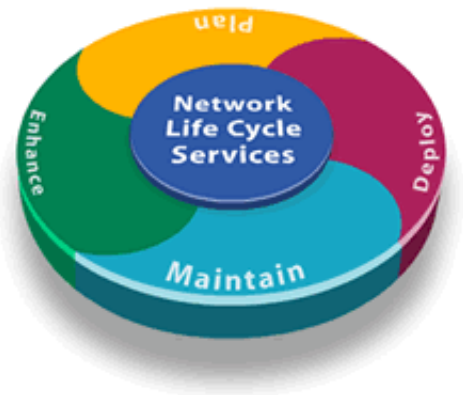




## Company History

**Tel-e-com, Telecom Services & Consultants Private Limited**, was founded in 2006 by its Chief Executive Mr. Junaid I. Khan. Mr. Khan has extensive telecom experience in the technical and business areas and has held various senior executive positions in leading companies such as PTCL (the largest telecom company in Pakistan as CEO), Mobilink (as CEO and Head of Engineering), Motorola Kuwait (as Regional Business Head), Rockwell Telecommunications (USA) and Xerox Corporation (USA) as Senior Business Manager.



## Company Profile

**Tel-e-com's is focusing on providing business process outsourcing (BPO) solutions to its customers.** Our assets are our full time talented staff and access to seasoned, multilingual, best-in-class professionals. Having worked inside wireless operations in Middle East, Pakistan and USA, **Tel-e-com** team members apply objective competence and industry standard tools to mission-critical projects, provide end to end outsourcing solutions and deliver unparalleled service. The team can effectively manage the lifecycle of every project to ensure that client needs are successfully met.

**Tel-e-com** can provide training, development and advisory services to the Telecommunications industry. We specialize in the detailed analysis of customers, markets, technologies, and suppliers. We focus on customer needs and recommend solutions accordingly.



*Tel-e-com* works with partners and has the capability to provide **operations and maintenance solutions** that range from network inspection to **vendor management** understanding very well that a well maintained network will require less corrective maintenance and will be easier and more reliable to operate. Managing network maintenance separately can be costly and inefficient, but because *Tel-e-com* has the capability to run the maintenance activities for several operators, clients will receive the best performance at optimum possible cost.

**Operation and maintenance** activities can be grouped into three main categories: preventive maintenance, corrective maintenance and network operations. *Tel-e-com* can perform an in-depth network audit to highlight all immediate and imminent criticalities and define the roadmap of maintenance activities to perform. Afterwards, preventive maintenance ensures that networks continue to operate under normal conditions. On the operational side, monitored activities include network surveillance, helpdesk, support, performance management (**Network Audits**), dispatch, OSS support, application management and network configuration management.



## **Project Management & HR outsourcing:**

- **Complete Project Management**
- Subcontractors selection and management
- **Resource Management & cost control**
- Inventory Control Management
- Logistics Control Management
- Spares Management
- We can monitor Q.o.S of all areas
- **We can help ensure fast & timely Rollout**
- Design Documentation
- We can provide project specific HR resources



## **IT Technical Support Services:**

- LAN/WAN Installation and Management.
- Customized support programs for customers
- In house support and training for all your IT needs
- Network security
- Software support services
- Data services (
- Complete network management & support
- Taking Backup of Windows Server, DHCP Server (Linux), Router Configurations.
- Broadband services (installation, maintenance, customer support, etc)
- Content Management
- IT Help-Desk services (entry, conversion, scanning, indexing, processing, etc)



## **Transmission Services:**



- LOS Surveying
- Network Planning
- Frequency Planning
- Interference Calculation
- Link Budgeting
- Installation & Commissioning
- Link Integration
- NMS Design & Implementation
- Operation & Maintenance
- Spares Management
- Repair & Return

## Network Services:

## Preventive Maintenance:



- Weekly Cleaning of the site
- Monthly cleaning of the filters or modules as per defined procedures
- Assistance in the deployment activities
- Checking of Site Grounding
- Inspection and maintenance of Earth Box/terminations (including greasing etc.)
- Inspection and maintenance of Cooling systems (Air-cons)
- Inspection and maintenance of Gensets
- Inspection and maintenance of MW links
- Inspection and maintenance of Antenna and Feeder Cable systems
- Support on all upgrade/expansion activities between Nokia and its vendors
- Collection of Utility bills
- Timely Submission of Utility Bills
- Recording and reporting, issues/observations about effectiveness of BTS site security measures/system (Security Gaurds).
- Monthly drive test for checking of Site's defined KPI's

## Corrective Maintenance:

- 24X7 Customer Support Desk for logging of alarms reported
- Alarm responding within defined time frames between Vendor and Operator
- First line BSS supports includes the replacement of faulty modules like radios, digital boards or rectifiers and carrying out all first line procedures to bring site on-air.
- Handling and clearing of the EAS/IAS alarms
- Clearance of any issue related to Wapda or Power Companies.
- Clearance of issue and coordination between Generator and Air-Con vendors for clearance of the alarms.
- Replacement of faulty bulbs/tube lights.
- Checking and clearing of the alarms on the Transmission links
- Actions on Issues affecting Network KPI's
- Maintaining small warehouse for the replacement of faulty parts
- Transportation of Faulty parts from Warehouse to Affected site
- Liaison between Wapda to rectify power related issues

## RF Services (BTS)

- Field Survey
- BTS Installation, Testing & Commissioning
- BTS-Site Integration
- Radio Network Optimization
- Drive Test Services
- Network benchmarking



## Network Audits

At *Tel-e-com* we believe before we begin to analyze network performance and do cost analysis we must do a network audit to identify areas that can be corrected for maximum efficiencies. The audit and data integrity processes identify all areas of possible concern or quality degradation along with cost/quality saving recommendations. We recommend the site audits to be done regularly by the Operators for optimum performance.



## Benchmarking Services



*Tel-e-com* can analyze specific isolated problems through extensive testing of the network. It is these identified areas in a network where subscribers might get better service from a competitor. By benchmarking these areas with Q.o.S reports, different divisions within the company – management, operations & engineering and /or marketing – get updated competitive understanding of their network's performance on overall basis.

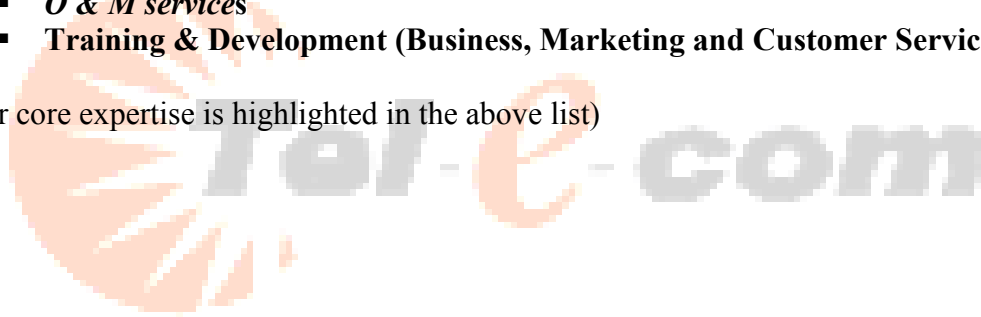
## Software Applications & Development

We have access to application developers with experience in the corporate sector. We can develop and customize applications for specific needs of the company.

The other prime activity of *Tel-e-com* is to provide all types of engineering and business services for IT/telecommunication area. The scope of services includes but not limited to following classifications

- *Design* assistance or verification
- *Supply* assistance
- ***Installation***
- ***Commissioning***
- *Testing* assistance
- ***Project management***
- ***Implementation***
- *Turnkey* projects
- ***O & M services***
- **Training & Development (Business, Marketing and Customer Service)**

(Our core expertise is highlighted in the above list)



## Current Projects



### Transmission Project

We are responsible for complete design and implementation of MW transmission network in the Central region (Faisalabad, Multan, central Punjab, etc) with Harris-Stratex and provide both PDH and SDH for voice & data traffic to Huawei-Ufone. This project includes following consulting/field services;

Customer Help desk Support  
Frequency Planning  
Link Budgeting & Integration  
NMS Design & Implementation  
Spares Management support

MW Network Planning  
Interference Calculation  
Installation & Commissioning  
Operation & Maintenance support  
Repair & Return



### Transmission Project

We are providing Harris Stratex MW links of SDH to PTCL;

- Supervision for Installation & Commissioning
- NMS Design & Implementation
- Operation & Maintenance
- Spares Management
- Repair & Return



### Technical Support Project

We have been selected as local partners for Blackberry support for **Emitac Mobile Solutions (UAE)**.





### RF Coverage Verification Project

We are providing Drive Test Services of 152 Sites for new sites for Warid Telecom in Central and South Region. These Services includes Coverage Verification and RF Optimization.

Nazdik Shodan نږدې کېدل



### RF Coverage Verification and RF Optimization

**Services includes:** Coverage Analysis, RX level, RX Quality, Capacity, Inference, Frequency Planning, Block Calls, Cell Setup Failure, Call Drops, Handover failures

- Post Process the data
- Analysis a post process data
- Identified the root causes of network problem areas
- Made recommendation base on analysis

Nazdik Shodan نږدې کېدل



### Transmission Project

We are responsible for complete design and implementation of MW transmission network in the whole Afghanistan with Harris-Stratex and provide both PDH and SPDH for Backbone, voice & data traffic to Roshan Telecom. This project includes following consulting/field services;

#### Turnkey Services:

Customer Help desk Support  
 Frequency Planning  
 Link Budgeting & Integration  
 NMS Design & Implementation  
 Spares Management support

MW Network Planning  
 Interference Calculation  
 Installation & Commissioning  
 Operation & Maintenance support  
 Repair & Return

Nazdik Shodan نږدې کېدل



### Technical Support and Resources

We are providing technical support services and resources to Roshan, the largest mobile Operator in Afghanistan

## **USF Universal Service Fund Company (Ministry of IT & Telecommunications)**

### **Technical Support Project:**

We provide consultancy services to the USF Company to help improve and expedite the telecommunication services and infrastructure in the un-served and underserved areas of Pakistan. As their Consultants we support their activities in the areas of Broadband and Rural telecommunications development, RFP preparation, Bid evaluation and strategy development.



### **RF Consultant Project:**

We are providing Technical resources to Alcatel-Lucent to support their GSM network RF Planning, RF Optimization and Deployment Projects for **CM-Pak (CHINA MOBILE)** and **Mobilink (ORASCOM)**



### **KUFPEC Pakistan Holdings B.V (KPH).**

### **Technical Support Project**

We are providing IT Services to Kufpec Pakistan Holdings B.V (KPH).

- Managing Local Area Network
- Managing Mail Server
- Managing Domain Controller
- Managing WAN (Cisco Routers 2600, Cisco Switches 2950 and Cisco Firewall PIX)
- Providing Technical Support
- Managing Data Connectivity to Head office in KUWAIT

## **Technical Expertise:**

**Tel-e-com** has access to skilled professionals in the Wireless Communications industry. The team has demonstrated achievements in RF Network design, System Performance, Verification, Frequency Planning, Optimization, Transmission Planning and Deployment. The team's goal is to increase network performance and efficiency while lowering capital and operational expenses. **Tel-e-com** is skilled to handle cutting edge technologies of Wireless systems (CDMA, GSM, IS-36 and GPRS/2.5G Technologies). **Tel-e-com** team is experienced in network design-to-launch life cycle.

## **Tel-e-com Key Team Members:**

### **Junaid I Khan – Chief Executive Officer**

27+ years experience – cellular start-up planning, strategic analysis and planning, business planning, licence bids, regulatory advice, market research, market forecasting, overall network planning.

### **Muhammad Sarwar – Lead Technical Consultant**

30+ years experience – extensive telecom experience in the technical and planning, in PTCL (the largest telecom company in Pakistan as Member Technical) and consultant for World Bank projects.

### **Shahid Haq, MBA (USA) – Lead Marketing Consultant**

20 years experience – business planning, project management, marketing analysis, brand building and management

### **Ibrar Khan, MBA (USA) – Distribution and Sales channel expert**

15+ years experience – Sales & distribution channel set up and management, sales training, corporate sales

### **Ali Naqvi, MBA (USA) – Project Management**

13+ years experience - Project Management, Financial Planning, and Network Deployment & Optimization.

### **Asim Popalzai – Lead Field Operations Consultant**

13+ years experience – RF field planning, network deployment, network maintenance

***We also have access to many experienced technical, Marketing and business experts who can further strengthen our team on an as-needed basis.***

## Why Chose TSC team?

- **Proven track record & highest quality talent:** A track record and combined experience of almost 100 years of outstanding delivery within the Telecom sector.
- **Demonstrated industry leaders:** On our team are consultants with personal reputations that are held in high regard within the sector and who have participated in the growth of Pakistan's record telecommunications growth.
- **Experienced in both developed and emerging markets:** Detailed knowledge of both developed and emerging markets including a comprehensive understanding of the operational and cultural challenges of working in Pakistan, the Middle East USA.
- **Providing a full service portfolio:** We have the capability to provide end to end solutions to most critical problems or challenges facing the telecom companies.
- **Value for money:** We operate with low overheads and have flexible pricing models thus allowing us to offer you exceptional value.
- **Dedication:** All senior members of our team are personally involved in all projects and take personal responsibility for ensuring successful delivery.
- **Knowing what works:** We have experience in small and large enterprises and thus can deliver practical advice and solutions that can be implemented in the real world
- **Skills:** We have in house skills in the IT/Telecom area or have ready access to the right skills required

TSC team has had the privilege to work with the world's leading Operators, manufacturers and content providers. Here are just some of the companies that TSC team members have served.

**HUAWEI/ WARID – GSM:** Transmission Planning and Deployment

**PTCL-UFONE – GSM:** Transmission Planning and Deployment

**LUCENT TECHNOLOGIES – CDMA:** System Performance and Optimization

**SPRINT PCS – CDMA:** RF Network design, System Performance, Verification

**CINGULAR – GSM:** System performance, Verification, and Optimization

**T-MOBILE – GSM:** Drive Test, System Performance, and Demographic Study

## International Business Partners



*Tel-e-com* is also channel partner of Cisco systems

## Local Business Partners

**Cellkom** (Telecom Field services)

**Teleserv** (Telecom site Civil Works)

**InterSES** (Telecom Implementation and Integration)

## Contact Information

Find out how Tel-e-com helps companies become wireless leaders and how Tel-e-com resources can be put to work for your company. Simply call +92-52-280-2500 or send an inquiry to [tsc@tel-e-com.com](mailto:tsc@tel-e-com.com). Our website is [www.tel-e-com.com](http://www.tel-e-com.com).

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