

SECTOR: **INFRASTRUCTURE SUPPORT FOR FOOD, NUTRITION,  
AGRICULTURAL AND HEALTH SECTORS**

Subsector: **GSM MOBILE SYSTEM REQUIREMENTS FOR THE NORTHERN**

CODE	DESCRIPTION	QUANTITY	UNIT OF MEASURE
07-09-10000	GSM MOBILE TELEPHONE SYSTEM FOR THREE CITIES AND A HIGHWAY ROAD FROM BAGHDAD TO MOUSIL WITH A DISTANCE OF ABOUT 450 KM. THE THREE CITIES ARE MOUSIL, TIKREET AND SAMARA. TOTAL SUBSCRIBER CAPACITY IS 40000 SUBSCRIBERS. BELOW ARE THE MAIN REQUIREMENTS FOR THE PROJECT. DETAILS AND EXACT NUMBERS WILL BE SUPPLIED AFTER FINAL DESIGN AND NEGOTIATION WITH THE SUPPLIERS: 1-BASE TRANCEIVER STATIONS (BTS) – 40-60 BTS 2-SMALL CAPACITY MICROWAVE LINKS 40-60 LINKS 3-BASE STATION CONTROLLER – 1-3 BSC 4-MOBILE SERVICES SWITCHING CENTER.– ONE IN MOUSIL 5-OPERATION AND MAINTENANCE CENTER NSS&BSS–ONE IN MOUSIL	As Necessary As Necessary As Necessary 1 1 10000 As Necessary	
	<b>EXPANSION OF BAGHDAD GSM SYSTEM (*)</b>		
07-09-20000	EXPANSION OF THE ALREADY CONTRACTED GSM SYSTEM UNDER PHASE 5 OF THE MOU TO A CAPACITY OF 100000 SUBSCRIBERS INSTEAD FROM THE EXISTING CONTRACTED CAPACITY OF 25000 SUBSCRIBERS. THE SYSTEM WILL COMPRISE THE FOLOWING MAIN ITEMS: 1-TRX UNITS TO BE ADDED TO THE EXISTING (CONTRACTED) BTS SITES. 2- BASE TRANCEIVER STATIONS (BTS) – 20-40 BTS 1-SMALL CAPACITY MICROWAVE LINKS 20-40 LINKS 2-BASE STATION CONTROLLER – 1-2 BSC 3-EXPANSION OF THE EXISTING MOBILE SERVICES SWITCHING CENTER 4-EXPANSION OF THE EXISTING OPERATION AND MAINTENANCE CENTER. 5-SUBSCRIBERS HANDHELD TERMINALS.	As Necessary  As Necessary As Necessary As Necessary As Necessary As Necessary 75000	
	<b>WIRELESS LOCAL LOOP (WLL) REQUIREMENTS (*)</b>		
07-09-30000	WIRELESS LOCAL LOOP (WLL) SYSTEM WITH A CAPACITY OF ABOUT 60000 SUBSCRIBERS TO SERVE URBANE AREAS IN BAGHDAD. THE SYSTEM WILL COMPRISE THE FOLLOWING MAIN ITEMS: 1-RADIO BASE STATIONS (BS) – NUMBERS WILL BE DECIDED LATER ACCORDING TO TECHNOLOGY TO BE CHOSEN AND NUMBER OF SITES AND FINAL CONFIGURATION. 2-BASE STATION CONTROLLER. 3-INTERCONNECTING LOW CAPACITY MICROWAVE LINKS. 4-SUBSCRIBERS PREMISES TERMINALS AND OUTDOOR	As Necessary  As Necessary As Necessary 60000 As Necessary	
	<b>PAGING SYSTEM REQUIREMENTS (*)</b>		
07-09-40000	PAGING SYSTEM WITH A CAPACITY OF 10000 SUBSCRIBERS IS REQUIRED TO SERVE THE BAGHDAD CITY AND SURROUNDING AREAS. THE MAIN REQUIREMENTS FOR THE SYSTEM ARE AS FOLLOWS: 1-OPERATION IN THE VHF FREQUENCY BAND (ONE WAY OPERATION). 2-ALL KIND OF COMMON PAGING SERVICES SHOULD BE OFFERED		
	<b>PRIVATE MOBILE RADIO SYSTEM REQUIREMENTS (*)</b>		

CODE	DESCRIPTION	QUANTITY	UNIT OF MEASURE
07-09-50000	FIFTEEN INDEPENDENT PRIVATE MOBILE RADIO (PMR) TRUNKING SYSTEM TO SERVE THE MAINTENANCE REQUIREMENTS OF IRAQI TELECOMMUNICATION AND POST COMPANY (ITPC) IN BAGHDAD AND 14 OTHER CITIES OF IRAQ. THE SYSTEM IS TO PROVIDE COVERAGE IN BAGHDAD AREA WITH A RADIUS OF 50 KM FROM THE CITY CENTER AND IN OTHER CITIES WITH LESS COVERAGE RADIUS. THE MAIN REQUIREMENTS FOR EACH SYSTEM ARE AS FOLLOWS: 1-PMR TRUNKING SYSTEM WITH A MAXIMUM CAPACITY OF 16 SIMULTANEOUS CALLS TO THE VARIOUS MAINTENANCE LOCATIONS AND MOBILE TEAMS THROUGHOUT BAGHDAD AND OTHER CITIES. 2-NECESSARY BASE STATIONS TO PROVIDE THE REQUIRED COVERAGE.		
	<b>REQUIREMENTS FOR RADIO TOWERS (*)</b>		
07- 09 -60000	180 STEEL SELF SUPPORTED TOWERS OF VARIOUS HEIGHTS AND TYPES TO BE USED TO SUPPORT ANTENNAS OF BASE STATIONS (BTS'S) IN FUTURE GSM AND PMR MOBILE SYSTEMS TO BE CONTRACTED AND IMPLEMENTED IN IRAQ. THE TOWERS WILL ALSO SUPPORT THE MICROWAVE LINKS	180	
07-09-60010	1- 60 TOWERS OF 20-25 M HEIGHT		
07-09-60020	2- 60 TOWERS OF 30-35 M HEIGHT		
07-09-60030	3- 60 TOWERS OF 45-50 M HEIGHT		