

Job Description

Job Title: ENGINEER Mobile BSS - Access Network	Employer: Telikom Limited
Job Code: JD – EMMSS-ANO	Job Grade:
Department: Access Network Operations	Job Location: Kokopo
Revision Date: 12/03/2024	Equal Employment Employer

Job Summary

As the Engineer-Mobile BSS (Access Network) at Telikom -Kokopo, you will be responsible for the operation, optimization, and maintenance of the Mobile Base Station Subsystem (BSS) and related radio access network (RAN) infrastructure. Your role ensures high availability, performance, and quality of service (QoS) for mobile network services. You will troubleshoot technical issues, implement upgrades, and work closely with field teams, vendors, and cross-functional units to maintain seamless network operations.

Main duties/responsibilities include;

1. BSS/RAN Network Maintenance & Optimization

- Perform preventive and corrective maintenance on 2G/3G/4G/5G BSS equipment (NodeB, eNodeB, gNodeB, BTS, BSCs, RNCs, etc.).
- Monitor and optimize radio access network (RAN) performance, including KPIs like call drop rates, handover success, and signal strength.
- Conduct drive tests, parameter tuning, and capacity planning to enhance network efficiency.

2. Fault Management & Troubleshooting

- Diagnose and resolve BSS-related outages, alarms, and performance degradation in coordination with NOC and field teams.
- Perform root cause analysis (RCA) for critical incidents and implement corrective actions.
- Escalate complex issues to vendors (Huawei, Ericsson, Nokia, etc.) when required.

3. Configuration & Upgrades

- Implement software/hardware upgrades, patches, and feature activations on BSS elements.
- Ensure proper parameter configuration (e.g., power settings, neighbor lists, frequency planning).
- Support network modernization (e.g., 4G expansion, 5G rollout).

4. Inventory & Documentation

- Maintain accurate records of BSS equipment, licenses, and spares.
- Update network diagrams, site configurations, and technical documentation.

5. Performance Monitoring & Reporting

- Analyze BSS performance metrics using tools like Huawei U2000, Ericsson ENM, TEMS, or Atoll.
- Generate daily/weekly reports on network health, outages, and optimization efforts.
- 6. Compliance & Standards**
 - Ensure adherence to company policies, vendor guidelines, and regulatory standards (e.g., ITU, GSMA).
 - Follow ITIL-based incident and change management processes.
- 7. Cross-Functional Collaboration**
 - Work with RF Planning, Transmission, and Core Network teams to align BSS operations with end-to-end service delivery.
 - Coordinate with field technicians and contractors for site access and repairs.
- 8. Training & Knowledge Sharing**
 - Stay updated on emerging mobile technologies (5G, Open RAN, VoLTE).
 - Train junior engineers and field staff on BSS best practices.

Key Skills & Competencies

- Strong knowledge of 2G/3G/4G/5G BSS architecture (BTS, NodeB, eNodeB, gNodeB, BSC, RNC).
- Experience with RAN optimization tools (e.g., TEMS, Actix, XCAL) and OSS platforms (e.g., Huawei U2000, Ericsson OSS-RC).
- Understanding of RF principles, antenna systems, and propagation models.
- Problem-Solving: Ability to troubleshoot complex BSS issues under pressure.
- Communication: Clear reporting and coordination with stakeholders.
- Analytical Skills: Proficient in analyzing KPIs and performance trends.

Reporting Relationships

The Engineer Mobile BSS - Access Network will report to the Manager Mobile BSS Access Network Operations - Kokopo.

Qualification & Experience

- Bachelor's degree in Telecommunications, Electrical/Electronics Engineering, or related field.
- 3+ years of hands-on experience in Mobile BSS/RAN operations and maintenance.
- Certifications in Huawei HCIA/HCIP, Ericsson Certified Associate, CCNA Wireless) are a plus.
- Familiarity with transmission (microwave, fiber) and power systems at cell sites.
- Willingness for on-call duty and field visits.

NOTE: This job description is not intended to be all-inclusive. Employee may perform other related duties as negotiated to meet the ongoing needs of the organization.