





### MILLENNIUM DEVELOPMENT AUTHORITY, MIDA PRE-BID CONFERENCE

## **Access Project**

High Voltage Distribution System +Security Lighting Upgrades in Selected Markets and Economic Enclaves

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> > June 18, 2019

### **OUTLINE OF PRESENTATION**

- COMPACT OVERVIEW
- ACCESS PROJECT: Objectives and Scope
- HIGH VOLTAGE DISTRIBUTION SYSTEM and SECURITY LIGHTING
- DESIGN CRITERIA
- WORK PACKAGING
- SCOPE OF WORKS
- WORK SCHEDULE
- KEY RELATIONSHIPS

### **OVERVIEW OF COMPACT**

#### **Compact II (Power Compact):**

- On August 5, 2014, the GoG and the USA acting through the Millennium Challenge Corporation ("MCC") entered into a Millennium Challenge Compact.
- Under the Compact, MCC is providing funding to the GoG in an amount not to exceed (US\$498,200,000) to develop the Power Sector in Ghana.

#### **Compact Goal.**

The goal of the Compact is to reduce poverty through economic growth in Ghana

#### **Objectives**

- Increase private sector investment, productivity, and profitability of micro, small, medium and large scale businesses;
- Increase employment opportunities for men and women; and
- Raise earning potential from self-employment and improved outcomes for men and women.

#### **Compact Duration**: Five (5) years from EIF

EIF date: September 6, 2016

### **COMPACT PROJECTS & ACTIVITIES**

ECG Financial & Operational Turnaround	NEDCo Financial & Operational Turnaround	Regulatory Strengthening & Capacity Building	Access	Power Generation Sector Improvement	Energy Efficiency & Demand Side Management
Private Sector Participation	Private Sector Participation	Sector Performance	Infrastructure	Operationalize "Gas to Power" Value Chain	Development and Enforcement of Standards and Labels
Modernizing Utility Operations Commercial Loss Reduction	Modernizing Utility Operations	Monitoring Capacity Building	Upgrades	Facilitate LNG	Improved Energy Auditing
Technical Loss Reduction	Tamale Service Area Improvement	Tariff Review &	Social Inclusiveness	Development	Education & Public Information
Outage Reduction	Commercial Development	Regulation	& Improved Partnerships	Strengthen Sector Planning & IPP Framework	Demand Side Infrastructure

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Access Project – Objectives and Scope

### **OBJECTIVES OF THE ACCESS PROJECT**

- Improve access to reliable, safe and legal electricity connections among Micro, Small and Medium Enterprises (MSME) in selected Markets and Economic Enclaves (M&EEs).
- Increase the number of new connections for MSMEs in targeted areas by reducing barriers to obtaining legal connections; and
- Strengthen partnerships, and improve coordination and collaboration among relevant institutions( MSMEs, MMDAs and the Utilities).

### **ACCESS INFRASTRUCTURE AUDIT**



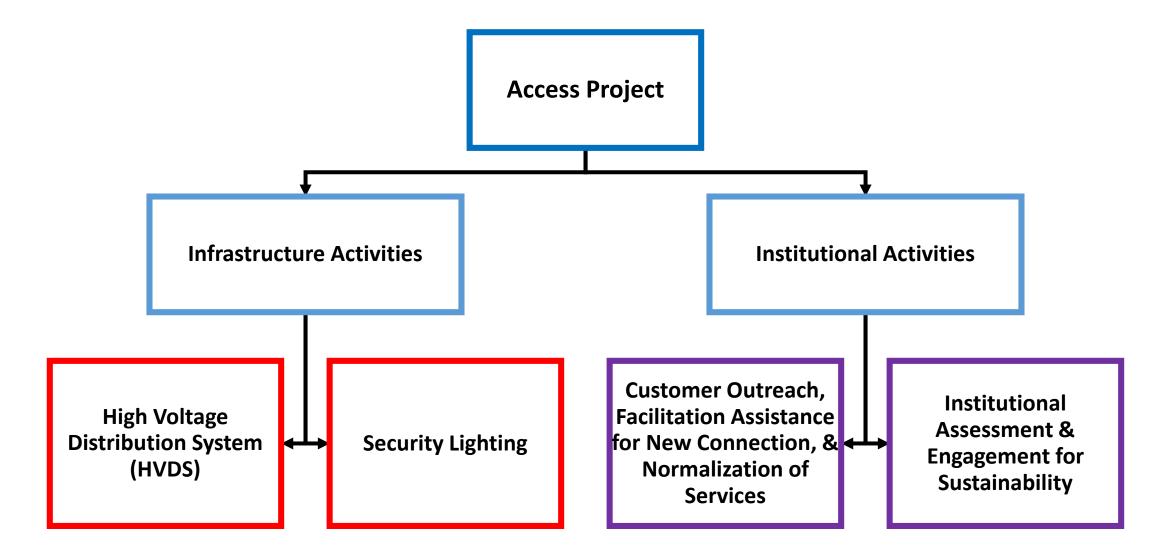
- Varying degree of aging internal wirings exposed to physical damage.
- Aging distribution transformers and LV infrastructure, that suffer from inadequate safety clearances, sagging lines, and vulnerable to faults and thefts.

### **ACCESS INFRASTRUCTURE AUDIT**



Poor visibility in market

### **ACCESS PROJECT STRUCTURE**



### **ACCESS PROJECT DESCRIPTIONS**

- High Voltage Distribution System (HVDS) Subactivity:
  - Addition of multiple new distribution transformers to shorten LV circuit lengths and improve voltage quality;
  - Replacement of legacy LV circuits with new, aerial-bundled cable (ABC) conductor to reduce safety concerns and improve current carrying capacity of the circuits; and
  - Replacement and expansion of metering and service installations to all shops and stalls in each M&EE
- Security Lighting Sub-activity:
  - Installation of new pole- and façade-mounted light emitting diode (LED) lighting units to address these deficiencies, which will take advantage of, and link with the proposed HVDS investments.



### **ACCESS PROJECT DESCRIPTIONS**

#### Customer Outreach, Facilitation Assistance for New Connections and Normalization of Services Sub-activity

- Provide facilitation assistance to support and accelerate the process of connecting new customers;
- Correct the gaps in legal connections including rectifying customer data errors and omissions;
- Improve coordination among project stakeholders to jointly identify and resolve institutional challenges and bottlenecks that impede effective and efficient delivery of electricity services.

#### Institutional Assessment & Engagement for Sustainability Sub-activity:

- A separate consultancy assignment which is intended to propose solutions to shortcomings in the arrangements and responsibilities in the installation, operation and maintenance of security lighting in the M&EEs;
- Help ensure improved service delivery and sustainability of the Security Lighting to be installed in the M&EEs selected for project interventions.

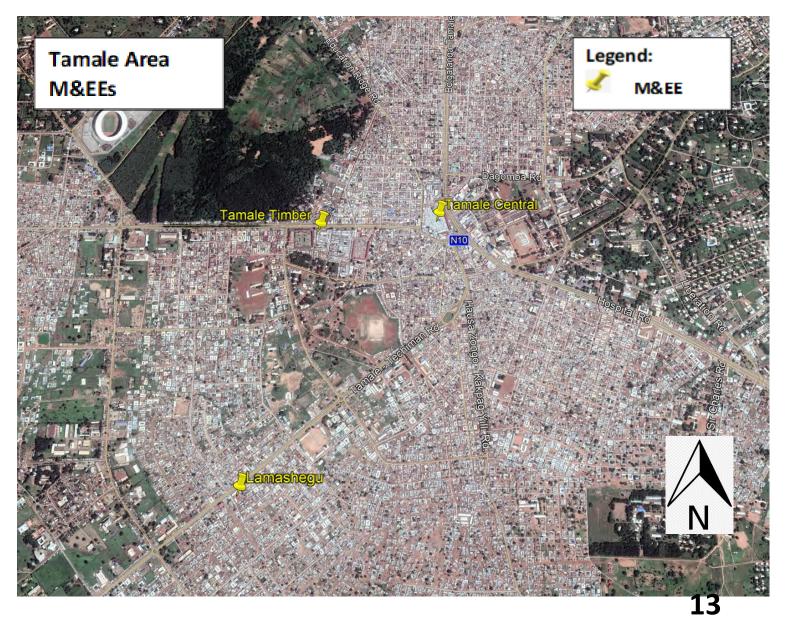
### **PROJECT SCOPE AND LOCATION**

- Eight (8) M&EEs in Accra and Tamale have been selected for project intervention.
- Additional two (2) M&EEs, each in Accra and Tamale, have been included as **options** to be considered for implementation at the discretion of MiDA.
- A total of 7 M&EEs are located in Accra and 3 M&EEs in Tamale
- Total of **10,973** beneficiary MSMEs in the ten (10) M&EEs (base – **10,360** and option - **613**)

#	Selected M&EE Location		Management	MMDA
1	Accra Timber	Accra Central	Local Assembly	АМА
2	Agbogbloshie I	Accra Central	Local Assembly	АМА
3	Dansoman Market	Dansoman, Accra	Private	AbWMA
4	Kaneshie Market	Kaneshie, Accra	Private	АМА
5	Madina Market	Madina	Local Assembly	LaNMMA
6	Makola Market	Accra Central	Local Assembly	АМА
7	Nii Boiman Market	Nii Boiman, Accra	Local Assembly	Abnma
8	Tamale Central Mkt			ТаМА
9	Tamale Timber	Tamale	Local Assembly	
	Lamashegu Market			ТаМА

### **PROJECT SCOPE AND LOCATION**





### **PROJECT SCOPE AND LOCATION**



## High Voltage Distribution System and Security Lighting Activity

### HVDS AND SECURITY LIGHTING PURPOSE AND OBJECTIVE

The 'HVDS and Security Lighting Activity consists of related components which include:

- > Addition of multiple new distribution transformers to shorten LV circuit lengths and improve voltage quality
- Replacement of legacy LV circuits with new, aerial-bundled cable (ABC) conductor to reduce safety concerns  $\geq$ and improve current-carrying capacity of the circuits.
- Replacement and expansion of metering and service installations to all shops and stalls in each M&EE.
- Installation of new pole- and facade-mounted light-emitting diode (LED) lighting units
- The Activity is aimed at increasing access to electricity service and improving quality and safe delivery of electric energy service and provide adequate security lighting to Micro, Small and Medium Enterprises (MSMEs) in selected Markets and Economic Enclaves.

Parts of this work will be carried out concurrently with implementation of the 'Customer' Outreach, Facilitation Assistance for New Connections and Normalization of Services' Consultancy. **16** 

## **Design Criteria**

#### The HVDS will use the following design principles:

Where <u>MV overhead lines</u> exist, those existing lines will be modified to connect the MV overhead extensions to pole-mounted distribution transformers.

Where <u>Underground MV lines</u> exist, the existing underground lines will be converted to overhead by installing a ring main unit module to make an overhead-to-underground transition using a riser pole for the transition.

#### **HVDS Design Principle - Continued.**

- Transformers will be physically elevated to alleviate problems with vendor intrusion, reduce safety risks, and also result in shorter LV circuit lengths.
- The location of pole-mounted distribution transformers is designed to serve consumers through LV network lines.
- □ Each transformer will have its own metering cabinet with a totalizing meter to register the power and energy delivered by the transformer to all the LV feeders connected to it.
- Transformers will be three-phase, with a maximum size of 200 kVA.
- All the poles to be used on the Project will be 12-meter wood poles with 1.8 meters directly embedded.

#### **HVDS Design Principle – Continued:**

- All the LV feeder conductors will be aerial-bundled cable (ABC). The ABC conductor used on the LV lines will be 3-phase, 4-wire self-supporting cable with completely insulated connectors.
- DIN-standard rail meters will be used in place of the A-base meters.
- Meter boxes will be installed on the poles to prevent unauthorized access.
- The consumer will be served by an individual service drop extending from the meter to the consumer's premises.
- □ The meters (prepaid) will communicate with a central server, and consumers will be able to pay for service using a cell-phone-based payment platform for account transfers

#### Security Lighting Design Principle.

Technical Specs. and Performance Requirements for Security Lighting is described in Part V. Section 4:

- LED luminaires shall be installed per Underwriters Laboratory (UL 1598, NEMA C82.77 and UL 8750
- □ Correlated Color Temperature (CCT) shall be in accordance with NEMA ANSLG C78.377:
  ✓ Nominal CCT: 4,000 degrees K: 3,985 ±275 degrees K
- LED Power Supply Units (Drivers) shall meet the following requirements:
  - ✓ Minimum efficiency shall be 85 percent.
  - ✓ Shall be rated to operate between ambient temperatures of minus 30 °C and 40 °C
  - ✓ Shall be designed to operate on the voltage system to which they are connected, typically ranging from 120 V to 480 V nominal.
  - ✓ Operating frequency shall be: 50 or 60 Hz.
  - $\checkmark$  Power Factor (PF) shall be greater than or equal to 0.90.
- □ The Contractor shall provide poles with brackets and supports for the security lights.
- Electrical equipment shall have factory-applied painting systems that shall, as a minimum, meet the requirements of a NEMA 250 corrosion-resistance test.

## Works Packaging

### WORK PACKAGE

Works to proceed concurrently for all three (3) lots, and will be completed in (12) calendar months from the start date:

- Lot 1 : HVDS + Security Lighting Work Package 1 (3 M&EEs + 1 M&EEoption in Accra)
- Lot 2:HVDS + Security Lighting Work Package 2 (3 M&EEs in Accra)
- Lot 3: HVDS + Security Lighting Work Package 3 (2 M&EEs + 1 M&EE option in Tamale)

## Scope of Works

#### **HVDS INSTALLATION**

Lot	Туре	Expected HVDS Connections	LV Conductors (m)	Transformers	Wood poles
Lot 1					
Dansoman Market	Market	822	789	2	38
Kaneshie Market	Market	1,995	857	5	45
Makola Market	Market	2,216	3,227	5	122
OPTION: Nii Boiman	Market	431	814	2	34
Lot 2					
Accra Timber	Economic Enclave	1,715	5,738	12	199
Agbogbloshie No. 1	Market	991	2,131	3	84
Madina Market	Market	788	1,501	2	53
Lot 3					
Tamale Central Market	Market	1,578	2,095	4	61
Tamale Timber	Economic Enclave	255	1,548	3	46
OPTION: Lamashegu	Market	182	295	2	15
GRAND TOTAL		10,973	18,995	40	679

#### **SECURITY LIGHTING INSTALLATION**

	Conductor	Lights Types	and Nos.		Conduit	Lighting Control
Lot	copper, single insulated, 4mm^2 (Meters)	Area	Canopy	Wall	Schedule 80, 20mm (Meters)	Enclosures, 8 way (with Meter)
Lot 1						
Dansoman Market	1,065	23	6	29	693	12
Kaneshie Market	790	19	-	-	-	4
Makola Market	4,099	74	-	133	2,590	26
OPTION: Nii Boiman	1,239	23 -		37	851	12
Lot 2						
Accra Timber	5,080	177	-	38	675	20
Agbogbloshie No. 1	2,131	60	8	63	1,474	16
Madina Market	1,501	30	6	37	991	10
Lot 3						
Tamale Central Market	3,444	40	-	131	2,737	14
Tamale Timber	1,525	47	-	3	115	8
OPTION: Lamashegu	507	13	-	12	278	4

## **RAP IMPLEMENTATION**

### RESETTLEMENT AND COMMUNITY ENGAGEMENT CONSULTANT

- MiDA has contracted Resettlement And Community Engagement Consultants (per Contract Lot) to manage the development and implementation of Project Resettlement Action Plans (RAPs).
- The RAPs Consultant will
  - > provide stakeholder engagement, communication and outreach plan
  - identify all stakeholders including PAPs
  - design appropriate and relevant messages to engage the stakeholders through the life of the project.
- RAPs implementation is to ensure issues of concern to affected parties are identified and addressed in a timely manner while ensuring the Works are not delayed.
- The RAPs Consultant will collaborate and work closely with the Works Contractor ensuring that work plans are synchronized for smooth project implementation.

### **REMOVAL AND REINSTALLATION OF PRIVATE ASSETS**

The Contractor shall be responsible for removing private assets to make way for works and will reinstate the assets immediately following completion of infrastructure installations.

Typical assets estimated to be impacted include:

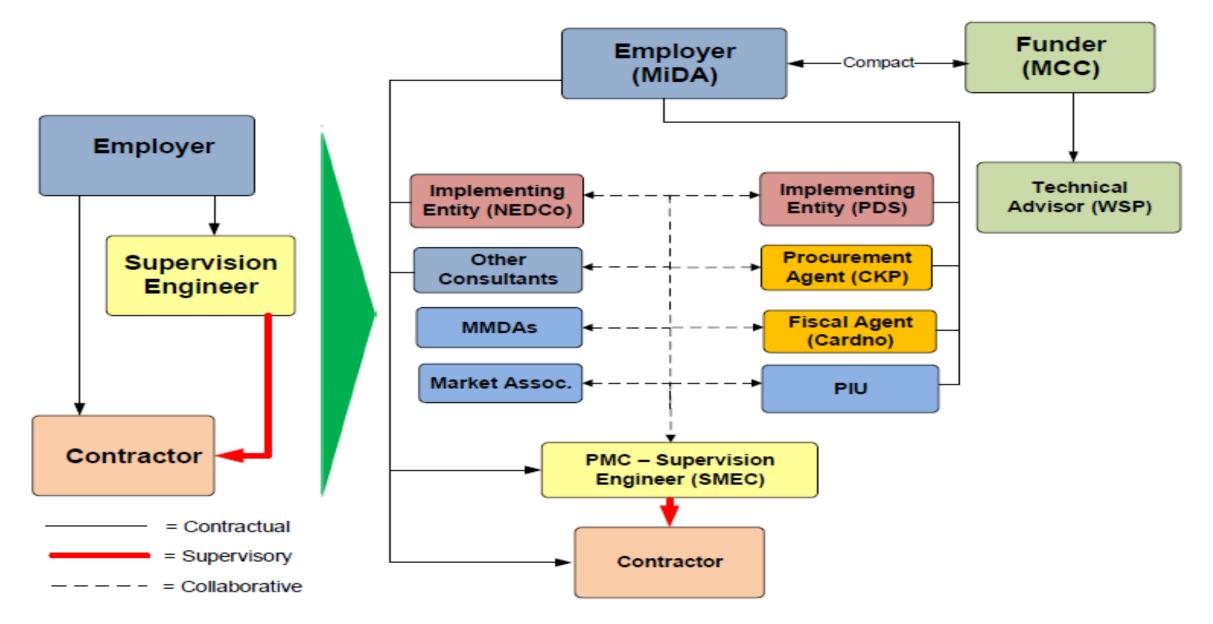
- Canopies (metal or wood-framed)
- Finished surfaces (ceramic tiles, pavement blocks, terrazzo)
- Kiosk (wooden or metal sheet)

Each asset is to be newly constructed to equivalent or better conditions than the existing assets to be removed.

## Work Schedule

	Α		es	s P	<b>Pro</b>	je	ct S	Scl	he	du	le																	
		Τ			201	-								202	20									202	21			End
Activities	Time (months)	J	J	A	S	0	N	D	J	F	М	А	Μ	J	J	А	S	0	N	D	J	F	Μ	A	Μ	J	J	A
HVDS and Security Lighting	Min	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Contract Signed	1																											
Delivery of materials -Lots 1, 2, 3	5																											
Construction (Works),-Lots 1, 2, 3	7																											
Testing & Commissioning -Lots 1, 2, 3	8																											
Defects liability period	6																											
Close out																												
Resettlement & Community Engagement	<b>N</b> 41-1	10		12					_	6	_			10		12		2	3		-		-	8		10		12
Consultancy	Min	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	ð	9	10	11	12
RAPs Development																												
RAPs Implementation																												
Customer Outreach and Facilitation Consultancy	Min	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Contract Signed	1																											
Commencement of Service	1																											
Implementation	21																											
Institutional Assesssment and Engagement for	<b>N</b> <i>C</i> <sup>1</sup>	10		12					_		_			10		12				4	5		7		9	10		12
Sustainability	Min	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	/	8	9	10	11	12
Contract Signed	1																											
Commencement of Service	1																											
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#### Institutional Arrangement







## **THANK YOU**

Q ? A





# Millennium Development Authority (MiDA)

PRESENTED BY PROCUREMENT AGENT

**DATE: 18<sup>TH</sup> JUNE 2019** 

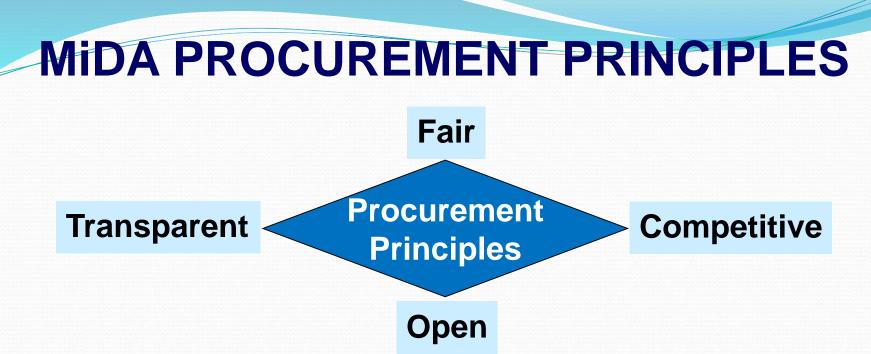
### **INVITATION FOR BIDS**

MCC STANDARD BIDDING DOCUMENT ADAPTED FROM IDA/WORLD BANK STANDARD DOCUMENTS BUT ADAPTED TO SUIT MCC

REMEMBER THIS IS UNTIED AID AND COMPETITION IS OPEN WORLDWIDE

IMPORTANT FOR INTERESTED BIDDERS TO READ THE IFB CAREFULLY AS THIS IS REVISED MCC SBD & HAS ONLY BEEN EFFECTIVE SINCE 2018

IF IN DOUBT ON ANY ISSUE(S) ALWAYS ASK FOR CLARIFICATION



- Procurement Agent to ensure integrity of the process
- Open competition wherever possible
- No geographic or national preferences
- Government-Owned Enterprises (ITB Clause 5.4)
- Independent and suitably qualified Evaluation Panels
- MCC and MiDA Board of Directors approvals over certain thresholds
- Price Reasonableness Analysis
- Contractor Past Performance Reports
- Reference Checks
- Bid Challenge System (www.mida.gov.gh) and Debriefings

## PART 1 - SECTION I

INSTRUCTIONS TO BIDDERS READ CAREFULLY, AND IN PARTICULAR NOTE

ITB CLAUSE 12 DOCUMENTS COMPRISING THE BID:

The Letter of Bid in Section IV.

- All Bid Forms in Section IV.
- Bid Security please refer to the Bid Data Sheet (BDS ITB 20).
- Written authorization of signatory to commit ...Bidder (BDS ITB 21.2).
- Documentary evidence of the Bidder's qualifications.
- Technical Offer, in accordance with ITB 17.
- Any other materials-BDS ITD 12.1(g):
  - Manufacturers' Names and Addresses & Catalogue numbers
  - Details of the Bidder's quality assurance and test set-up in compliance with quality assurance under Section V Works Requirements.
  - Products and equipment brochures and catalogues
- Joint Venture/Association Agreement(s) ITB 12.2.

Any change in the legal structure of the Bidder after the Bid submission
 ITB 12.3

### PART 1 - SECTION I INSTRUCTIONS TO BIDDERS READ CAREFULLY, AND IN PARTICULAR NOTE

#### **CLAUSE 20 : BID SECURITY**

- Shall be a demand guarantee and either an unconditional bank guarantee or an irrevocable letter of credit
- If the financial institution is from outside of Ghana the Bid Security must be confirmed by a correspondent financial institution in Ghana, satisfactory to the Employer (MiDA), to make the Bid Security enforceable

For the individual Lots:

- Lot 1: US\$ 50,000 (Fifty Thousand United States Dollars).
- Lot 2: US\$ 45,000 (Forty-Five Thousand United States Dollars).
- Lot 3: US\$ 15,000 (Fifteen Thousand- United States Dollars). For All 3 Lots combination:
- US\$110,000 (One-Hundred and Ten-Thousand- United States Dollars).

Shall be valid until 27<sup>th</sup> December, 2019 – that is 120 (+28) days after Bid Submission.

## PART 1 - SECTION I

#### INSTRUCTIONS TO BIDDERS READ CAREFULLY, AND IN PARTICULAR NOTE

ITB CLAUSE 22 The Inner and Outer Envelopes shall:

- Bear the full name and address of the Bidder
- Be addressed to MiDA as shown in the Bid Data Sheet (ITB 23.1)
- Be clearly marked with the name and reference for the assignment also see Bid Data Sheet ITB 1.1;
- Bear a warning not to open before the time and date for Bid Opening specified in the Bid Data Sheet (ITB 22.2).

## PART 1 - SECTIONS II AND III

**Section 2** – The Bid Data Sheet (BDS) supersedes the related clauses from the Instructions to Bidders. Please ensure that the BDS is read carefully.

Please note ITB 23.1 that Bids must be submitted no later than **10:00 hours Ghana time on 2<sup>nd</sup> August, 2019**.

**Section 3** – The Bid Review, Evaluation Criteria and Bidder Qualification Requirements contains all the criteria that the Employer shall use to review Bids, post qualify Bidders and select the winning Bid.

### SECTION III - THE BID REVIEW, EVALUATION CRITERIA AND BIDDER QUALIFICATION

#### A. Bid Review

- A1 Administrative Review and
- A2 Responsiveness determination
- Technical Review
  - Documents of the Technical Offer and
  - Adequacy of Technical Offer

#### B. Evaluation criteria

- BI. Price Review
- B2. Price Reasonableness Analysis
- C. Qualification Review and References and Past Performance Review – Bidder must meet the requirements
  - CI. Qualification Review
    - For multiple Lots Award Bidder must meet aggregated requirements
  - C2. Bidder References & Past Performance

## **SECTION IV – BIDDING FORMS**

Section IV starts with Notes to Bidders to guide the completion of Bidding Forms – please follow the instructions carefully.

The Forms include:

- A. Bid Submission Forms
  - Letter of Bid with priced BOQs
  - Technical Offer :-
    - shall include Descriptions, Tables, Drawings, and Charts, as necessary to comply with the Works Requirements (includ. Technical Specifications), E&S, H&S, Key personnel, Equipment etc.
    - Technical Data Schedules (complete all)
- B. Bidder's Qualification Forms

Bidders must respond to all of the Forms provided.

### **SECTIONS VI, VII AND VIII**

#### SECTION VI – GENERAL CONDITIONS OF CONTRACT (These cannot be changed)

#### • SECTION VII CONTAINS

PARTICULAR CONDITIONS OF CONTRACT (PCC) & ANNEX TO THE CONTRACT – MCC ADDITIONAL PROVISIONS (These cannot be changed)

 SECTION VIII - NOTICE OF INTENT TO AWARD, LETTER OF ACCEPTANCE, CONTRACT AGREEMENT AND FORMS OF GUARANTEES, CERTIFICATES AND OTHER FORMS

## CLARIFICATION QUESTIONS AND RESPONSES

CLARIFICATION QUESTIONS MUST BE SENT **BY E-MAIL** NO LATER THAN CLOSE OF BUSINESS ON **25<sup>TH</sup> JUNE, 2019** TO:

paghana@charleskendall.com

and

procurement@mida.gov.gh

YOU MUST USE THESE ADDRESSES TO SOLICIT A WRITTEN RESPONSE TO YOUR QUESTIONS INCLUDING THOSE RAISED AT THIS MEETING.

RESPONSES TO ALL QUESTIONS WILL BE ISSUED ALONG WITH THE MINUTES OF THE PRE-BID MEETING, AND ANY ADDENDUM TO THE IFB, NO LATER THAN **12<sup>TH</sup> JULY, 2019.** 

### **SUBMISSIONS**

### MIDA PROCUREMENT 4<sup>TH</sup> FLOOR HERITAGE TOWER INSIDE THE TENDER BOX SUBMISSION FORM ON TENDER BOX TO BE COMPLETED.

SUBMISSIONS DUE BY **10:00** HOURS GHANA TIME ON **2<sup>ND</sup> AUGUST, 2019**. A PUBLIC OPENING FOLLOWS IMMEDIATELY AFTER. LATE SUBMISSIONS WILL NOT BE ACCEPTED.

## **COMMON CHALLENGES**

- Clarification questions not asked by due date and time
- Bids submitted late
- Courier packages not clearly marked
- Bids not signed
- Written authorization of signatory to commit the Bidder not provided
- Bid Envelopes not correctly marked or packaged
- JV or Association documents not provided (where applicable)
- Government-Owned Entities form not completed and/or signed
- Bid Security in the wrong format, value and/or validity and /or not supported by correspondent financial institution where required
- Bid Forms not completed correctly and/or submitted
- Works Requirements not responded to in full (Bidder to create own specs compliance table to align to lot (s) of interest, where applicable)
- References not provided for Bidder and/or Key Personnel
- Incorrect and/or no email addresses provided for References

## SPECIFIC CHALLENGES

- Bid Submission being supply-driven rather than responding to the Works Requirements in Section V.
- Failure to respond to the Technical Data Schedules (TDS) in the Technical Offer (respond to the respective Specifications of the Lot of interest).
- Where data is required in TDS, one-or two-word responses (e.g. "Yes," "No," "Will comply," etc.) are normally not taken as sufficient to confirm technical responsiveness to the Technical Requirements.
- There should be a separately priced Bid submission for each Lot. Do not put Bids for more than one Lot together and be clear on the discount options (if any) for each Lot or combinations thereof.
- Multiple Lots: Aggregated requirements of multiple Lots exceed the capacity of the Bidder.
- Expecting payments for partial work done, when Work done will be measured and valued fully completed and operational.



# **Any Questions?**