



Terms of Reference (TOR) for Software Planet /features for optimizations – Technical Wireless Department



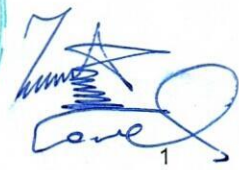

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Technical Specification for AFTEL wireless, Project (Planning & Optimization Tools for 2G/3G/4G)

Version	Date	Author	Reviewer		Notes
Latest	June 2026	RF & BSS Department	Hekmatullah Stanekzai		

Preface & Background

Afghan Telecom (AFTEL) is a telecom company offering fixed line, wireless voice and data services under a 26-years license in Afghanistan. The company is government owned and operated. In 2005, the Afghan Ministry of Communications spun it off into a private entity, while retaining oversight and control AFTEL, a country leading telecommunication service provider, has always been on the forefront of the evolution of telecom network. With the development of telecom technology and the growing demands of subscriber, AFTEL first demonstrates its pioneer position to underline its leadership in the future of mobile network, and willingness to continue delivering to subscribers new and more advanced services every day.

Incorporated in 2013, Salaam is the latest entrant in Afghanistan's telecommunication industry providing a top-quality, affordable, 100% Afghani solution. Envisioned by the Ministry of Telecommunications and Information Technology, Salaam is committed to revolutionizing the telecommunication sector in Afghanistan by complementing the nationwide fixed network with 3G GSM voice and data services.

Setting ourselves apart from the competition through our customer-friendly packages without restrictions or tricky charges, Salaam gives its customers the freedom to enjoy lowest call rates, both domestic and international, and trouble-free internet at unbelievable rates without compromising on quality

Project background.

Afghan Telecom Company is a governmental telecommunication company which provides telecommunication services like Voice and Data in all provinces of Afghanistan. Currently (SALAAM) have around 2000 sites, in all provinces of Afghanistan. They provide 2G/3G and (1209 4G) sites, services for both voice and data.

Service in all over Afghanistan, so in this case it is necessary to have **Planet Optimization tool/ features.**

with this project

This software and hardware project can significantly optimize and improve network quality across all telecommunications technologies. It is especially important at the current stage, as Afghan Telecom continues to expand its 4G network coverage by deploying more sites.

For effective network optimization and frequency planning, advanced tools are required for PSC and PCI planning in 2G, 3G, and 4G networks. These tools help reduce interference, improve spectrum utilization, and enhance overall network performance.

In addition, the project will support the improvement of HSR, High-Speed, depending on your context) coverage and mobility performance, ensuring better service quality and user experience.

Project Scope

Planning & Optimization Tools for 2G/3G/4G.

- RF Coverage Analysis,
- RF Capacity Planning
- Finds weak signal or overshoot areas
- Suggests antenna tilt/power changes



- Identifies high-interference zones
- Helps in frequency and PCI/RSI planning

Capacity Balancing

- Detects overloaded cells
- Recommends load balancing strategies

Handover Optimization

- Ensures smooth mobility between cells
- Reduces call drops and handover failures
- Adjusts network settings (e.g., neighbor list, thresholds)

Geographical Information System (GIS)

Key Functions:

- Mapping: Shows roads, buildings, towers, users, etc.
- Analysis: Finds patterns like coverage gaps or high-traffic areas
- Planning: Helps decide where to build sites, lay cables, or improve signal
- Visualization: Makes complex data easier to understand using maps

Propagation Modeling

- Propagation modeling is like using a virtual map to predict how far and strong a signal will go, helping design better wireless coverage.
- It helps engineers estimate signal strength, coverage area, and interference before building or optimizing a network.

Spectrum analyzer

- Detecting interference or jammers
- Verifying frequency usage by operators
- Testing equipment in labs or field

Technical Specifications of the Project:

The contractor should provide the following given specifications for Planet/features software, TEMS latest version, Spectrum analyzer project:

should provide latest version of Planet/ features for the Optimization with this project.

And support all technology (2G/3G/4G)

2 TEMS Investigation

2 TEMS investigation (21) will upgrade to latest version.



Training.

- Workshop Duration: 10 working days
- Location: Dubai/China
- Number of Trainee: 6 Person

Notes:

(Without Visa, Flight Ticket, meals and accommodation and it will be done by AFTEL)

Price Schedule:

Description	Quantity	List Price	Extended Price
SPECTRUM SCANNER + TEMS 5G UPGRADE WITH SAMSUNG S26 DEVICES			
TEMS Inv. Professional Upgrade Package, Regional	2		
Tems Investigation, Device Protocol Bundle, 2026	2		
TEMS Investigation 5G License	2		
TEMS Discovery 5G License	1		
Tens Device connectLicense, Locked	8		
Samsung Galaxy S26+ 5G SM-S946, HW only	8		
TEMS Investigation Device FW, Samsung token, Locked	8		
TEMS Investigation Scanner Protocol Bundle, 2026	2		
IBflex Super Configuration (10 MHz to 6 GHz)	1		
IBflex Spectrum Analysis & Enhanced Power Scan (EPS)	1		
IBflex Layer 3 Option - All Technologies	1		
IBflex C/I Option for GSM	1		
GPS USB, DeadReckoning Assisted	2		
USB Hub (6-port) kit w/ software control	2		
Third Party Component (Inverters)	2		
Annual Software Support Services for TEMS Investigation	1		
Annual Appliance Support Services for TEMS Investigation	1		
Mentum PLANET 5G UPGRADE WITH OPTMIMIZATION MODULE			
Shared Planet ACP Module Perpetual License	1		
Shared AIM (Artificial Intelligence Model) Perpetual License	1		
Shared Planet 5G NR Module Perpetual License	1		
Annual Support Services (8*5) for RE Planning Software	1		
DESKTOP PCs FOR PLANET SOFTWARE			
HP Z2 Mini G9 Workstation With Monitors & Accessories	2		
REMOTE CONSULTANCY			



NT-Solution Consultant Day TEMS Software Upgrade, Spectrum Scanner & New Devices Testing	5		
RE-Solution Consultant Day (Planet Software Upgrade & Configuration)	10		
TECHNICAL WORKSHOP			
Mentum Planet Offsite Technology Workshop, Excluded - Flights, Hotel, Daily Meals, and - Visa, it will be provided by AFTEL	10		

Location of Services:

Our central Office for these services is located in Mohammad Jan khan watt, 2th district of Kabul province and the remote sites are located in all over Afghanistan.

Responsibilities:

NO	Jobs/Performance	Responsibilities	
		Aftel	Contractor
1	Perform Planning & Optimization Tools for 2G/3G/4G, Geographical Information System (GIS), Digital Map and Clutter map, TEMS investigation Spectrum analyzer.	√	
2	Installation of the equipment	√	
3	Maintenance of the equipment on line support.		√



4	Providing the requested equipment with mentioned specifications		√
5	Delivering the equipment up to KBL Airport.(CIP)		√
6	1-year warranty		√

Payment Terms:

- 1) 30% of the total contract value shall be paid the supplier on advance against advance payment guarantee or a commitment letter of the manufacture guarantying the delivery of 100% equipment from his reseller.
- 2) 70% of the total contract value shall be paid to the supplier after receiving all the equipment and license upon the confirmation of the technical term.

Contract Period:

The contractor /supplier shall supply the equipment as per incoterms (CIP) within 60 days to the Kabul International Airport.

Rejection: If the delivered tools are not according to the required specification, will be rejected within 5 days to the supplier and the supplier should return them with their expenses as per specification within 10 days.

Hekmatullah Stanekzai

RF & BSS Director

Mohammad Haroon Mohammadi

Salaam COO

Sayed Mohammad Afzal Afzali

SALAAM CTO

Ali Ahmad Samand

AFTEL CEO

