

JOB DESCRIPTION

Position Title	Transmission Network Design & Optimization Engineer	Business Unit / Function	Network
Location	Kigali Rwanda	Department	NW Design, Planning & Optimization
Written By		Administrative Reporting to: (Please provide position title)	Transmission Network Design & Optimization Manager
Approved by:		Functional Reporting to: (Please provide position title)	Head NW Design & Optimization

1. JOB PURPOSE

(Briefly describe the general purpose of the position or its significance from the organization's point of view and how it contributes to the overall mission/objective of the organization).

To ensure the Design & Optimization for the end-to-end Transmission Network and ensure robust and high-quality access, backbone and international connectivity infrastructure to support various services on the 2G, 3G, 4G, 5G, VAS and other existing systems. The role also involves KPI monitoring and analysis as well as capacity dimensioning and management.

The role will require a high degree of co-ordination with Central Technical team and strategic partners for governance of Transmission Network operational activities and validation & evaluation of Transmission network designs.

2. KEY ACCOUNTABILITIES

Expected End Results ("WHAT") <i>(List the expected end results that must be achieved in order to fulfill the job purpose)</i>	Supporting Activities ("HOW") (What are the key activities undertaken to achieve the desired end results?)
Provide Transmission network strategic and architecture planning, ensuring robustness, scalability, inter-operability and appropriate technology	<p>Check the Transmission Connectivity plan for 2G/3G/4G/5G Network (overall), and provide the client with recommendations and solutions that ensure the maximum source utilization with minimum cost for a secured Transmission network.</p> <ul style="list-style-type: none"> • Review the Microwave links budget design (individual) and make sure it complies with the ITU standards, taking into consideration all the environmental and geographical related parameters. • Analyze Transmission paths statistics which come out of different Business Object reports. • Transport network capacity dimensioning, scope of work preparations, solution validation, bill of quantities verification and project implementation advisory and support.
KPI governance and performance analysis for Transmission Network optimization recommendations	<p>Specify the impact of the Transmission problems on the GSM / WCDMA and LTE Networks (Drop call, Outage, Blocking...)</p> <ul style="list-style-type: none"> • Troubleshoot the Transmission problems and determine the problem's causes and provide recommendations and advice. • Use different Transmission Management Systems for the Analysis and troubleshooting processes as Mini Link Manager, DXX Manager, ENM & NCE.

	<ul style="list-style-type: none"> • Perform monthly & weekly reports that contain all the transmission exceptions, special events, recommendations.
Transmission Network capacity management	<ul style="list-style-type: none"> • Evaluation of strategic partners' Transmission Network evolution proposals and compare this with network projections and Airtel design guidelines. • Ensure plans for link upgrades for all links operating above a defined threshold (i.e. 70%).
Accurate & timely CAPEX and OPEX budget planning for Transmission network	<ul style="list-style-type: none"> • Replication of industry best practices. • Accurate quantification of transmission links in the network • Prepare Quarterly Inventory reports for CAPEX/OPEX budgets.
Transmission Network change request management and acceptance test verification	<ul style="list-style-type: none"> • Checking, validation and recommend for approval all propose changes by partners. • Review the acceptance tests and compare this with network performance.

3. SKILLS & KNOWLEDGE

(State the minimum acceptable proficiency for this job. Do not state incumbent-specific information)

Educational Qualifications & Functional / Technical Skills	Bachelor's in engineering/technology (Electronics & Communication).
Relevant Experience (Type of experience and minimum number of years)	<p>2-3 years of versatile experience in Operations, Optimization and Planning of Transmission Networks.</p> <p>Understanding of latest technological trends in Transmission Network, including classical ones too, PDH, SDH, ATM, IP systems, Fiber technologies, IPRAN & DWDM basics etc.</p>
Other requirements (Behavioral etc.)	<ol style="list-style-type: none"> 1. Strong analytical skills 2. Strong Organizational & Motivational Skills 3. Strong communication and Interpersonal skills.