registration arms/steady arms. Then, installation of current conductor contact, a new catenery wire, new droppers, new electrical connections is made and network regulation as well.

**Question 25:** Does the position No 10 of Chapter III - Electrical Works in the Bill of Quantities, means only the installing of solid tension bearing rope without replacing fastener ČZ. Whether it is necessary to replace the solid tightening fasteners in the tunnel (Catalogue No 164400).

**Answer 25**:In the Bill of QuantitiesItem No 10 of Chapter III-Electrical Works includes the following works in accordance with the CatalogŽJZ 77/96 valid from 25th of January, 1996: replacement of solid tension of overhead line(catenery wire and conductor contact ), including drilling of new foundation bolts with marking of holes, replacement of fasteners of solid tension in tunnel 164400, replacement of bolts for adjustment M16, replacement of finishing clamps M 10, 12 universal clamps KP-NU, KA and all other clamps for solid tension.

NOTE: It is envisaged to replace all metal parts in the tunnel consoles and solid tensions of overhead line, because they are in very poor condition due to continuous use in aggressive and humid environment.

**Question 26:** Clarification regarding the drainage ditches in the tunnel

In the tender documents, there is no information regarding the position of the existing drainage ditches in the tunnel. During the site visit we also did not have the possibility to obtain additional information regarding the ditches.

Depending on where these ditches are positioned in cross-sections, it is likely that a certain temporary construction works should be carry out, in aim to be ensured access for cleaning of drainage ditches.

If existing drainage ditches are positioned on the right side, a temporary dislocation of cables and removing of cable channels has to be done. After all the cables and channels will be replace back to the primary position.

If existing drainage ditches are positioned on the left side, a temporary construction works refers the concrete channel for water pipe has to be done.

In the absence of this information the bidder is unable to calculate the above-mentioned construction works, and we are in opinion that these works should be charged by Contingencies 10%.

In terms of technical clarification, please provide a precise answer to the question below.

**In the case of potential construction works, related with the temporary removal/protected cable channels of concrete channel for water pipe, in order to enable cleaning of drainage channel, whether these works will be charged from the Contingencies 10%?**

**Answer 26**: Water pipe:

In accordance with the tender documentation on page 7, Volume 3-Technical Specifications, part\_Other Requirements:

“The Contractor has to take care of the local water supply pipe, placed in a covered channel along the tunnel. During the execution of works, the Contractor will take all measures to protect the channel and pipes within”

The water pipe (diameter of ~Ø 350 mm) is placed in concrete channel covered with concrete cover thickness of 5 cm. The water pipe is located on the left side of the tunnel at the height above the drainage channel and does not prevent free access to the drainage channel. Please see Annex 4

These protection measures will not be paid separately.

Drainage channel:

In according with the tender documentation on page 19, Volume 3-Technical Specifications, part B.1.6 Cleaning of drainage ditches: The works include cleaning of existing drainage ditches.

On page 5, Volume 4-Bill of Quantity, position:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 7 | B.1.6 | Cleaning of drainage ditches  Cleaning of existing drainage ditches from ballast grains or other debris material, manually or with machines.  Measurement per km of the ditch length. | km | 6,54 |

Item B.1.6 Cleaning of the drainage ditches in BoQ is refer on cleaning the drainage channel for drainage of the track, on the left side of the tunnel.

Works, on protection of the water pipe and cleaning the drainage channel, are part of the tender documentation (Technical Specification and BoQ) and will be paid as stated above and will not be charged from Contingences.

**Question 27: Close of traffic**

In Volume 2-Section 2-Particular Conditions of Contract, page 12, Sub-Clause 6.5, part Working Horus is written:

”.with 4.5 hours (4 hours and 30 minutes) working hours per day (including transport from the stations to the work field) for the works which require use of the railway line with interruption of the railway traffic.”

**In which period of day/night will be approved close of traffic for construction works?**

**Answer 27**: The traffic closure for the construction works is planned at night, but is not limited to this, in case that the traffic timetable requires different schedule. On the Contractor’s demand the RIoM will provide traffic closure and issue special telegram with the instructions to the Contractor.

**Question 28:** Store space is very small in Virpazar station, so the rail which 120m length can be unloaded at the work site directly?

**Answer 28**: The storage space in station Virpazar is sufficient for unloading rails and site organization because there is space on the right side of the tracks (next to loading ramps) and space on the left side where is embankment. Please see Volume 3 Technical Specifications Storage Space page 7.

**Question 29:** Employer will appoint the location to pick up the materials for subgrade or not.

**Answer 29**:Because of occupancy of section for other open investment works, at the moment we are not able to give closer information.

**Question 30:** Could we unloading the earth materials remove from subgrade beside of railway or should be transport it by trucks to special place.

**Answer 30**:Please, see Volume 3 Technical Specifications B.Works on SubstructureB.1.2 Excavation of earth material, page 14: ' …the price shall include excavation, loading of material, transport to medium distance of 5 km and shaping the material into medium size stockpiles as instructed by the Engineer. The Engineer/Employer will give instruction on which landfill the Contractor will be allowed to transport waste material from the site’.

**Question 31:** Could we parking construction equipment and store materials in Sutomore station.

**Answer 31**:Please see Volume 3 Technical Specifications Storage Space, page 7: ' The Employer will provide storage/parking space for Contractor’s machines and equipment on station Virpazar: on station track no.1 (length of track 310 m) and station track no. 4 (length of track 733m). Road access to station Virpazar is available’.

**Question 32:** Replace of subgrade work need more interruption time, is it possible permit us use continuous interruption time, it will be continued about one week.

**Answer 32**:For the track reconstructionit is not possible to use continuous interruption time of one week. Please, see Volume1\_Section 2\_ Appendix to Tender Sub-clause 6.5.

**Question 33:** According to Technical Specification D1, the first paragraph last sentence “it is required to make replacement of all tunnel consoles, solid tightening, complete supporting rope with droppers and all electrical connections.” However in BOQ electrical works price no.5 and no.6 just mentioned “installation of the new contact line made out of wire Bz 65 mm2 in accordance with TR6-554”. Please make this item clearly.

**Answer 33**: In the Bill of Quantities\_Item No 5 of Chapter III-Electrical Works is foreseen the delivery of a new catenery wire Bz 65 mm2, and in the position 6 is planned dismantling of the existing catenery wire Bz 65 mm2 and installation of the new catenery wire Bz 65 mm2.

**Question 34:** Our plan is arrange storage sites at the opposite of the Virpazar station, so would you permit set up temporary level crossing to transit the railway in the station.

**Answer 34**: The temporary level crossing will not be allowed for security reasons.

**Question 35:** In the various chapters of the Technical Specifications (2. Objective of the Project C.1.5 Procurement, Transportation and placing of crushed stone, C.3.3 Laying and assembling of delivered concrete Sleepers with elastic fastenings to the delivered rails) is specifying a variety of requirements for origin of crushed stone for ballast prism. Is it permitted to install crushed stone of limestone origin or it is requested to install of crushed stone obtained from volcanic rocks, therefore eruptive origin?

**Answer 35**: Ballast prism has to be of crushed stone eruptive origin. Installation of crushed stone of silicate (magmatic and metamorphic) rock mass is required. Magmatic rocks are particularly suitable for the production of crushed stone, such as basalt, diabase, granite, gabbro, syenite and quartz. Thickness of ballast layer under the concrete sleepers is h = 35 cm.

For concrete sleepers, volcanic rock (eruptive origin) is permitted to be installed in ballast prism according to Instructions 311.

Lime stone origin is not permitted for installation with the concrete sleepers.

**Question 36:** Because we didn't receive any answers to our questions, please extend the deadline for submission of tender at least to October 10th 2016 and for prompt treatment of all questions.

**Answer 36**: Please, refer to the following points of Tender documentation:

**INSTRUCTIONS TO TENDERERS - Point 1. General instructions**:

**1.1. Timetable**

Deadline for requesting any additional information from the Contracting Authority: 29 August 2016, 24.00hrs

Last date on which additional information are issued by the Contracting Authority: 8 September 2016.

**- Point 8. Explanations concerning tender documents:**

8.1.Tenderers may submit questions in writing up to 21 days before the deadline for submission of tenders, specifying the publication reference and the contract title:

Directorate of Public Works

NovakaMiloševa 18,

81000 Podgorica, Montenegro

Fax: +382 020 230-228

E-mail: [ipa.rr@djr.gov.me](mailto:ipa.rr@djr.gov.me)

The Contracting Authority has no obligation to provide additional information after this date.

The Contracting Authority must reply to all tenderers’ questions at least 11 days before the deadline for receipt of tenders.

8.2 The questions and answers will be published on the EuropeAid website at <https://webgate.ec.europa.eu/europeaid/online-services/index.cfm?do=publi.welcome>, on the Delegation of the European Union to Montenegro website <http://delmne.ec.europa.eu/code/navigate.php?Id=1626>, on the Ministry of Transport and Maritime Affairs website [www.msp.gov.me](http://www.msp.gov.me)and on the Directorate of Public Works-Montenegro website [www.djr.gov.me/direkcija](http://www.djr.gov.me/direkcija).

Therefore, Contracting Authority is respecting all deadlines defined in ITT, Hence no extension of the deadline for submission of tender will be granted.