

**DATE POSTED:** March 07, 2019  
**CLOSING DATE:** March 21, 2019 – 5:00 P.M.



## Job Announcement

The following full-time position is available in our organization. Interested applicants who meet the Minimum Qualification Requirements must submit an IT&E employment application form to the Human Resource Office no later than the posted closing date above.

**JOB TITLE:** RF OPTIMIZATION ENGINEER  
**DEPARTMENT:** WIRELESS ENGINEERING  
**LOCATION:** GUAM  
**SALARY LEVEL:** 8  
**STARTING SALARY:** \$46,093.00 (negotiable based on experience)  
**FLSA STATUS:** EXEMPT  
**JOB POSTING #:** #6792/#G-24-2019-03

### **Job Summary:**

The RF Optimization Engineer is responsible for the design and performance aspects of the WCDMA 3G and LTE 4G networks; is also responsible for the commissioning and integration of network infrastructure, troubleshooting, installation and upgrade of the Base Station Terminal of WCDMA, LTE and other future wireless equipment; also supports the microwave radio system and optical fiber backhaul; will commission, install and maintain AC and DC power systems such as UPS, Rectifiers, Inverters, Electrical circuit breakers and Generator sets as well as the DMR, Access Multiplexer system. The position will also require the candidate to work or support special projects and field studies, document or communicate project status or trial results, with an objective to deliver RAN performance, improve standards and processes, while helping to develop best practices. As an individual contributor and a technical leader, the Engineer will act as a mentor and provides training or coaching to less experienced engineers and technicians.

### **Essential Duties and Responsibilities:**

The Employee will:

1. Know and uphold the established IT&E Mission, policies and procedures, IT&E and Department objectives, quality assurance and safety programs and standards.
2. Design networks based on marketing requirements for new coverage and Optimization requirements for Densification.
3. Supervise and monitor field surveys, site designs and delivery of reports, maintaining time and quality.
4. Develop recommendations that will help market achieve corporate performance initiatives.
5. Understand, adhere to and strive towards achieving corporate or market RAN performance objectives and standards; be responsible for maintaining or improving market RAN performance. Coordinate with other departments and vendors to meet the rollout schedule, providing site design and other relevant documents.
6. Keep track of the progress of radio network design activities and maintain the radio network design data base.
7. Produce coverage maps and calculate the area and population covered in respect to sites on air.
8. Handle radio design as a special project.
9. Perform automatic and manual frequency planning.
10. Conduct neighbor planning and the optimization of the neighbor plan to improve radio quality and eliminate interference.
11. Perform periodic inconsistency checks between planned and OMC data for both frequency and neighbor plans.
12. Lead a team of frequency planners to achieve the team objectives.
13. Perform the extension or frequency changes by the optimization team.
14. Extend capacity to cope with growing radio traffic.
15. Plan the radio network as per business requirements: Radio Capacity Planning -TRX additions, TRX re-deployment ,Traffic balancing and re-balancing, Cabinet Expansions, In-fill Capacity Sites, Nominal Tracking, Justification and Case Approval Utilization tracking of in-fill sites for AT process monitoring plan) In-fill Efficiency tracking.
16. Analyze Network information for strategy.
17. Process for Import Data directly from OSS, Parse data through pre-set/pre-defined processes and Generate trends.
18. Maintain regular interaction with vendors for RF design of the WCDMA and LTE Network
19. Develop Site Proposals/Clearance and Network Optimization Nominal Cell Plans; perform site surveys, drive test route finalization, propagation model tuning and drive test skills.
20. Prepare RF Planning and optimizing guidelines.

21. Adhere to RF KPIs for WCDMA and LTE networks.
22. Lead in the commission, integration, installation of wireless equipment for WCDMA, LTE and other wireless networks.
23. Lead in the commissioning, integration, installation of SONET/SDH/ATM, Ethernet access, support facilities and antenna system.
24. Manage trouble tickets and troubleshooting network/customer complaints and closing of tickets.
25. Maintain accurate records and documentation of plans and inventory of RF resources.
26. Teach and coach other engineers on the team.
27. Perform other related duties or tasks as assigned or required.

**Minimum Qualification Requirements:**

Education: Bachelor's degree from an accredited college or university in telecommunications, electrical, or electronic engineering, computer science or RF related fields.

Work Experience: Five years of 'hands-on' experience with Cellular and LTE/VoLTE System Level RF Design, Troubleshooting & Optimization.

**Licensure/Certification/Professional Association:**

- Valid Driver's License
- Certified in Engineering
- Certified in Tower Climbing preferred at the time of hire, or willingness to be certified

**Special Knowledge, Skills and Abilities:**

1. Knowledge of:
  - a. Materials and supplies used in the telecommunications industry
  - b. Principles and concepts of team building and resource management
  - c. Computer systems and Windows applications
  - d. Telecommunication fundamentals and technology evolution
  - e. In-depth understanding of 3G and 4G wireless technologies, related standards and interworking of 3G and 4G
  - f. Propagation modeling software such as Planet EV or Atoll
  - g. Networking concepts (such ATM, TDM, IP, Ethernet, etc.)
  - h. Voice and data performance optimization
  - i. Ericsson RAN, ENODEB/ NODEB 6101/6202 and related OSS-RC tools.
  - j. Design, drive test and post-processing tools, such as TEMS, Actix, JDSU, MENTUM Planet 5.7, Telsasoft KPI tool, etc.
  - k. RF tools, SDH/SONET and IP test instruments

2. Skills in:

- a. Performing basic mathematical calculations and able to identify and distinguish units of measure
- b. Using telecommunications industry materials, supplies and tools such as BERT, Ethernet, VSWR tester, Power meter, Spectrum analyzer and VOM
- c. Using Ericsson Multi-Radio deployment and performance parameters, and experience with the Ericsson Customer 'Portal' Interface system and use is HIGHLY desired.
- d. Analytics; understand the key issues of the WCDMA and LTE network
- e. Using personal computer hardware and Microsoft software programs
- f. Program and Project Management

3. Ability to:

- a. Act independently under very general direction on complex system performance challenges, equipment or RF troubleshooting and problem resolution, project management and vendor interface
- b. Communicate clearly and accurately, in English, at a customer service level, both verbally and in writing
- c. Perform in a self-directed, minimally supervised and forward thinking manner
- d. Work outdoors in any type of island weather condition
- e. Work as part of a team and individually
- f. Be on-call for emergency repairs after business hours
- g. Work in confined space outside in adverse weather and road conditions
- h. Use hand tools and safety harness in climbing towers and know how to apply safety work practices on the job
- i. Meet project deadlines and work on multiple on-going projects/tasks

**As an Equal Opportunity/Affirmative Action Employer, we afford equal opportunity to all applicants and employees for hire and promotion without regard to race, color, origin, gender, age, marital status, religion, veteran status, gender identity, sexual orientation, pregnancy or disability or genetic information.**

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