

Republic of Serbia MINISTRY OF FINANCE

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

30/10/2019, Belgrade

CONTRACTING AUTHORITY'S CLARIFICATIONS No. 2

The modernization and rehabilitation of the railway section Niš - Brestovac Publication ref.: EuropeAid/140002/IH/WKS/RS

1.	General Employers Requirement 1: 5.7 Taking over certificates and delay damages: Time for completion for Section 1 is 825 days and for Section 2 is 1005 days - including signaling. In that case will be mandatory to have two separate Safety cases with additional cost. We propose to	Please review Corrigendum No.1 to the Tender Dossier, VOLUME 3, 4du_techspec3.2B-en, Section 1.2.
	have only final Taking over certificate and one Commissioning for signaling& telecom works.	
2.	PARTICULAR REQUIREMENTS PART 2B; 2.7 Level crossing: All existing relay level crossing interlocking devices shall be dismantled and replaced with new electronic level crossing interlocking devices. The existing electronic interlocking device for level crossing located in km 255+450 (type PZZ-EA) can be kept and integrated into the station interlocking device (SID) of station Belotince with necessary interface or replaced with a new level crossing interlocking device. This requirement is not in line with fair competition and it is in favor of producer of installed level crossing. We suggest to request also new level crossing device in km 255+450 and existing device could be moved to another location. This will bring all competitors in same position.	Please review Corrigendum No.1 to the Tender Dossier, VOLUME 3, 4du_techspec3.2B-en, Section 2.7 and Volume 4.

3.	In section 3.2B (Particular Employer Requirements), in paragraph 1.2. is stated that "The entire electronic interlocking device with its' components (hardware and software) shall be evaluated by an independent and recognized institution according to CENELEC EN standards 50126/50128/50129, for both generic application and for specific application on railway line section Nis-Brestovac (with two sub-sections included)".	One, unique Safety Case for specific application. Please review Corrigendum No.1 to the Tender Dossier, VOLUME 3, 4du_techspec3.2B-en, Section 1.2
	Please clarify if this implies that Contractor shall obtain only one, unique Safety Case for specific application, or two separate Safety Cases for each of specific sub-sections included.	
4.	Please clarify if new signalling-interlocking facilities on section Nis-Brestovac shall be connected to existing Centralised Traffic Control (CTC) system for railway line Belgrade-Nis-Presevo-state border (Westinghouse Flexicode) with centre located in Nis, or to the prospective integrated CTC system designed for whole Serbian network. In case of the first option, we kindly ask you to provide the description (drawings) of the existing interface between the relay signaling-interloking and the existing	Please review Corrigendum No.1 to the Tender Dossier, Volume 3, 4du_techspec3.2B-en, Section 1.2.
	CTC; In the case of the second option, it is necessary to specify which communication protocol is envisaged for prospective integrated CTC system designed for whole Serbian network.	For the mentioned drawings, please consult Annex No.1 to the Clarifications No.2.
5.	In Section 3.2B (Particular Employer Requirements), in paragraph 2.7. is stated that "The existing electronic interlocking device for level crossing located in km 255+450 (type PZZ-EA) can be kept and integrated into the station interlocking device (SID) of station Belotince with necessary interface or replaced with a new level crossing interlocking device". We consider that such solution favors the supplier of this device, and we kindly ask	Please refer to the response to the Question No. 2.

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	you to request new level crossing device as mandatory for all tenderers.	
6.	In Section 3.2B (Particular Employer Requirements), in introduction part "SIGNALLING" is stated that: "During execution of the works, the Employer/End Recipient is responsible to provide the temporary signaling system in the affected area of works".	Please review Corrigendum No.1 to the Tender Dossier, Volume 3, 4du_techspec3.2B-en, Section SIGNALLING.
	Please clarify if Employer/End Recipient shall provide complete outdoor and indoor temporary equipment, as well as installation of this equipment. Can you specify how employer will guarantee delivery terms and quality?	The Design for Construction Permit shall be in accordance with PCC 1.1.6.12 and Volume 3.1 Section 6.1.
	Also, if the Design for Construction Permit shall include only permanent signaling system or also the temporary signaling system?	Temporary Works are as per Volume 3.1, Section 6.5.
7.	Please clarify if the existing CTC centre in Nis already contains necessary elements for integration of	Please review response to Question No.4.
	commands/indications for point heating system and new level crossing or this shall be included within this project.	Please review Corrigendum No.1. to the Tender Dossier, Volume 4, Errata.
8.	In official BoQ 1.25 SCHEDULE NO.4.2.3.15 SIGNALLING WORKS-SUMMARY, SECTION 1 (the	This is not a BOQ, this is a Schedule of Prices.
	page 207 Schedule of Prices), it was written Total for SECTION 2 to be carried forward to Schedule No. 4.2.3.15.B. Please clarify it.	Please review Corrigendum No.1. to the Tender Dossier, Volume 4, Errata.
9.	Please confirm that replacement of concrete cable troughs shall be done only in station areas.	The replacement of concrete cable troughs are only in the station areas.
	in station areas.	This is covered by Volume 3.2B, Section 2.6 and Volume 4, Schedule 15.
		Additionally, please review Corrigendum No.1. to the Tender Dossier, Volume 4, Errata.
10.	In section 3.2B (Particular Employer Requirements), in paragraph 2.7. is stated: "Power supply of level crossing device	There is no BOQ. There is a Schedule of Prices.

	1.111.	
	shall be implemented from power supply device of corresponding station's power supply device, by using the special railway lineside power supply cable (type PNK or equivalent), with appropriate voltage level depending on the location of level crossing (230V for station level crossing or 750V for level crossings on the open line)". On the other hand, in the official BoQ for several level crossing is predicted power supply from mast transforming stations from OCL. Please clarify.	Please review Corrigendum No.1 to the Tender Dossier, Volume 3, 4du_techspec3.2B-en, Section 2.7.
11.	Difference between the above Excel spreadsheet and the table in Word CD2 / Documentation / Part 4 file 4dx_finoffer_4dot2_en Word Table 4.2.3.12 OCL Total Sum by paragraphs. The Medjurovo, Belotince and Doljevac	Please refer to the Contracting Authority Clarifications No.1, response to the Question No. 11.
	stations are missing items Chapter 2 Electrical instalations Paragraphs 2.09; 2.10; 2.13; 2.17 i 2.18 elements of bypass feeder Paragraph 2.12 A complete drop arm assembly with bracket attached to rigid portal boom Paragraph 3 Dismantling of electrical equipment Paragraph 3.08; 3.09; 3.11 and 3.14 Dismantling of equipment of bypass feeder Paragraph 3.10 A complete drop arm assembly with bracket Paragraph 3.15 and 3.16 dismantling of disconnector and dismantling of transverse 25 kV connections Without these items it is impossible to make OCL in the stations and sums of their values from the excel spreadsheet must be entered in the Word tables for the	Design for Execution of the Works is to be as per Volume 3.1, Section 6.4. This is covered by Volume 3.2B and Volume 4, Section 1.2, page 6.
12.	Tender to be valid The excel table does not sufficiently define Chapter 6. Other works. What is meant by other works?	Please refer to the response to Question No. 11.
	What is meant by other works? Also in the word table of paragraph 4.2.3.12.1 (up to 7) .69 other works specified by the tenderer	

	T	T
	Please clarify these items so that we can	
	determine their price.	
13.	In the recapitulation of the OCL Table in Word PART 1 Paragraphs 4.2.3.12.12 and 4.2.3.12.13 List of Employers Requirements Mandatory Spare Parts and Requirements Mandatory Special Tools and PART 2 Items 4.2.3.12.22 and 4.2.3.12. List of Employers Requirements Mandatory Spare Parts and Requirements Mandatory Spare Parts and Requirements Mandatory Special Tools. Please explain where these specifications are, if any exist. How to determine the price if there are none and do not know their quantity and type?	This is covered by Volume 4, Section 1.1.
	Folder "Tender Dossier" => "Volume 3"	Regulations in this context were taken to
14.	=> document "4du_techspec3.1_en" – page 89, chapter 07 BRIDGES AND CULVERTS" states: "Detailed static calculation for all bridges and culverts should be done in accordance with the applicable Regulations, standards and Eurocode norms, taking into consideration all effects given in these regulations, as well as loading schemes for special vehicles." It is unclear what "applicable Regulations, standards" are as Eurocode is already mentioned?	mean Serbian Regulations. Where Serbian Regulations have not been transposed from Eurocodes by the Base Date, use Eurocodes.
15.	Folder "Tender Dossier" => "Volume 3" => dokument " 4du_techspec3.2A_en" - page 76, chapter 7.1 TECHNICAL RULES AND STANDARDS states: Technical rules and codes 1. Rulebook PBAB. 87 "Technical norms for concrete and reinforced concrete" ("Official Gazette of the SFRY" No.11/87) and Commentary on the provisions of Rulebook PBAB (Official Gazette 1987) 2. Rulebook on technical norms for determining of the load and categorization of railway bridges, culverts and other objects on the railway lines ("Official Gazette of the SFRY" No.23/92)	Please refer to the response to Question 14.

	3. Rulebook on technical norms for	
	determining bridge loads ("Official	
	Gazette of the SFRY" No.1/91)	
	4. Rulebook on the technical standards for	
	the design and calculation of engineering	
	1	
	structures in seismic areas (1986)	
	5. Rulebook on technical norms for	
	designing and performance of works on	
	founding of building facilities ("Official	
	Gazette of the SFRY", No. 34/74)	
	6. SRPS U.M1.046: 1985 - Testing of	
	bridges with test load	
	7. Eurocode 0 SRPS EN 1990: 2002 -	
	Basis of structural design	
	8. Eurocode 1 SRPS EN 1991: 2002 -	
	Actions on structures	
	9. Eurocode 2 SRPS EN 1992: 2014 -	
	Design of concrete structures	
	10. Eurocode 3 SRPS EN 1993: 2012 -	
	Design of steel structures	
	11. Eurocode 4 SRPS EN 1994: 2012 -	
	Design of composite steel and concrete	
	structures	
	12. Eurocode 6 SRPS EN 1996: 2016 -	
	Design of masonry structures	
	13. Eurocode 7 SRPS EN 1997: 2014 -	
	Geotechnical design	
	14. Eurocode 8 SRPS EN 1998: 2012 -	
	Design of structures for earthquake	
	1	
	resistance	
	15. Law on Noise Protection in the	
	Environment (Official Gazette of RS No.	
	36/2009 and 88/2010);	
	Both, our (applicable) and Eurocode	
	regulations are stated here. Which	
	regulations are to be used for design?	
	This tender is following the principles of	
16.	YELLOW FIDIC ed.1999. As such the	
	Contractor is responsible to develop and	
	submit Design for the scope of Works,	
	under which principles the Contractor	
	may propose any solution being	
	requirements and legislation in force. The	
	Employer's requirements in many details	
	and in depth prescribes particular details	

for technical parameters and features for components/subsystems which will be embedded within the complete Signalling system, while achieving the general performance requirements. The technical/safety conditions and design manuals for the interlocking systems are however requiring other parameters that the particular ones mentioned in the Employer's requirements. For instance structural requirements for signalling cables, details regarding interfaces of wayside elements etc.

Please clarify whether the Contractor will allowed be propose to solutions/components/features that may vary in details from the Employers facilitating requirements, however fulfilment of the general Employer's requirements.

This is covered by Volume 3.2B and Volume 4, Section 1.2, page 6,

The Contracting Authority cannot give a prior commitment on the implementation of the contract.

VOLUME 2. Section 3 – Particular **17.** Conditions, Sub-clause 1.5 - Priority of Documents

(2) The following documents shall be deemed to form and be read and construed as part of this contract, in the following order of precedence: ¶

in the following order of precedence.

(a) the Contract-Agreement.

(b) the Particulair Conditions with Annex 2 of the Tender Form-Appendix to Tender for a Works-Contract.

(c) the General Conditions.

(d) the Employer's Requirements.

(e) the Employer's Requirements.

(f) the Schedule of Prices (after arithmetical corrections), schedule of guarantees etc.,

(g) the Drawings (drawings and annexes to the Drawings),

(h) The Contractor's Proposal; and

(i) Modifications No...lo...lo. the Tender-Dossier and any other documents forming part of the Contract).

VOLUME 2, Section 1 – Contract Form, Clause 2 - Order of precedence of Contractual documents

1.50	Priority of Documents a
0	Delete-Sub-Clause-1.5-and-substitute-with-the-following:
	The documents forming the Contract are to be taken as mutually explanatory of one another.
	For the purpose of interpretation, the priority of the documents shall be as listed with order
	of precedence in the Contract Agreement, Clause 2 (a) to (i).
	In cases of ambiguity or divergence, they shall prevail in the order in which they appear
	above. Addenda shall have the order of precedence of the document they are amending.
	If an ambiguity or discrepancy is found in the documents, the Engineer shall issue any

Please clarify the following:

By the priority of documents, set up in the Contract Agreement, the provisions of the Contract Agreement prevails over the content of Particular Contract the Conditions. This arrangement, content of both documents provide sever ambiguities, for which we kindly ask clarification:

• The PCC 1.5 explains that regarding the contractual documents "In cases of The priority of documents shall be as stated in Contact Agreement Clause 2.

Last bullet (i) is related to modification of other part of tender documentation, or any other documents forming part of the Contract not mentioned in bullets (a) to (h). For priority of the documents please see last paragraph of the Contract Agreement Clause 2 where it is stated that addenda shall have the order of precedence of the document they are amending.

ambiguity or divergence, they shall prevail in the order in which they appear above. Addenda shall have the order of precedence of the document they are amending".

However the schedule of the documents set up in the Contract Agreement (prevailing over the PCC) defines that the "(i) Modifications No. To...to... to the Tender Dossier and any other document forming the part of the Contract, have the lowest priority among all documents. Assuming that the term "Addendum" is synonymous to "Modification", this is an discrepancy apparent and conflict between the provisions of the prevailing Contract Agreement and the subsidiary Particular Conditions of the Contact. Please clarify.

- The Priority list of the documents doesn't mention or define priority of typical documents – please define priority of these documents:
- o MoM from the Site meeting
- o MoM from the tender meeting
- o Answers to the tenderers' questions
- o Corrigendums to the Tender Dossier, if

VOLUME 2. Section 3 Particular **18.** Conditions, Sub-clause 1.13 Compliance with laws

1.13□	Compliance-with-Laws:	1
п	In:Sub-Clause-1.13¶	7,
	In paragraph (a), replace "Employer" with "Employer and/or the End Recipient ".	ı
	In paragraph (b), after Employer insert the following text "and the End Recipient".	ı
	After-sub-paragraph (b). insert the following-text." "Design, Drawings and all other documents issued by the Contractor for approval, and also required by others for permits, licences and approvals for the Works, shall be in both the Serbian and English hanguage, in both hard-copy and electronic format. An accurate but not necessarily legal translation of these documents into Serbian is the responsibility of the Contractor."	
	It shall be to the cost of the End Recipient and/or the Final Beneficiary in directly applying for updated Location Conditions, the Construction Permit and the Usage Permit, as per PCC 1.16.12.*	

VOLUME 3.1 General **Employers** Requirements, chapter 6.2, page 32/101

6.2 → TECHNICAL DESIGN-REVIEW¶

These are the documents prepared by a Technical Design Review Committee appointed by the Employer and/or the End Recipient in accordance with Law on Planning and Construction (LPC), 'Article 129 and 129a, as amended, and among others.¶

nstruction (LPC), 'Article 129 and 129a, as amended, and among others, ¶

→ Rulebook on Content, 'Method and Manner of Development and Performing Control

of Technical Documentation: According to Class and Intended Use of the

Constructions, Article 4, 'Art. '76-83. (Official Gazette of the RS, latest No. 96/2016), ¶

→ The cost of the Committee (private sector organisation) is to the Employer and/or the

End Recipient. The report of the Technical Design Review Committee shall be

presented to the MCTI within 30 days. If this is favourable, a Construction Permit will

be issued within 7 days. ¶

Be please kindly asked to confirm the

Any extension of time will be in accordance with the Contract.

	above time periods 30 days to review the Technical design and 7 days for issuing the Building permit shall be considered as nominal periods to be considered in the Program of Works, and any prolongation of these periods will be considered as a ground for Extension of Time. Please clarify the procedural durations considered for the other procedures mentioned in the PCC sub-clause 1.13, i.e. updating the Location conditions, and receiving the Usage permit.	The Contracting Authority cannot give a prior commitment on the implementation of the contract.
19.	According to Tender Dossier instruction, we fill free to ask following question: According to IPA funding, VAT and Custom duty for Contractor is excluded. Please confirm that: • Above exemptions would be directly applied, or if it shall be ask for their application and, in such case, if any requirement must be met by the contractor • If the same exemptions will be applied also towards Subcontractors, i.e. VAT and custom duty will be excluded also for them.	Please refer to the Contracting Authority Clarifications No.1, answer to the Question No. 21.
20.	Questions to the Employers Requirements VOLUME 3.2. Q_T1:The tender dossier envisages that the existing relay based interlocking systems in Niš, Niš Ranžirna and Brestovac shall be interfaced by the new interlocking systems installed within this Project. With the goal of proper quote for these interfaces by an Experienced Tenderer, please publish the existing As-built technical documentation of the said station relay interlocking systems? These drawings has not been included in the VOLUME 5 - Design documents including drawings. Q_T2:It has been noticed that in many	For the mentioned drawings, please consult Annex No.1 to the Clarifications No.2. This is covered by Volume 4, Section 1.1,
	cases the textual descriptions of the items	and Section 1.2, page 6.

in he VOLUME 4 – Schedule of Prices are, by its wording, not corresponding or extending respective Employer's requirements.

Please confirm our opinion, that the textual description of the Items in Schedule of Prices doesn't represent the Employer's requirements?

Q_T3:VOLUME 3.2 - PARTICULAR EMPLOYERS REQUIREMENTS PART **2B**, Chapter 1.2., page 9/140

Quote: "The entire electronic interlocking device with its' components (hardware and software) shall be evaluated by an independent and recognized institution according to CENELEC EN standards 50126/50128/50129, for both generic application and for specific application on railway line section Nis-Brestovac (with two sub-sections included) - these documents must be available with the application by the Contractor for the approval of the technical designs (Design for Construction Permit and Design for Execution of the Works) and issuing of Taking Over Certificate."

According to this requirement, the Contractor shall deliver along with the Design for Building permit also the ISA certificates for a) Generic application, and b) Specific application for the line Niš – Brestovac, when the design is being submitted for the approval (we suppose submitted to the Engineer).

It is common practice that the ISA b) for the specific application is produced for an already built systems, while the system for section Niš-Brestovac will be, at the moment of submitting design for building permit, not existing or even fully designed, and therefore the ISA b) won't be possible to reach.

We kindly ask you to modify the above requirement by deleting the Specific application ISA from the text?

Please review response to the Question No.3.

Please review Corrigendum to the Tender Dossier, VOLUME 3,

EMPLOYERS REQUIREMENTS	
PART 2B, Chapter 1.4., sub-clause "The	
offered MMI must meet the following	
minimal technical principles" page	
16/140	
Quote:	
"The offered MMI must meet the	
following minimal technical principles:	
☐ Safety integrity level is SIL 0 or higher;	
□Possibility of registering, recording,	
printing of given commands and changes	
in condition of interlocking device in real	
time;	
Possibility of establishing the efficient	
diagnostics and provision of support to	
authorized staff in phases of current	
maintenance and repair of interlocking	
device;	
□All functions of standard control desk	
which were monitored by registering (i.e.	
counting and justifying the process) shall	
be possible to record in protocol;	
□ Possible change of display of track	
layout in case of changed station	
configuration and to monitor the change	
of traffic technology;	
□ All inputs and outputs must be	
galvanically isolated;	
Power supply by the separation	
transformer 230V/230V, power 1kVA;	
□MMI shall possess hardware reserve	
which understands spare working place in train dispatcher room, spare processor and	
power supply unit and 10% of total	
number of input or outputs for the event	
of failure on input-output elements	
toward relay device;	
Synchronize system time with the	
official time on the End Recipient	
network;	
The primary workplace includes 3	
monitors, computer, mouse and keyboard;	
The secondary workplace includes 3	
monitors, computer, mouse and keyboard;	
☐ MMI shall be delivered with the	
installation software (operation and	



(e.g. point&click, windows with buttons and/or menus etc)."

It is required that the Interlocking MMI has to be SIL0 or better, and at the same time with the "safety architecture 2 out of 2". For a system with SIL0, the "safety 2 out of 2 architecture" is contra productive (a single failure in any of the branches causes shut down of both branches – resulting in lower reliability/availability), but the redundant architecture (primary and secondary MMIs) could be the case. Please clarify?

Q_T5:VOLUME 3.2 - PARTICULAR EMPLOYERS REQUIREMENTS PART **2B**, Chapter 2.1 - Signals and point, section Signal lamp, page 27/140 Quote:

"Signal lamp

In the existing signal lamps is used optical system with parabolic lenses, coloured glass, divergent glass and lamps with double fibre 12V, 20/20W. Because of short operative life and failures caused by fibre burning-out, it is predicted that new signals shall be equipped with signal lamps in LED technology.

Signal lamp with LEDs is mounted on the signal board. On the front top of the clamp are attached the hoods, which protect the lamps from dust and snow, especially from the harsh sun or other light.

Signal lamp with LEDs need to have good visibility of signals, that must be seen from the required distance of visibility, in accordance with Signal Rulebook /1/ for speeds up to 160 km/h. Signal lamp with LEDs has to be seen in the curves with sufficient distance visibility.

Signal lamp with LEDs shall be at all compatible with the V136 optical system with the signal light bulbs.

Signal lamp with LED module shall meet the following requirements:

□MTTF≥10 years (according to IEC/TR 62380 model calculations):

Please review Corrigendum to the Tender Dossier, VOLUME 3, 4du_techspec3.2B-en, Section 2.1.

□ Operational to	emperature range: -30□C	
to +70 □ C;		
□Reliable work	with the flashing light at	
frequency which	ch currently exist in the	
signalling syste	m;	
☐ Monitoring th	ne work of the main and	
auxiliary fibers	s as well as the change	
voltage of day	/night, on the way that	
functionality of	LED module must be the	
same as function	onality of standard signal	
lamp.		
☐ In addition	to the abovementioned	
national standa	ards, the applied signal	
lamps with LEI	O modules shall also meet	
the provisions f	rom following standards:	
□SRPS EN 50	0124-1: 2017 - Railway	
applications –	Insulation coordination,	
Part 1: Basic re	equirements – Clearances	
and creepage d	listances for all electrical	
and electronic e	quipment,	
□SRPS EN 50	0121-4: 2017 - Railway	
applications	 Electromagnetic 	
compatibility (EMC), Part 4: Emission	
	of the signalling and	
telecommunicat		
	831 Electrical signalling	
systems (08/199		
	000-6-4 Electromagnetic	
1 1 1	EMC), generic emission	
	munity for industrial	
environments ((
	art 4 Colours and colour	
_	lights (07/1977);	
	000-6-2 Electromagnetic	
1 1	EMC), Part 6-2, generic	
	ndard, immunity for	There is no BOQ, there is only Schedule of
	onments (08/2002);"	Prices
We noticed	1 2	Trices
-	or LED lamps consist of	
	regarding "Monitoring	
	iary fibres". LED lamps,	
1 -	do not bear any "fibres".	
	to the standard bulb	Please review Corrigendum No.1 to the
technology. Ple	ase charmy?	Tender Dossier, Volume 4,
O T6:		, , , , , , , , , , , , , , , , , , ,
Q_T6:	clauses 4.2.2.15.1.25	
In the BoQ	clauses 4.2. 3.1 5.1.25,	

4.2.3.15.3.25 and 4.2.3.15.5.25 it's requested that the flashing voltage controller meets the safety level of SIL 4, whereas no such requirement exists in the technical description of the VOLUME3 PART 3.2B power supply unit 1.6.

Can you confirm that a Contractor which controls flashing voltage within the interlocking device that owns SIL4 does not need to meet this requirement within a power supply device?

Q_T7:Changes in the track layout of Belotince station and the instalation of new level crossing devices on the whole line of reconstruction have consequences on the changes of station devices of CTC in the controlling station and in CTC centre of Niš.

Can you confirm that Contractor have obligation make interface to station CTC device and adaptation CTC devices in Niš centre?

O T8:Tenders documentation in technical requests VOLUME 3 PART **3.2B** chapters 1.2, 1.3 and 2.7 envisages interfaces for the conection of newly installed electronic interlockings with relay interlockings in stations Niš, Niš Ranžirna and Brestovac which are not part of the reconstruction. Can you confirm that for the making of these interfaces Contractor can use relay equipment from stations which are under reconstruction with reparations for this equipment and change the necessary elements?

Q_T9:In the technical requirements for point heatings VOLUME 3 PART **3.2B** chapter 2.4, it is stated "Heating system switches to enable operation with 50% of installed power per heater;".

Considering that 1 heater per arm of the switch point and transverse heaters is required can you confirm that this request

Please review response to Question No 4.

Please be informed that your proposal is not accepted.

Please review Corrigendum No.1 to the Tender Dossier, VOLUME 3, 4du_techspec3.2B-en, Section 2.4.

Please review Corrigendum No. 1 to the Tender Dossier, VOLUME 3, 4du_techspec3.2B-en, Section 2.7.

is not necessary?

Q_T10:In the technical requirements for level crossings VOLUME 3 PART 3.2B chapter 2.7, it is requested that on the level crossing signal lights must be only diameter Φ 136.

Can you confirm that in agreement with Rulebook on technical condition for signaling safety devices (Official Gazette 18/16) clause 18 on level crossing light signals can install signal lights with minimal diameter Φ 136?

Q T11:In technical requirements VOLUME 3 PART 3.2B envisages the change of all existing signaling and telecommunication devices, but not the installation of temporary signaling and telecommunication devices for controling railway traffic for time of reconstruction. Can you confirm that it's not necessary to install temporary signaling telecommunication devices for controling railway traffic during the time of reconstruction, until the newly installed ones are put to use?

Q_T12:In technical requirements and BoQ VOLUME 3 PART 3.2B for signaling and telecommunications it was not specified which rooms are under reconstruction. Can you confirm that subject of reconstruction includes only interior rooms where new signaling and telecommunication devices would be installed, including train operators room?

21. delivery of delivery of Overhead Contact Lines (OCL) equipment. Since this type of business is specific and there are few companies that are involved in this business, we have already received more requests for offers.

Since tender documents CD2/VOLUME 1/ SECTION 1: INSTRUCTIONS TO TENDERERS, paragraph 4 advises that

Please review response to Question No 6.

Please review Corrigendum No. 1 to the Tender Dossier, VOLUME 3, 4du_techspec3.2B-en, Section 1.7.

Please refer to ITT 4. "The same company may only participate as subcontractor in different tenders if that is justified by the specific nature of the market and cleared by the contracting authority". There is no specific nature of the market to allow participation of the same Company as subcontractor in different tenders.

we can require from the contracting authority to approve that we can submit more Offers as a Subcontractor, please issue an approval for our company that, as a Subcontractor, we can submit more offers for the Contact network to all interested parties.

We believe that this approval would help better conduct the tender process as it would allow more Bidders to participate in the tender.

""Ref. No. 1: Tender Dossier / Volume 4 /
Schedule of Prices

Ref. No. 2: Additional to TD / Preliminary Design / BoQ / 4.5_4.3.7_level crossings 12102018 Ref. No. 3: Additional to TD / Preliminary Design / K4 S2.2 -Trasa-Track / Graphic documentation

Regarding our participation in tender for The modernization and rehabilitation of the railway section

Niš – Brestovac Republic of Serbia, we have noticed that:

Question no. 1: After we have analyzed the tender documents for the subject project, we noted that Supply of materials is not individual sub-item on the list Schedules of Prices (Ref. No. 1).

Please explain, whether we should calculate supply of material in the sub-item position for "Work" part or we should make new sub-items in blank cells under "Other works, to be specified by the Tenderer" for all material that is need to be procured.

Question no. 2: Please define item "Temporary level crossing during execution of works" which we can find in the BoQ for the Level crossings (Ref. No. 2).

Question no. 3: In the BoQ for the Level crossings (Ref. No. 2) we can find Level crossing on km 245+612, but in the

Please see Contracting Authority Clarifications No.1., response to the Question No. 11.

In FIDIC Yellow Book tender, "materials are not "Works"

This is covered by Volume 4. Section 1.2, page 6.

Please see Contracting Authority Clarifications No.1., response to the Question No. 11.

Preliminary Design (Ref. 3) we can't find drawing 'Layout road crossing 261+780'' or 'Typical cross sec. and long. profile of road crossing 261+780''. Please give us information whether this road crossing is canceled or two drawings are missing.

Question no. 4: Please find below questions about turnouts that we prepared along with the manufacturer.

- 4.1 What is maximum allowed speed over turnouts?
- 4.2 According to tender documentation, rails 60E1 are in accordance with SRPS EN 13674-1 and tongue rails 60E1A1 are in accordance with SRPS EN 13674-2. In line with that, please conform if

stock rails, tongue rails and transition rails are in quality E260 or 350HT and if all the rails in turnouts are vertical in relation to turnout sleepers?

- 4.3 On page 46 it is specified that supporting elements (spreaders) should be made of EN GJS 500-7 grade of cast iron. Does that imply that all slide chairs, check rails supports and stops should be casted from material GJS 500-7? Please confirm if system of integrated rollers in slide chairs is requested?
- 4.4 Because the type of switching mechanism is not specified by tenderer documentation please clarify next issues:
- How many clamp locking devices should be on each turnout types 60E1 300 and 60E1-760 and are they mutually connected with rods?
- Does scope of supply also include metal sleepers for locking mechanism?
- 4.5 Should turnouts be delivered together with glued insulated joints? If yes, please specify hoy many GIJ are planed per one turnout?
- 4.6 Is turnout producer obliged to deliver hand manual boxes and lantern together with every turnout or not?

Please see Contracting Authority Clarifications No.1., refer to the response to Question 11.

This is covered by PCC 1.1.6.12 and Volume 3.2A, Section 5.6.

4.7 By tender documentation it is started
that fastening will be elastic, but it is not
specified which type of fastening will be
used. Please confirm, if SKL 12 type of
elastic fastenings or some other types will
be used.

4.8 Whether the tender documentation implies that all turnouts should be delivered completely assembled with prestressed concrete bearers to the construction site?

Turnouts are usually fully assembled on concrete bearers only for the purpose of technical acceptance test, because transportation of fully assembled turnouts from factory to construction site is very complicated and time consuming, and it will have huge impact on commercial and delivery conditions.

We refer to Tender Dossier Volume III, file 4du_techspec3.1_en.docx, Paragraph 5.2 of Technical Specifications CLOSURE PERIODS OF THE RAILWAY LINE.

As we are not sure of the correct available traffic interruption periods, we kindly ask you to confirm our current understanding according to the example we have drafted in the table to follow

Start	Day	Finish	Day	H	Tra
				0	ffic
				u	Inte
				rs	rru
					ptio
					n
02/03/	Mo	03/03/	Tue	3	YE
20	n	20		6	S
07:00		19:00			
03/03/	Tue	05/03/	Thu	3	NO
20		20		6	
19:00		07:00			
05/03/	Thu	06/03/	Fri	3	YE
20		20		6	S
07:00		19:00			
06/03/	Fri	10/03/	Tue	9	NO

Please review Corrigendum No. 1 to the Tender Dossier, VOLUME 3, 4du_techspec 3.1_en, Section 5.2.

		T
	20 20 6	
	19:00 19:00	
	As a matter of fact, assuming our	
	understanding is correct, we have noticed	
	that Works within the limit of the ballast	
	do not start every week on Monday at 7	
	a.m. since the typical week indicated in	
	the specifications has a duration of 204	
	hours/week instead of 168 hours/week.	
	We would like to obtain the tender dossier	Please see Contracting Authority
24.	for the procedure mentioned above.	Clarifications No.1, answer to the
	Does a person coming need any power of	question No.1.
	attorney?	
	According to Tender dossier please	
25.	answer following question:	Please see Contracting Authority
		Clarifications No.1, answer to the question
	Question: According to IPA funding,	No.21.
	VAT and Custom duty for Contractor is	
	excluded. Please confirm that:	
	• Above exemptions would be	
	directly applied, or if it shall be ask for	
	their application and, in such case, if any	
	requirement must be met by the contractor	
	• If the same exemptions will be	
	applied also towards Subcontractors, i.e.	
	VAT and custom duty will be excluded	
	also for them.	
26	Tender documentation requires	Diagram of the Complete Arms No. 1 to the
26.	compliance with TSI standards.	Please refer to Corrigendum No.1 to the
	Does the equipment for the Overhead	Tender Dossier, VOLUME 3,
	Contact Lines (OCL), (poles, cantilevers,	4du_techspec3.2B-en, Section 7, new No.17.
	brackets, fasteners, etc.) of domestic manufacturers who manufactured the	NO.17.
	same according to the valid catalog of Serbian Railways and have a license for	
	their installation, can be offered in the	
	tender.	
	Namely, the Overhead Contact Lines	
	(OCL) equipment is not specified in the	
	TSI system regulation which is on the	
	website of the Railway Directorate.	
	Commission Regulation (EU) No	
	182/2011 1299/2014 of 18 November	
	2014 on the technical specifications for	
	interoperability relating to the subsystem	
	"infrastructure" of the rail system in the	
	initiastractare of the full bystem in the	

	European Union	
27.	We would like to obtain the tender dossier for the procedure mentioned above. Does a person coming need any power of attorney?	Please see Contracting Authority Clarifications No.1, answer to the question No.1.
28.	With reference to Vol. 3, 4du_techspec3.2B-en, chapter 2.7 of the Tender Documentation the Contractor asks for following clarification: The Tender document '4du_techspec3.2B-en' states there should be "strong sounding bells". The Contractor assumes that it is possible to use electronic sound generators and loudspeakers.	
	Please confirm that electronic sound generators and loudspeakers can be used.	It is confirmed
29.	With reference to Vol. 3, 4du_techspec3.2B-en, chapter 2.7 of the Tender Documentation the Contractor asks for following clarification: In Chapter 1.2 its required: Mean Time To Repair (MTTR): according to the Art. 9 of Rulebook on maintenance of signalling-interlocking facilities In Chapter 1.4 its required: Reliability level of 0,05 disturbances per section per one year shall be proved. The Contractor shall also submit the data on Mean Time To Repair (MTTR)	Please review Corrigendum No.1 to the Tender Dossier, VOLUME 3, 4du_techspec3.2B-en, Section 1.5.
	As of understanding of the Contractor, Art. 9 of Rulebook does not specify MTTR. Therefore the Employer / End-Recipient shall define the data on MTTR accordingly.	
30.	With reference to Vol. 3, 4du_techspec3.2B-en, chapter 2.7 of the Tender Documentation the Contractor asks for following clarification: The tender requires in chapter 1.2: Common system failure, which may mislead the system and endanger safety,	

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	must be of least possible probability	
	(SIL4 level)	
	The Contractor unterstands that	Please be informed that your proposal is not
	"Common System" comprises: MMI +	accepted
	electronic Interlocking + relevant outdoor	
	elements. Therefore we ask the Employer	
	to change the requirement as following:	
	"Common system, compromising	
	Electronic Interlocking, relevant outdoor	
	elements and MMI, failure, which may	
	mislead the system and endanger safety,	
	must be of least possible probability	
	(SIL4 level)."	
	With reference to Vol. 3,	
31.	4du_techspec3.2B-en, chapter 2.7 of the	
	Tender Documentation the Contractor	
	asks for following clarification:	
	The tender requires in chapter 1.2:	
	Adjustable system working cycle in range	
	200ms-500ms	
	The Employer/End recipient has no	
	The Employer/End-recipient has no	Please be informed that your proposal is not
	possibility to check the requirement and it will not influence functionality of the	accepted
	system. Therefore the Contractor asks to	accepted
	not specify this requirement,	
	Employer/End-recipient to confirm.	
	With reference to Vol. 3,	
32.	4du_techspec3.2B-en, chapter 2.7 of the	
	Tender Documentation the Contractor	
	asks for following clarification:	
	The tender requires in chapter 1.2:	
	"Application software – includes specific	
	signalling logic, computer interfaces for	
	diagnostics and maintenance, additional	
	HMI application, modules for individual	
	control of exterior elements as well as	
	interfaces for automatic train protection	
	system (at this stage), that is for ETCS	
	system (at a later date). This software	
	shall be evaluated by an independent	
	institution (Safety Case Certificate);"	
	Due to unclear describtion of ETCS	
	requirement to be considered the	
	Contractor asks to change the requirement	
L	1	1

	as followowing: "Application software – includes specific signalling logic, computer interfaces for diagnostics and maintenance, additional HMI application, modules for individual control of exterior elements as well as interfaces for automatic train protection system (at this stage), the hardware shall be prepared for an later upgrade with an decentral ETCS L1 solution (at a later date). This software shall be evaluated by an independent institution (Safety Case Certificate);" Can you confirm this?	This cannot be confirmed.
33.	With reference to Vol. 3, 4du_techspec3.2B-en, chapter 2.7 of the Tender Documentation the Contractor asks for following clarification: The tender requires in chapter 1.2: Non-safety-related controller shall be installed on the interface frame, with programmable logic, through which commands shall be given and status signals received in respect of other system elements which are not connected to the route safety elements (e.g. heating of switches). Block diagram of connections of this controller shall be set forth in the Design for Execution of the Works. The controller communicates with the electronic (computer) configuration through the connection to the local network. A mix of vital and non-vital functionality should be avoided. Contractor proposes that non-vital functions (e.g. point heating, diesel engine, etc.) shall be controlled by a independend SCADA	Please be informed that your proposal is not accepted.
34.	system. Employer / End-recipient to confirm. With reference to Vol. 3, 4du_techspec3.2B-en, chapter 2.7 of the Tender Documentation the Contractor	

	asks for following clarification: The tender requires in chapter 1.2: The controller communicates with the electronic configuration via the local network port	
	A mix of vital and non-vital functionality should be avoided. Contractor proposes that non-vital functions (e.g. point heating, diesel engine, etc.) shall be controlled by a independend SCA <i>DA</i> system. Employer / End-recipient to confirm.	Please be informed that your proposal is not accepted.
35.	With reference to Vol. 3, 4du_techspec3.2B-en, chapter 2.7 of the Tender Documentation the Contractor asks for following clarification: The tender requires in chapter 1.3: The station part of the APB device represents the electronic interlocking device updated and extended by an appropriate hardware and software so as to achieve the required functions of a centralized APB (control and command of block signals, control and command of devices that provide information concerning the state of block sections occupancy, and control, command and visualization of all the information received at the station interlocking device). The centralized block is an integrated part of the Electronic Interlocking and therefore can not be considered as separate. Therefore this requirement shall be not be sepcified, Employer to confirm.	Please be informed that your proposal is not accepted.
36.	With reference to Vol. 3, 4du_techspec3.2B-en, chapter 2.7 of the Tender Documentation the Contractor asks for following clarification: The tender requires in chapter 1.3: Hardware upgrade and expansion of electronic interlocking device is achieved by installing the appropriate number of	

	needs of distributed equipment that	
	belongs to the zone for managing the specific station.	Please be informed that your proposal is not
	specific station.	accepted.
	The centralized block is an integrated part	
	of the Electronic Interlocking and	
	therefore cannot be considered as	This is covered in Volume 3.2B, Section
	separate. Therefore this requirement shall	1.3.
	be not be sepcified, Employer to confirm.	
	"With reference to Vol. 3,	
37.	4du_techspec3.2B-en, chapter 2.7 of the	
	Tender Documentation the Contractor asks for following clarification:	
	asks for following clarification: The tender requires in chapter 1.3:	
	Hardware upgrade and expansion of	
	electronic interlocking device is achieved	
	by installing the appropriate number of	
	controllers of field elements covering the	
	needs of distributed equipment that	
	belongs to the zone for managing the	
	specific station.	
	The centralized block is an integrated part	Please refer to the response to the Question
	of the Electronic Interlocking and	36.
	therefore cannot be considered as	
	separate. Therefore this requirement shall	
	be not be sepcified, Employer to	
	confirm."	
	"With reference to Vol. 3,	
38.	4du_techspec3.2B-en, chapter 2.7 of the	
	Tender Documentation the Contractor	
	asks for following clarification: The tender requires in chapter 1.4:	
	- A connection of simple USB module	
	shall enable the opening of start-up	
	programmes for the operator's personnel;	
	Due to IT security issues USB ports must	
	be disabled, therefore the specified	Please be informed that your proposal is not
	Employer Requirement shall not be	accepted.
	applicable and deleted in the Technical	
	Specification.	
	Employer / End-Recipient to confirm." "With reference to Vol. 3,	
39.	4du_techspec3.2B-en, chapter 2.7 of the	
	Tender Documentation the Contractor	
	asks for following clarification:	

The tender requires in chapter 1.4:

Required minimal technical characteristics for components of MMI are given in the following text.

MMI Control Unit, in a ,,2 out of 2"safety architecture, which shall perform evaluation of the visualisation logic, the interface with the SID and recording/playback of the events and visualised items. This unit shall consist of industrial-based PC computers (primary unit and secondary units), each of the computers shall include central processing unit, power supply unit and input/output unit. The operation of the Control Unit shall be based on the Windows operating platform (Windows 10 Enterprise or later), with usage of typical Windows layout and facilities (e.g. point&click, windows with buttons and/or menus etc).

The minimal characteristics of the industrial PCs shall be the following:

- processors, 8 cores/16 threads each
- 32 GB RAM DDR3
- Ethernet ports
- sets of external hard disks in RAID 1 configuration (one set as hot spare); each set with 1TB capacity
- DVD-RW optical drive
- A robust IP54 housing

The Contractor asks to verify the Ingress Protection requirement, as IP 54 refers to a splash-proof hardware which us unusual and unnecessary requirement for indoor installation. Therefore the Contractor asks to change the IP rating to IP40 which is the standard Ingress Protection rating for standard COTS HW.
Employer to confirm."

Please review Corrigendum No.1 to the Tender Dossier, VOLUME 3, 4du_techspec3.2B-en, Section 1.4.

"With reference to Vol. 3,

- 40. 4du_techspec3.2B-en, chapter 2.7 of the Tender Documentation the Contractor asks for following clarification: The tender requires in chapter 1.7:
 - made of hard and durable (resistant) material, transitional resistance toward the ground at least 200 k Ω , and resultant resistance between 6.4 M Ω and 1 G Ω ;
 - shall be an insulated raised (access) floor in mosaic form (600x600 mm squares), whose transitional resistance is at least $200 \text{ k}\Omega$, and bearing capacity 8 KN/m2;

Since for electronic interlockings the floor cabinet must be grounded this requirement is not applicable.

(This requirement referes to relay interlocking technology.)

Therefore we ask you to change or delete this requirement. "

Please be informed that your proposal is not accepted

"With reference to Vol. 3, 4du_techspec3.2B-en, chapter 2.7 of the Tender Documentation the Contractor asks for following clarification: The tender requires in chapter 2.2:

The wheel sensors shall also satisfy other conditions from standard SRPS EN 50617-2.

As the norm EN 50617-2 does not sufficiently specify interoperability/compatibility, we propose to extend this requirement with the following wording:

In order to guarantee an available and reliable operation it is mandatory to ensure the interoperability/compatibility between the train detection system (axle counter detector) and rolling stock, both the systems shall comply with Technical Specification of Interoperability – TSI CCS according to Commission Regulation (EU) 2016/919.

These shall be confirmed with a certificate issued by a notified body (NoBo). The certificate for the offered

There is no requirement in the Tender that Certificates issued by a notified body (NoBo) be included in the Tender.

Please be informed that your proposal is not accepted. This is covered by Volume 3.2B, Page 6.

	sensors shall be submitted with the offer	
	documentation.	
	documentation.	
	Please confirm. "	
		The section of the se
42.	"With reference to Vol. 3, 4du_techspec3.2B-en, chapter 2.7 of the Tender Documentation the Contractor asks for following clarification: The tender requires in chapter 2.7: Activation/deactivation devices	There is no requirement in the Tender that Certificates issued by a notified body (NoBo) be included in the Tender.
	As the norm EN 50617-2 does not sufficiently specify interoperability/compatibility, we propose to extend this requirement with the following wording: In order to guarantee an available and reliable operation it is mandatory to ensure the interoperability/compatibility between the train detection system (axle counter detector) and rolling stock, both the systems shall comply with Technical Specification of Interoperability – TSI CCS according to Commission Regulation (EU) 2016/919. These shall be confirmed with a certificate issued by a notified body (NoBo). The certificate for the offered sensors shall be submitted with the offer documentation.	Please be informed that your proposal is not accepted. This is covered by Volume 3.2B, page 6.
	Please confirm. "	
43.	With reference to Vol. 3, 4du_techspec3.2B-en, chapter 2.7 of the Tender Documentation the Contractor asks for following clarification: The BoQ gives no numbers for switch-on and switch-off elements, road signals and barriers for LC 255+449. Please indicate numbers of switch-on elements,	Please refer to the Contracting Authority Clarifications No.1, response to the Question No. 11.
	switch-off elements, road signals and barriers for this LC.	Please refer to response to the Question No. 2.
44.	With reference to Vol. 3, 4du_techspec 3.2B-en, chapter 2.7 of the Tender Documentation the Contractor asks for following clarification: The BoQ gives for all LCs 2 switch-on	Please refer to the Contracting Authority Clarifications No.1, response to the Question No. 11.

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	elements and 2- switch off elements (besides 255+449 - no numbers given - and 261+780 - 4 switch-on elements and 4 switch-off elements) independent of number of tracks (245+612 and 247+068 cross two tracks each) and configuration (LC in station/partly in station/with or without block signal(s) in approach area). Please indicate correct number of switch-on and switch-off elements for all LCs.	This is covered by Volume 3.2B, Section 2.7.
45.	"With reference to Vol. 3, 4du_techspec3.2B-en, chapter 2.7 of the Tender Documentation the Contractor asks for following clarification: The document 4du_techspec3.2B-en states that road signals have to be equipped with LED, 136mm diametre. This diametre is smaller than the optics used in former projects - Employer to confirm that diametre of 200mm for optics of road signals is also allowed. Rulebooks require two filemant bulbs or LEDs for road signals. We assume that it is also possible to use ""one filament LED"" if safety and reliability of this solution is given.	Please refer to response to the Question No. 20.
46.	Employer to confirm. " "With reference to Vol. 3, 4du_techspec3.2B-en, chapter 2.7 of the Tender Documentation the Contractor asks for following clarification: The Contractor asks for clarification regarding requirements for adaption of existing Westinghouse screen. According to Tender documentation the understanding of the Contractor is that only display of information and no remote command and control out of the CTC needs to be considered. Please confirm.	Please refer to response to the Question No.4.
	Or otherwise please specify in detail	

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	which information (e.g. commands) has	
	to be exchanged and which data protocol	
	has to be used."	
	"With reference to Vol. 3,	
47.	4du_techspec3.2B-en, chapter 2.7 of the	
	Tender Documentation the Contractor	
	asks for following clarification:	
	The Contractor asks for clarification	
	regarding discrepancy between timelines	
	mentioned in the General Employer	
	requirements compared to Preliminary	Please refer to the Contracting Authority
	Design.	Clarifications No.1, response to the
	In Volume 3 '4du_techspec3.1_en' it is	Question No. 11.
	specified that the project shall be executed	
	in two phases (Section 01 & 02) while	
	document of Preliminary Design 'K4 S26	
	- Tehn Odv Saob Izv Rad' specifies an	
	execution of seven phases.	
	The contractor consideres that exuction of	
	the project shall be followed according	
	specified duration times in document	
	'4du_techspec3.1_en' chapter 5.7	
	(execution of Section 01 & 02).	
	Employer to confirm."	
	"With reference to Vol. 3,	
48.	4du_techspec3.2B-en, chapter 2.7 of the	
70.	Tender Documentation the Contractor	
	asks for following clarification:	
	The contractor understands, based on	
	Tender document '4du_techspec3.2B-en'	This is covered by Volume 3.1, Section
	chapter 2.9, that tests on completion will	6.13.
	be done in two phases, Section 1 and	0.13.
	Section 2.	
	Please confirm that separate Taking over	
	Certificates will be issued for Section 1	
	and Section 2."	
	"With reference to Vol. 3,	
49.	4du_techspec3.2B-en, chapter 2.7 of the	
7,	Tender Documentation the Contractor	
	asks for following clarification:	
	""Existing command-control desks	
	assembled in stations Medjurovo,	This is covered by Volume 3.2B, Sections
	Belotince and Doljevac shall be	1.2, 1.4 and 1.7.
	dismantled and new command control	1.2, 1.7 and 1.7.
	system of electronic type (MMI) shall be	
	installed which present electronic	
	interface between station operator and	

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	station interlocking device.""	
	Employer to clarify if new local MMIs	
	need to be installed at all three stations	
	Medjurovo, Belotince and Doljevac and if	
	a Maintenance Workstation shall be	
	considered."	
	"With reference to Vol. 3,	
50.	4du_techspec3.2B-en, chapter 2.7 of the	
50.	Tender Documentation the Contractor	
	asks for following clarification:	
	""The Employer/End Recipient will	
	provide to the Contractor all necessary	For the mentioned drawings, please consult
	information regarding the functionality of	Annex No.2 to the Clarifications No.2.
	existing signalling/interlocking system	Timex 10.2 to the Charmentons 10.2.
	Siemens-EI SpDrS-64-JŽ (insight into the	
	Standard Installation Design).""	
	The Contractor asks the Employer/End	
	Recipient to provide the documentation	
	already now during the tender phase for	
	required review and consideration of	
	requirements in the bid of the Contractor."	
	"With reference to Vol. 3,	
51.	4du_techspec3.2B-en, chapter 2.7 of the	
	Tender Documentation the Contractor	For the mentioned drawings, please consult
	asks for following clarification:	Annex No.2 to the Clarifications No.2.
	The Contractor understands that	
	according to tender additional interface	
	hardware has to be installed in station NIS	
	and Brestovac.	
	Employer to provide a room plan for the	
	additional hardware which is required due	
	to the block interface." "With reference to Vol. 3,	
52.	"With reference to Vol. 3, 4du_techspec3.2B-en, chapter 2.7 of the	
34.	Tender Documentation the Contractor	Please review Corrigendum No.1 to the
	asks for following clarification:	Tender Dossier, VOLUME 3,
	The Contractor understands that coording	4du_techspec3.2B-en, Section 1.6.
	to tender additional interface hardware	
	has to be installed in station NIS and	
	Brestovac.	
	The Employer to confirm that the existing	
	power supply (and batteries) have	
	sufficient reserves to supply the	
	additional interface hardware. The	
	Contractor assumes that 3-5kVA will be	
		I .

	nococcony "	
	necessary."	
53.	"With reference to Vol. 3, 4du_techspec3.2B-en, chapter 2.7 of the Tender Documentation the Contractor asks for following clarification: ""In the existing signal lamps is used optical system with parabolic lenses, coloured glass, divergent glass and lamps with double fibre 12V, 20/20W. Because of short operative life and failures caused by fibre burning-out, it is predicted that new signals shall be equipped with signal lamps in LED technology.""	Please be informed that your proposal is not accepted.
	The Employer to confirm that also bulb	
	type lamps instead of LED indicator can be used."	
54.	With reference to Vol. 3, 4du_techspec 3.2B-en, chapter 2.7 of the Tender Documentation the Contractor	
	Employer to confirm that there is no "automatic train route setting" functionality required and all train routes have to be set manually by train operator.	This cannot be confirmed.
55.	"With reference to Vol. 3, 4du_techspec3.2B-en, chapter 2.7 of the Tender Documentation the Contractor asks for following clarification: ""Level crossing road warning signals serve to warn road traffic participants about the approaching of a railway vehicle to the level crossing, i.e. about the closing of the crossing by half-barriers. Level crossing interlocking device shall be equipped with road light signals with the optics 136mm in LED technology, with light dispersion angle of 120° and blinking light in the rhythm of 60 blinks per minute. No later than 8 seconds after the railway vehicle's passage over the deactivation devices, the road warning signals shall switch off, in the absence of half-barriers, i.e. upon the placement of the half-barriers in the end top position.""	Please be informed that your proposal is not

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	proposes to use reflectors instead of LED	accepted.
	lights. Employer to confirm."	
56.	With reference to Vol. 3, 4du_techspec3.2B-en, chapter 2.7 of the Tender Documentation the Contractor asks for following clarification: The Employer to confirm that the existing signaling / telecom cable (according to Employers Requirements 3.2B – chapter 1.3 and 3.2), which is installed between the stations, can be used and there is no new cable required.	Please be informed that your proposal is not accepted. This is covered by Volume 3.2B, Section 1.3 and 3.2 This is covered by Volume 4, Schedules 13 and 15.
57.	With reference to Vol. 3, 4du_techspec3.2B-en, chapter 2.7 of the Tender Documentation the Contractor asks for following clarification: The Employer to confirm if cables in line with "Bauprodukteverordnung" (Construction Products Regulation) need to be used or not.	The Contracting Authority cannot give a prior commitment on the implementation of the contract.
58.	"With reference to Vol. 3, 4du_techspec3.2B-en, chapter 2.7 of the Tender Documentation the Contractor asks for following clarification: Is it allowed to install electronic interlockings based on experimental or rare concepts like boolean algebra or shall the electronic interlocking be based on ""Spurplantechnik/Geographical principle"" which is known and acepted in Serbia since decades? Employer to confirm."	The Contracting Authority cannot give a prior commitment on the implementation of the contract. This is covered by Volume 3.2B, Section 1.2.
59.	"With reference to Vol. 3, 4du_techspec3.2B-en, chapter 2.7 of the Tender Documentation the Contractor asks for following clarification: There are no requirments that the offered signalling equipment shall have any references, approvals and commercial operations on corridor lines in Europe. To avoid, that the suppliers will offer prototype tecnologies without references	There is no requirement that reference letters are required to be included in the tender.

we strictly recommend to add to the tender requirments the following sentences:

The offer must include a reference letter issued by the railway autorithy of a member state of the european union or beneficary country, that the offered equipment is in commercial operation on corridor lines.

Reference letters shall be provided for:

- electronic interlocking with intergrated electronic Block
- electronic Level crossing
- axle counters

Employer to confirm."

"With reference Vol. 3. to **60.** 4du techspec3.2B-en, chapter 2.7 of the Tender Documentation the Contractor asks for following clarification: Within **FIDIC** yellow book the Preliminary Design represents the basis for cost calculation and providing the offer. Moreover the Preliminary Design represents the basis for Design for Construction Permit (DCP) and Design for Execution of Works. The Preliminary Design and its Review (7.3 ANNEX C: REVIEW OF **PRELIMINARY** DESIGN), for example, clearly describes interlockings based on relay technology, which is in contradiction with the **Employer** Requirements where installation of electronic interlockings are required. This is only an example, numerous other examples exist. Given the fact that the Preliminary Design is obviously outdated, the basis for an offer based on FIDIC yellow book is not given. According to FIDIC the Employer is obliged to provide tender documents that must be clear, concise, understandable and unquestionable, and that they must be provided in such a way as to enable the Contractor to work out a precise offer. For

Please note that the contract which is subject to this procedure is "design-build" type. The tenderer is allowed to propose his technical solution as long as it is in line with the Tender documentation, in particular with Employer's Requirements (see Volume 3).

	T	
	the time being this is not given.	
	Therefore we selve you to provide a realist	
	Therefore we ask you to provide a valid	
	Preliminary Design which reflects the Employer Requirements. "	
		Diagon on Contracting Authority
<i>C</i> 1	·	Please see Contracting Authority
61.	4du_techspec3.2B-en, chapter 2.7 of the Tender Documentation the Contractor	Clarifications No.1., answer to the question No.22.
		NO.22.
	8	
	The Contractor requests to align the	
	provision of the Particular Conditions of	
	the Contract, Sub-Clause 14.7, with the mandatory provisions of the Serbian law	
	* *	
	in respect to payment due date, i.e. to change the payment due date occurring	
	not later than 60 days following the	
	issuance of Interim Payment Certificate	
	or any other payment instrument.	
	Employer to confirm.	
	With reference to Vol. 3,	If you question is related to the payment of
62.	4du_techspec3.2B-en, chapter 2.7 of the	advance payment, it is regulated by the
02.	Tender Documentation the Contractor	Clause 14.7 of the General and Particular
	asks for following clarification:	Conditions of Contract
	The Contractor requests to change the	Conditions of Contract
	provision regulating the due date for the	
	advance payment stipulating a payment	
	date not later than 21 days following the	
	fulfilment of the relevant conditions.	
	Employer to confirm.	
	"With reference to Vol. 3,	Please refer to response to the Question No.
63.	4du_techspec3.2B-en, chapter 2.7 of the	44.
	Tender Documentation the Contractor	
	asks for following clarification:	
	The Contractor asks to specify the	
	positions of the activation sensor for LC	
	at km245+612,2 and LC at km247+068.	
	Moreover the Employer shall specify the	
	train route dependencies, if an activation	
	sensor is situated within station Nis."	
	"With reference to Vol. 3,	Please refer to response to the Question No.
64.	4du_techspec3.2B-en, chapter 2.7 of the	44.
	Tender Documentation the Contractor	
	asks for following clarification:	
	The Contractor asks to specify the	
	positions of the activation sensor for LC	
	at km267+142,33.	

	Moreover the Employer shall specify the train route dependencies, if an activation sensor is situated within station	
	Brestovac."	
		Diagonation No.
65.	With reference to Vol. 3, 4du_techspec 3.2B-en, chapter 2.7 of the Tender Documentation the Contractor	Please refer to response to the Question No. 44.
	asks for following clarification:	
	The Employer shall specify if the	
	activation sensor for the LC at	
	km247+068 is situated in front of the	
	branch toward Nis/Medjurovo (for trains	
	•	
	coming from Nis Marshalling).	Diagon ha informed distance
	"With reference to Vol. 3,	Please be informed that your proposal is not
66.	4du_techspec3.2B-en, chapter 2.7 of the	accepted.
	Tender Documentation the Contractor	
	asks for following clarification:	
	As the required SIL level for the MMI is	
	SIL0, we assume that there is no need of a	This is covered by Volume 3.2B, Section
	mutual check between MMI PC (personal	1.4
	computer) and MMI Software. Please	
	confirm.	
	"	
	With reference to Vol. 3,	
67.	4du_techspec3.2B-en, chapter 2.7 of the	All Design (including the Contractors
	Tender Documentation the Contractor	Preliminary Design) in a FIDIC Yellow
	asks for following clarification:	Book Tender is fully that of the Contractor
	The Employer to specify which fire	to the Employers Requirements.
	mustaction class according to EN50575	
1	protection class according to EN50575	
	applies for the following rooms:	This is covered by Volume 3.2B, Section
	-	This is covered by Volume 3.2B, Section 2.5
	applies for the following rooms:	,
	applies for the following rooms: Interlocking room, Battery room (UPS),	,
68.	applies for the following rooms: Interlocking room, Battery room (UPS), Power Supply room, Operators room.	,
68.	applies for the following rooms: Interlocking room, Battery room (UPS), Power Supply room, Operators room. "With reference to Vol. 3, 4du_techspec3.2B-en, chapter 2.7 of the Tender Documentation the Contractor	,
68.	applies for the following rooms: Interlocking room, Battery room (UPS), Power Supply room, Operators room. "With reference to Vol. 3, 4du_techspec3.2B-en, chapter 2.7 of the Tender Documentation the Contractor asks for following clarification:	,
68.	applies for the following rooms: Interlocking room, Battery room (UPS), Power Supply room, Operators room. "With reference to Vol. 3, 4du_techspec3.2B-en, chapter 2.7 of the Tender Documentation the Contractor asks for following clarification: ""On remaining sections	,
68.	applies for the following rooms: Interlocking room, Battery room (UPS), Power Supply room, Operators room. "With reference to Vol. 3, 4du_techspec3.2B-en, chapter 2.7 of the Tender Documentation the Contractor asks for following clarification: ""On remaining sections Medjurovo-Belotince and	It is confirmed that there is no automatic
68.	applies for the following rooms: Interlocking room, Battery room (UPS), Power Supply room, Operators room. "With reference to Vol. 3, 4du_techspec3.2B-en, chapter 2.7 of the Tender Documentation the Contractor asks for following clarification: ""On remaining sections Medjurovo-Belotince and Belotince-Doljevac, the APB will	It is confirmed that there is no automatic block system or station-station dependency
68.	applies for the following rooms: Interlocking room, Battery room (UPS), Power Supply room, Operators room. "With reference to Vol. 3, 4du_techspec3.2B-en, chapter 2.7 of the Tender Documentation the Contractor asks for following clarification: ""On remaining sections Medjurovo-Belotince and	It is confirmed that there is no automatic block system or station-station dependency between station DOLJEVAC and
68.	applies for the following rooms: Interlocking room, Battery room (UPS), Power Supply room, Operators room. "With reference to Vol. 3, 4du_techspec3.2B-en, chapter 2.7 of the Tender Documentation the Contractor asks for following clarification: ""On remaining sections Medjurovo-Belotince and Belotince-Doljevac, the APB will	It is confirmed that there is no automatic block system or station-station dependency
68.	applies for the following rooms: Interlocking room, Battery room (UPS), Power Supply room, Operators room. "With reference to Vol. 3, 4du_techspec3.2B-en, chapter 2.7 of the Tender Documentation the Contractor asks for following clarification: ""On remaining sections Medjurovo-Belotince and Belotince-Doljevac, the APB will function as standard centralized electronic	It is confirmed that there is no automatic block system or station-station dependency between station DOLJEVAC and
68.	applies for the following rooms: Interlocking room, Battery room (UPS), Power Supply room, Operators room. "With reference to Vol. 3, 4du_techspec3.2B-en, chapter 2.7 of the Tender Documentation the Contractor asks for following clarification: ""On remaining sections Medjurovo-Belotince and Belotince-Doljevac, the APB will function as standard centralized electronic automatic block, with direct	It is confirmed that there is no automatic block system or station-station dependency between station DOLJEVAC and
68.	applies for the following rooms: Interlocking room, Battery room (UPS), Power Supply room, Operators room. "With reference to Vol. 3, 4du_techspec3.2B-en, chapter 2.7 of the Tender Documentation the Contractor asks for following clarification: ""On remaining sections Medjurovo-Belotince and Belotince-Doljevac, the APB will function as standard centralized electronic automatic block, with direct communication between electronic	It is confirmed that there is no automatic block system or station-station dependency between station DOLJEVAC and
68.	applies for the following rooms: Interlocking room, Battery room (UPS), Power Supply room, Operators room. "With reference to Vol. 3, 4du_techspec3.2B-en, chapter 2.7 of the Tender Documentation the Contractor asks for following clarification: ""On remaining sections Medjurovo-Belotince and Belotince-Doljevac, the APB will function as standard centralized electronic automatic block, with direct communication between electronic interlocking devices in adjacent	It is confirmed that there is no automatic block system or station-station dependency between station DOLJEVAC and

69.	automatic block system or station-station dependency between station DOLJEVAC and KURŠUMLIJA. The Contractor expects that train traffic is secured by telephone from Operator to Operator." "With reference to Vol. 3, 4du_techspec3.2B-en, chapter 2.7 of the Tender Documentation the Contractor asks for following clarification: After review by the Contractor of the BoQ for Signaling Scope the individidual costs do not correspond to total sum (e.g. position for cables not considered in total sum). The Contractor aks the Employer for review of the BoQ sums and revise overall Budget as applicable."	Please refer to the Contracting Authority Clarifications No.1, response to the Question No. 11.
70.	With reference to Vol. 3, 4du_techspec3.2B-en, chapter 2.7 of the Tender Documentation the Contractor asks for following clarification: Based on raised questions for general basis of the design (e.g. difference of availabe Preliminary Design compared to Employer Requirements) and therefore expected clarifications by the Employer, the Contractor asks the Employer for five (5) weeks extension of the bid submission date (5th November 2019) to ensure propoer time for review and consideration of the Employer clarifications in the offer. Employer to confirm.	Please refer to the Contracting Authority Clarifications No.1, response to the Question No. 11.
71.	"With reference to Vol. 3, 4du_techspec3.2B-en, chapter 2.7 of the Tender Documentation the Contractor asks for following clarification: Employer to confirm the understanding that a tenderer or a member of consortium being a tenderer, may participate as a subcontractor in different tenders only if that is unjustified by the specific nature of he marker and subject to the clearance by the contracting authority? I.e. please confirm the understanding that a subcontractor, which is not a tenderer or a member of consortium being a tenderer, may participate in different tenders?	Please refer to response to the Question No. 21.

	If the above understanding is not correct, could you please consider deleting the third sentence of the Clause 4 of the ITT since such provision, the effect contrary to the above understanding is effectively limiting the competition? If none of the above is confirmed i.e. accepted, please clarify what the contracting authority would consider to be a specific nature of the market and at what point of time the clearance shall be granted?"	
72.	With reference to Vol. 3, 4du_techspec3.2B-en, chapter 2.7 of the Tender Documentation the Contractor asks for following clarification: The Employer to confirm the following understanding of the declaration no. 13 contained in the Tender Form Volume 1 Section 2 of the Tender Dossier, i.e. could you please confirm that the administrative sanction in the form of financial penalties amounting up to 10% of the estimated value of the contract is applicable only in case of willful provision of a false statement / declaration?	Please refer to Instructions to Tenderers (ITT) 3.4 "Tenderers guilty of making false declarations may also incur financial penalties up to 10% of the total value of the contract and exclusion, in accordance with the Financial Regulation in force". Thus the penalties will not be applicable only in case of willful provision of a false statement.
73.	With reference to Tender Dossier, Volume 3, Particular Employers requirements 3.1 (Document 4du_techspec3.1_en.docx), we asks for following clarification: Tender requirement is that Design and executed works must be TSI complaint, our understanding is that offered equipment and offered OCL system for this Tender must be also TSI certified and respective TSI certificates must be included in the Offer and stated in Form 4.6.11. Please confirm.	There is no requirement in the Tender that TSI Certificates be included in Form 4.6.11.
74.	With reference to Tender Dossier, Volume 4, Schedule of prices (Document 4dx_finoffer_4dot2_en.docx) and Volume 3, Particular Employers requirements 3.2B (Document 4du_techspec 3.2B-en.doc), we asks for following clarification: Tender requirement, Schedules related to	Please refer to the response to the Question No. 13.

	T	_
	Overhead Contact Line no. 4.2.3.12 and 4.2.3.14 refer to List of Employers Requirements Mandatory Spare Parts and Mandatory Special Tools. Since there is no such requirements in Particular Employers requirements 3.2B our understanding is that this positions should not be filled out.	
75.	With reference to Tender Dossier, Volume 1, Section 1, Instruction to Tenderers, chapter 12.Information/Documents to be supplied by the Tenderer, point 12.2.c) Technical capacity, we asks for following clarification: It is stated "The works performed by the JV/Consortium member or a sub-contractor must include all the elements specified in 12.2.c)1)a)". Please clarify whether is acceptable that the subcontractor provide some of the elements specified in 12.2.c)1)a) and Joint venture to fulfill jointly all the required elements specified in 12.2.c)1)a).	Please note that according to PRAG Section 5.3.4. Additional information during the procedure, "The Contracting authority cannot give a prior opinion on the assessment of the tender".
76.	Hereby we kindly ask you for a postponement of the offer submission date stated in clause 1.2 of Volume 1 in Section 1 for the tender EuropeAid/140002/IH/WKS/RS "The modernization and rehabilitation of the railway section Niš – Brestovac" by at least 21 calendar days. The reason for this request are the following: The complexity is high due to interfaces to existing equipment Serbian norms and standards have to be translated and evaluated by us.	Please see Corrigendum No.1 to the Contract Notice. and Corrigendum No.1 to the Tender Dossier.
77.	Regarding Tender Preparation, and according to paragraph 8 "Explanations Concerning Tender Documents" in Volume 1, Section 1 "Instructions to Tenderers", we kindly would ask: "Dear Sir, Madam	Please see answer to the question No. 76.

		<u> </u>
	Due to the importance of the Project and its relevant scope, and considering also that "Design and Build "tenders require a complex technical preparation (mainly in signalling systems, track works, electrification), We kindly ask for an extension of time of 4 weeks of the deadline for submission of tenders"	
78.	1) Please confirm if one company can be nominated Subcontractor in more then one Offer?	1) Please refer to the response to the Question No. 21.
	2) Please confirm if one company can supply his equipment to different Tenderers?	2) Yes, one company can supply their equipment to different tenderers.
79.	Having access to the Report of the Audit Committee for the professional control of the technical documentation on the performed expert control of the Feasibility Study and Conceptual Design, no. 350-01-00781 / 2014-14 from August 22, 2018, which is enclosed in the Tender Documents, we noted that the Report refers to previously issued Location Conditions no. ROP-MSGI-26551-LOCA-2/2017, Code no. 350-02-00968 / 2017 from 07.12.2017. As new Location Conditions no. ROP-MSGI-26551-LOC-3/2018, Code no. 350-02-01657/2018-14 dated 01.03.2019. in accordance with Article 118 of the Law on Planning and Construction (Official Gazette of RS, No. 72/09, 81/09 - correction, 64/10 - decision of the US, 24/11 and 121/12, 42 / 13 - US decision, 50/2013 - US decision, 98/2013 - US decision, 132/14, 145/14, 83/18, 31/19 and 37/19), for the facilities referred to in Article 133 of the same Law, it is necessary to obtain the Report of the Republic Commission which concludes that the urban and other parameters in the new location conditions	Please refer to the response to the Contracting Authority Clarifications No.1, Question No. 11.

have not been changed in relation to the same parameters in the old location conditions, and that in this sense they do not affect the technical solution from the Conceptual design, which was adopted at the Audit Committee session held on 21 August 2018, on which the Report was submitted to the Investor, and that on that basis, the Investor may proceed with the preparation of the next stage of the technical documentation.

In order to proceed with the preparation of the Project for a building permit with technical control, in accordance with the Law on Planning and Construction and the provisions of the Rulebook on the content, manner and procedure preparation and manner of performing technical control of technical documentation according to the class and purpose of the facilities ("RS Official Gazette", No. 72/18), it is necessary to obtain a new Report of the Republic Commission confirming the compliance of the old and new location conditions, in order to complete the procedure for designing and adopting the Feasibility Study and the Conceptual Design.

Since it is the obligation of the Bidder and the potential Contractor to prepare the Construction Permit Project, please answer us how this problem will be overcome, because without the new Report of the Republic Commission, whose acquisition is the obligations of the Investor, that is, without completing the complete procedure the preparation of the Feasibility Study and the

Preliminary Design, cannot proceed with the preparation of the next stages of the technical documentation.

Tender Dossier, volume 3, 80. 4du techspec3.1 en, item 5.2. Closure periods of railway line states "The Works within the limit of the ballast are to be carried out during two interrupted 36hour work periods, separated by a 36 open Please refer to the response to the Question No. 23.

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1	period, followed by 96 hours (four days	
1	open period) of regular transportation	
	service. The time for commencement of Work shall be 07,00 on each Monday"	
1	That means track closures will begin	
	every Monday at 07:00h with a duration	
	of 36h after which track will be open for	
	36h than again starts track closure of 36h	
	after which track has to be open for period	
1	of 96h. Bearing in mind the above;	
	36+36+36+96 (8,5 days) we're getting to	
1	Tuesday 19:00h. Can Contractor count on	
	two 36h closures per week (if there will	
	be no longer closures becouse of objects),	
1	that is, will the period of 96h open line	
	shorten on 60h so that next week the track	
1	closure can begin on Monday at 07:00h.	
1	Please explain in more detail the	
	organization of the track closures.	
	As for the technology of performing	Please refer to the response to the Question
	works on two track sections; Niš -	No. 23.
	Medjurovo, Niš – Niš Ranžirni, Niš	
	Ranžirni - Medjurovo; will it be possible	
	to have a longer track closure than 36 hours or even a permanent track closure	
	on one track while performing works on	
	these sections?	
	Is it possible to deposit material from the	The Contracting Authority cannot give a
	excavation (ballast and transitional layer)	prior commitment on the implementation of
	temporarily along the railway to the JŽI's	the contract.
	land during the track closure and to take it	
	to a permanent dump after the track	
	closure? Can this material be used as a	
	finish layer to build service / access roads	This is covered by Volume 3.1, Section 3.2.
—	along the railway line?	
	In Tender dossier volume 3, file	Please refer to the response to the
	4du_techspec3.1en, under paragraph 3	Contracting Authority Clarifications No.1,
	PURPOSE OF THE WORKS, 3.2. 7.18 WORKS it is mentioned that it is foreseen	Question No. 11.
	to be built approximately 10km of noise	The Employers Requirement for Noise
	barries. In the same document under	Barriers are included in Volume 3.2A,
1	paragraph 7.5 Annex E – TOR FROM	Section 7.18
1	THE END RECIPIENT under item 05	The extent of the Noise Barriers are to be
	SUBSTRUCTURE it is stated "Envisage	found in Volume 4. Schedule No. 4.2.3.10
	fences and panels for noise protection	NOISE BARRIERS CONSTRUCTION
	within the Preliminary Design. Barriers	WORKS –SUMMARY
	on the part of the railway line from km	

253+950 until 255+200 should Please review Corrigendum No.1. to the foreseen in the Preliminary Design due to Tender Dossier, Volume 4, Errata. the proximity of the local road." Here it is clear that there are 1.250 * 2=2500m of noise barriers which is not according to above statment construction of approx. 10 km. Please provide us with the exact locations of noise barriers and the preliminary design. Without it it is imposible to Please refer to the response to the Question No. 60. estimate the cost of noise barriers. According to the technical spec. for 84. eletrical works; Tender Dossier, file 4du_techspec3.2b_en, it is stated that we Please refer to the response to the are supposed to construct lighting on level Contracting Authority Clarifications No.1, crossings, underpasses, stops and stations, Ouestion No. 11. however in the preliminary design there is no mentioning of lighting. Lighting is only estimated in the indicative BoQ in exel. Could You please provide us with preliminary design on lighting? Please refer to the response to the Question No. 60. 5.7.1 it is stated "This includes placing of 85. crushed stone into the track, lifting the The Contracting Authority cannot give a track on alignment with necessary super prior opinion on the implementation of the elevation and extension in the curves and contract. tamping, mechanical lining and dynamic stabilization of the track per direction and alignment, with elastic fastenings on concrete sleepers, and finishing of ballast prism." How does technology envisage a 36h This is covered by PCC 1.1.6.12 and track closure after which the track is open Volume 3.2A, Section 5.7.1. for traffic under speed limit, is it the obligation of the Contractor to perform dynamic stabilization after each closure of the track and to perform mechanical profiling the ballast prism of the part of the track on which he performed the work? Is it necessary to perform dynamic track stabilization at all, since, according to the technology of the works, the works are

carried out in 36h track closures after

	which regular traffic on the track is	
	established?	
	In Tender Dossier, volume 3, file	Please refer to the response to the Question
86.	4du_techspec3.1_en, item 5.2. Closure	No. 23.
	periods of railway line states "There will	
	be a speed restriction on the line during	
	the Time for Completion according to the	
	rules and instructions of the End	
	Recipient."	
	For how long and what is maximum	The Contracting Authority cannot give a
	lenght of speed restriction in part of track	prior commitment on the implementation of
	that Contractor is working on?	the contract.
	Ç	
	According to the Tender Dossier, Volume	
87.	3, 4du_techspec3.2A_en in paragraph 5.6,	
	point 7, it is stated "Track fastenings shall	
	be of most simple, easy for fixing, may	Please review Corrigendum No.1 to the
	require minimum maintenance and allow	Tender Dossier, VOLUME 3, 4du_techspec
	easy replacement of all fastening	3.2A_en, Section 5.6, bullet point 7.
	components, without screws, fully	/ _ 1
	clipped.". The above description is	
	limiting given that there is only one	
	manufacturer of elastic fastening without	
	screws in the Serbian and surrounding	
	markets. We believe that the requirement	
	without screws is redundant, and please	
	change it so that other reputable,	
	European and worldwide suppliers of	
	elastic fastening can offer their product	
	(type SKL or W which include screws).	
	Furthermore, the described fastening	
	require a special type of concrete sleepers,	
	for which local manufacturers do not have	
	certified and formed production lines.	
	What's acceptable way for the Investor of	Please refer to ITT 12.1.12 "All tenders
88.	Joint Venture issuing tendering	must comprise the following information
00.	guarantee? Our proposal is that XXXX, as	and duly completed documents: Tender
	a leader of Joint Venture, will provide a	guarantee, using the form provided in
	tendering guarantee in amount of	Volume 1, Section 3". Therefore, only one
	€600,000.00 as requested in tendering	guarantee must be provided by a tenderer -
	documents. At the same time, the other	JV/Consortium as a whole.
	parties will provide their tendering	3 1/ Consortium as a whole.
	guarantee to XXXX. If the investor has	
	any other better way or suggestion, we're	
	glad to accept it.	Diago maviore the Control of Acres
90	Is it possible for a Chinese company	Please review the Contracting Authority
89.	whose subsidiary registered in Serbia to	Clarifications No.1, response to the

	T	To the second se
	take part in tendering for the project as the	Question No 2.
	leader party of Joint Venture?	The spection is not along Volume 2
90.	There is one documents called TAX AND CUSTOMS ARRANGEMENTS in	The question is not clear. Volume 2 contains only 6 sections.
	section 7, volume 2 that we can't find it in	
	CD-ROM received from the Ministry of	
	Finance. Does it exist in tendering	
	documents? Where can we find it?	
	We found that there're some missing	
91.	price in BoQ listed in additional	Please refer to the response to the
	information regarding Lighting works. Is	Contracting Authority Clarifications No.1,
	it possible for the Investor to provide	Question No. 11.
	relative budget information? Besides, we	
	have't noticed anz budget regarding detail	
	design (construction design). Can we get	
	some more budget information regarding	
	Design and Drawings?	
	Is it possible to postpone 2 weeks based	Please see answer to the question No. 76.
92.	on current tendering date? We'd like more	
	time to prepare requested documents in	
	tendering documents.	
	Considering the complexity of the Project	Please see answer to the question No. 76.
93.	and especially the content of the different	
	requirements including the review of the	
	Design, we kindly request you to grant an	
	extension of 4 (four) weeks of the current	
	deadline for the submission of the Tender.	
	The same questions, was sent to you 5	Please see answer to the question No. 76.
94.	times (3 times by email, 1 time by post	
	office and 1 time personally on your	
	registry office in Sremska 3-5 street, VII	
	floor, 701 room).	
	Our questions have significant influence	
	on prices in our offer.	
	Unfortunately, we did not receive any	
	answer from your side and we have really	
	short time for preparation of our offer.	
	Because of this situation we kindly ask	
	you for extension of the deadline for	
	submission of tenders until 05.12.2019.?	
	Ref. No. 1: Additional to TD /	Please refer to the response to the
95.	Preliminary Design / K4 S3 -	Contracting Authority Clarifications No.1,
	Stanica-Station Medjurovo / Technical	Question No. 11.
	report	

Ref. No. 2: Additional to TD / Preliminary Design / K4 S3 -Stanica-Station Medjurovo / Graphic documentation / Layout

Ref. No. 3: Tender Dossier / Volume 4 / Schedule of Prices / Noise barriers 4.2.3.10

Ref. No. 4: Additional to TD / EIA Study / PPF4-06-006-MI-150520-EIA

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Ref. No. 5: General employers Requirements 3.1./ 5.2.Closure periods of the railway line

Dear Sirs,

Regarding our participation in tender for The modernization and rehabilitation of the railway section Nis — Brestovac Republic of Serbia, we have noticed that:

Question no. 1: Please define rail type for the gauge truck at the station Medjurovotrack no. 6 (Ref. No. 1) from km 249+823.615 to km 249+953.500 (Ref. No. 2), whether it is 49E1 or 60E1.

Question no. 2: Please confirm that part "Works/metre (to be used for table below)" (Ref. No. 3, page 147) is not part of summary in Total (Lump sum) along with all sub—items at the same page. Which values should be input into bill for these items (for which particular wall) or should these cells be empty?

Question no. 3: We have noted non-conformity between number of barriers in the list Schedules of Prices (Ref. No. 3) and EIA Study (Ref. No. 4). Noise barriers in Section 2 — by number 4.2.3.10.2.12, 4.2.3.10.2.13 and 4.2.3.10.2.14 are missing in the EIA study. Please clarify that above mentioned barriers are part of this offer or not.

Question no. 4: We have noted

The rail type is 60E1.

Schedule No 4.2.3.10, Sub-Item No 4.2.3.10.1 is for use if additional noise barriers are required in the Design for Construction Permit They should reflect the costs in the table below. They are not part of the Summary.

In accordance with Volume 5, Section 5.2 page 7 of 7,

3 – EIA (In Serbian Only) 2019,

The above Documents are not part of the Tender Dossier and are for information only and available on DVD at the following address:

Information only documents shall not form a part of the future Contract.

Please review the response to Question No. 73.

non-conformity between number of barriers in the list Schedules of Prices (Ref. No. 3, page 148) and Summary (Ref. No. 3, page 145). Noise barriers in Section 2 — by number 4.2.3.10.2.12, 4.2.3.10.2.13 and 4.2.3.10.2.14 are missing in Summary. Please clarify.

The Contracting Authority cannot give a prior commitment on the implementation of the Contract.

Question no. 5: In order to reduce traffic closers, is allowed construction of temporary deviations in railway reserved area on some parts of the project?

Please refer the response to the Question No. 23.

Question no. 6: In ref. No 5 Defined closure periods are:

-

hours in separated periods with 36 hours open period between followed by 96 hours for open period

- The time for commencement work shall be 07.00 on each Monday
- The closure period will not be Saturdays and Sundays

If works starts on 07.00 Monday, followed with respectively 36 hours closure period, 36 hours open period, 36 hours closure period, means that period od 96 hours will start on Friday 19.00. This means that new closure (after 96 hours) could be on Tuesday 19.00, not on Monday 07.00. Please clarify.

Question no. 7: Because of complexity of the project and waiting for clarifications, can you approve extension of time for submission of offers for 4 weeks?

We would like to take your attention to time schedule of this tender.

As experienced company we are facing big difficulties to prepare the offer.

There are some discrepancies in Tender documents but also some open point in commercial and especially technical requirement.

We are still waiting answers for clarification questions which strongly impact technical solution and commercial Please refer the response to the Question No. 76.

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conditions.

Normally, some clarification questions could bring new dilemmas or open points and increase risk for Tenderer without chance to clarify the topic again.

We would like to underline that global companies has they own internal procedure to prepare and approve the Offer and this procedure take time.

Trying to prepare the best offer, companies negotiate for potential partnership and this also can be done after official answers will be published.

It is very important for Beneficiary and for the final customer to support competition and receive best quality offers.

Because of all above mentioned we strongly suggest to postpone offer submission for additional 30 to 45 days.

In that case evaluation process will be more simple and more transparent.

Thank you in advance for your understanding and hopefully positive answer.

97. The company XXXX is interested to apply for tender The modernization and rehabilitation of the railway section Niš – Brestovac.

The company XXXX is registered in Serbian Business Registers Agency as branch office of the Chinese company YYYY.

The branch office, according to the Serbian law, is not considered as legal person.

The tender for the modernization and rehabilitation of the railway section Niš – Brestovac is open to all natural and legal persons from EU territory.

Questions:

If Chinese company, which has already finished the project Rehabilitation by General Overhaul of the Junction "G" - Rakovica - Resnik section, from km 7+126 to km 14+554 (L=7.428 m), on Belgrade - Mladenovac - Nis - Presevo -

Please refer to ITT 3.3. "The eligibility requirement detailed in sub-clauses 3.1 and 3.2 applies to all members of a joint venture/consortium and all subcontractors, as well as to all entities upon whose capacity the tenderer relies for the selection criteria."

State border railway line - total value of the work is 25.8 million EURO (this section is part of Corridor 10 and includes, excluding design, the work on the sub-structure and superstructure, railway station, OCL electrification, telecommunications and electronic signaling which is corresponding to the requirements for the technical capacity of the tenderer) form JV relations with EU company - tenderer, which fulfilled all necessary requirements for tender (such as EU TSI), would the EU company tenderer be entitled to join the tender. Is Serbian branch office, as branch office of the Chinese company, entitled to join the tender as a subcontractor of the EU company –tenderer?

98. In accordance with instruction published in Tender Dossier we kindly ask you to answer following questions:

In Volume 1, Section 4, Form 4.6.13. it is requested to submit all Modifications (addenda, corrigenda, minutes of the clarification meeting and responses to tenderers' questions issued).

Question: do you accept to sign Statement to accept all Modifications (addenda, corrigenda, minutes of the clarification meeting and responses to tenderers' questions issued) instead of submitting all your documents? In any case all Modification will be included in Contract Agreement article 2.i

In Volume 1, Section 4, Form 4.6.11. a list of materials and any supplies intended for use in the works, stating their origin...

Please refer to the instruction contained in the Form 4.6.13 "Tenderers shall include here copies of all Modifications (addenda, corrigenda, minutes of the clarification meeting and responses to tenderers' questions issued) in accordance with Clause 9 of the Instructions to Tenderers (if any). Each page of all modifications shall be initialed by the authorised person."

Question: please define list of equipment for signaling scope which has to be provided detailed information. Ref. No. 1: Tender Dossier / Volume 4 / Please refer to the response to the 99. Schedule of Prices / Volume4. 2.1 — Contracting Authority Clarifications No.1, introduction Question No. 11. Ref. No. 2: Tender Dossier / Volume 3.1 / General Employers Requirements / 7.3 ANNEX C: REVIEW **OF** PRELIMINARY DESIGN from Revision Committee Ref. No. 3.' Tender Dossier / Volume 4 / Schedule of Prices / Substructure 4.2.3.5/ 4.2.3.5.2.78 Separator with integrated sludge trap Ref. No. 4: Tender Dossier / Volume 3.2 / PARTICULAR **EMPLOYERS** REQUIREMENTS - PART 2A-CIVIL WORKS / CONSTRUCTION OF SUPERSTRUCTURE 5.12 DISMANTLING OF TRACK (Page 58) Ref. No. 5: Tender Dossier / Volume 4 / Schedule of Prices / Sperstructure 4.2.3. 6/ 4.2.3.6.1.35 - 4.2.3.6.1.36 Dismantle (Page 83) Question no. 1: In Ref.No.1 is written: This should be attached as an Annex to the In the case where the Tenderer's Design Documents required in accordance with solution does not require a particular Volume 1, Form 4.6.3, with reference to the sub-item, the Tenderer shall enter 0.00 particular Sub-Item No. and shall also provide a short technical explanation for this sub-item not being required. Also in the case where a sub-item is required for the Tenderers Design but is priced at 0.00, a short explanation shall be provided. Please clarify where short technical explanation should be written. Ouestion no. 2: In Ref.No.2 for BOOK 4, VOLUME 2.1 _ **PRELIMINARY** Please refer to the response to the DESIGN FOR RECONSTRUCTION Contracting Authority Clarifications No.1, AND MODERNIZATION - LINE Question 11 LAYOUT is given remark: Consider especially the possibility

of constructing a delevelled road crossing

at km 261+780.628 (Municipal road - Zeleznicka Street) and extension of the track at the station Doljevac.

This remark was present in Preliminary report of Revision Committee also. In Explanation of Design concerning this Report, Employer gave Statement that construction of overpass / underpass on this crossing could increase costs and extend time for construction, because of harmonization of the solution with the planning documents in force for this area. Our opinion is, in line with Employer's explanation, that detailed study of all design solutions should be part of Design for Construction Permit and construction of level road crossing should be included in the offer. Please confirm.

Question no. 3: For the item Ref. No. 3, there is no enough technical characteristics for the procurement of separators with integrated sludge trap. Please define the necessary characteristics:

- -Direct flow through the separator
- -By-pass flow rate
- -Sediment volume.

Question no. 4: Please define a technical requirement for geotextile and geocomposite, type or some other characteristics.

Question no. 5: In railway stations and railway stops, Preliminary Design, technical requirements, you require benches, waste bins and others equipment. Please define the type and quantity of equipment required.

Question no. 6: Please provide detail drawings for Pedestrian fence made of tubular or box profiles for bridges and culverts. This is covered in Volume 3.2A, Section 9.1 and 9.4.

This is covered in Volume 3.2A, Section 4.2

Please refer to the response to the Contracting Authority Clarifications No.1, Ouestion No. 11.

This is covered in Volume 3.2A, Section 6.4, 7.22 and 24.

Question no. 7: Please provide details for elevators which are parts of pedestrian underpasses.

This is covered in Volume 3.2B, Section 9.1.

Question no. 8: Is there any special requirement with reference to disposal of steel structures to be dismantled?

This is covered by Volume 3.1 Section 2.

Question no. 9: Please provide locations to be used for disposal of concrete and other material to be demolished.

This is covered in Volume 3.1 Section 2.

Question no. 10: Is it possible to change / partially relocate the railway line to be reconstructed within the existing railway land?

The Contracting Authority cannot give a prior commitment on the implementation of the contract.

Question no. 11: Please provide design of existing objects (bridges, pedestrian underpasses and culverts) or at least graphic documentation / As-built.

This is covered in Volume 3.1, Section 4.

Question no. 12: Please provide detailed requirements with reference to pumping station for evacuation of water from the pedestrian underpasses (drawings of pump stations, capacities, types of pumps, etc.).

This is covered in Volume 3.2A, Section 7...

Question no. 13: Please provide detailed requirements with reference to waterproofing of upper surface of the structures.

Please review response provided above.

Question no. 14: Please provide detailed requirements for bitumen coating of the concrete surfaces in contact with soil.

This is covered by Volume 3.

Question no. 15: Please provide detailed requirements with reference to coating of concrete surfaces of curbs, edges, lower surfaces of brackets, side and lower surfaces of main girders along the entire length of the bridge, as well as all bearing beams and visible surfaces of columns and wings, with a protective hydrophobic

This is covered by Volume 3.1, Section 4 and Volume 5, Section 5.1..

coating for concrete.

Question no. 16: Please provide Technical requirements for all objects that are parts of this tender.

This is covered by Volume 3.1, Section 3.2,

Question no. 17: Please provide design of existing railway and railway stations with technical description, graphic documentation / As-built.

This is covered by Volume 3.1, Section 3.2

Question no. 18: Whether disposal of contaminated excavate ballast is Contractors scope of works? If yes, what is the percentage of ballast for disposal that we should calculate with in this offer?

This is covered by Volume 3.1, Sections 5.3 and 5.4

Question no. 19: In the Ref. No. 4 it is said that existing tracks are on concrete sleepers. In the site visit we have seen that sleepers are wooden. Is it disposal of contaminated wooden sleepers Contractors scope of works? If yes, what is the percentage of sleepers for disposal that we should calculate with in this offer?

Question no. 20: Where is the location of End Recipient Storage named in Ref No. 5?

In the "Contract Notice", part of "Selection and award criteria", item a) stands "Tenderer must have completed at least one (1) JSIew/Modemisation Works

contracts, with minimum contract value of 25 million euros, for public railways, compliant with EU TSI (Technical Specification for Interoperability). Reference works contract (s) must be of a similar nature covering works with railway line and including all of the following components: sub-structure and superstructure, railway station, OCL

(Overhead Contact Line) electrification,

signalling. Railway line completed under the reference works contracts should have

and

telecommunications

Please note that according to PRAG Section 5.3.4. Additional information during the procedure, "The Contracting authority cannot give a prior opinion on the assessment of the tender".

electronic

been for a minimum length of 10 kms. The works contracts must have been completed at any moment during the period of past eight (8) years from the date of submission of tenders."

If the potential contractor has carried out work on a project of reconstruction / modernization of a railway line in the territory of the European Union, can such a project also prove that it was made according to the EU TSI? Is it possible to attach the contractor declaration of conformity and the statement that the Nis - Brestovac project will be designed (all materials and equipment) in accordance with the EU TSI with the requested reference of railway reconstruction / modernization?

The request is not common, so please explain in more detail.

The preamble of the Particular Employer Requirements (Volume 3, part 28-SIGNALLING) states:

"The information below is an overview of the minimal technical and functional requirements, foreseen by the Employer. The Contractor is allowed to propose this (as described below) or any other technical solution that guarantees the same (as described below) or better level of system functionality, which complies with the previously-mentioned norms and standards, especially the I SI CCS. By offering any technical solution the Contractor is allowed to foresee the removal of the legacy systems that are currently in operation as long as the Contractor will ensure smooth and continuous functioning of the system project during and after the implementation. Most importantly, this (as described below) or any other technical solution has to comply with the TSI CCS technical and procedural requirements and previously mentioned national norms and standards. This means that during the implementation stage, the

technical design of the proposed system has to be approved by a Notified Body (which guarantees that all the equipment and the system integration as a whole complies with the TSI CCS requirements) and by a Designated Body (which guarantees that equipment not in scope of TSI CCS complies with the requirements from national norms and standards). The fully installed system has to be approved by above mentioned bodies as well."

Also, point 2 (Performance requirements) of the Particular Employer Requirements (Volume 3, part **2B**-SIGNALLING) states:

"Since the station electronic signalling-interlocking device can be diverse technological found in environment (the existing and future interlocking systems and adjacent stations), it shall, in addition to the requirements set forth in the documents referred to in other chapters, also meet the additional specifications set out in the Annex I to the Commission Decision 2012/88/EU of 25.1.2012, as amended by the Commission Decisions 2012/696/EU of 6.11.2012, 2015/14 of 5.1.2015 and 2016/919 of 27.05.2016. These decisions updated the technical specification for interoperability relating to the control-command and signalling subsystems of the trans-European rail system (which also apply to conventional lines and high-speed lines)"

According to Article 8 (Class B systems) of the COMMISSION REGULATION (EU) 2016/919 of 27 May 2016 on the technical specification for interoperability relating to the 'control-command and signalling' subsystems of the rail system in the European Union states:

"Member States shall ensure that the functionality, performance and interfaces of the Class B systems remain as currently specified, except where modifications are needed to mitigate safety-related flaws in

those systems."

Also, point 2.2. (Scope) of the annex (Technical specification for interoperability relating the to 'control-command and signalling' subsystems of the rail system in the European Union) of this regulation states: "The Control-Command and Signalling Subsystem TSI specifies only those requirements which are necessary to assure the interoperability of the Union rail system and the compliance with the essential requirements (2).

(2) Currently the CCS TSI does not specify any interoperability requirement for the interlockings, level crossings and certain other elements of the CCS.

<...>

Class B systems for the trans-European rail system network are a limited set of train protection and voice radio legacy systems that were already in use in the trans-European rail network before 20 April 2001.

Class B systems for other parts of the network of the rail system in the European Union are a limited set of train protection and voice radio legacy systems that were already in use in those networks before 1 July 2015."

According to the definitions and the requirements, set out in the above-mentioned Commission Regulation, the scope of the signalling and telecommunications systems, defined in the Particular Employer Requirements (Volume 3, part 2B) may be considered as Class B system.

Please confirm if we understand correctly that the above-cited technical and performance conditions for the signalling and telecommunications parts of the Particular Employer Requirements (Volume 3, part 2B) require the technical solutions to comply with the national

The Contracting Authority cannot give a prior commitment on the implementation of the contract.

Please note that there are also parts of the signalling system which belong to the scope of TSI CCS and therefore your

norms and standards only. Consequently, during the implementation stage, the technical design of the proposed system would to be approved by a Designated Body only.

understanding is not fully correct.

Please also confirm that the Designated Body in the Republic of Serbia is the National Safety Authority (Directorate for Railways). This is dependent on the Designated Body on the Base Date.

RE: VOLUME 1, SECTION 1: 102. INSTRUCTIONS TO TENDERERS INFORMATION/DOCUMENTS TO BE SUPPLIED BY THE TENDERER

12.2., c) Technical capacity of tenderer, point 1) - a):

Can the following part of the requirement: "compliant with EU TSI (Technical Specification for Interoperability)," and related explanation:

"The above requirements are to be interpreted as follows:

• Compliance with EU TSI must be demonstrated through a certificate issued by the relevant notification body." be removed, i.e. deleted?

This part of the requirement is not necessary and its delectation will increase number of prospective tenderers and therefore improve competitiveness.

Explanations and reasons:

a. The tender requires modernisation and rehabilitation only of a small, middle part of the existing corridor that is not in compliance with EU TSI and the tender does not include any ERTMS (ETCS and GSMR) equipment of any of ETCS levels, which would require compliance with EU TSI.

b. In accordance with the Law on security in railway traffic, Section 2 - Interoperable sub-systems, Article 39, the application of the Interoperability related Control-Command and Signalling (TSI CCS) subsystem is obligatory on the lines with a maximum speed over 160 km/h.

Please be informed that your proposal is not accepted.

Note: In the tender the required maximum line speeds are 90 km/h and 120 km/h.

- c. All modernisation and rehabilitation work required by the tender can be covered by the National law.
- d. There were no New/Modernisation Works contracts completed until now in Serbia, which are certified by a NOBO.
- e. There were no New/Modernisation Works contracts compliant with EU TSI, which are completed until now in Serbia.
- f. There is no NOBO Notified Body registered and operated in Serbia.

RE: VOLUME 1, SECTION
1:INSTRUCTIONS TO TENDERERS
INFORMATION/DOCUMENTS TO BE
SUPPLIED BY THE TENDERER

12.2., c) Technical capacity of tenderer, point 2:

Can the following part of the requirement: "compliant with EU TSI (Technical Specification for Interoperability)", and related explanation:

"Design project is to be interpreted as follows:

• Compliance with EU TSI must be demonstrated through a certificate issued by the relevant notification body." be removed, i.e. deleted?

This part of the requirement is not necessary and its delectation will increase number of prospective tenderers and therefore improve competitiveness.

Explanations and reasons:

a. The tender requires modernisation and rehabilitation only of a small, middle part of the existing corridor that is not in compliance with EU TSI and the tender does not include any ERTMS (ETCS and GSMR) equipment of any of ETCS levels,

which would require compliance with EU TSI.

b. In accordance with the Law on security in railway traffic, Section 2 - Interoperable sub-systems, Article 39, the

Please review the response to Question No. 101

application of the Interoperability related Control-Command and Signalling (TSI CCS) subsystem is obligatory on the lines with a maximum speed over 160 km/h.

Note: In the tender the required maximum line speeds are 90 km/h and 120 km/h.

- c. All modernisation and rehabilitation work required by the tender can be covered by the National law.
- d. There were no completed New/Modernisation Works design projects, which are compliant with EU TSI and certified by a NOBO until now in Serbia.
- e. There is no NOBO Notified Body registered and operated in Serbia.

RE: VOLUME 3, PARTICULAR EMPLOYERSREQUIREMENTS, PART 2B SIGNALLING,

Regulations and standards for signalling-interlocking facilities and devices:

Can the following part of the requirement:
"- Commission Decision (EU) 2016/919,
Technical Specification for
Interoperability relating to the
Control-Command and Signalling (TSI
CCS) subsystems of the trans-European
rail system;"

be removed, i.e. deleted?

Also, in conjunction to above the text that follows:

"The information below is an overview of the minimal technical and functional requirements, foreseen by the Employer. The Contractor is allowed to propose this (as described below) or any other technical solution that guarantees the same (as described below) or better level of system functionality, which complies with the previously-mentioned norms and standards, especially the TSI CCS. By offering any technical solution the Contractor is allowed to foresee the removal of the legacy systems that are currently in operation as long as the

Please review the response to Question No. 101.

Please be informed that your proposal is not accepted.

The Contracting Authority cannot give a prior commitment on the implementation of the contract.

Contractor will ensure smooth and continuous functioning of the system during and after the project implementation. Most importantly, this (as described below) or any other technical solution has to comply with the TSI CCS technical and procedural requirements and previously mentioned national norms and standards. This means that during the implementation stage, the technical design of the proposed system has to be approved by a Notified Body (which guarantees that all the equipment and the system integration as a whole complies with the TSI CCS requirements) and by a Designated Body (which guarantees that equipment not in scope of TSI CCS complies with the requirements from national norms and standards). The fully installed system has to be approved by above mentioned bodies as well."

should be altered to remove references related to TSI CCS and NOBO and to be as follows:

The information below is an overview of the minimal technical and functional requirements, foreseen by the Employer. The Contractor is allowed to propose this (as described below) or any other technical solution that guarantees the same (as described below) or better level of system functionality, which complies with the previously-mentioned norms and standards. By offering any technical solution the Contractor is allowed to foresee the removal of the legacy systems that are currently in operation as long as the Contractor will ensure smooth and continuous functioning of the system during after and the project implementation. Most importantly, this (as described below) or any other technical solution has to comply with the technical and procedural requirements and previously mentioned national norms and standards. This means that offered equipment shall have appropriate certificates/approvals for use, which are issued by a Designated Body (which guarantees that equipment complies with the requirements from national norms and standards). The fully installed structural sub-system (complete line under the tender) has to be approved for use (appropriate certificate issued) by above mentioned bodies as well.

This part of the requirement is not necessary and involves significant additional project expense which is not technically and economically justified.

Explanations and reasons:

a. The tender requires modernisation and rehabilitation only of a small, middle part of the existing corridor that is not in compliance with EU TSI and the tender does not include any ERTMS (ETCS and GSMR) equipment of any of ETCS levels, which would require compliance with EU TSI.

b. Re: Guide for the application of the INF TSI, According to Framework Mandate C(2010)2576 final of 29/04/2010, CLARIFICATIONS ON THE INFRASTRUCTURE TSI:

'General remarks: For all the requirements whose mandatory scope of application are new lines, it is understood that these requirements are optional (target parameters) for upgrade or renewal of existing lines. It is expected that, while preparing the project of upgrade/renewal of the existing line, the fulfilment of the target parameters will be considered. when technically economically possible."

c. In accordance with the Law on security in railway traffic, Section 2 - Interoperable sub-systems, Article 39, the application of the Interoperability related Control-Command and Signalling (TSI CCS) subsystem is obligatory on the lines with a maximum speed over 160 km/h.

Note: In the tender the required maximum line speeds are 90 km/h and 120 km/h.

- d. All modernisation and rehabilitation work required by the tender can be covered by the National law.
- e. There is no NOBO Notified Body registered and operated in Serbia.

RE: VOLUME 3, PARTICULAR EMPLOYERSREQUIREMENTS, PART 2B SIGNALLING,

1. INDOOR EQUIPMENT, 1.2. Performance requirements

Can the following paragraph of requirements (page 9 of 140):

"Since the station electronic signalling-interlocking device can be found in a diverse technological environment (the existing and future interlocking systems and adjacent stations), it shall, in addition to the requirements set forth in the documents referred to in other chapters, also meet the additional specifications set out in the Annex I to the Commission Decision 2012/88/EU of 25.1.2012, as amended by the Commission Decisions 2012/696/EU of 6.11.2012, 2015/14 of 5.1.2015 and 2016/919 of 27.05.2016. These decisions updated the technical specification for interoperability relating the to control-command and signalling subsystems of the trans-European rail system (which also apply to conventional lines and high-speed lines)."

be removed, i.e. deleted?

This requirement is not necessary and involves significant additional project expense which is not technically and economically justified.

Explanation and reasons:

1. The tender requires modernisation and rehabilitation only of a small, middle part of the existing corridor that is not in compliance with EU TSI and the tender does not include any ERTMS (ETCS and GSMR) equipment of any of ETCS levels, which would require compliance

Please review the response to Question No. 101

	with EU TSI.	
	2. Introduction of the ETCS of any level is	
	not visible on this part of the line in the	
	near future. The future implementation of	
	the ETCS level 1, that could be used for	
	this line and that would be the most	
	appropriate would not require any	
	modification of the station interlocking	
	devices.	
	3. In accordance with the Law on security	
	in railway traffic, Section 2 -	
	Interoperable sub-systems, Article 39, the	
	application of the Interoperability related	
	Control-Command and Signalling (TSI	
	CCS) subsystem is*** obligatory on the	
	lines with a maximum speed over 160	
	km/h.	
	Note: In the tender the required maximum	
	line speeds are 90 km/h and 120 km/h.	
	4. All modernisation and rehabilitation	
	work required by the tender can be	
	covered by the National law.	
	Clause 2 of the Contract Agreement and	
106.	Particular Contract Conditions –	Please be informed that your proposal is not
100.	sub-clause 1.5 – the order of priority of	accepted. The Clauses 2 of the Contract
	documents is completely modified.	Agreement and 1.5 of the Particular
	Therefore, the meaning of FIDIC –	Conditions of Contract remains as it is.
	Yellow Book is completely lost.	Conditions of Contract Temains as it is.
	The Tender Form is in the fifth place in	
	-	
	this order of priority, under the rank of	
	Particular Contract Conditions, General	
	Contract Conditions and Employer's	
	Requirements, whereby the Appendix to	
	Tender is attached to the Particular	
	Contract Conditions placed second.	
	We kindly request for the basic order of	
	priority, stipulated by the FIDIC – Yellow	
	Book, to be followed, as provided in the	
	Guidance for preparation of particular	
	conditions.	
	Clause 2 of the Contract Agreement, item	Drawings means any drawing and any
107.	(g) – It is stated as follows: "Drawings	annexes to the drawing (if any) which shall
	(drawings and annexes to the Drawings)".	be part of the Contract.
	We kindly ask you to clarify which	If your question is related to preparation and
	"drawings" you refer to. Are these	submission of the offer, then please see ITT,
	drawings provided by the Employer along	in particular Article 11, 12 and 17.
	with the tender? What are "annexes to the	
		1

	Drowings"9	
<u> </u>	Drawings"? Particular Contract Conditions (SC	Dlagge he informed that your properties
100	Particular Contract Conditions (SC	Please be informed that your proposal is not
108.	1.1.2.6) and Appendix to Tender – terms	accepted. The Clause 1.1.2.6 of the
	"Final Beneficiary" and "End Recipient"	Particular Conditions of Contract remains
	are introduced as Employer's Personnel.	as it is.
	They are also mentioned in other clauses,	
	thus making the Contract more	
	complicated - FIDIC foresees one	
	Employer, not three, especially since the	
	Contract Agreement is signed with only	
	one Employer. SC 1.1.2.6 allows the	
	Employer to appoint the Employer's	
	Personnel during the performance of the	
	contract agreement, but such Personnel	
	does not have the same capacity as the	
	Employer. We kindly ask you to make	
	relevant corrections in the Particular	
	Conditions.	
	PC SC 5.1 – It is stated as follows: "The	
109.	Contractor shall be responsible for	
	preparation of Design to	Please refer to the response to Question No.
	international/national standards,	15.
	whichever is of the higher standard,".	
	There is always a higher standard – this is	
	not the subject matter of the Contract	
	Agreement, but of the Employer's	
	Requirements. An Employer's	
	Requirement must be clear and it should	
	not refer to the highest standard	
	applicable.	
	PC SC 4.9 – It is stated as follows: "The	
110.	Quality Assurance Plan shall, in addition,	Please refer to the response to Question No.
	ensure (a) the all materials and equipment	15.
	delivered to site are traceable as	
	compliant with a recognized international	
	standard for the material or equipment".	
	So far, we have executed works according	
	to the standards applicable in the country	
	where works are executed, which also	
	applies to materials and equipment to be	
	installed.	
	Please clarify what standards you refer to.	
	Once again, we kindly ask you to specify	
	technical requirements within Employer's	
	Requirements.	
	PC SC 4.7 – It is stated as follows: "The	For responsibilities of the contractual

111. Employer's responsibility excludes any responsibility relating to the information determined from the Employer's documents and drawings forming part of, in referred to. the Volume 3-Employer's Requirements or Volume 5-Design **Documents** including Drawings". If the Employer is not considered responsible for its own documents, please clarify who is responsible for Employer's Requirements in that case, as well as for the documents submitted as a part of the tender documentation - Volume 5. PC SC 1.1.6.12 and PC 1.1.6.13 – The last

parties during the contract implementation please see Employer's requirement and General and Particular Conditions of Contract.

The Clause 4.7 is related to the documents and drawings listed (or referred to) in the Employer's Requirements, and not for Employer's Requirements itself.

It is the Contractor's is responsibility to scrutinize all documents.

numbers of Official Gazette issues in which specified legislation was published, are not specified. Please make relevant corrections, since it is the responsibility of the Bidder's authorized person to sign all pages of the Particular Conditions. The last amendment of the Law on Planning and Construction was published in the Official Gazette No. 37/2019, dated 29.05.2019.

This is covered by the definition of the Base Date in ITT Article 12.1.3.1. eg, PCC 1.1.6.12 quotes current on Base Date.

PC SC 14.3 – The evaluation of works should be performed through BPQPW (Bill of principal Quantities of the permanent Works). Payments shall be made based on quantities. However, the manner of measuring such quantities is not determined. The only request in this particular case refers only to "no objection" by the Engineer. Please specify the manner of measuring relevant quantities. It is of utmost importance for us to have that information during the bid preparation phase.

The BPQPW is for the purpose of calculating payments for progress of completion of sub-items as measured by the quantities completed against total quantities and is prepared by the Contractor.

The period foreseen for the submission of non-binding Estimates for payment is reduced from 42 to 28 days (PC 14.4), whereas the payment period is unreasonably extended to 84 days (instead of 56), whereby the period foreseen for making the advance payment is extended from 21 to 84 days. We kindly ask you to correct these periods of time

Please be informed that your proposal is not accepted. The Particular Conditions of Contract related to payments remains as they are.

	and not to shorten, i.e. extend them at the	
	expense of the Contractor.	
	We kindly ask you to follow the Golden	
	Rules issued by FIDIC in June, 2019.	
	As specified in the Appendix to tender,	Ruling language as well as Language of
115.	the language of the Contract Agreement	communication shall remain as it is stated in
	and all other communication is English,	Appendix to Tender, and in Particular
	which is incorrect, since according to	Conditions of Contract Clause 1.4.
	Particular Conditions all documents need	Conditions of Contract Clause 1.1.
	to be provided in bilingual form and the	
	personnel needs to be able to	
	-	
	communicate in both languages.	
	Please make relevant adjustments.	
	Taking into consideration the importance	Please see answer to the Question No. 76.
116.	of this project, the scope of tender	
	documentation and Contract Agreement	
	type which is in accordance with "FIDIC	
	– Yellow Book", ambiguities in Particular	
	Contract Conditions and Employer's	
	Requirements, we kindly ask you to	
	postponed the deadline for Bid	
	submission.	
	With reference to the Volume 1, Section 1	Yes, if the expiry date is specified, the
117.	Instructions to Tenderers, Article 15.3,	mention "(one year after the deadline)"
	page 14/21 and Volume 1, Section 3,	should be deleted.
	Tender guarantee Form, please confirm	
	that the validity of the Tender Guarantee	
	is 45 days beyond the period of validity of	
	the Tender.	
	If the bank stipulates the precise expiry	
	date, 45 days beyond the period of of	
	validity of tender, i.e. 19th March 2020.,	
	than it does not have to insert the mention	
	(and in any case at the latest on (one year	
	1	
	after the deadline for submitting tenders)- Please confirm.	
		As it is stated in the Clause 14.9 of the
110	Particular Conditions, Article 14.9, page	
118.	25/30- Payment of Retention money- If	
	the Contractor submits the Retention	Conditions of the Contract, if Contractor
	money Guarantee in amount of 10% of	submits the Retention money Guarantee
	the Accepted Contract Amount for each	than the Employer shall make payment to
	Section, before issuance of the Taking	the Contractor of the amount related to
	over Certificate, then the 1st half of RM is	Retention Money.
	paid to the Contractor and the Guarantee	After issuance of the Taking over
	is reduced for the amount of 1st half of the	Certificate in accordance with the Clause
	RM. Please confirm.	14.9 of the General Conditions of Contract
1		the Retention Money Guarantee shall be

lieu of the release of the second half of the The release of the second half of the Retention money"- Please clarify this, Retention Money Guarantee will be in When is the payment of the 2nd half of the accordance with the second paragraph of the Clause 14.9 of the General Conditions RM? of Contract. Vol. With reference 3. to 119. 4du_techspec3.2B-en, chapter 1.2 of the Tender Documentation the Contractor All Design (including the Contractors Preliminary Design) in a FIDIC Yellow asks for following clarification: The tender requires in chapter 1.2: Book Tender is fully that of the Contractor Data software (individual topography to the Employers Requirements. software) contains necessary dependencies specific for each station and This is covered by Volume 3.2B-Section it shall be executed in such a way that it 1.2 can be installed and commissioned with no need for additional independent evaluation. The requirement is in contradiction with CENELEC EN50128, where its definded that safety related configuration data is subject to specific verification and validation. The Contractor requests to not specify this requirement, Employer to confirm. With reference to Vol. 3. 4du techspec3.2B-en, chapter 1.2 of the 120. Tender Documentation the Contractor Please review Corrigendum No.1 to the Tender Dossier, VOLUME 3, asks for following clarification: The tender requires in chapter 1.2: 4du_techspec3.2B-en, Section 2.4. Input-output units (controller's I/O for field devices) connect to the element they controlling (switches, sections, counters), by the means of an appropriate interface. Interfaces can be either of relay or electronic type, and are basically installed on a separate interface frame. The interface shall have support for at least one of the following communication protocols: Ethernet; UDP (User Datagram Protocol); TCP (Transmission Control Protocol); CAN (Controller Area Network); RS422/485

reduced by half.

The release of the guarantee shall be in

The specified requirement for communication protocols represents a limitation of the suppliers competition. Therefore this requirement shall not be sepcified and Contractor standard shall apply to fulfill the system functionality, Employer to confirm. With reference to Vol. 121. 4du techspec3.2B-en, chapter 1.2 of the Tender Documentation the Contractor Please be informed that your proposal is not following clarification: accepted. asks The tender requires in chapter 1.2: The Contractor shall also supply the Minimum features are an acceptable format additional laptop with installed diagnostics software, which can be used in Employers Requirements. necessary) to connect to workstation maintenance via **RJ45** connection. The laptop shall have following minimum features: - Processor with 4 cores, 2.6GHz or faster - 8 GB RAM - Hard disk with 1TB capacity - HDMI, RJ45, USB 3.0 ports Operating system Windows 10 Enterprise or later specified minimum features represents a limitation of the suppliers and competition. The contractor understands that the described functionality need to be ensured, which is however not pending on described minimum features. Therefore this requirement shall not be specified and Contractor standard shall apply to fulfill the system functionality, Employer to confirm. Vol. With reference to 122. 4du techspec 3.2B-en, chapter 1.2 of the Please be informed that your proposal is not Tender Documentation the Contractor accepted. following clarification: The tender requires in chapter 1.2: The following cables shall be used for the Minimum features are an acceptable format computer network: in Employers Requirements. - Foiled Twisted Pair (FTP) or Shielded for Twisted Pair (STP) cables inter-connecting of LAN network processors;

- single-mode fibre optical cable with required number of fibres for connecting the station; interlocking device to the safety computer within the operator's workstation.

The specified requirement represents a limitation of the suppliers and competition. Therefore this requirement shall not be sepcified and Contractor standard shall apply to fulfill the system functionality, Employer to confirm.

With reference to Vol. 3, 4du_techspec 3.2B-en, chapter 1.4 of the Tender Documentation the Contractor asks for following clarification: The tender requires in chapter 1.4:

Required minimal technical characteristics for components of MMI are given in the following text.

MMI Control Unit, in a ,,2 out of 2" safety architecture, which shall perform evaluation of the visualisation logic, the interface SID with the and recording/playback of the events and visualised items. This unit shall consist of industrial-based PC computers (primary unit and secondary units), each of the computers shall include central processing unit, power supply unit and input/output unit. The operation of the Control Unit shall be based on the Windows operating platform (Windows 10 Enterprise or later), with usage of typical Windows layout and facilities (e.g. point&click, windows with buttons and/or menus etc).

The minimal characteristics of the industrial PCs shall be the following:

- processors, 8 cores/16 threads each
- 32 GB RAM DDR3
- Ethernet ports
- sets of external hard disks in RAID 1 configuration (one set as hot spare); each set with 1TB capacity
- DVD-RW optical drive
- A robust IP54 housing

Please review the response to the Question No. 39.

Please review the response to the Question No. 20.

The specified minimal characteristics represent a limitation of the suppliers and competition. The Contractor understands that the described functionality need to be ensured, which is however not pending on the described minimum features. Therefore this requirement shall not be sepcified and Contractor standard shall apply to fulfill the system functionality, Employer to confirm.

It is allowed to have minimum characteristics as an Employers Requirement.

With reference to Vol. 3, 4du_techspec 3.2B-en, chapter 1.4 of the Tender Documentation the Contractor asks for following clarification: The tender requires in chapter 1.4:

- f) Communication Layer 2 Switch, with speed 10/100 Mbps or higher, with RJ45/SFP ports, with quality of service (acc. to IEEE 802.1p) for real-time applications, based on one of the common network protocols (e.g. Ethernet, Fibre Channel, RapidIO, ATM, ITU-T G.hn, IEEE 802.11 etc) and configurable through RS232 serial interface with Command Line Interface (CLI) commands;
- Keyboard, Video and Mouse (KVM) switch, which shall have a option to connect both PCs from MMI Control Unit to one set of monitors (via HDMI/DVI-D port), keyboard, mouse and printer (via USB 2.0 ports). It shall also support connection of digital video devices (such as flat panel displays, data projectors, plasma displays or digital TVs), 2.1-channel audio capability and technology which eliminates boot-up display problems and optimizes resolution (such ..Power Detection")

Components under b), c) and d) have to be duplicated (for the primary workplace and

Please be informed that your proposal is not accepted.

Minimum features are an acceptable format in Employers Requirements.

	T	
	secondary workplace).	
	The specified requirement represents a	
	limitation of the suppliers and	
	competition. Therefore this requirement	
	shall not be specified and Contractor	
	standard shall apply to fulfill the system	
	functionality, Employer to confirm.	
	With reference to Vol. 3,	
125.	4du_techspec3.2B-en, chapter 1.5 of the	
	Tender Documentation the Contractor	Please be informed that your proposal is not
	asks for following clarification:	accepted.
	The tender requires in chapter 1.5:	
	Each parallel I/O module has two relay	
	contacts as outlet (double disconnecting)	Minimum features are an acceptable format
	for one section. They are internally	in Employers Requirements.
	checked by the safety module. Section	
	clearance is displayed for both contacts	
	closed. The used relays have forced	
	guided contacts in accordance with the standard SRPS EN 50205	
	Standard SRPS EN 30203	
	The specified requirement represents a	
	limitation of the suppliers and	
	competition. Therefore this requirement	
	shall not be specified and Contractor	
	standard shall apply to fulfill the system	
	functionality, Employer to confirm.	
126.	With reference to Vol. 3,	
	4du_techspec3.2B-en, chapter 1.5 of the	
	Tender Documentation the Contractor	
	asks for following clarification:	_
	The tender requires in chapter 1.5:	Tender Dossier, VOLUME 3,
	Each parallel I/O module has the inlet	4du_techspec3.2B-en, Section 1.5.
	which controls the safety computer	
	which, when closed from 0,5 seconds to 6,0 seconds, causes section clearance.	
	0,0 seconds, causes section creatance.	
	The specified requirement represents a	
	limitation of the suppliers and	
	competition. Therefore this requirement	
	shall be not be sepcified and Contractor	
	standard shall apply to fulfill the system	
	functionality, Employer to confirm.	
127.	With reference to Vol. 3,	
	4du_techspec3.2B-en, chapter 1.5 of the	
	Tender Documentation the Contractor	Please be informed that your proposal is not

asks for following accepted. clarification: The tender requires in chapter 1.5: On each parallel I/O module, there are also two non-safety outputs available. Minimum features are an acceptable format signalling-interlocking in Employers Requirements. Interface for module has to be with redundancy in order to ensure a high availability. The specified requirement represents a limitation of the suppliers competition. Therefore this requirement shall not be specified and Contractor standard shall apply to fulfill the system functionality, Employer to confirm. **128.** "With Vol. 3. reference to 4du_techspec3.2B-en, chapter 1.5 of the This is covered by Volume 3.2B ,Section Tender Documentation the Contractor asks for following clarification: The tender requires in chapter 1.5: - Data transfer between the detector points and evaluator shall be tolerant to disturbances caused by electromagnetic interferences (EMI) to the cables. The Contractor proposes to formulate the Please be informed that your proposal is requirement as following, not accepted requirment is definded in the EN 50121-4. "Data transfer between the detector points and evaluator shall be tolerant to disturbances **CENELEC** according EN50121-4." 129. With reference Vol. to 4du techspec3.2B-en, chapter 1.5 of the Tender Documentation the Contractor Please be informed that your proposal is not asks for following clarification: accepted. The tender requires in chapter 1.5: Parallel electronic or relay interface towards SI devices with two working and Minimum features are an acceptable format two still, voltage-free safety relevant in Employers Requirements. information about the section occupancy, for each section: The specified requirement represents a limitation of the suppliers competition. Therefore this requirement shall not be specified and Contractor standard shall apply to fulfill the system

	functionality, Employer to confirm.	
130.	With reference to Vol. 3,	
	4du_techspec3.2B-en, chapter 1.5 of the	
	Tender Documentation the Contractor	Please be informed that your proposal is not
	asks for following clarification:	accepted
	The tender requires in chapter 1.5:	
	Mechanical requirements: possibility of	Since the accommodation is also required in
	accommodation on the standard relay	stations Niš and Brestovac equipped with
	rack for SpDrS-64-JŽ system;	SpDrS-64-JŽ system, this requirement is
		necessary.
	This requirement can influence the CE	
	conformity of the realy and axle counter.	
	Therefore this requirement shall not be	
	specified and Contractor standard shall	
	apply to fulfill the system functionality,	
	Employer to confirm.	
131.	With reference to Vol. 3,	
	4du_techspec3.2B-en, chapter 1.6 of the	Please be informed that your proposal is not
	Tender Documentation the Contractor	accepted.
	asks for following clarification:	
	The tender requires in chapter 1.6:	
	All rectifiers within the power supply	
	device must have a redundant structure,	
	so in a case of failure of basic rectifier,	
	automatic switching to the auxiliary	
	rectifier is done.	
		This was a visual and is seen a data as a secondina to
	The redundance structure will not	This requirement is mandatory according to
	significantly increase the availablility of	the "Rulebook on technical conditions for
	the components compared to higher cost	signalling/interlocking devices"
	investment. Therefore this requirement	
	shall not be specified and Contractor	
	standard shall apply to fulfill the system	
132.	functionality, Employer to confirm. With reference to Vol. 3,	
134.	4du_techspec3.2B-en, chapter 1.6 of the	
	Tender Documentation the Contractor	
	asks for following clarification:	
	The tender requires in chapter 1.6:	
	Power supply device shall be designed	Please be informed that your proposal is not
	according to the these technical	accepted.
	requirements and Drawing No 4.3.15/10.	acceptod.
	Complete power supply device must be	
	wired, tested, installed and connected at	
	the factory. All parts of the power supply	
	device must be so dimensioned according	
	to the power and voltage levels that can	
	to the power and voltage levels that can	

permanently, in addition to station interlocking devices, supply the automatic block devices (APB), CTC, level crossings and telecommunication devices in the station.

The design of the power supply device is subject of the Contractor during Design of Execution phase. Therefore this requirement shall not be specified and Contractor standard shall apply to fulfill the system functionality, Employer to confirm.

With reference to Vol. 3, 4du_techspec3.2B-en, page 6, SIGNALLING, of the Tender Documentation the Contractor asks for following clarification:

The Tender document '4du_techspec3.2B-en' states the technical design of the proposed system has to be approved by a Notified Body (which guarantees that all the equipment and the system integration as a whole complies with the TSI CCS requirements) and by a Designated Body (which guarantees that equipment not in scope of TSI CCS complies with the requirements from national norms and standards). The fully installed system has to be approved by above mentioned bodies as well.

Please confirm that the costs of these bodies will be covered by Employer/End Recipient?

With reference to Vol. 3, 4du_techspec3.2B-en, page 6, SIGNALLING, of the Tender Documentation the Contractor asks for following clarification:

The Tender document '4du_techspec3.2B-en' states during execution of the works, the Employer/ End Recipient is responsible to provide the temporary signalling system in the affected area of works.

Please refer to the Contracting Authority Clarifications No.1, response to Question 23.

This is covered by Particular Conditions of the Contract, Point. 4.8.

	1	_
	Employer to specify how dismantling of	
	existing signalling equipment is forseen.	
135.	With reference to Vol. 3,	
	4du_techspec3.2B-en, chapter 1.4, page	
	16 of the Tender Documentation the	
	Contractor asks for following	Please review Corrigendum No.1 to the
	clarification:	Tender Dossier, VOLUME 3,
	The tender requires in chapter 1.4:	4du_techspec3.2B-en, Section 1.4.
	10% of total number of input or outputs	
	for the event of failure on input-output	
	elements toward relay device	
	There is no relay device so this	
	requirement should be deleted, Employer	
	to confirm.	
136.	With reference to Vol. 3,	
	4du_techspec3.2B-en, chapter 1.5, page	
	20 of the Tender Documentation the	
	Contractor asks for following	
	clarification:	
	The tender requires in chapter 1.5:	
	All equipment for APB shall be installed	Please review drawings 4.3.15/7-a,
	in the existing block houses on sections	4.3.15/7-b, 4.3.15/7-c.
	Niš-Medjurovo and Doljevac-Brestovac,	The scope of adaptation is related to
	with adaptations of the same (if needed).	existing state of the block houses and
	Please clarify these adaptations, specify	specific equipment of the Contractor.
	all necessary works as well as a total	
	number of these block houses which	
	should be repaired.	
	Please confirm if these works are only	
	related to the existing block houses	
	related to left track on section	
	Nis-Medjurovo and section	
	Doljevac-Brestovac.	
137.	With reference to Vol. 3,	
	4du_techspec3.2B-en, chapter 1.6, page	This is covered in Volume 3.2B, Section 9.
	20 of the Tender Documentation the	,
	Contractor asks for following	
	clarification:	
	The Tender document	
	'4du_techspec3.2B-en' states auxiliary	
	power source: overhead contact line	
	(OCL) network 25kV, 50Hz, from which	
	the device is powered according to the	
	technical solution by way of	
	pole-mounted substation 25/0,23kV,	
	50Hz	
	Please clarify in which scope/position this	

		Т
	pole mounted substation 25/0,23kV,	
	50Hz is included. Where is a tender	
	requirement for this substation?	
138.	With reference to Vol. 3,	
	4du_techspec3.2B-en, chapter 2.3, page	
	31 of the Tender Documentation the	Please review Corrigendum No. 1 to the
	Contractor asks for following	Tender Dossier, VOLUME 3,
	clarification:	4du_techspec3.2B-en, Section 2.3.
	The Tender document	
	'4du_techspec3.2B-en' states The	
	Contractor shall also include in the DCP	
	the fulls needs for installation of	
	additional track magnets 500 Hz,	
	according to the provisions from	
	"Rulebook on technical requirements for	
	signalling - interlocking devices".	
	Please clarify if we need to predict	
	possibility of connecting these track	
	magnets 500Hz or to deliver, install and	
	connect these magnets to the signal	
	cabinets?	
139.	With reference to Vol. 5, V5 drawings,	
	drawing number 4.3.15.6 of the Tender	Please review Corrigendum No. 1 to the
	Documentation the Contractor asks for	Tender Dossier, VOLUME 3,
	following clarification:	4du_techspec3.2B-en, Section 2.1.
	Please confirm if pre-signal PDu93	
	should be shown on MMI display.	
140.	With reference to Vol. 5, V5 drawings,	
	drawing number 4.3.15.7-a of the Tender	
	Documentation the Contractor asks for	
	following clarification:	
	Please confirm if all block signals	
	(included repeater PA32) on the left	This is confirmed.
	track of section Nis - Medjurovo should	
	be replaced with LED signals.	
141.	With reference to Vol. 5, V5 drawings,	
	drawing number 4.3.15.7-a of the Tender	There is no right track Niš-Medjurovo,
	Documentation the Contractor asks for	there are single-track railway lines Niš-Niš
	following clarification:	Ranžirna and Niš Ranžirna-Međurovo and
	Please confirm if all block signals on the	corresponding signals on these lines shall
	right track of section Nis - Medjurovo	not be replaced with LED signals.
	should not be replaced with LED signals	
1.42	(replacement is not foreseen).	
142.	With reference to Vol. 5, V5 drawings,	
	drawing number 4.3.15.7-c of the Tender	
	Documentation the Contractor asks for	

		T
	following clarification:	
	Please confirm if all block signals on	
	section Doljevac - Brestovac should be	This is confirmed.
	replaced with LED signals.	
143.	With reference to Vol. 3,	
	4du_techspec3.2B-en, chapter 2.4, page	
	33 of the Tender Documentation the	
	Contractor asks for following	
	clarification:	
	The Tender document	
	'4du_techspec3.2B-en' states Electrical	
	point heating system which shall be	
	installed must be a closed technological	
	system with power supply input which	
	compiles the following components:	
	• pole transformer station with	
	corresponding connections to Overhead	
	Contact Line (OCL);	This is covered by Volume 3.2B, Section
	• pole distribution cabinets;	2.4
	• connecting cabinets;	
	• electric heaters;	
	• connecting cables.	
	Please confirm if all these positions	
	should be included in schedule of prices	
	of the electrical point heating devices.	
	Where are the requirements of pole	
	transformer station and pole distribution cabinets?	
144.	With reference to Vol. 3,	
144.	-,	
	4du_techspec3.2B-en, chapter 2.7, page	
	38 of the Tender Documentation the	
		Please review response to the Question No.
	clarification:	10.
	The Tender document	
	'4du_techspec3.2B-en' states Power	
	supply of level crossing device shall be	
	implemented from power supply device	
	of corresponding station's power supply	
	device, by using the special railway	
	lineside power supply cable (type PNK or	
	equivalent), with appropriate voltage	
	level depending on the location of level	
	crossing (230V for station level crossings	
	or 750V for level crossings on the open	
	line).	
	· ·	
	In schedule of prices for level crossings in	
	position 4.2.3.7.1.41 Transformer station	

	(TG) 25/0 24/11 51114 TG C	T
	(TS) 25/0.24kV, 5 kVA TS for OCL, for	
	power supply and lighting of level	
	crossing, a different solution is foreseen	
	for the power supply of the LCs.	
	Please clarify these oposite requirements.	
145.	With reference to Vol. 3,	
	4du_techspec3.2B-en, chapter	
	telecommunications of the Tender	
	Documentation the Contractor asks for	
	following clarification:	Batteries are not in the scope of the Works.
	Please clarify if replacement of TT	
	batteries is foreseen. If the answer is yes	
	_	
	please provide us with technical	
	requirements for these batteries.	
146.	With reference to Vol. 3,	
	4du_techspec3.2B-en, chapter 3.2, page	
	56 of the Tender Documentation the	
	Contractor asks for following	
	clarification:	
	The Tender document	
	'4du_techspec3.2B-en' states These	
	measurements should be done by an	
	1	
	independent, accredited inspection body	
	before putting the optical infrastructure	
	into operation and should include	
	following measurements:	
	- Optical loss (attenuation)	
	- Chromatic dispersion	
	- Polarization mode dispersion	
	Employer to clarify if Contractor has to	
	request an independent, accredited	This is covered by Volume 4, Sub-Item
	inspection body in Serbia. Please confirm	4.2.3.0.7.5.
	_ =	1.2.3.0.7.3.
	that the costs of this body will be covered	
	by Employer/End Recipient?	
147.	With reference to Vol. 3,	
	4du_techspec3.2B-en, chapter 5.2, page	
	63 of the Tender Documentation the	
		This is accounted by Volume 2.1 Section 6.4
		This is covered by Volume 3.1-Section 6.4
	clarification:	
	Employer to specify which type of	
	telecommunication manholes is	
	requested. Employer to provide the	
	drawing of this manholes.	
140		
148.	With reference to Vol. 4 Schedule of	
	prices, 4dx_finoffer_4dot2en, page 97,	
	Schedule No. 4.2.3.7 LEVEL	

	CROSSING CONSTRUCTION	
	WORKS -SUMMARY	This is covered by Volume 4, Section 1.1,
	=> Employer to specify which special	page 4
	tools for LC's need to be considered.	page +
149.	With reference to <i>Vol. 4</i> Schedule of	
17/,	prices, 4dx_finoffer_4dot2en, page	
	101, 4.2.3.7.2. LEVEL CROSSING	
	(Nis-Medjurovo-km 244+600 to km	Please review Corrigendum No. 1 to the
	248+751) at km 247+069	Tender Dossier, VOLUME 3,
	4.2.3.7.2.44 Repair of Road warning	4du_techspec3.2B-en, Section 2.7.
	signal, with foundation and anchors	-du_teenspees.zb-en, seedon z.7.
	=> Please confirm that you want to repair	
	a road warning signals?	
	4.2.3.7.2.47	
	=> Please confirm that you do not want a	
	new LOB box with switch neither a repair	
	of an existing LOB box?	
150.	With reference to Vol. 4 Schedule of	Please refer to the response to the
1000	prices, 4dx_finoffer_4dot2en, page	Contracting Authority Clarifications No.1,
	103, 4.2.3.7.3. LEVEL CROSSING-	Question 11.
	Medjurovo Station at km 248+751 to	Constitution of the control of the c
	250+323Km 250+067	
	4.2.3.7.3.41 Transformer station (TS)	Please review Corrigendum No.1 to the
	25/0.24kV, 5 kVA TS for OCL, for power	Tender Dossier, VOLUME 3,
	supply and lighting of level crossing	4du_techspec3.2B-en, Section 2.7.
	=> Please confirm that this TS should be	_ ,
	delivered. In K4 S17.2, page 68, this TS	
	does not exist.	
151.	With reference to Vol. 4 Schedule of	
		Contracting Authority Clarifications No.1,
	108, 4.2.3.7.5. LEVEL CROSSING	Question 11.
	(Belotince -km 253+363 to km 254+959)	
	at km 253+691	
	4.2.3.7.2.43 Pole L=4,5m	Please review Corrigendum No.1 to the
	=> In folder BoQ, in preliminary design	Tender Dossier, VOLUME 3,
	on CD2-additional documentation,	4du_techspec3.2B-en, Section 2.7
	requested poles are 5,5m long. Please	
	confirm that you want pole L=4,5m?	
	4.2.3.7.2.47	
	=> Please confirm that you do not want a	
	new LOB box with switch neither a repair	
150	of an existing LOB box? With reference to <i>Vol. 4</i> Schedule of	Dlagge refer to the magness to the
152.		Please refer to the response to the
	prices, 4dx_finoffer_4dot2en, page	Contracting Authority Clarifications No.1,
	110, 4.2.3.7.6. LEVEL CROSSING-	Question 11.

	Relatince to Dolievac (km 254+050 to	
	Belotince to Doljevac (km 254+959 to 260+536)Km 255+450	
	4.2.3.7.3.41	
	=> Transformer station (TS) 25/0.24kV, 5	
	kVA TS for OCL, for power supply and	
	lighting of level crossing is not requested	
	according to the schedule of prices.	
	=> Please clarify does this TS should be	
	delivered. In K4 S17.5, page 64, this TS is	
	shown on drawing.	
153.	With reference to Vol. 4 Schedule of	
	prices, 4dx_finoffer_4dot2en, page	Please refer to the response to the
	115, 4.2.3.7.8. LEVEL CROSSING-	Contracting Authority Clarifications No.1,
	Belotince to Doljevac (km 254+959 to	Question 11.
	260+536)Km 259+753	
	4.2.3.7.2.41	Please refer to the response to the Question
	=> Transformer station (TS) 25/0.24kV, 5	No. 151.
	kVA TS for OCL, for power supply and	
	lighting of level crossing is not requested	
	according to the schedule of prices. In	
	folder BoQ, in preliminary design on	
	CD2-additional documentation, requested	
	transformer station (TS) is 1 pcs. Also, in	
	K4 S17.5, page 68 this TS is shown on	
	drawing. Please clarify does this TS	
	should be delivered.	
	4.2.3.7.2.47	
	=> Please confirm that you do not want a	
	new LOB box with switch neither a repair	
	of an existing LOB box	
154.	With reference to <i>Vol.</i> 4 Schedule of	
10.11	prices, 4dx_finoffer_4dot2en, page	
	117, 4.2.3.7.9. LEVEL CROSSING—	
	Doljejevac Station (km 2260+536 to	Please refer to the response to the Question
	262+085)Km 261+780	No. 151.
	4.2.3.7.2.47	10. 131.
	=> Please confirm that you do not want a	
	new LOB box with switch neither a repair	
	of an existing LOB box?	
155.	With reference to Vol. 4 Schedule of	
133.	prices, 4dx_finoffer_4dot2en, page	Please refer to the response to the
	119, 4.2.3.7.10. LEVEL CROSSING	<u> </u>
		Contracting Authority Clarifications No.1,
	(Doljevas to Brestovac (km 262+085 to	Question No. 11.
	km 267+433) at km 263+273	
	4.2.3.7.2.43 Pole L=4,5m	
	=> In folder BoQ, in preliminary design	
	on CD2-additional documentation,	

	requested poles are 3,5m long. Please	
	confirm that you want pole L=4,5m?	
156.	With reference to Vol. 4 Schedule of	
	prices, 4dx_finoffer_4dot2en, page	
	121, 4.2.3.7.11. LEVEL CROSSING	
	(Doljevas to Brestovac (km 262+085 to	Please refer to the response to the Question
	km 267+433) at km 265+867	No. 151.
	4.2.3.7.2.47	
	=> Please confirm that you do not want a	
	new LOB box with switch neither a repair	
	of an existing LOB box?	
157.	With reference to Vol. 4 Schedule of	
	prices, 4dx_finoffer_4dot2en, page	
	124, 4.2.3.7.12. LEVEL CROSSING	Please refer to the response to the
	(Doljevas to Brestovac (km 262+085 to	Contracting Authority Clarifications No.1,
	km 267+433) at km 267+142	Question No. 11.
	=> Description is same for positions	
	4.2.3.7.12.40 and 4.2.3.7.12.41. Also you	
	do not have position for switching-off	
	device in electronic technology. Please	
	correct positions 4.2.3.7.12.41 -	
	4.2.3.7.12.46 in this schedule.	
	=> TS is not shown in drawing on page	
	65, K4 S17.7. Please clarify does this TS	
	should be delivered.	
158.	With reference to Volume 3,	
	4du_techspec3.2B-en, chapter 1.2 of the	
	Tender Documentation the Contractor	Please refer to the response to the Question
	asks for following clarification:	No. 20.
	""The entire electronic interlocking	
	device with its' components (hardware	
	and software) shall be evaluated by an	
	independent and recognized institution	
	according to CENELEC EN standards	
	50126/50128/50129, for both generic	
	application and for specific application on	
	railway line section Nis-Brestovac (with	
	two sub-sections included) - these	
	documents must be available with the	
	application by the Contractor for the	
	approval of the technical designs (Design	
	for Construction Permit and Design for	
	Execution of the Works) and issuing of	
	Taking Over Certificate."	
	Because your requirement to provide with	
	application for the approval of the	

technical designs (Design for Construction Permit and Design for Execution of the Works) the assessment report is very unusual. The assessment report is a document which will be issued at the end of the software and engineering phase. This phases takes at least 12-18 months.

To avoid a such a long stop of the works we understands that approval of the technical designs is required as following: For Design for Construction Permit and Design for Execution of the Work:

Application for approval can be done based on generic application of already approved safety case and assessment report for installed Electronical Interlocking of the Contractor in Serbia.

For Taking Over Certificate we suggest: Project specific safety case and assesment report for Nis-Brestovac need to be available.

Employer to confirm.

With reference to Volume 2 Section 3, d4o_particular conditions_en, Sub-Clause 1.1.6.14 of the Tender Documentation the Contractor asks for following clarification:

This Clause shall not apply insofar, as submittal of electronic documents in editable format would infringe IPRs and/or company secrets.

Employer to confirm.

With reference to Volume 2 Section 3, d4o_particular conditions_en, Sub-Clause 4.4 of the Tender Documentation the Contractor asks for following clarification:

The first sentence shall be replaced with the following text:

"The Contractor may not subcontract more than thirty per cent (30%) of the difference between Accepted Contract Amount and Provisional Sum. On the The contract is subject to Serbian Law.

The question is not clear. The following text from your question is not part of the Clause 4.4 of the Particular Conditions of Contract "On the End-Customer's request – but in no case more often than once a year – the Employer is entitled to audit the Subcontractor. The Subcontractor will grant access to records, documents, costs and accounts as required for the audition purposes. Access to specific company secrets may be refused. The Employer bears

	End-Customer's request – but in no case	the audit costs."
	more often than once a year – the	If your question is related to the Clause 22
	Employer is entitled to audit the	of the Particular Conditions of Contract,
		,
	Subcontractor. The Subcontractor will	then we confirm that the cost of audits will
	grant access to records, documents, costs	not be borne by Contractor.
	and accounts as required for the audition	
	purposes. Access to specific company	
	secrets may be refused. The Employer	
	bears the audit costs."	
	Employer to confirm.	
161.	With reference to Volume 2 Section 3,	
101.	d4o_particularconditions_en, Sub-Clause	
	_	
	4.12 of the Tender Documentation the	
	Contractor asks for following	
	clarification:	
	The obligation to call a meeting within	The period for notifying the claim (28 days)
	two working days shall not shorten the	as well as for submittal of formal claim (42)
	claim notice periods according to FIDIC	days) shall not be affected by respective
	Yellow Book.	meeting time.
	Employer to confirm.	
162.	With reference to Volume 2 Section 3,	
102.	d4o_particular conditions_en, Sub-Clause	
	1 • · · · · · · · · · · · · · · · · · ·	Diagram to informed that the managed is not
	10.1 of the Tender Documentation the	Please be informed that the proposal is not
	Contractor asks for following	accepted.
	clarification:	
	The definition of Sections of the Works	
	shall remain. Apart from that, the original	
	wording of FIDIC Yellow Book shall	
	apply with the following addition at the	
	end of the Clause	
	"However, in no event later than 56 days	
	after receiving the Contractor's	
	application for a Taking-Over Certificate	
	the Works shall be deemed to have been	
	taken over."	
1.00	Employer to confirm.	XX
163.	With reference to Volume 2 Section 3,	We cannot confirm. The wording of the
	d4o_particularconditions_en, Sub-Clause	Clause 20.6 of the Particular Conditions of
	20.6 of the Tender Documentation the	Contract remain as is stated in Tender
	Contractor asks for following	Documentation.
	clarification:	
	The wording of this Clause shall be	
	replaced by the following:	
	"Unless settled amicably, any dispute	
	arising from or in relation to this contract,	
	including the conclusion, interpretation,	
	performance or termination thereof shall	

		T
	be settled by the Serbian courts of law	
	having jurisdiction."	
	Employer to confirm.	
164.	With reference to Vol. 3, 4du_techspec3.2B-en, chapter 2.5, page 35 of the Tender Documentation the Contractor asks for following clarification: According to the general recommendations for similar signalling systems in European Union, cables to connect the outdoor and indoor signalling/interlocking devices shall be the cables which do not contain PVC, i.e. cables with polyethylene insulation (PE). However in Tender Documentation Vol. 3, 4du_techspec3.2B-en, chapter 4.2, page 60 following is specified in	This is covered by Volume 3.2B, Sections 2.5 and 4.2.
	contradiction to requirement that cables shall not contain PVC: The external anticorrosive and protective sheath shall be of seamless tube of thermoplastic polyvinylchloride - PVC. The properties of the PVC compound shall conform to SRPS N.A.8.175. Its identification sign will be Gpt and the thickness shall comply with SRPS N.S.4.030. Employer to clarify these requirements regarding PVC?	
165.	S-21 TT of the Tender Documentation the	Please refer to the response to the Contracting Authority Clarifications No.1, Question No. 11.
	In preliminary design K4 S-21 TT, in the BoQ, replacement of cable ducts (concrete or steel) is foreseen. As a new bridges are designed to be mounted, do the designed bridges have their own cable ducts or do we need to install them?	On new bridges, cable ducts are installed in sidewalks
	It is understands that the Contractor needs to provide and install cable ducts, Employer to confirm.	This is covered by Volume 4, Schedule 4.2.3.1 etc.
166.	With reference to Volume 3, 4du_techspec 3.2B-en, chapter 9.2 of the	This is covered by Volume 3.1 Section 3.2 and Volume 3.2A, Section 2, and also by

		TV 1 4 C 1 1 1 4 2 2 0 4 5
	Tender Documentation the Contractor	Volume 4, Schedule 4.2.3.0.4.5.
	asks for following clarification:	
	Understanding of the Contractor is that	
	geodetic records shall show trenches with	
	all cables in it.	
	Employer to confirm.	
167.	With reference to Vol. 3,	
	4du_techspec3.2B-en, chapter 2.6, page	
	37 of the Tender Documentation the	
	Contractor asks for following	The Contracting Authority cannot give a
	clarification:	prior commitment on the implementation of
	The Tender document	the contract.
	'4du_techspec3.2B-en' states The	
	concrete cable trough is placed on the	
	sand layer with thickness 5-10 cm.	
	The Contractor considers layer with	
	thickness of 5 cm, Employer to confirm.	
168.	With reference to <i>Vol.</i> 4 Schedule of	This is covered by Volume 3.1, Section and
100.	prices, 4dx_finoffer_4dot2en, for	by Volume 4, Schedules 4.2.3.13 and 15,
	1=	under subtitle "Dismantle."
	signalling and telecommunication part	under subtitue Dismanue.
	states Dismantle and transport of replaced	
	signalling & telecommunications	
	equipment and cables to End Recipient	
	storage.	
	The Contractor understands that only	Please review response to the Question No.
	dimantle of cables in station area needs to	56.
	be considered, Employer to confirm.	
169.	With reference to Vol. 3,	
	4du_techspec3.2B-en, chapter 1.5, page	This is covered by Volume 5, Drawing No
	20 of the Tender Documentation the	4.3.15/7-a.
	Contractor asks for following	
	clarification:	
	The tender requires in chapter 1.5:	
	Please confirm that block houses on	
	section Nis - Nis ranzirna and Nis	
	ranzirna - Medjurovo are not included in	
	this scope of works.	
170.	With reference to Vol. 3,	
	4du_techspec3.2 <i>B</i> -en, chapter 1.5, page	
	20 of the Tender Documentation the	This is covered by Volume 3.2b, Section
	Contractor asks for following	1.5, and Drawings 4.3.15/7 and 4.3.15/7-c.
	clarification:	1.5, and Diawings 7.5.15// and 7.5.15//-0.
	The tender requires in chapter 1.5:	
	<u> </u>	
	Please clarify what is foreseen for APB	
	houses on section	
	Medjurovo-Belotince-Doljevac?	

171. With reference to Tender Dossier, Volume 4, Schedule of prices, Schedule No. 4.2.3.14. REFURBISHMENT OF TSP DOLJEVAC, position 4.2.3.14.35 Connection to the prospective SCADA system, we asks for following clarification: Tender requirement is that Contractor should deliver the local SCADA system (RTU with Microprocessor control device). Please confirm. Also, Please confirm that RTU, beside microprocessor device, should be equipped with HMI panel or workstation with display for local control of the TSP.

This is covered by Volume 3.2B, Section 8.5.

172. According to the definitions and the requirements from Volume 3, part 2B-SIGNALLING-TELECOMMUNICA TIONS -ELECTRICS AND POWER and Terms of References for development of Design for construction permit there is not clear or precise information about existing or new clock system, visual-information systems, video supervision systems, sound systems, fire protection systems. Please confirm if those systems (equipment and works) to be provided telecommunication part of Tenderer bid (scope of offer) and by which technical document it is .defined. In case of using existing old ones, during execution of works, please confirm responsibilities of Tenderer and Contractor!

Clock system, visual-information systems, video supervision systems, sound systems, fire protection systems are not in scope of this tender.