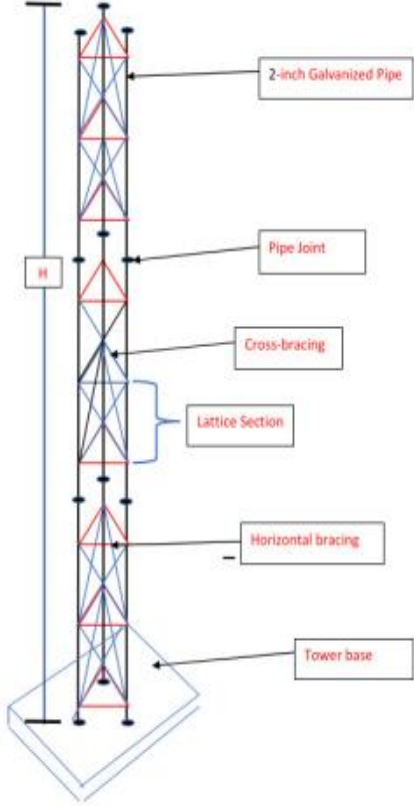


## ANNEX A

### TECHINICAL SPECIFICATIONS

Request for Quotation No: RFQ HCR NIGOG 22 011

**Supply, Delivery, Installation and Commissioning of various Fabricated items and Accessories at Ukende, Adagom 1  
& Adagom 3 refugee settlements located in Ogoja, Cross River State and Ikyogen Settlement, located in Adikpo, Benue State**





S/No	Item description	Minimum Acceptable Specifications	Quantity	UoM	Sample Picture (Only for demonstration purposes)
1	Delivery and Installation of Fabricated Non-Standard Tower	<p>Tower design specs: Fabricated self-supporting non-standard galvanized Lattice Mast made from Galvanized hollow steel pipes.</p> <ul style="list-style-type: none"> <li>• Structure: 3-legged with bolted joints</li> <li>• All material is high tensile (tube, rods)</li> <li>• Easy Installation.</li> <li>• Mast height (H) =15m self-supporting Lattice</li> <li>• Tower underground depth: = 1m</li> <li>• Galvanized steel pipe size = 2-inch</li> <li>• Lattice Spacing = 2ft</li> <li>• Cross-bracing (Y12 steel rod) = 2ft</li> <li>• Horizontal bracing (Y12 steel rod) = 2ft</li> <li>• <b>Colour: Red and White</b></li> </ul> <p><b>Other Requirements:</b></p> <ul style="list-style-type: none"> <li>• A mandatory site visit is planned for 11.08.2022 starting, Vendors are to call cell phone number - 09010660654 to confirm their participation</li> <li>• Proposed completion: time 10 days for both locations i.e. Ukende and Adagom 3 settlement.</li> <li>• Thunder arrestor(s) to be installed on each mast.</li> </ul>	2	Item	

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2.	Thunder Arrestor plus accessories	<p><b>Thunder Arrestor plus accessories:</b></p> <ul style="list-style-type: none"> <li>- Thunder Arrestor</li> <li>- High Quality Arrestor Earth Ground Rod (4ft/14mm)</li> <li>- Copper Clamp</li> <li>- 20mm Copper earth tape</li> </ul> <ul style="list-style-type: none"> <li>• Proposed delivery &amp; installation time: 10 days</li> <li>• Delivery Location: Ukende and Adagom 3 settlement.</li> <li>• Other requirements: Earthing works.</li> </ul> <p><u><b>Note:</b></u> All other necessary installation and construction materials such as sand gravel, cement, should be estimated during the survey and incorporated in the quotation submitted to UNHCR.</p>	5	Pcs	
			5	Pcs	
			5	Pcs	
			100	Meters	

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3.	Fabricated 2-Layer Battery Rack	<p><b>2-Layer Steel Battery Racks</b></p> <ul style="list-style-type: none"> <li>Type of Rails: “G”- Galvanised; Dimensions:</li> <li>Assembled unit: L X B X H = 60cm X 53cm X 78.6cm;</li> <li>No. of steps or tiers: 2;</li> <li>Cell Dimension: For battery depth not less than 8.5”;</li> <li>Angle size: Not less than 20x20x3mm</li> <li>Base material for each stance: MDF Hard Board.</li> <li>Installation of a solar system at 4 sites. <i>(Each of the solar systems will consist of 4 Solar panels, inverter and two (2) batteries, which will be provided by UNHCR.)</i></li> <li>Proposed completion time for delivery and installation time: 7 days.</li> <li>Delivery location for rack(s) and solar system</li> </ul> <p>Installation locations (5 sites):</p> <ol style="list-style-type: none"> <li>Ukende Settlement, Cross River State</li> <li>Ikyogen settlement, Benue State.</li> <li>Adagom 1 Settlement, Cross River state.</li> <li>Adagom 3Settlement, Cross River State</li> <li>Health Centre Adagom (Connectivity Centre), Cross River state.</li> </ol>	5	Pcs	
			Item	Item	

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4.	VSAT Dish Stand	<p><b>Galvanized pipe</b> Height = 2m above surface, 1m underground. Diameter = 2.5 inches, casted 0.5m underground</p> <ul style="list-style-type: none"><li>• Proposed delivery time: 3 days</li><li>• Delivery and installation location (1 site): Ikyogen Settlement, Benue state.</li></ul>	1	Item	
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### TECHINICAL SPECIFICATIONS

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#### Summary Guide to installation requirements per site:

Site Location	Required Services per services per site
1. Ukende Settlement, Cross River State	<ul style="list-style-type: none"><li>- Non-standard mast including all accessories and earthing</li><li>- Solar System installation.</li><li>- Earthing works</li></ul>
2. Adagom 3 Settlement, Cross River State	<ul style="list-style-type: none"><li>- Non-standard mast including all accessories and earthing</li><li>- Solar System installation.</li><li>- Earthing works</li></ul>
3. Ikyogen, Benue State	<ul style="list-style-type: none"><li>- Solar System Installation</li><li>- VSAT Stand</li><li>- Earthing works</li></ul>
4. Adagom 1	<ul style="list-style-type: none"><li>- Solar System installation <b>Note: We request for two quotations in respect of solar panel installation. One covering installation of Solar panels at Block A (which is coloured Yellow) and other at covering installation of solar panels are Block B (colored Blue). We shall decide which Block to install solar panels at the contract award. We shall need to have the different quotations submitted.</b></li><li>- Earthing works</li></ul>
5. Health Centre (Connectivity Centre), Adagom, Cross River State	<ul style="list-style-type: none"><li>- Solar System</li><li>- Earthing works</li></ul>