

EXPRESSION OF INTEREST (EOI) FOR THE SUPPLY OF PREFABRICATED KIOSKS WITH COMPLETE SOLAR POWER SYSTEM

DOCUMENT RELEASE DATE	LAST DATE RECIPIT PROPOSAL
September 8, 2022.	September 22, 2022, Until 5:00 PM



September 2022/ Addis Ababa



INTRODUCTION

Telecom service has been recognized as an enabler for the socio-economic growth of a nation and plays significant role in overall betterment of citizens' life. Ethio telecom has been serving the nation by providing various telecom services such as Fixed Line telephone services, Mobile Services (GSM and CDMA Mobile post-paid and prepaid services, WCDMA) and Internet services (Broad Band Wired Internet (ADSL), CDMA 2000 1x data + Voice, EVDO Data). Currently, the company has been working to bring operational excellence, ensure affordable and quality services, enhance strategy execution capability, empower, and build leadership and staff capacity.

Ethio telecom is currently soliciting expressions of interest (EOI) proposals from an experienced and well-known companies who helps provide quality products and makes it a competitive and preferred telecom service provider.

OBJECTIVE

This Expression of Interest (EOI) is intended to identify experienced and reputable kiosk with complete Solar system providers.

EOI REQUIRMENTS

INDEX	REQUIREMENT	REMARK
1	All suppliers should submit their company profile such as year of experience, the current audited report, your staff experts, etc.	Provide documents
2	List of customers and customer reference/testimonial letter for proof of delivery and supporting documents	Provide documents
3	All suppliers should comply to provide the required types of Kiosks with complete solar power system attached here with and can propose their kiosk catalogue for ethiotelecom preference.	Comply/Not comply
4	All suppliers should have a valid and renewed trade license (for local companies).	Attach

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5	Suppliers should have VAT registration certificate (for local companies).	Attach
6	Any additional information that supports your capabilities in this scope	Provide documents

Prospective suppliers should attach a separate document like stated below for specific items for this year demand.

Mandatory Technical Requirements for Prefabricated Kiosk (civil part)

No	Requirement Attributes
1	Submit picture and/or video of the product
2	Availability of Manufacturer / Distributer Authorization
3	Give one-time practical Training for ethio telecom staff how to assemble and disassembled.
4	The material shall be washable materials for external body
5	Dimension shall be 2.5*1.5*2.5 high
6	Material type should be fiberglass
7	It should have one lockable door Should have double serving Hatches with burglar grids
8	Outside counters for customer & Inside counter with cash tray (Drawers)
9	The roof should have ventilation
10	Wall mounted shelves and display hooks
11	Integrated Solar system
12	Should be branded per ethio telecom brand standard
13	Easily assembled and disassembled
14	Should be easily portable
15	Integrated Ventilator & Heater during hot & cold seasons respectively.
16	For customer photo capture it needs background material to have a good picture.

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17	The floor needs additional material to protect cold like Quality P.V.C Type materials.
18	In the front side of aluminum verandah, shade height is better to extend 2.10 meter for customer safety and to get good photo picture.
19	A Let the overall contents of the project is presented with floorplan, elevation and interior designs for all disciplines [Power , AR, ST, SN, and interior designs which align with ethio telecom brandings]
20	Propose Aesthetically integrated shop units
21	Propose assembly, disassembly, and maintenance manuals

Mandatory Technical Requirements for Solar system	
#	Solar power Requirement Details
	1. SOLAR PANEL
1	The solar panel shall pass the following standard tests:
	UL1703 (Type 2 Fire Rating)
	IEC 61215
	IEC 61730
2	The proposed solar panel shall be mounted on the top of KIOSK
3	The total solar power required for the system is 700WP
4	The average panel efficiency shall greater than 17%. The Electrical Performance under Standard Test Conditions (Irradiance of 1000W/m ² , AM 1.5, 25°C cell temperature) for each panel type shall be provided as below:
5	Shall comply with IEC61215 (Mono crystalline silicon technology).
6	Power Tolerance should be 0 to +5%.
7	The Electrical Characteristics of PV module shall comply with: Operating Module Temperature -40 °C to +85 °C The transferrable power output warranty shall be: 5 years/95%, 10 years/90%, 25years/83%
8	The PV module shall have multi-layer polyolefin (Elastomer) compressed circuit, which should be moisture- proof, well-insulated and must work stably under in under voltage conditions.
9	The PV module shall be Certified by the TUV, International Organization for Standardization (ISO), CE, and International Electromechanical Commission (IEC). EC61215/ IEC61730/ UL1703/ IEC61701/ IEC62716
10	ISO 9001: Quality Management System
11	ISO 14001: Environmental Management System

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12	ISO14064: Greenhouse gases Emissions Verification
13	OHSAS 18001: Occupation Health and Safety

2. Charge controller

	The MPPT charge controller shall:
14	The MPPT charge controller should not be less than 30A at 12V.
15	meet the relevant requirements of AS/NZS 4509., Standalone Solar (PV) Power Systems
16	be suitably matched to the PV array and battery.
17	prevent the batteries from being over discharged
18	provide reverse polarity protection
19	The MPPT module efficiency shall be 98%
20	provide lightning/surge protection
21	provide protection against short-circuit and overload
22	provide over voltage protection and under voltage cut off

3. Inverters

	The inverter shall:
23	Meet the relevant requirements of AS/NZS 4509.2. AS/NZS 5033 and AS/NZS 5603
24	the inverter input voltage the same with solar system voltage of 12V
25	The inverter has output frequency limits 45-50Hz
26	The require inverter capacity shall be 1KW
27	have ac output voltage limits 200-240V
28	The invertor shall be pure sine wave type compatible with the electronic equipment loads to be connected
29	Shall be capable of supplying equipment maximum demand and surge demand loads allowing for the load power factor
30	Shall be matched to the system dc voltage
31	be complete with self-diagnostics, data logging and communications protocol
32	High frequency switching technology for compact size and light weight
33	Pure sine wave output for wide range of applications and harsh environment
34	Highly efficient DC-to-AC conversion minimizing energy loss
35	LCD displays comprehensive operation status
36	Thorough protections: Input low voltage / Overload / Short circuit / Low battery alarm /
37	Input over voltage / Over temperature
38	Supports both rack and wall-mounting set-up for flexible installation

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4. Battery	
39	The total battery capacity need for the system is 12v/600A
40	The proposed battery shall be placed in a secured compartment.
41	Designed floating service life: shall be >10 years @ 25 °C/77°F.
42	The battery life cyclic usage @ 80% DOD, shall be >800cycles
43	The proposed battery shall be deep Cycle Tubular OPzV maintenance free Battery
44	The battery shall be recommended for outdoor applications, renewable energy systems and other harsh environment applications.
45	The batteries are safer for the environment, and safer to use
46	Battery should have no water levels to check or terminals to clean, without risks of dangerous acid spills, and can be installed in any position.
47	Proposed battery can be recharged faster.
48	Shall have wide operating temperature range from -15°C to 50°C
49	Tubular positive plate with prolonged cycle life
50	Positive Plates Robust tubular plates consisting of Pb-Ca-Sn alloy, optimized for high corrosion resistance, offer an extreme high cycling expectancy
51	Negative Plates: Grid plate construction consisting of lead calcium alloy
52	The battery terminal Poles: screw connection shall be easy and safe assembly and maintenance-free connection with excellent conductivity
	The battery shall be complying the following standards
53	IEC 60896-21/22, IEC 61427
54	ISO9001, ISO14001, ISO18001
55	Euro bat guide, long life, BS6290 part 4 and equivalent

5. GROUNDING/EARTHING	
56	Provide lightning arrester and placed at strategic locations to protect the Kiosk from lightning
57	The lightning conductor shall be earthed through flats and connected to the grounding mats as per applicable International Standards with earth pits.
58	Each array structure of the PV yard should be grounded/ earthed properly. In addition, the lighting arrester/masts should also be earthed inside the array field.
59	Earth resistance shall not be more than 1 ohm. It shall be ensured that all the earths are bonded together to make them at the same potential.
60	earth all the non-current carrying metal parts are bonded together and connected to earth to prevent shock to the manpower & also the protection of the equipment in case of any accidental contact
61	The array structure of the PV modules shall be grounded properly using adequate numbers of earthing pits

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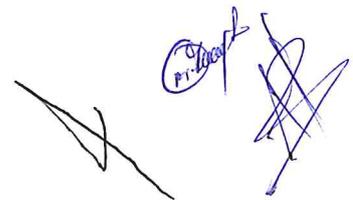
62	All metal casing/ shielding of the Kiosk shall be thoroughly grounded to ensure safety of the power Kiosk .
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IMPORTANT INSTRUCTIONS AND SUBMISSION OF RESPONSES

1. Ensure you attach the response in a separate document.
2. The attachments should be submitted in folders properly.
3. Interested suppliers should submit their responses to [Mintesenot. Tezera @ethiotelecom.et/](mailto:Mintesenot.Tezera@ethiotelecom.et) aklilu.berhanu@ethiotelecom.et or you can submit your response in person to Ethio Telecom Head Quarter, Churchill road, 3rd Floor Room Number 309, not later than Thursday 22 September 2022 until 5:00PM.
4. Suppliers who did not work with ethio telecom previously can register on our ERP at www.ethiotelecom.et ☐ supplier portal☐ Register. Then fill what the template requests and attach the documents that it requests.
5. If you have any clarification and information related to this Expression of Interest (EOI) you can contact via email mintesenot.tezera@ethiotelecom.et or Phone No.0911210803 and aklilu.berhanu@ethiotelecom.et or Phone No. 0911526020.

Next Steps

- Review of submitted Expressions of Interest.
- Prequalification of shortlisted suppliers.
- Competitive RFQ process for successful suppliers in the EOI.
- Ethio telecom reserves, at its sole discretion, the right to select or reject, either in totality or partially, any or all proposals made in the context of this EOI. Any such decisions made will be final and no correspondence will be engaged into, other than for the purpose of informing the suppliers for the outcome.



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