## **CORRIGENDUM No: 1**

#### to the

## **TENDER DOSSIER**

Publication reference: EuropeAid/140002/IH/WKS/RS

Subject: The modernization and rehabilitation of the railway section Niš - Brestovac

**Location: Republic of Serbia** 

The tender dossier is corrected or modified as follows:

## **VOLUME 1, Section 1, INSTRUCTIONS TO TENDERER (d4b\_itt\_en)**

## Point No 1.2. Timetable

## Instead of:

	DATE	TIME*
Clarification meeting (mandatory)	24 September 2019	10.00-15:00
Site visit (mandatory)	23 September 2019	10.00-14.00
Deadline for requesting any additional information from the Contracting Authority	15 October 2019	15:00
Last date on which additional information are issued by the Contracting Authority	25 October 2019	-
Deadline for submitting tenders	5 November 2019	12.00
Tender opening session	8 November 2019	12.00
Notification of award to the successful tenderer	12 December 2019 <sup>3</sup>	-
Signature of the contract	27 December 2019 <sup>3</sup>	-

<sup>\*</sup> All times are in the time zone of the country of the Contracting Authority

<sup>&</sup>lt;sup>9</sup> Provisional date

#### Read:

	DATE	TIME*
Clarification meeting (mandatory)	24 September 2019	10.00-15:00
Site visit (mandatory)	23 September 2019	10.00-14.00
Deadline for requesting any additional information from the Contracting Authority	1 November 2019	15:00
Last date on which additional information are issued by the Contracting Authority	11 November 2019	-
Deadline for submitting tenders	22 November 2019	12.00
Tender opening session	22 November 2019	14.00
Notification of award to the successful tenderer	12 December 2019 <sup>3</sup>	-
Signature of the contract	27 December 2019 <sup>3</sup>	-

<sup>\*</sup> All times are in the time zone of the country of the Contracting Authority

## **VOLUME 1, Section 5, EVALUATION GRID (d4m\_evalgrid\_en)**

## Page 3/6 Table: row II.5/ column C3 II. Technical

#### Instead of:

"The average annual turnover of the tenderer (individual applicant or JV/consortium members as a whole) must, in 3 (three) previous financial years for which the accounts are closed, be at least EUR 40 million euros."

#### Read:

"The average annual turnover of the tenderer (individual applicant or JV/consortium members as a whole) must, in 3 (three) previous financial years for which the accounts are closed, be at least 30 million euros."

<sup>&</sup>lt;sup>9</sup> Provisional date

# VOLUME 3, 4du\_techspec 3.1\_en

Volume 3, Part 3.1, Section 5.2	In Volume 3.1, Section 5.2, second paragraph, delete the text "96 hours and insert the following text "60 hours".		
	In Volume 3.1, Section 5.2, third paragraph, delete the text "96 hours and insert the following text "60 hours".		
	ADDITION to Section 5.2, third paragraph To the end of this paragraph insert the following text ", which must be announced at least 15 days before the scheduled interruption of traffic.		

## VOLUME 3, 4du\_techspec 3.2A\_en

Volume 3, Part 2A, Section 5.6 Bullet Point 7	In Sub-Clause 5.6" delete the following paragraph: "Track fastenings shall be of most simple, easy for fixing, may require minimum maintenance and allow easy replacement of all fastening components, without screws, fully clipped."
	and substitute with the following: "Track fastenings shall be of most simple, easy for fixing, may require minimum maintenance and allow easy replacement of all fastening components"

# VOLUME 3, 4du\_techspec3.2B-en

Volume 3, Part 2B, Section 2.7	In Sub-Clause "Level crossing interlocking device" delete the following paragraph: "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."
	and substitute with the following:  "The existing electronic interlocking device for level crossing located in km 255+450 (type PZZ-EA) shall be dismantled and replaced with a new level crossing interlocking device."

## Volume 3, Part Delete the following paragraph: 2B, Section 1.2 "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" and substitute with the following: "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 (One unique Safety Case) these documents must be available with the application by the Contractor for the issuing of Taking Over Certificate". Volume 3, Part After Sub-Clause "Local computer network", insert the following Sub-Clause: 2B, Section 1.2 "Connection to the Centralised Traffic Control (CTC) system New signalling-interlocking devices 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 railway station Nis. The Contractor shall design and perform all necessary works for implementation of this connection (all required commands and indications). Regarding the prospective integrated CTC system designed for whole Serbian network which is part of a separate project, new signalling-interlocking devices must have support for communication protocols in accordance with provisions of standard SRPS EN 50159 and Contractor is obliged to deliver the manuals in open format to support the integration into the prospective CTC system at later stage" Volume 3, Part Delete the following paragraph: 2B, Section "During execution of the works, the Employer/ End Recipient is responsible to provide the temporary signalling system in the affected area of works" "SIGNALLING" and substitute with the following: "During execution of the works, the Employer/End Recipient will provide complete outdoor and indoor temporary equipment, while Contractor's obligation is installation of this equipment. The Taking Over Record for temporary equipment shall be conducted between the Employer/End Recipient and Contractor, before beginning of works on installation of this device". Volume 3. Part *In Sub-Clause "Power supply device" delete the following paragraph:* 2B, Section 2.7 "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 crossing or 750V for level crossings on the open line)" and substitute with the following: "Power supply of level crossing device shall be implemented both 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)" and from the corresponding TS 25/0.23kV from OCL (if it is predicted on this level crossing)".

V 1 2 2	
Volume 3, Part 2B, Section 1.4	Delete the following paragraph: "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."
	and substitute with the following: "MMI Control Unit, which shall perform evaluation of the visualisation logic, the interface with the SID and recording/playback of the events and visualised items."
Volume 3, Part 2B, Section 2.1	In Sub-Clause "Signal lamp" delete the following sub-item:  " - Monitoring the work of the main and auxiliary fibers as well as the change voltage of day/night, on the way that functionality of LED module must be the same as functionality of standard signal lamp"
	and substitute with the following:  "- Monitoring the states of fault and failure of the LED lamp (with proper action toward the interlocking device), as well as the change voltage of day/night, on the way that functionality of LED module must be the same as functionality of standard signal bulb"
Volume 3, Part	Delete the following sub-item:
2B, Section 2.4	"• Heating system switches to enable operation with 50% of installed power per heater;"
Volume 3, Part 2B, Section 2.7	In Sub-Clause "Road warning signals" delete the following sub-item: "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 $\Phi$ 136mm in LED technology, with light dispersion angle of 120° and blinking light in the rhythm of 60 blinks per minute"
	and substitute with the following: "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 minimum $\Phi$ 136mm in LED technology, with light dispersion angle of 120° and blinking light in the rhythm of 60 blinks per minute"
Volume 3, Part 2B, Section 1.7	At the end of the Section insert the following paragraph:  "Since the subject of reconstruction depends on technical solution for specific equipment of the Contractor, it must include all necessary works in buildings required by national regulations and according to technical solution of Contractor's equipment, including the energetic efficiency of the affected buildings (if required)"
Volume 3, Part 2B, Section 1.5	In Sub-Clause "Reliability" delete the following sub-item:  "- 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);"
	and substitute with the following:  "- Reliability level of 0,05 disturbances per section per one year shall be proved"

Volume 3, Part	In Sub-Clause "Reliability" delete the following paragraph:		
2B, Section 1.4	"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"		
	and substitute with the following:		
	"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 IP40 housing"		
Volume 3, Part	At the end of the Section insert the following paragraph:		
2B, Section 1.6	"The Contractor is obliged to check whether the existing power supply devices		
2B, Section 1.0			
	(rectifiers, converters, transformers, batteries etc) in railway stations Niš, Niš Ranžirna		
	and Brestovac have sufficient capacities to supply all additional hardware predicted		
	for installation in these stations, and if necessary, to design and install new elements		
	for these power supply devices"		
Volume 3, Part	In Sub-Clause "Field Devices Interface" delete the following paragraph:		
2B, Section 1.2	"The interface shall have support for at least one of the following communication		
	protocols:		
	- Ethernet;		
	<ul><li>UDP (User Datagram Protocol);</li></ul>		
	<ul> <li>TCP (Transmission Control Protocol);</li> </ul>		
	- CAN (Controller Area Network);		
	- RS422/485."		
	1.5 1.22/ 1.00 1		
	and substitute with the following:		
	"The interface shall have support for communication protocols in accordance with		
	provisions of standard SRPS EN 50159"		
Volume 3, Part	Delete complete Sub-Clause "Section clearance by reset" with the following		
2B, Section 1.5	paragraph:		
	"Each parallel I/O module has the inlet which controls the safety computer which,		
	when closed from 0,5 seconds to 6,0 seconds, causes section clearance."		
Volume 3, Part	Delete the following sub-item:		
2B, Section 1.4			
	"- 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;"		
	and substitute with the following:		
	" - 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 electronic		
	interlocking device;"		
I	<i>Ο</i> *** ***		

Volume 3, Part 2B, Section 2.3	Betete the jotto with paragraphi	
	and substitute with the following:  "The Contractor shall also include in the DCP the full needs for installation of additional track magnets 500 Hz if there are such situations required by specific track situations, which is on the Contractor to determine according to the provisions from "Rulebook on technical requirements for signalling - interlocking devices."	
Volume 3, Part 2B, Section 2.1	At the end of the Sub-Clause "General" insert the following paragraph: "The distant signal PDu93 shall be included in the interlocking device and shown on MMI display in station Doljevac (not shown on the drawings No 4.3.15/5 and 4.3.15/6)"	
Volume 3, Part 2B, Section 2.7	At the end of the Sub-Clause "Road warning signals" insert the following paragraph: "A new road warning signals must be included on each level crossing in scope of works"	
Volume 3, Part 2B, Section 2.7	At the end of the Sub-Clause "Level crossing manual switching device (LOB)" insert the following paragraph: "A new LOB box shall be included on each level crossing in scope of works"	
Volume 3, Part 2B, Section 7, new No 17	At the end of Section 7, add the following point "17. Commission Regulation (EU) No 1301/2014 on the technical specifications for operability relating to the "energy" subsystem (TSI ENE) of the rail system in the Union."	

## **VOLUME 4**

Add the following table to Schedule 4.2.3.7.6, Sub-Items 40-50

4.2.3.7.6.40	Indoor interlocking device, power supply, with interface	Lump Sum
	to station interlocking device, concrete hut,	
4.2.3.7.6.41	Transformer station (TS) 25/0.24kV, 5 kVA TS for	Lump Sum
	OCL, for power supply and lighting of level crossing	
4.2.3.7.6.42	Electrical barrier machine	Lump Sum
4.2.3.7.6.43	Pole L=4,5m	Lump Sum
4.2.3.7.6.44	Road warning signal, with foundation and anchors	Lump Sum
4.2.3.7.6.45	Switching-on device in electronic technology	Lump Sum
4.2.3.7.6.46	Switching-off device in electronic technology	Lump Sum
4.2.3.7.6.47	LOB box with switch	Lump Sum
4.2.3.7.6.48	Earthing to all reinforcement and metallic elements	Lump Sum
		Lump Sum
	Testing	
4.2.3.7.6.49	Factory Testing of Components.	Lump Sum
4.2.3.7.6.50	Field Testing of Components and Overall System	Lump Sum

Make the following deletions to the following Sub-Items-delete reference to (SIL4)

	Delete Sub-Items 4.2.3.15.1/3/5		
4.2.3.15.1/3/	Automation of power supply device with switches and	Lump Sum	
5.25	control devices for voltage and current, with blinker unit		
	and controller of blinking voltage (SIL4),		
	And replace with Sub-Items 4.2.3.15.1/3/5		
4.2.3.15.1/3/	Automation of power supply device with switches and	Lump Sum	
5.25	control devices for voltage and current, with blinker unit		
	and controller of blinking voltage		

#### **VOLUME 4, Errata**

in Volume 4, page 188 with CC

SECTION 1

Please delete numbers 4.2.3.15.20-25 and insert the following numbers 4.2.3.15.10-15

In the second last line in the table, please delete the numbers 5-6 and insert the following numbers 1-4. In the last line in the table, please delete SECTION 2 and insert the following text "SECTION 1". Also please delete "4.2.3.15B" and replace with the text "4.2.3.15A"

In Schedule 15, SIGNALLING STATION BELOTINCE –OUTDOOR EQUIPMENT-4.2.3.15.4, page 222, delete the text "4.2.3.15.5.36" and replace with the following text "4.2.3.15.4.36

Volume 4, Schedule 4.2.3.10 Summary, page 145, the title "Station Doljevac" should be inserted before 4.2.3.10.2.7 and the title "Open Track" should be inserted before 4.2.3.10.2.15.

Noise barriers 4.2.3.10.2.12-14 from pg 148 should be inserted and 4.2.3.10.2.12 to 17 should be renumbered 15 to 20.

Sub-Items 4.2.3.10.2.20 to 21 should be renumbered 25 to 26

Delete last line in table on page 146, "TOTAL FOR 4.2.3.10.2.1-17 & 20-21" and replace with the following text. "TOTAL FOR 4.2.3.10.2.1-20 & 25-26." l

Volume 4, Schedule 4.2.3.10 Summary, page 145, the title "Station Doljevac" should be inserted before 4.2.3.10.2.7 and the title "Open Track" should be inserted before 4.2.3.10.2.15.

Noise barriers 4.2.3.10.2.12-14 from pg 148 should be inserted and 4.2.3.10.2.12 to 17 should be renumbered 15 to 20.

*Sub-Items 4.2.3.10.2.20 to 21 should be renumbered 25 to 26* 

Delete last line in table on page 146, "TOTAL FOR 4.2.3.10.2.1-17 & 20-21" and replace with the following text. "TOTAL FOR 4.2.3.10.2.1-20 & 25-26."

All other terms and conditions of the tender dossier remain unchanged. The above alterations and/or corrections to the tender dossier are integral part of the tender dossier.