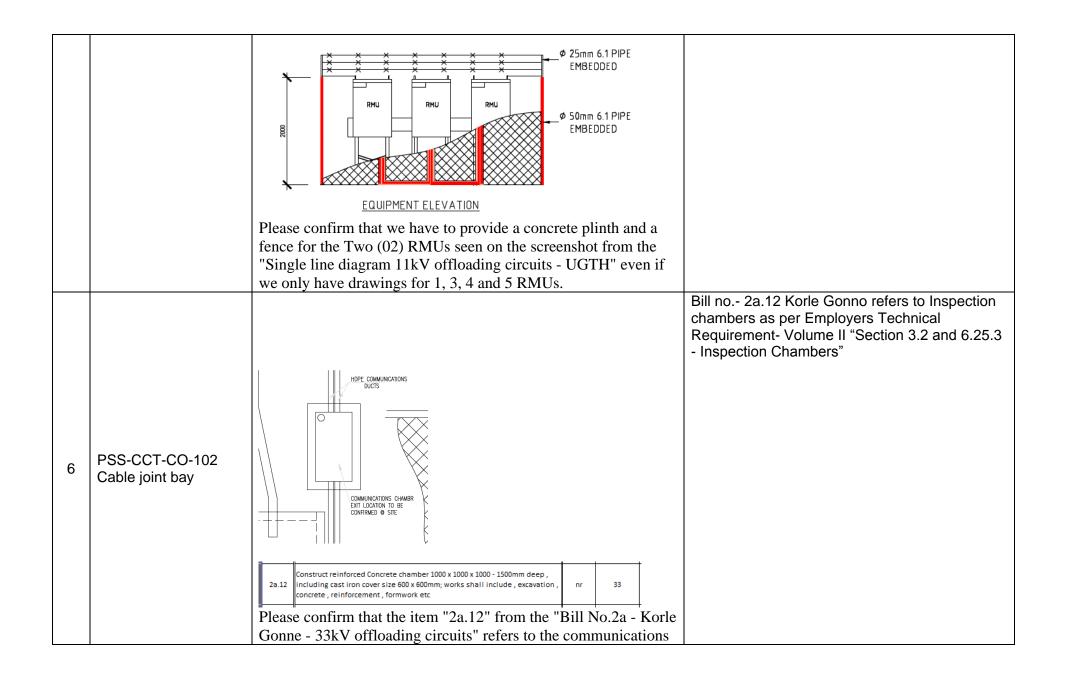


<u>CLARIFICATIONS FOR 5940500 – SUPPLY AND INSTALLATION OF THE PRIMARY SUBSTATIONS INTERCONNECTING CIRCUITS FOR KORLE-GONNO, KOTOBABI, KANDA AND LEGON</u>

CB NO: 5940500/IFB/CB/06/19

SI	Ref	Question	Answer
1		As part of the tender SUPPLY AND INSTALLATION OF THE PRIMARY SUBSTATIONS INTERCONNECTING CIRCUITS FOR KORLE-GONNO, KOTOBABI, KANDA AND LEGON - CB No: 5940500/IFB/CB/06/19, in accordance with ITB 8.1 and in Section VI General Conditions of Contract, I kindly ask you, in the name of the company CEGELEC, to communicate to us the General Conditions of the Contract.	The General Conditions of Contract are the "Conditions of Contract for Construction," First Edition, 1999, as prepared by the Fédération Internationale des Ingénieurs-Conseils ("FIDIC"), a copy of which can may be received from the Employer through the Engineer at the following address: Technical Director SMEC International Pty Ltd 13 th Floor, Heritage Tower, 6 th Avenue Ridge, West Ridge, Accra, Ghana Tel: +233 -203035704 /+233 558241189 E-mail: Munusu.Dizamuhupe@smec.com/Ghana@smec
2	TDS-PSS-CCT-030 Concrete and Concrete constituents	Table 32: Concrete Grade Requirements Concrete (As Defined in Clause 2.3.6.1) Clause Perturbation Resisting) Maximum Cement Centered Table (Subjected 2.3.6.1) Concrete (As Defined in Clause	Contractor to submit concrete mix design for Engineer review and approval prior to construction activities.

		5 Max. Aggregate size			Use aggregate sizes per TDS-PSS-CCT-030.
		C20/25 (Reinforced.)	mm	20	
		C25/30 (Reinforced.)	mm	20	
3	TDS-PSS-CCT-030 Concrete and Concrete	C12/15 (Lean)	mm	20	
	constituents	Maximum Aggregate size s concrete grades, we believe and mass concrete C12/15.	it should be 40	0 mm for the blinding	
4	TDS-PSS-CCT-030 Concrete and Concrete constituents	Please confirm that we have fence for the Two (02) RM "Single line diagram 11kV we only have drawings for	Us seen on the offloading circ	Where is the screenshot? If there are 2 RMU arrangement, yes. Arrangement for 2 RMUs shall be provided with concrete plinth and fence same as that of for 1, 3, 4, 5 RMU arrangements	
5	PSS-CCT-UG-E-103 Single line diagram 11kV offloading circuits & PSS-CCT-UG-C-105A The extensible 11kV RMUs IN-ONE-UNIT installation arragement	LITTLE LEGON			See SI 4.



		chambers next to the cable joint bays. If not, please send us the dimensions and description of those communications chambers.	
7		Once the cable joints have been completed the joint bays will be covered with joint bay cover as detailed above. The actual joints will be surrounded by a layer of thermal sand approximately 100mm/150mm thick. 6.24.6 Cable Installation Requirements Please give us the characteristics and thickness of the surfaces	As per the Employers' Technical Requirement Volume II and as listed in BoQ.
		to be broken up and re-instated.	
8		Once the cable joints have been completed the joint bays will be covered with joint bay cover as detailed above. The actual joints will be surrounded by a layer of thermal sand approximately 100mm/150mm thick. 6.24.6 Cable Installation Requirements	As per section 6.24.5 (Construction of Joint Bays) of Volume II - actual joints shall be covered by a layer of thermal sand
		Please indicate the exact surface area to be covered by the thermal sand.	
10	2.4.2 Similar Experience	As per the Qualification Criteria, each member in Joint Venture must meet requirement stipulated in 2.4.2 Similar Experience Participation as contractor, management contractor, or subcontractor, in at least five (5) contracts within the last ten (10) years, each Lot with a value of at least Seven Million US	With regards to a Joint Venture (JV), all Members Combined must meet requirement.
	Page No. 50	Dollars (US\$7,000,000.00 Kindly clarify whether it is acceptable if all JV partners combined meet the qualification requirement stipulated in 2.4.2 Similar Experience.	
		We Noted that the Design Proposal is not mentioned in Criteria	See SI13 below.
11		 and point system for the evaluation of Technical Offers. Please define is needed or not? If it is needed, please define required documents and no. of points. 	This project is not a Design-Build contract and so Design Proposal is not required

12		Who is responsible for right-of-way acquisition?	As per Employers Technical Requirement Volume II- Section 4.5.9.
13	2.4.4 Section III	It is asked for the document EXP-4 as document required for Environmental and Social Management Experience, please clarify	The EXP Forms are as follows; Form Referenced: Section-III EXP-1 2.4.1 General Experience EXP-2 2.4.2 Similar Experience EXP-3 2.4.3 Specific Experience in Key Activities EXP-4 2.4.4 Environmental and Social Management Experience EXP-5 2.4.5 Health and Safety Bidder is required to provide documentation to demonstrate its experience in managing Environmental and Social Management issues on past projects executed.
14	2.4.5 Section III	It is asked for the document EXP-5 as document required for Health and Safety Management Experience, please clarify	SI13 above
15	Section III vs Section IV	Section IV, form TECH -5 is required for Project Management Organization and TECH -4 for Cash Flow Projection, While in Section III, TECH 4 is required for Project Management Organization, please clarify	The TECH Forms are as follows; Form Referenced: Section-IV TECH-1 Method Statement TECH-2 Environmental, Social Gender, Health & Safety staffing Methodology TECH-3 Program

			TECH-4 Cash Flow (to be submitted as part of the Financial Offer) TECH-5 Project Management Organisation TECH-6 Construction equipment TECH-7 CVs of Key Personnel
16	Chap 2.5.7 Scope of works	In Chapter 2.5.7 it is mentioned that Geotechnical Investigation Report is jointed, please provide this document,	There is no Geotechnical Report to be provided. Bidder can use the 250kPa for allowable soil bearing capacity as needed for the bid preparation.
17	Appendix 2-Technical Data Schedules_11kV RMU	In Technical Data Schedules it is required 200 A as Rated current of fused switches, while in Vol II Employers technical requirement (6.21.2.1 Design, Current Rating) it is required 100A, please provide which value to be used	As per section 6.21.2.1 The continuous and load break current rating of fused switches shall be 100 A
18	Appendix 2-Technical Data Schedules Composite Insulator	The values of parameters (Arcing distance, rated creepage distance) 11 kV & 33 kV long rod Insulators are not the same for those provided in Vol II Employers technical requirement (6.15.3.1 Performance characteristics, Tableau 21), Please clarify	Arcing distance rated creepage distance for 11 & 33 kV long rod Insulators Should be as per values in Appendix-2 Technical Data Schedule.
19	2.4.3 Section III	Please confirm that Installation of MV Metal Enclosed Switchgear 33 and 11kV will be considered same as installation of RMU?	Supply Install and commission RMUs as stated in the Employers Technical requirement, Volume-II. The qualification criteria shall be as stated in the referred Section.
20	Volume II: 6.21.2.1 Vs TDS	Short Circuit Rating The short circuit withstand rating of the ring main units shall be as follows: 1.Rated short time (3 seconds) current of load break switches - 25kA 2.Rated making current of load break switches - 25kA 9 Rated short time (3 seconds) current of load break switches kA 31,5 10 Rated making current of load break switches kA 31,5 Rated short time (3 seconds) current of load break switches - 25kA TDS: Rated short time (3 seconds) current of load break	Rated short time (3 seconds) current of 11kv load break switches should be 25kA.

		switches - 30kA			
		Please confirm witch paragraph should note that many manufacturers have not time(3s) current of load break switches RMU with Rated short time(3s) current 21kA will be considered?	short		
		4 6.21.7 Performance Characteristics		TI	he rating of transformer shall be 500kVA.
		Rating			
		(a) The rating of transformer under this projec	t shall be 315 kVA.		
21	Volume II: 6.21.7 Vs	A RATINGS			
21	TDS	Nominal transformer rating (3phase)	kVA 500		
			-	7	
		TDS: Nominal Transformer rating= 500l			
		Please confirm witch paragraph should			
		Section III: Form EXP-1 is required for 0		ee SI13 above	
		Form EXP-2 is required for Similar Experience in key			his is not a Design Build contract and as
	Section III vs Section	required for Specific Experience in key is required for Health and Safety Manage		his is not a Design-Build contract and so besign Experience is not a qualification	
22	IV	While in Section IV, Form EXP-5: Speci		equirement.	
		Key Activities, Form EXP-6: Specific Co	onstruction Experie		he forms to be followed are as listed and
		Key Activities, Please confirm the form to be considered	od.		esponded for Q#13. Section IV is superseded vith this clarification
		Section IV chap 2.6 it is asked for 4 Cor			orm Tech-5 is to be filled for each lot and
23	Section IV chap 2.6	Electrical, But in Form Tech-5 it is aske			ence, 2 construction supervisors- Electrical per
23	Vs Form Tech-5	Supervisor - Electrical. Also valid for the	e Fibre Splicing	lo	ot.
		Specialist (2 vs 1), Please clarify In which Form TECH should we insert 1	Tachnical Data		he Technical Data Schedules have Bidder's
24	General	Schedules?	echnicai Data		ffer Column. Please use the same.

25	General	In which part should we insert Manufacturer auth Certificate of origin? (if necessary) Please provide the model to be used,	Manufacturer authorisation and Certificate of origin are not necessary as they are already noted in the Volume II. This is an Employer's Design and the use of the Red Book. In Design Build IFBs, they are inserted in the Financial Offer before the Form Tech 5 - Cashflow Projection		
26	Scope of work Vs TDS cable 240mm²	The cross-section 1x240mm2 according to the deshould have voltage 6/10 or 11 KV, however in a the excel file the insulation thickness should be 8 thickness concerns 33KV cables. Please clarify?	ance with nm – such	The XLPE insulation thickness 6/12 kV – 3.4mm.	
27	Scope of work Vs TDS cable	Specification says that the metallic screen should copper wires + counter helix spirals but in the call the screens shall be made of Cu or Al tapes. Ple	escription	The metallic screen shall be as specified in section 6.1.3.2 of Volume II. (Cu Tape with Cross sectional area 35mm Sq. for cables >300mmsq.)	
28	Scope of work Vs TDS Cable	Armor: for 1-core cables is written SWA, but in spentioned non-ferromagnetic material (AWA), Please explain.	cation is	For Single Core Cable Armouring shall be ''Nonmagnetic" armouring complying with IEC 60502 Clause 13	
29	Lot 1 & Lot 2 BoQ for PSS Interconnecting Circuit	2a.13 Breakup Temporal and Permanent pavement blocks, remove and Re-instate same 2a.14 Breakup Temporary and Permanent Concrete surface or Screeded, remove and Re-instate same 2a.15 Breakup Temporal and Permanent Tiles, remove and Re-instate same 2a.16 Breakup Temporal and Permanent Terrazzo, remove and Re-instate same 2a.17 Breakup Temporal and Permanent Asphalt or Double Surface, remove and Re-instate same 2a.18 Demolition and Reinstate fencewall 2a.19 Removal and Reinstatement of grassed surfaces Please give us the characteristics and thickness to be broken up and re-instated.	m2 m3 m2 m2 m2 m2 m2	3 612 76 132 94 63 45 575	As per section 6.24.10 (Reinstatement) of Volume II and as listed in the BoQ.

30	Once the cable joints have been completed the joint bays will be covered with joint bay cover as detailed above. The actual joints will be surrounded by a layer of thermal sand approximately 100mm/150mm thick. 6.24.6 Cable Installation Requirements Please indicate the exact surface area to be covered by the thermal sand.	As per section 6.24.5 (Construction of Joint Bays) of Volume II - actual joints shall be covered by a layer of thermal sand		
31	Provide, lay and Join 200mm diameter HDPE pipe cable ducts by thrust boring in asphalt road base, with all necessary Cover Tiles and warning tapes complete as per specification The contract of the contra	Confirmed to be 200mm.		

	which the second	E G	FONN.			C3				200m as per Table – 4 - Employers Technical requirement Volume II.
32		VODI E CO	Table 4: Ro	one and Condu			CHTS			
	Route	Type	Ground length/Span (m)	10% allowance for sag & wastage(m)	Estimated Length(m)	Number of conductors	Extended Total(m)	Rounded Total(m)		
	Korle Gonno PSS - 33kV Korle Bu (Station B) feeder (C1 & C2)	33k UG, 1x630	200	20	220	12	2640	2700		
	Please spe the value ir we have a 100m only.	ndicate span o	d on the	e table	or the	/alue o	f the C	AD pla	an.	
	(Ctation C)	_	1	1	[[l	1	As per Table – 4 - Employers Technical
33	(Station G) Korle Gonno PSS - High Street PSS (Station AH)	UGFOC, 48 core	4200	420	4620	1	4620	4600	_	requirement Volume II.
	Please spe the value ir we have a	ndicate	d on the	e table	or the	/alue o	f the C	AD pla	an.	

	4800m.	
34	Please specify which value of Span/length for feeders 11 kv KORLE GONNO is to be considered; the value indicated on the table or the value of the CAD plan. Because we have the difference between this value Please specify which value of Span/length for feeders 11 kv KOTOBABI is to be considered; the value indicated on the table or the value of the CAD plan. Because we have the difference between this value	The value should be as per Table – 4 of Employers Technical requirement Volume II. (The plan indicates only the ground length.) The value should be as per Table – 4 of Employers Technical requirement Volume II. (The plan indicates only the ground length.)
35	Earthing Equipment 3b.14 Supply, install, test and commission RMU Earthing as per specifications set 7 Civil Works 3b.15 Construct concrete plinth for Ring Main units as per specifications and drawings Please specify which value is to be considered: 3b.14: Supply, Install, Test and commission RMU Earthing =7 3b.15: Construct concrete plinth for Ring Main units =11	The value is ten (10) as per the scope in Employers' Technical requirement Volume II. And this has been changed in the BoQ. Please use the following link to access the updated BoQ: http://bit.do/PSS-ICC-UPDATED-BoQ
36	2.5.7 Geology (Soils and Vegetation) The load bearing capacity of the soil has been recommended as 250 kPa from the Geotechnical Investigation Report which is attached with this document. Please send us the Geotechnical Investigation Report mentioned in paragraph "2.5.7 Geology".	There is no Geotechnical Report to be provided. Bidder can use the 250kPa for allowable soil bearing capacity as needed for the bid preparation.
37	Cable Truss of Forty-Two meters (42m) for cables to be laid across drains/lagoons, size 1000 x 900mm deep in angle bars; 10 set of Plinth foundations for RMUs; h) Construction detailing and supply, installation, testing and commissioning of complete earthing system including but not limited to laying of earthing conductor along with all Civil Works 3b.15 Construct concrete plinth for Ring Main units as per specifications and drawings 11	As per section 3.2.2 of Employers' Technical requirement – Volume II, 10 sets of plinth foundation for RMU shall be provided and changes made in the BoQ to reflect same. Please use the following link to access the updated BoQ: http://bit.do/PSS-ICC-UPDATED-BoQ

		In "B.33kV and 11kV Kotobabi Primary Substation interconnecting and offloading circuits with total circuit lengths as given in Table 4 in section 3.2.2." We have 10 set of Plinths foundations for RMUs and 11 in BoQ. Please clarify.	
38		DE-COMMISSION WORKS 3b.20 Decommission of existing RMU's and store as directed nr 6 Please let us know if the decommissioning of the RMUs involves civil engineering works other than dismantling and transport.	Decommissioning of existing RMUs includes demolition of plinth foundation.
39		Please confirm the number of JOINTING KIT for cable 1x630 mm² is 108 or 216 for KOTOBABI	To be provided as per BoQ and scope in Section 3.2 Employers' Technical Requirement - Volume II and change made in the BoQ. Please use the following link to access the updated BoQ:
			http://bit.do/PSS-ICC-UPDATED-BoQ
40	Lot 1 - BoQ for PSS Interconnecting Circuit and the drawing PSS- CCT-KB-T-102-T- 103A	Please specify if the inspection chamber of the drawing is the same one as chamber mentioned on the bill n° .2a (item 2a.12) there is a conflict between quantities BILL and quantities plans	Inspection chamber - As per Lot -1 BoQ - Price Schedule (2a.12) and change made in the BoQ. Please use the following link to access the updated BoQ: http://bit.do/PSS-ICC-UPDATED-BoQ
41	Chap 6.11.36 Scope of works	In chapter 6.11.36 of SOW you mention: "The Contractor shall submit two samples each of the type of meter(s) offered with the Bid". Is it at the time of the offer or during tests in the project implementation phase? Thank you for clarifying	Sample meters are not required during bid submission but at implementation phase.
42	Lot 2 - BoQ for PSS Interconnecting Circuit and the drawing PSS- CCT-KA-E-103A TO	Please specify which value of Span/length for feeders 11 kv KANDA is to be considered; the value indicated on the table or the value of the CAD plan. Because we have the difference	As per Table – 4 of Employers' Technical requirement Volume II and change made in the BoQ.

	103C	between this value	
43	Vol II _PSS ICC SoW specifications TABLE 4: Route and conductor / cable lengths and the drawing PMC-5091019-PSS-CCT-UG-E-107	The line of 11 kv feeder F1, UGTH PSS to UGTH Switchboard is not indicate in the plan	F1 is not connecting to UGTH switch board and change made in the BoQ. Please use the following link to access the updated BoQ: http://bit.do/PSS-ICC-UPDATED-BoQ
44	ot 2 - BoQ for PSS Interconnecting Circuit/BILL N0 3b and the drawing PMC- 5091019-PSS-CCT- UG-E-104-115	The number of INDOOR TERMINATION KIT FOR 1x400mm ² CABLE FOR RMU is: 15 in the plan and 27 in the BILL which value to be considered	The value should be as per BoQ and changes made. Please use the following link to access the updated BoQ: http://bit.do/PSS-ICC-UPDATED-BoQ
45	Lot 2 - BoQ for PSS Interconnecting Circuit/BILL N0 3b and the drawing PMC- 5091019-PSS-CCT- UG-E-104-115	The number of INDOOR TERMINATION KIT FOR 1x240mm ² CABLE FOR RMU is: 51 in the plan and 57 in the BILL which value to be considered	Change made in the BoQ. Please use the following link to access the updated BoQ: http://bit.do/PSS-ICC-UPDATED-BoQ
46	Lot 2 - BoQ for PSS Interconnecting Circuit/BILL N0 3b and the drawing PMC- 5091019-PSS-CCT- UG-E-104-115	The total number of NON-EXTENSIBLE RING MAIN UNIT (RMU) (FUSED) is: 2 in the plan and 1 in the BILL which value to be considered	Change made in the BoQ. Please use the following link to access the updated BoQ: http://bit.do/PSS-ICC-UPDATED-BoQ
47	PSS-CCT-CO-102 Cable joint bay	COMMUNICATIONS CHAMBR CONFIRMED ® SITE	Inspection chambers as per Employers Technical Requirement- Volume II "Section 3.2 and 6.25.3 - Inspection Chambers" and BoQ.
		Please send us the number; the dimensions and description of	

	T		,
		the communications chambers next to the cable joint bays. And confirm if their price must be included with cable joint bays.	
48	Lot 2 - BoQ for PSS Interconnecting Circuit/BILL N0 2a and the drawing PSS- CCT-KA-E-103A TO 103C	The total number of JOINTING KIT FOR cable 1x630 mm ² is: 144 in the plan but 216 in the BILL which value to be considered.	Change made in the BoQ. Please use the following link to access the updated BoQ: http://bit.do/PSS-ICC-UPDATED-BoQ
49	Lot 2 - BoQ for PSS Interconnecting Circuit/BILL N0 2b &3b and the drawing PSS-CCT-KA-C-102 & PSS-CCT-UG-C- 101	Please specify which value of diam of HDPE pipe for 11 kV is to be considered; the value indicated on the BILL (diam 150mm) or the value of the CAD plan (diam 220mm).	200mm
50	Lot 1 - BoQ for PSS Interconnecting Circuit/BILL N0 2b &3b and the drawing PSS-CCT-KG-C-102 & PSS-CCT-KB-C- 102	Please specify which value of diam of HDPE pipe for 11 kV is to be considered; the value indicated on the BILL (diam 150mm) or the value of the CAD plan (diam 220mm).	200mm
51	Lot 1 - BoQ for PSS Interconnecting Circuit/BILL N0 3a and the drawing PSS- CCT-KB-E-106A-E- 106B-E-106C	The total number of JOINTING KIT FOR cable 1x630 mm ² is: 108 in the plan but 216 in the BILL which value to be considered	Change made in the BoQ. Please use the following link to access the updated BoQ: http://bit.do/PSS-ICC-UPDATED-BoQ
52	PSS-CCT-UG-C-106	ED 11kV UNGROUND CABLE (1x400Al.sqmm)	The requirement is that the cable is to be put in a PVC pipe in the specified section and concrete to be casted over the pipe as protection. There is no concrete coated PVC pipe.

		Please tell us where we will need the concrete coated PVC pipes. We can't find them on the plan views and price schedule.	
53	PSS-CCT-KA-C-106	Please confirm that our scope includes a 30 m long cable/pipe	Change made in the BoQ. Please use the following link to access the updated BoQ: http://bit.do/PSS-ICC-UPDATED-BoQ
		truss bridge in Kotobabi and a 37 m long one in Kanda. And let us know where their price must be included in the BoQ.	
54	Lot 1 - BoQ	Can Bidders bid on two (2) lots simultaneously? In the file «Lot 1 - BoQ for PSS Interconnecting Circuit final revision 110619ESP», under sheet «BoQ 2b - 11kV - Korle Gonno» there are no quantities for item 2b.23b «Excavate in unsuitable material and dispose off» and 2b.25b «Provide and fill with imported gravel material»? Please provide clarifications for the above	Bidders can bid for two (2) lots simultaneously but will be contracted only for one lot. Change made in the BoQ. Please use the following link to access the updated BoQ: http://bit.do/PSS-ICC-UPDATED-BoQ
55		In order for us to prepare an exact estimation as per your requirement and to present you with our best competitive and complete offer, we need a little more time. As a result, we hereby request a 1-month extension to the due date for the bid submission. As you know the most suppliers are closed during august for summer holiday, we need a close collaboration with those suppliers to feel the TDS and the manufacturer authorization and also the price for the quotation. Consequently, we formally request an extension to the submission deadline and undertake to deliver our submissions by 22 rd September 2019	MiDA does not intend to exercise its discretion to extend the deadline for the submission of Bids as no addenda and/or amendments have been issued in accordance with ITB 9, in which case all rights and obligations of MiDA and Bidders previously subject to the deadline shall thereafter be subject to the deadline as extended. Accordingly, as indicated in ITB 23.1, the deadline for Bid submission is and remains the Thursday 22 nd August, 2019 at 10:00 am local time