### Yaser Anwar Pathan

LTE /UMTS/GSM RF Consultant Contact: +61-427-666-786

### **PROFESSIONAL PROFILE**

- 12+ years of work experience in pre-sales, post-sales, system design and optimization
- Demonstrated project management skills such as management of technical teams, planning, scheduling, and implementation

Email: yaserpathan@gmail.com

- End to End delivery for Planning & optimization related projects
- Costing, budgeting & resource efficiency improvement for RF related projects
- Strong interpersonal skills gained through experience in client relations and customer service
- Well-developed analytical and organizational skills including identifying and solving problems
- Effective negotiation skills with customers, suppliers and colleagues
- In-depth knowledge of cellular systems, RF propagation, planning & optimization methods.
- Multi technology (like LTE & NB-Iot, WCDMA, CDMA 2000 / EVDO, GSM) RF Planning & Optimization
- Strong technical background in LTE & NB-lot, WCDMA, CDMA 2000 / EVDO, GSM/GPRS/EDGE technologies through Trainings, coursework and different projects
- Excellent presentation & training Skills
- Multi-vendor experience including Huawei, NOKIA, Ericsson & SIEMENS.
- Identification and measurement of KPIs throughout the life of different projects
- Ability to work independently or in a team environment
- Mentoring junior engineers and team development.

### **MAJOR ACHIEVEMENTS**

- Reduced the RF planning & optimization OPEX by 140% by synergizing different team activities , exploiting exiting tools to achieve maximum efficiency , and reduced redundancy in process and activities
- Winner of Best Team Leader Management Award for 2016 & 2017 by Huawei UAE
- Awarded Best Team leader for 2015 by du EITC (Customer)
- Two Times Future Star Award Winner for Huawei UAE in 2015 & 2016.
- Customer and internal appreciation for Project Success and outstanding performance.
- Won the Optimizer of the Month award in LCC for two times
- Overall Best Project award among all categories at COMPPEC 2006 (5th All Pakistan Computer Project and Exhibition Competition held at College of E&ME, Rawalpindi, Pakistan).(Project Name: BioDSP System ver:2.3)

### **Projects & Companies**



### **Huawei Australia**

B/799 Pacific Hwy, Chatswood NSW 2067 Tel: 0061 (02) 9928 3888

Senior RF Engineer – (UMTS + LTE) - (Sep 17 – Present)

Operator Name : Vodafone (Sydney, Australia)

- RF Data fill Planning & Creation for PCI / PRACH / Cell/TAC/Radius for New Sites
- New Sites Parameter Audit to ensure all the new sites are following baseline parameters as per different combination / templates
- Ensuring New Site Performance as per SLA and pre-launch optimization
- Prepare & ensure selection of Antenna with physical RF parameters, MIMO Type (2T Vs 4T), Carrier Aggregation 2CC/3CC/4CC, RRU / RFU, Baseband boards, feeder (type) / feeder-less solution is as per requirement
- Reviewing & Verifying RF Engineering Parameter (check against RFNSA/As built drawings/current site survey result/photo)
- Verifying Modeling Design (check against site survey/site photo/photo of street view)
- Reviewing and checking EME Reports ensuring following standards
- LTE new features testing and implementation (eMIMO, Breathing Pilot, 256 QAM etc)

### **Huawei Middle East**



24/F, Thuraya Tower 1, Dubai Media City, P.O.BOX:500327, Dubai, UAE

Tel: 00971-4-3688118 Fax: 00971-4-3688170

### Team Lead Radio Planning & Optimization – (UMTS + LTE) - (Dec 14 – Aug 17) Operator Name: Du (Dubai, UAE)

- Leading team of 10 RF Engineers, 03 Wireless Engineer, 14 DT engineers, 3 DT coordinators & 6 Rigger Teams.
- Formulating strategies for network improvement and presenting to High level customer
- Periodic customer & internal meeting for project progress ,network Safety , EHS assurance & other ongoing activity
- Support for Pre sales team and Customer for New product and features
- Continuous discussion with Customer on New Features and work related issues
- Lead Optimization activities in LTE to improve and achieve SLA KPI Targets i.e. ERAB success rate, drop rate, IRAT CSFB reselection, DL and UL throughput improvement.
- Major Event assurance, with subscribers ranging from 15 thousand to 1.5 million people (New Year Event, Formula 1, Major Concerts, Major Sport Events) with new Sites & parameter Optimization.
- Evolution towards 5G Massive MIMO (64T64R) WTTx Trial achieving Max Speed of 702Mbps using 20 Mhz LTE TDD with Beamforming Technology, NB-lot trial for smart parking 1st time in UAE
- LTE Carrier Aggregation 2CC, 3CC Successful trial and commercial launch followed by post launch optimization
- SRAN Trail, enabling 3G UMTS 2100 Hardware to use for LTE2100, and then perform 3CC (L800+L1800+L2100)
- LTE / UMTS KPI Monitoring and Analysis for worst cell Improvement to improve overall KPI performance
- LTE dual Carrier (800/1800) strategy Trial & implementation for Commercial Launch
- Planned, Integrated & optimized over 1400+ New LTE Sites with dual layer
- Understanding & Implementation of LTE features, LTE Carrier Aggregation, LTE 2nd Carrier Launch, CSFB to UTRAN, CQI Adjustment, ANR, LTE UTRAN Reselections, RS power Increase trial, Load Balancing b/w different carriers
- U900 Trial & implementation including Handover, traffic balancing & Camping strategy includes Re-Farming of EGSM band to introduce U900 Carrier in 3G
- Higher Level Analyzing and Parameter optimization of Inter-RAT Handover and Reselection performance Algorithms for dual Carrier Strategy
- 3<sup>rd</sup>/4<sup>th</sup>/U900 Carrier planning, implementation and optimization depending on capacity requirement
- RNC Migration \ LAC Optimization Planning & New RNC Feature trial (CE Overbooking Trial & implementation, UMTS to LTE mobility Optimization, RNC In Pool etc)
- Implementation & Testing of Flexible MC-HSPA supporting 42Mbps for supporting 04 Carriers
- Trouble shooting of different problems using FMA, Huawei Trace Viewer and Real time tracing.
- Capacity monitoring & optimization including PRB utilization, Board utilization, IuPS, IuCS, IuR & IuB/FE GE links utilization, License utilization, NBAP Signaling load on NodeB & SPU/DPU/EGPUA on RNC & planning for high risk sites
- Cluster optimization by identifying potentially week area on the basis of SINR, HO failure, call drops, RSRP, low throughput & optimize that area by tilt, orientation, checking HO parameters.

### LCC LCC Middle East & Asia (MEA)

Shatha Tower - 12th floor, Suite 1206 Dubai Media City - PO Box 500639 - Dubai, United Arab Emirates Direct: +971 4375 1718 Fax: +971 4391 8140 - Email: uae@lcc.com

### Technical Lead: 3G HSPA+/ 4G LTE Sr.KPI's Consultant - (UMTS + LTE) - (June 12 - Dec 14) Operator Name: Du (Dubai, UAE)

- Technical Lead responsible for meeting the SLA & KPI targets for UMTS/LTE RNO Services
- Daily Optimization Tasks: Worst cells Analysis, Traffic & KPI degradation, Live KPIs Monitoring (RNC alarm investigation, NodeB / EnodeB alarms, KPI (Accessibility, Retain-ability, mobility) monitoring, and NodeB capacity monitoring (Power, Noise rise, Code, CE utilization, etc) & throughput improvement), New Site optimization, HW issues identification, Compressive DT after major Changes
- LTE / UMTS KPI Monitoring and Analysis for worst cell analysis & Improvement
- Analyzing SON Features such as ANR and X2 Handover Analyzing
- Optimize LTE NW parameters for better user perception (DL/UL throughput & battery consumption) and better network signaling load.
- Manage PCI planning activities to enhance DL/UL performance by ensuring better utilization of all modulus planning rules.

- Managing Special Events: Existing sites parameter optimization (CE/Power/Code/IUB) & new sites
  recommendations for major events, developing camping & resource utilization strategy to insure minimum
  impact on network quality & capacity and Ensure Best User Perception During the event
- VIP Complain Handling & solution proposal
- Analysis of Layer3 messages to investigate connectivity & other issues like abnormal releases by network. Ensuring their optimal performance, improvement, network quality, redesigning & proposal for new sites.
- Create the Database tools / Template for Parameter Audit, Standardization, Inconsistencies checking and make correction for inconsistent parameter and physical Change (such as down/up tilt and re-azimuth) to improve Network audit and improvement for TRA Benchmark and live monitoring
- Network Capacity study and expansion proposal
- Paging capacity Analysis, proposing TAC / LAC Splits to improve the PSR(%) & load.
- Network Camping Strategy Recommended the camping strategy to be changed from Random to F1/F2 with F3 (load sharing) & improved accessibility KPIs.
- quality of network.
- Major Road and cluster DT analyzing to make Improvement in the network to achieve Better KPI levels as per SLA by improving (RSRP, CINR, CQI, Packet loss & DL Latency for 4G whereas RSCP, EnNO, CQI, pilot pollution etc for 3G)

# 3G HSPA+ Sr. Optimization Consultant (UMTS) - (Aug 10 – May 12) Operator Name : Du (Dubai, UAE)

- Daily Network Performance to achieve objectives by optimizing the KPIs (Accessibility, Retain-ability, Integrity)
  of degraded network elements, indentifying and escalating faults and coordinate with respective teams to
  constantly follow up on the resolution measures.
- Perform all 3G Capacity Studies related to the Network performance and Customer perception including (Channel elements, IUB. codes, power sources)
- Implementation & Testing of 2<sup>nd</sup> Carrier in whole network & finalizing camping strategy
- Planning, Implementation & Optimization of Six Sectors.
- Throughput improvement and Capacity for HSPA+/DC-HSPA Sites enable by parameter changing, such as: code uses strategy, improving Radio conditions & Improving/Resolving Tx.
- Throughput troubleshooting and improvement strategies for UMTS New sites.
- Channel switching and state transition parameters optimization & Multi RAB parameters optimization
- Cluster level optimization from Intra, Inter and IRAT Neighbor optimization, call drop analysis, CHR analysis, and Coverage optimization including pilot pollution.
- Drive Test Analysis to verify interference problem, overshoot coverage problem and verification, best neighbor detection, pilot pollution, RSCP/EcNo Level, Swap Feeder, etc.
- VIP complaint handling and manage seasonal special events parameters optimization (UL power control settings, load balance, capacity parameters and mobility parameters) to ensure stable KPIs and customer perception during events.
- Verifying Inter system issues related to core network and activation of Parameters with different vendor 2G.

## 3G HSPA+ Optimization Consultant (UMTS) - (Feb 10 – July 10)

Operator Name: Du (Dubai, UAE)

- KPI analysis & SLA meeting for new sites as well as sites swapped from NSN to Huawei.
- RF Optimization of New sites and Acceptance report preparation for new sites.
- Cluster/new site pre optimization after swap and preparing cluster/site on air report for acceptance.
- Using Nastar WCDMA for KPI reports, Neighbor analysis and CHR data analysis (for call drop). & Performance analysis for in SW Upgrade Activity, IUPS Cut over activity, SGSN Cutover Activity, RAN Upgrade Activity,
- Trouble shooting IUR related issues during swap between Huawei and NSN RNC's & Layer 3 analysis for trouble shooting of AMR call & PS call Call Drop, Call Access Failure
- Neighbor optimization for New Sites & Swapped Clusters (includes intra freq, inter freq & inter RAT)
- Drive Test Analysis to verify interference problem, overshoot coverage problem and verification, best neighbor detection, pilot pollution, RSCP/EcNo Level, Swap Feeder, etc.
- Coordination with project team, transmission team and planning team for additional new 3G sites to improve, quality, coverage, and additional capacity.
- Provide technical support in customer discussions and respond to queries related to radio network design and optimization. Participate regularly to weekly QoS / technically / Acceptance meetings.



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### 3G Radio Network Optimization Consultant (UMTS) - (Sep 09 – Nov 09)

Operator Name: OmanTel (Muscat, Oman)

- UMTS KPI Monitoring and Analysis for worst cell
- Cluster Optimization and improve the DT KPI to meet the required KPI Agreements.
- Strong troubleshooting capability of interference related issues, Call Drop cases, problems such as Pilot Pollution (identification of overshooting pilots, azimuth and tilt optimization), poor/no/over coverage, missing neighbors, Soft/Hard/Intra- and inter frequency handover. Analysis of IMSI Traces & Call History Records (CHR).

### **3G Radio Network Optimization Consultant (UMTS) - (Apr 09 – Aug 09)**

Operator Name: AXIS (Jakarta, Indonesia)

- Daily worst cell analysis and improving worst DCR, CSSR and SHO Overhead cells
- Cluster level optimization from Intra, Inter and IRAT Neighbor optimization, call drop analysis, CHR analysis, and Coverage optimization including pilot pollution.
- Optimization of parameters (Power Control, Load Control, Handover Algos) in 3G network to improve KPIs of congested areas. The trials helped in reducing the overall congestion of the city's 3G network to 0.06%.
- Parameter consistency check by comparing planned values with implemented values

### 2G Radio Network Optimization Engineer (GSM) - (Feb 09 - Mar 09)

Operator Name: Alfa (Beruit, Lebanon)

- Cluster Optimization and improve the DT KPI to meet the required KPI Agreements.
- Analysis & benchmark report for different operators & their DT performance
- Network and Parameter Auditing, Parameter Trials and suggesting different parameter templates for different Cell and Clutter Types, Cross network implementation, Benchmarking and Auditing.

### 2G Radio Network Optimization Engineer (GSM) - (Feb 08 – Jan 09)

Operator Name: Telenor (Islamabad, Pakistan)

- Responsible for Delivering the key KPI SLA targets in North Region on the existing network and the newly integrated Rollout Sites.
- Daily worst cell analysis and improving worst DCR, CSSR and HOSR cells.
- Redesign Rawalpindi & Peshawar City Network to improve overall Key Performance Indicators (KPI)
- Traffic analysis using statistics and proposing redesigns, HR settings changes, expansions and new sites as per requirement. Traffic sharing, directed retry, load based handovers features are used to steer traffic while keeping performance within acceptable thresholds.
- Trial, testing and fine tuning /optimization of parameters for Nokia features like DCS only Sectors/cluster, MPD Improvement, power control, distance based handovers, directed retry, call setup time reduction, traffic shifting to 1800 band, Reduced HO Drop, AMR quality threshold tuning etc.
- Changing Non Bcch layer parameters on cell basis to optimize traffic on both 900 and 1800 layer.
- Changing Cell Reselect Hysteresis for cells on Lac boundary to avoid ping pong location updates.
- Changing Cell Reselection and HO parameters for Micro and macro layers.
- Network and Parameter Auditing, Parameter Trials and suggesting different parameter templates for different Cell and Clutter Types, Cross network implementation, Benchmarking and Auditing.
- City and Cluster Level Redesign and Benchmarking including Physical Changes, Configuration and Adjacencies Changes and Parameter Changes.
- Preparing re-homing plans for BSC's to reduce BSC load.
- LAC boundary planning for optimum utilization of SDCCH resources.
- Calculating MPD (Minutes per drop) across the network to compare the performance of overall network.
- Checking Hardware problems (cross feeders, VSWR,TRX's) during pre-launch phase
- Parameter consistency check by comparing planned values with implemented values.



### **ZTE Corporation, Pakistan**

Plot# 360, I-9/3 Islamabad, Pakistan Tel: +92-51 4859201-5

Senior 3G Network Optimization Engineer (CDMA) - (Mar 06 – Jan 08)

Operator Name: PTCL (Islamabad, Pakistan)

- Responsible for all type of Optimization & Maintenance of assigned region
- Cluster Optimization & Single Site optimization for new & existing Sites.
- EVDO Sites Optimization by improving Radio Environment.
- Daily/Weekly/monthly monitoring of the radio network quality, through network performance Statistics.
- Conduct performance analysis and identifying the worst performing cells.
- Conduct neighboring relation Analysis and Optimization.
- Tuning of Radio Features, Analysis and adjustments of all radio related parameters on BSC and Cell levels.
- Perform traffic capacity expansion forecasting and prepare the Network expansion proposals.
- Coordinates and Perform drive test analysis for regular quality benchmarking and troubleshooting reasons.
- Support to Customers in optimization related issues & Coordination with site engineers



### Research Instruments & Measurement Systems (RIMS)

Trainee R & D Engineer (Sep 05 - Mar 06) - (Research) - BioDSP V 2.3

- Design & Development of PC based real time bio signal analysis and storage system.
- Involves PCG (Phonocardiograph) Acoustic Signal Analysis, ECG (Electrocardiograph) Bio-Electric Signal
- Analysis, Fiberscopy Optical Signal Analysis & Microscopy Biological Image Analysis
- Implementation involves DSP, DIP, Hardware interfacing, Database & Remote Accessing.

### **Proficient using Network Software/Tools**

- Experienced with Huawei LMT, IManager PRS, M2000 and NASTAR WCDMA RAN 19 & eRAN12.1
- Experienced with Huawei Trace Viewer, FMA, Nastar and Real Time tracing through LMT.
- Experience with Nokia stats analysis tool Network Doctor, Reporting Suite and KPI Browser.
- Experienced with Drive testing tools TEMS, NEMO, Probe 2& CNT.
- Experienced with Drive test Analysis tool Actix, Assistant, TEMS Analyzer & CNA.
- Experienced with cellular network simulation tool such as Asset, uNET and Netact Planner.
- Experienced with Mapinfo ,Vertical Mapper and Google Earth

### TRAININGS / CERTIFICATIONS

LTE Planning & optimization

LTE Advance Features

WCDMA (UMTS) Overview & Protocols

WCDMA (UMTS) HSDPA: Protocols & Physical Layer

WCDMA (UMTS) Network Planning

CDMA-Planning & Optimization

CDMA-BSSB (EVDO) Training

Huawei

Huawei

QUALCOMM, Islamabad

QUALCOMM, Islamabad

ZTE University, Pakistan

ZTE University, Pakistan

### **EDUCATION**

University of Engineering & Technology, Taxila, Pakistan

Bachelor of Engineering in Telecommunication (Specialization: Communication)

2006