REQUIREMENTS FOR A GSM MOBILE NETWORK FOR THE MIDDLE PART OF IRAQ (*)

CODE	ITEM	QTY	
07-09-10000	900 MHZ GSM MOBILE TELEPHONE SYSTEM TO COVER THE MIDDLE PART OF IRAQ (OUTSIDE BAGHDAD) COVERING 20 CITIES AND TOWNSHIPS	1	
	AND HIGHWAY ROADS CONNECTING THEM WITH A TOTAL DISTANCE OF ABOUT 1200 KM. TOTAL SUBSCRIBER CAPACITY IS AROUND 100000		
	SUBSCRIBERS. BELOW ARE THE MAIN REQUIREMENTS FOR THE PROJECTS. DETAILS		
	WILL BE SUPPLIED AFTER FINAL DESIGN AND NEGOTIATION WITH THE SUPPLIERS:		
07-09-10001	BASE TRANSCEIVER STATIONS (BTS)	120 TO 140	
07-09-10101	SMALL CAPACITY MICROWAVE LINKS (7 & 18 GHZ)	120 TO 140	
07-09-10201	BASE STATION CONTROLLER (BSC)	2 TO 3	
07-09-10301	MOBILE SERVICE SWITCHING CENTER (MSC/VLR)	1	
07-09-10401	HOME LOCATION REGISTER (HLR/AUC)	1	
07-09-10501	OPERATION AND MAINTENANCE CENTER (OMC)	1	
07-09-10601	SUBSCRIBERS HANDHELD TERMINALS	100000	
07-09-10701	PREPAID SERVICE PLATFORM	1	
07-09-10901	VOICE MAIL SERVICE PLATFORM	1	
07-09-11101	SHORT MESSAGE SERVICE CENTER	1	
07-09-11301	GPRS SYSTEM	1	
07-09-11501	PRIVATE MOBILE RADIO FUNCTIONS (WITHIN GSM)	1	
07-09-11701	ANY OTHER ITEMS OR EQUIPMENT NECESSARY	AS NECESSARY	
	FOR THE NORMAL AND ORDERLY OPERATION OF		
	THE COMPLETE SYSTEM SUCH AS POWER		
	SUPPLY EQUIPMENT, TOWERS, SHELTERS, AIR-		
	CONDITIONING , SERVICE VEHICLES ETC. (*) NOTE: THE EXACT CONFIGURATION OF THE		
	SYSTEM AND DETAILS AND QUANTITIES OF THE		
	EQUIPMENT WILL BE SUBMITTED LATER AFTER		
	COMPLETION OF THE TECHNICAL STUDIES AND		
	NEGOTIATION WITH THE CONTRACTING		
	SUPPLIERS. THE NUMBERING FOR THE DETAILS		
	WILL USE THE VACANT SPACES BETWEEN THE		
	GIVEN NUMBERS ABOVE.		

REQUIREMENTS FOR A SECOND GSM MOBILE NETWORK FOR BAGHDAD (*)

CODE	ITEM	QTY	

07.00.00000		
07-09-20000	1800 MHZ GSM MOBILE TELEPHONE SYSTEM TO	1
	COVER THE CAPITAL CITY OF BAGHDAD WITH A	
	TOTAL SUBSCRIBER CAPACITY OF 100000	
	SUBSCRIBERS. BELOW ARE THE MAIN	
	REQUIREMENTS FOR THE PROJECTS. DETAILS	
	WILL BE SUPPLIED AFTER FINAL DESIGN AND	
	NEGOTIATION WITH THE SUPPLIERS:	
07-09-20001	BASE TRANSCEIVER STATIONS (BTS)	120 TO 160
07-09-20101	SMALL CAPACITY MICROWAVE LINKS (7 & 18 GHZ)	120 TO 160
07-09-20201	BASE STATION CONTROLLER (BSC)	2 TO 3
07-09-20301	MOBILE SERVICE SWITCHING CENTER (MSC)	1
07-09-20401	HOME LOCATION REGISTER (HLR/AUC)	1
07-09-20501	OPERATION AND MAINTENANCE CENTER (OMC)	1
07-09-20601	SUBSCRIBERS HANDHELD TERMINALS	100000
07-09-20701	PREPAID SERVICE PLATFORM	1
07-09-20901	VOICE MAIL SERVICE PLATFORM	1
07-09-21101	SHORT MESSAGE SERVICE CENTER	1
07-09-21301	GPRS SYSTEM	1
07-09-21501	PRIVATE MOBILE RADIO FUNCTIONS (WITHIN GSM)	1
07-09-21701	ANY OTHER ITEMS OR EQUIPMENT NECESSARY	AS NECESSARY
	FOR THE NORMAL AND ORDERLY OPERATION OF	
	THE COMPLETE SYSTEM SUCH AS POWER	
	SUPPLY EQUIPMENT , TOWERS , SHELTERS , AIR-	
	CONDITIONING, SERVICE VEHICLESETC.	
	(*) NOTE: THE EXACT CONFIGURATION OF THE	
	SYSTEM AND DETAILS AND QUANTITIES OF THE	
	EQUIPMENT WILL BE SUBMITTED LATER AFTER	
	COMPLETION OF THE TECHNICAL STUDIES AND	
	NEGOTIATION WITH THE CONTRACTING	
	SUPPLIERS. THE NUMBERING FOR THE DETAILS	
	WILL USE THE VACANT SPACES BETWEEN THE	
	GIVEN NUMBERS ABOVE.	

WIRELESS LOCAL LOOP (WLL) REQUIREMENTS (*)

CODE	ITEM	QTY	
07-09-30000	WIRELESS LOCAL LOOP (WLL) SYSTEMS WITH A	1	
	TOTAL CAPACITY OF 50000 SUBSCRIBERS TO		
	SERVE SUBURBANE AND OPEN AREAS. THE		
	SYSTEM TECHNOLOGY TO BE ADOBTED WILL BE		
	DECIDED LATER. THE SYSTEM WILL COMPRISE		
	THE FOLLOWING MAIN ITEMS:		
07-09-30001		AS NECESSARY	
	RADIO BASE STATIONS FOR UP TO ABOUT 50	FOR UP TO 50 TX	
	TRANSMITTING SITES - NUMBERS TO BE DECIDED	SITES	
	LATER ACCORDING TO THE TECHNO; OGY TO BE		
	CHOSEN AND FINAL CONFIGURATION.		
07-09-30002	power cables / contractor oil	10150	unit
07-09-30101	BASE STATION CONTROLLER (BSC)	20-30	

07-09-30201	INTERCONNECTING LOW CAPACITY MICROWAVE LINKS	20-30	
07-09-30301	SUBSCRIBERS FIXED TERMINALS	50000	
07-09-31701	ANY OTHER ITEMS OR EQUIPMENT NECESSARY FOR THE NORMAL AND ORDERLY OPERATION OF THE COMPLETE SYSTEM SUCH AS POWER SUPPLY EQUIPMENT, TOWERS, SHELTERS, AIR- CONDITIONING, SERVICE VEHICLESETC.	AS NECESSARY	
	(*) NOTE: THE EXACT CONFIGURATION OF THE SYSTEM AND DETAILS AND QUANTITIES OF THE EQUIPMENT WILL BE SUBMITTED LATER AFTER COMPLETION OF THE TECHNICAL STUDIES AND CHOICE OF TECHNOLOGY AND NEGOTIATION WITH THE CONTRACTING SUPPLIERS. THE		
	NUMBERING FOR THE DETAILS WILL USE THE VACANT SPACES BETWEEN THE GIVEN NUMBERS ABOVE.		

PAGING SYSTEM REQUIREMENTS (*)

CODE	ITEM	QTY	

07-09-40000	PAGING SYSTEM WITH A CAPACITY OF 10000 SUBSCRIBERS IS REQUIRED TO SERVE THE CAPITAL CITY OF BAGHDAD AND SURROUNDING AREAS UP TO 50 KM RADIUS. THE FREQUENCY OF OPERATION WILL BE IN THE VHF BAND. THE MAIN REQUIREMENTS FOR THE SYSTEM ARE AS FOLLOWS:	1	
07-09-40001		AS NECESSARY	
07-09-40101		AS NECESSARY	
07-09-40201	COMPUTERS	AS NECESSARY	
07-09-40301	SUBSCRIBERS PAGERS	10000	
07-09-41701	ANY OTHER ITEMS OR EQUIPMENT NECESSARY FOR THE NORMAL AND ORDERLY OPERATION OF THE COMPLETE SYSTEM SUCH AS POWER SUPPLY EQUIPMENT, TOWERS, SHELTERS, AIR- CONDITIONING, SERVICE VEHICLESETC.	AS NECESSARY	
	(*) NOTE: THE EXACT CONFIGURATION OF THE SYSTEM AND DETAILS AND QUANTITIES OF THE EQUIPMENT WILL BE SUBMITTED LATER AFTER COMPLETION OF THE TECHNICAL STUDIES AND CHOICE OF TECHNOLOGY AND NEGOTIATION WITH THE CONTRACTING SUPPLIERS. THE NUMBERING FOR THE DETAILS WILL USE THE VACANT SPACES BETWEEN THE GIVEN NUMBERS ABOVE.		

PRIVATE MOBILE RADIO SYSTEMS REQUIREMENTS (*)

CODE	ITEM	QTY	

07-09-50000	FIFTEEN INDEPENDENT PRIVATE MOBILE RADIO (PMR) SYSTEM TO SERVE MAINTENANCE REQUIREMENTS OF IRAQI TELECOMMUNICATIONS AND POSTS COMPANY (ITPC) IN BAGHDAD AND FOURTEEN OTHER CITIES IN IRAQ. THE MAIN REQUIREMENTS ARE AS FOLLOWS:	15	
07-09-50001	RADIO BASE/REPEATER STATIONS	60	
07-09-50101	CONTROLE AND DISPATCH EQUIPMENT	15	
07-09-50201	HAND HELD USER TERMINALS	900	
07-09-50301	VEHICULAR USER TERMINAL	900	
07-09-50401	FIXED USER TERMINALS	450	
07-09-50501	ANY OTHER ITEMS OR EQUIPMENT NECESSARY FOR THE NORMAL AND ORDERLY OPERATION OF THE COMPLETE SYSTEM SUCH AS POWER SUPPLY EQUIPMENT, TOWERS, SHELTERS, AIR- CONDITIONING, SERVICE VEHICLESETC. (*) NOTE: THE EXACT CONFIGURATION OF THE SYSTEM AND DETAILS AND QUANTITIES OF THE EQUIPMENT WILL BE SUBMITTED LATER AFTER	AS NECESSARY	
	COMPLETION OF THE TECHNICAL STUDIES AND CHOICE OF TECHNOLOGY AND NEGOTIATION WITH THE CONTRACTING SUPPLIERS. THE NUMBERING FOR THE DETAILS WILL USE THE VACANT SPACES BETWEEN THE GIVEN NUMBERS ABOVE.		

E-MAIL SERVICE REQUIREMENTS (*)

CODE	ITEM	QTY	

07-09-60000	E-MAIL SYSTEM WITH THE FOLLOWING	1	1
	REQUIREMENTS AND SPECIFICATIONS:		
07-09-60001	SYSTEM CAPACITY : 50000 SUBSCRIBERS	50000	
07-09-60101	FIVE NODES TO CONNECT TO PSTN VIA 2 MB/S	5	
	LINES.		
07-09-60201	NECESSARY SERVERS THAT CAN HANDLE THE	AS NECESSARY	
	TRAFFIC REQUIREMENTS		
07-09-60301	NECESSARY STORAGE MEDIA FOR HANDLING THE	AS NECESSARY	
	STORAGE REQUIREMENTS FOR THE		
	SUBSCRIBERS WITH RESONABLE MEMORY		
	ALLOCATION FOR EACH SUBSCRIBER.		
07-09-60401	ACCESS SERVERS CAPBLE OF HANDLING THE	AS NECESSARY	
	TRAFFIC AND THE NUMBER OF SUBSCRIBERS.		
07-09-60501	MODEM POOLS WITH APPROPRIATE NUMBER OF	AS NECESSARY	
	MODEMS		
07-09-60601	NECESSARY ROUTERS TO CONNECT TO E-MAIL	AS NECESSARY	
	GATEWAY		_
07-09-60701		AS NECESSARY	
	NECESSARY FIREWALL , PROXY SERVERS ETC		
07.00.00004	TO ENSURE THE SECURITY OF THE SYSTEM E-MAIL SYSTEM SOFTWARE BASED ON MOST UP		_
07-09-60801	TO DATE PROTOCOLES THAT PROVIDE THE	AS NECESSARY	
	LATEST E-MAIL SERVICE OFFERING		
	(*) NOTE: THE EXACT CONFIGURATION OF THE		_
	SYSTEM AND DETAILS AND QUANTITIES OF THE		
	EQUIPMENT WILL BE SUBMITTED LATER AFTER		
	COMPLETION OF THE TECHNICAL STUDIES AND		
	CHOICE OF TECHNOLOGY AND NEGOTIATION		
	WITH THE CONTRACTING SUPPLIERS. THE		
	NUMBERING FOR THE DETAILS WILL USE THE		
	VACANT SPACES BETWEEN THE GIVEN NUMBERS		
	ABOVE.		
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