



November 16, 2020

TO: ALL PROSPECTIVE BIDDERS

QUESTIONS AND CLARIFICATIONS 2

ZICTA/ORD/26/20: TENDER FOR THE DESIGN, SUPPLY, DELIVERY, INSTALLATION AND COMMISSIONING OF TWENTY-FOUR COMMUNICATION TOWERS

In accordance with Section I, Clause 10.1 of the solicitation document, ZICTA/ORD/26/20, the undersigned, acting as the Purchaser's Representative, hereby responds to requests received from prospective bidders for clarification of the solicitation documents and presents herewith a summary.

1. Query

Does it mean that the tower heights are changeable when the bidder make LOS (Line of Sight) design of microwave link?

Response

The tower heights indicated in annex 1 are only a guide. The Bidder should determine the suitable tower height subject to meeting the following: (1) microwave radio link LOS, and (2) RF coverage requirements.

2. Query

Will ZICTA provide the information where ZESCO power is available or solar power is used for each site? If ZESCO power is available, what is the distance between ZESCO power line and the tower site?

Response

Only one site, Chobela (site no. 5) has ZESCO supply within its vicinity. All the other sites require solar PV supply.

3. Query

Will ZICTA provide the information of the coordinates and heights of all or at least nearest Zamtel communication towers?

Response

ZICTA will provide the coordinates and tower heights of the nearest existing sites that are proposed for microwave radio transmission backhaul. A soft copy will be sent to every prospective bidder.

4. Query

To upgrade the 2 existing sites 'KILWA ISLAND' and 'NALOLO ROYAL VILLAGE', does it mean that if the bidder is not the current vendor of the RAN, the RAN equipment will be replaced and solar power, transmission, tower will be reused? Please provide more information what will be done for the upgrade?

Response

The existing towers are proposed for re-use. However, the Bidder must provide for microwave radio equipment, RAN and power.

5. Query

Does it mean that the bidder will build tower with fence, microwave, DC or solar power for the LUANO repeater site? Which 2 sites (including the coordinates, heights of tower) will be relayed by the LUANO repeater site?

Response

Luano Community School Repeater is a microwave radio repeater site to enable transmission backhaul for Luano Community School terminal site. The Bidder will provide tower, microwave radio, power and fence for the Repeater site.

6. Query

Do these sites have grid? Advise if the sites are off grid or on grid and whether diesel generator and hybrid power system are needed?

Response

Only one site, Chobela (site no. 5) has the national electricity grid within its vicinity. The summary of the power requirements is shown in the table below.

Table Indicating Power Supply to each of the Twenty four Sites

No.	Site Name	Site Type	District	Long	Lat	Power Supply Type
1	Kaputi School	Greenfield	Chisamba	28.6090	-14.9992	PV Solar
2	Kazimule	Greenfield	Chipata	32.3609	-13.8721	PV Solar
3	Chisheta	Greenfield	Chipili	28.9150	-10.6517	PV Solar
4	Lukashi Health Post	Greenfield	Kasama	30.9991	-9.9352	PV Solar
5	Chobela	Greenfield	Mpika	31.8174	-11.7139	Commercial supply (Zesco).
6	Mboza Hill	Greenfield	Chipata	32.3454	-13.6207	PV Solar
7	Kwenje Ward	Greenfield	Chipata	32.2285	-13.8317	PV Solar
8	Chief Msoro's Chiefdom	Greenfield	Mambwe	32.0778	-13.6161	PV Solar

9	Malambala Hills	Greenfield	Chipata	32.3110	-13.7104	PV Solar
10	Kabwe Primary	Greenfield	Chienge	28.9886	-9.0770	PV Solar
11	Kaonde Primary	Greenfield	Mpika	30.7458	-11.8451	PV Solar
12	Kilwa Island	Existing (Upgrade)	Nchelenge	28.4740	-9.2835	PV Solar
13	Muyembe	Greenfield	Mporokoso	30.0611	-10.0994	PV Solar
14	Mufubushi Junction	Greenfield	Mpika	31.2518	-12.1279	PV Solar
15	Chungu	Greenfield	Luwingu	29.6386	-10.6001	PV Solar
16	Tapa Primary	Greenfield	Mporokoso	30.6401	-9.7854	PV Solar
17	Nalolo Royal Village	Existing (Upgrade)	Nalolo	23.1121	-15.5435	PV Solar
18	Wiya Primary	Greenfield	Mafinga	33.4468	-10.2275	PV Solar
19	Kaftanika	Greenfield	Mafinga	33.3278	-10.1011	PV Solar
20	Luano Community School	Greenfield	Chisamba	28.8371	-14.9751	PV Solar
21	Senior Chief Luembe's Area	Greenfield	Nyimba	30.5801	-14.3634	PV Solar
22	Kabunda Girls School	Greenfield	Mansa	28.8082	-11.2110	PV Solar
23	Chimbwi	Greenfield	Nyimba	30.6137	-14.4663	PV Solar
24	Luano Community School Repeater	Repeater Site	Chisamba	28.6812	-15.0131	PV Solar

7. Query

How much is the standard pocket allowance - Trainee/day?

Response

The per diem paid in public institutions for foreign travel is USD365/person. The allowance covers all living expenses whilst an officer is out of the country.

8. Query

In undertaking the works, the contractor shall subcontract 20% of the works and services to a citizen empowered, citizen influenced and citizen owned company as defined by the Citizens Economic Empowerment (Preferential Procurement) Regulations SI No. 36 of 2011. In order to meet the requirement of this clause, could the international vendor provide a list of Citizen Owned,

Citizen Empowered and Citizen Influenced companies and promise that at least one of listed partners will be the subcontractor? Or the joint vendor is mandatory?

Response

For international bidders, joint ventures with Citizen Owned, Citizen Empowered and Citizen Influenced companies is mandatory.

9.0 **Query**

What is the heights for the required towers?

Response

Refer to Section VI, Technical Requirements/Technical Specifications.

10.0 **Query**

Where is the location for 24 towers.

Response

Refer to Section VI, Technical Requirements/Technical Specifications.

11.0 **Query**

Are they supposed to be 3 legged or 4 legged towers?

Response

Refer to Section VI, Technical Requirements/Technical Specifications.

12.0 **Query**

Should the main tower member be tubular or angle iron?

Response

Refer to Section VI, Technical Requirements/Technical Specifications.

13.0 **Query**

What is the tower loading required?

Response

Refer to Section VI, Technical Requirements/Technical Specifications.

14.0 **Query**

What is the other passive equipment required on site e.g. Generator, Rectifier, Fence, BTS shelter or canopy? Or is it that these passive materials should not be included in the bid?

Response

Refer to Section VI, Technical Requirements/Technical Specifications.

15.0 **Query**

Can the tender document be received by email or obtained as a hard copy?

Response

A soft copy of the solicitation document is available on the website (www.zicta.zm). Soft copies have been sent via email to prospective bidders upon request.

16.0 **Query**

Will this tender be published on ZPPA?

Response

No, the tender has not been published on the electronic government procurement system hosted by the ZPPA?

17.0 Query

The Special Conditions of Contract are missing in the solicitation document.

Response

Refer to the Particular Conditions of Contract.

18.0 Site Visit

In accordance with Clause 2.1, (Pre-bid Technical Survey) of the Technical Requirements/Technical Specifications, mandatory site visits shall be undertaken as scheduled below:

Team A (13 Sites)

No.	Site Name	Site Type	District	Long	Lat	Date	Meeting Point
1	Kabunda Girls School	Greenfield	Mansa	28.8082	-11.2110	24/11/20	14:00Hrs, Kabunda Girls Site in Mansa
2	Chisheta	Greenfield	Chipili	28.9150	-10.6517	24/11/20	16:00hrs Chisheta Site, Chipili District
3	Kilwa Island	Existing (Upgrade)	Nchelenge	28.4740	-9.2835	25/11/20	10:00Hrs, Kliwa Island and proceed to Kabwe Primary school, later proceed to Luwingu and end with Chungu Site
4	Kabwe Primary	Greenfield	Chienge	28.9886	-9.0770	25/11/20	
5	Chungu	Greenfield	Luwingu	29.6386	-10.6001	25/11/20	
6	Muyembe	Greenfield	Mporokoso/Lunte	30.0611	-10.0994	26/11/20	07:00hrs, Muyembe Site,
7	Tapa Primary	Greenfield	Mporokoso	30.6401	-9.7854	26/11/20	Then proceed to Tapa,
8	Lukashi Health Post	Greenfield	Kasama	30.9991	-9.9352	26/11/20	Lukashi and kaonda sites
9	Kaonde Primary	Greenfield	Mpika	30.7458	-11.8451	26/11/20	
10	Wiya Primary	Greenfield	Mafinga	33.4468	-10.2275	27/11/20	10:00hrs, Kafutanika site. Later proceed to other sites
11	Kafutanika	Greenfield	Mafinga	33.3278	-10.1011	27/11/20	
12	Chobela	Greenfield	Mpika	31.8174	-11.7139	27/11/20	
13	Mufubushi Junction	Greenfield	Mpika	31.2518	-12.1279	27/11/20	

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Team B: 11 Sites

NO.	SITE NAME	SITE TYPE	DISTRICT	LONG	LAT	DAYS	ACTIVITIES
1	Kaputi School	Greenfield	Chisamba	28.6090	-14.9992	24/11/20	10:00hrs, Kaputi Site and later proceed to other sites
	Luano Community School	Greenfield	Chisamba	28.8371	-14.9751	24/11/20	
	Luano Community School Repeater	Repeater Site	Chisamba	28.6812	-15.0131	24/11/20	
2	Kazimule	Greenfield	Chipata	32.3609	-13.8721	25/11/20	10:00hrs, Kazimule Site. Later proceed to other sites
3	Mboza Hill	Greenfield	Chipata	32.3454	-13.6207	25/11/20	
4	Kwenje Ward	Greenfield	Chipata	32.2285	-13.8317	25/11/20	
	Malambala Hills	Greenfield	Chipata	32.3110	-13.7104	25/11/20	
5	Chief Msoros's Chiefdom	Greenfield	Mambwe	32.0778	-13.6161	26/11/20	08:00 hrs, Msoros site and later proceed to sites in Nyimba
	Senior Chief Luembe's Area	Greenfield	Nyimba	30.5801	-14.3634	26/11/20	
6	Chimbwi	Greenfield	Nyimba	30.6137	-14.4663	26/11/20	
7	Nalolo Royal Village	Existing (Upgrade)	Nalolo	23.1121	-15.5435	27/11/20	08:00hrs Nalolo Royal Village site

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19.0 Query

Radio access equipment to be configured provide GSM900/UMTS900, GSM900/UMTS900/DCS1800 and GSM900/UMTS900/DCS1800/L1800 but must be able to support operation in the following bands) 800MHz (791-821/832-862 MHz D/L), 900 MHz (925-960/880-915 MHz D/L), 1800 MHz (1805-1880/1710-1785 MHz D/L), There is a conflict based on the configuration requirement and operation support, please confirm which configuration should be followed.

Response

2.2.4 Should now read as follows:

The 900MHz RRU shall support GSM and UMTS in the 900 MHz (925-960/880-915 MHz D/L) Band. The 1800MHz RRU shall support DCS and LTE FDD in the 1800 MHz (1805-1880/1710-1785 MHz D/L) band.

2.1.3 Should read as follows:

The radio access equipment shall be equipped and configured to provide GSM900/UMTS900, GSM900/UMTS900/DCS1800 and GSM900/UMTS900/DCS1800/L1800 according to Annex 1.

20. Query

What is the power configuration requirement for 1800 RRU and how many watts per cell and how many watts for LTE?

Response

2.2.6 Should now read as follows:

RRU output power shall be 20W/TRX for GSM900, 40W per carrier for UMTS or LTE and the total output power should be 160W. DCS/LTE1800MHz RRU should have a total output power of 160W (20W/TRX-for 4TRXs and 2 x 40W for LTE1800MHz).

21.0 Query

In order to meet this requirement, the sites will be configured with RRUs that support required bands as well RRUs that are not in use but installed in order to provide future proofing to the GSM900/UMTS900/DCS1800/L1800 requirement, is this the desired request?

Response

2.1.4 is hereby deleted.

2.1.5 Should read as follows:

All the radio access equipment for sites configured with DCS1800 shall be upgradable to support LTE (4G) 1800 MHz FDD without requiring any new hardware.

22.0 Query

What's the meaning of Factory Training? Does it refer to training in China?

Response

Factory training refers to training at the Original Equipment Manufacturer's facility. The training is typically for the active elements (microwave radio and RAN equipment) and power equipment.

ZAMBIA INFORMATION AND COMMUNICATIONS TECHNOLOGY AUTHORITY

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FOR/DIRECTOR GENERAL