

INVITATION FOR BIDS FOR 4G CAPACITY UPGRADE ON 5 SITES

Tender No: KTRN/ADMIN/S/2020/11/002

Date of issue: 19th November 2020

Date of bid submission: 1st December 2020



KTRN is looking for a company that fulfils the requirements to bid for KTRN Network capacity and coverage expansion by supplying, installing and commissioning of the 4G equipment required, based on the technical specifications for KTRN network and available Bandwidth

Summary of equipment required

ltems	Туре	Number of Sites
Radio	800 Frequency	5 Sites
Radio Unit	1800 Frequency	5 Sites
Antenna	Dual	5 Sites
Baseband	Vendor specific	5 Sites

Brief technical information for KTRN network and Bandwidth requirement. KTRN mobile data operates in two frequency bands: Band 20 and Band 3.

- It has a bandwidth of 30MHZ in Band20 and 15MHz in Band3 respectively.
- Supplied equipment must be able to use all available bandwidths in both bands (Band20 and Band3).
- A site has three (3) Sectors, each Sector is planned to have and operate in both bands (Band20 and Band3), with bandwidths of 30MHz and 15MHz respectively.
- Combining both bandwidths, the Sector shall have 45MHz as available bandwidth and each site 135MHz bandwidth.
- With a 2TX/2RX and 256QAM configuration, it estimates to a Sector throughput of 440.55Mbps on Downlink (DL) and 112Mbps on Uplink (UL). Which estimates to a site throughput of 1.4Gbps on DL and 336Mbps on UL.
- Almost all sites that are in Kigali city and other secondary major towns use fibre as backhaul transmission.
- In case of centralized RAN architecture, all RRHs/RUs (Remote Radio Heads / Radio Units) installed on fibre fed sites must be connected to their respective Baseband Units in as far as 20km away.
- All RUs must support cascading in order to minimize number of fibre core going to site.
 Maximum two cores per site.

3. Required from Bidders:

- Specification of proposed equipment to be supplied
- BOQ and prices for Hardware and software required
- This is a turn-key project. Supply and installation fee up to FAC stage
- maintenance and warranty conditions
- Prices must include all taxes, transport, warehousing, labor charges and local taxes if any.

4. BIDS SUBMISSION:

Well, scanned bids, properly bound and presented in one file not exceed ten Megabytes (10MB) must be sent by email on procurement@ktrn.rw. No later than December 1st 2020, at 10:00am local time. Late bids will be rejected.

For any inquiry you can write to <u>Mike.Bwatete@ktrn.rw</u>. In at least 2 days before the bids submission deadline.

Done at Kigali, on 19th November 2020

KT Rwanda Networks Ltd