

**ANNEX SEVEN / Telecommunications**

**Sub - sector : Upper Euphratus Digital Microwave ( Baghdad –Qaim )**

Code	Item Description			
07-03-02100	SDH Microwave Radio Equipment			
07-03-02101	-STM-1 6(8)GHZ, (4+1),or (11)GHZ Radio Terminals With Frequency &Space Diversity all complete.			
07-03-02102	-128(64) QAM Modems Modules.			
07-03-02103	-Protection Switch.			
07-03-02104	-Engineering order wire channel.			
07-03-02105	-2Mb/s auxiliary traffic.			
07-03-02106	-Interface to central Network management.			
07-03-02107	-Peripherals ( Lap Top PC , etc..... )			
07-03-02108	-Rack with 48V. d/c unit (duplicated ).			
07-03-02109	-Installation & Maintenance tools & materials.			
07-03-02110	-Spare parts & spare units.-Documentation.			
07-03-02111				
07-03-02119	Microwave Antennas			
07-03-02120	-Parabolic Dish ( 1.8m.-3.7m. diameter ).			
07-03-02121	-Antenna Radiation Element with ( 1 / 2 / 4)Ports.			
07-03-02122	-Connector Flanges.			
07-03-02123	-Tower Attachment.			
07-03-02124	-Installation & Maintenance tools & materials.			
07-03-02129	Microwave Feeders			
07-03-02130	-Elliptical waveguide for 13/11/6 GHZ band .			
07-03-02131	-Medium capacity dehydrator.			
07-03-02132	-Pressure Window.			
07-03-02133	-Fixture clamps.			
07-03-02134	-Earthing Kits.			
07-03-02135	-Installation materials & tools.			
07-03-02136	-Documentation.			
07-03-02139	DC Power Plant			
07-03-02140	-48V,300 Ah Lead-Acid Sealed-Batteries(2sets).			
07-03-02141	-48V,300 Ah Lead-Acid Sealed-Batteries(2sets).			
07-03-02142	-Cabinet.			
07-03-02143	-Installation materials , cables, tools.- Documentation.			
07-03-02144				
07-03-02149	Air Conditioners			
07-03-02150	-Duplicated 18000 / 24000 BTU Unit.			
07-03-02151	-Piping & installation materials & fixtures.			
07-03-02152	-Spare parts.			
07-03-02153	-Documentation.			
07-03-02159	Diesel Engine Generator			
07-03-02160	-Capacity 50 KVA, Dual Set.			
07-03-02161	-Daily Fuel Tank.			
07-03-02162	-Fan.			
07-03-02163	-Piping.			

07-03-02164	-Control cubicle & Alarms.			
07-03-02165	-Installation Materials & Tools.			
07-03-02166	-Spare parts & PCB's.			
07-03-02167	-Documentation.			
07-03-02169	SDH Multiplex Equipment			
07-03-02170	-STM-4 Multiplexer Subrack with redundant common units			
07-03-02171	-STM-1 Multiplex Subrack with redundant common units			
07-03-02172	-Tributary Cards ( 3x34Mb/s, 6x(21x2Mb/s),4x(140/155			
07-03-02173	Mb/s).			
07-03-02174	-Access & Connection Modules.			
07-03-02175	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP contained in subracks with common units & with function units, controllers ,connectors, ETC.with compression equ. .... -Full Matrix ( duplicated).			
07-03-02176	-Auxiliary /Engineering order wire.			
07-03-02177	-Telephone Handset.			
07-03-02178	-Installation Materials & Tools.			
07-03-02179	-Racks with power supply unit (duplicated)and cable head.			
07-03-02180	-Digital Distribution Frames for 300systems.			
07-03-02181	-Primary Multiplex ( PCM-30CH.) Subrack with			
07-03-02182	common units & channel PCB's of different			
07-03-02183	configurations.			
07-03-02184	-Equipment craft terminal for programmed control			
07-03-02185	and display with operation software . -Spare parts & spare units. -Installation materials & tools. -Documentation.			
07-03-02189	Network Management Equipment			
07-03-02190	-Central Network Management System platform(Hard ware)			
07-03-02191	-Central Network Management System software packages.			
07-03-02192	-Local Network Management Equipment ( craft terminals).			
07-03-02193	-Mediation , Interface, and connection cards &modules.			
07-03-02194	-Installation Materials & Tools.			
07-03-02195	-Documentation..			
07-03-02119	Test Instruments			
07-03-02200	-Digital Multimeter.			
07-03-02201	-Frequency Counter .			
07-03-02202	-Power Meter .			
07-03-02203	-PCM Multiplex Tester .			
07-03-02204	-RF Sweep Generator .			
07-03-02205	-VSWR Test Set.			
07-03-02206	-RF Spectrum Analyzer.			
07-03-02207	-SDH Analyzer for STM-1.			
07-03-02208	-TX / RX MW Link Analyzer .			
07-03-02209	-PDH Analyzer ( 2Mb/s ).			
07-03-02210	-Oscilloscope 500 MHZ Dual channel.			
07-03-02211	-Vedio Test Set.			
07-03-02212	-RF Attenuators Fixed & Variable ( 0 - 60 )DB.			
07-03-02213	-Cables & Adapters.			
07-03-02214	-Waveguide / Coax. Adapters.			
07-03-02219	Specific Tools			
07-03-02220	-20 Ton Lorry with crane & winch.			
07-03-02221	-Specific Maintenance Tools			
07-03-02222	-Station Tools			
07-03-02223	-Installation Tools.			
07-03-02229	Services			
07-03-02230	-Factory Training Abroad.			

07-03-02231	-Training In Iraq.			
07-03-02232	-Supervision Services (Supplier Expert).			

**ANNEX SEVEN / Telecommunications**  
**Sub- sector : Upper Euphratus Digital Microwave ( Baghdad –Qaim )**  
**Site - Name : Assas**

Code	Item Description			
07-03-03100	SDH Microwave Radio Equipment			
07-03-03101	-STM-1,6(8)GHZ (4+1), Radio Terminals With Frequency Diversity / Space Diversity all complete.			
07-03-03102	-128(64) QAM Modems Modules.			
07-03-03103	-Protection Switch.			
07-03-03104	-Engineering order wire channel.			
07-03-03105	-2Mb/s auxiliary traffic.			
07-03-03106	-Interface to central Network management.			
07-03-03107	-Peripherals ( Lap Top PC , ETC..... )			
07-03-03108	-Rack with 48V. d/c unit (duplicated ).			
07-03-03109	-Installation & Maintenance tools & materials.			
07-03-03110	-Spare parts & spare units.			
07-03-03111	-Documentation.			
07-03-03119	Microwave Antennas			
07-03-03120	-Parabolic Dish ( 2.4m -3.0.-3.3m. diameter ).			
07-03-03121	-Antenna Radiation Element with ( 1 / 2 / 4)Ports.			
07-03-03122	-Connector Flanges.			
07-03-03123	-Tower Attachment.			
07-03-03124	-Installation & Maintenance tools & materials.			
07-03-03129	Microwave Feeders			
07-03-03130	-Elliptical waveguide for 6 GHZ band .			
07-03-03131	-Medium capacity dehydrator.			
07-03-03132	-Pressure Window.			
07-03-03133	-Fixture clamps.			
07-03-03134	-Earthing Kits.			
07-03-03135	-Installation materials & tools.			
07-03-03136	-Documentation.			
07-03-03139	DC Power Plant			
07-03-03140	-Modular switched rectifier system 48V / 30Ampere module (2+1) configuration.			
07-03-03141	-48V, 200Ah Lead-Acid Sealed-Batteries(2sets).			
07-03-03142	-Cabinet.			
07-03-03143	-Installation materials , cables, tools.			
07-03-03144	-Documentation.			
07-03-03149	Air Conditioners			
07-03-03150	-Duplicated 24000 BTU Unit.			
07-03-03151	-Piping & installation materials & fixtures.			
07-03-03152	-Spare parts.			
07-03-03153	-Documentation.			
07-03-03159	Diesel Engine Generator			
07-03-03160	-Capacity 50 KVA, Dual Set.			
07-03-03161	-Daily Fuel Tank.			
07-03-03162	-Fan.			
07-03-03163	-Piping.			
07-03-03164	-Control cubicle & Alarms.			
07-03-03165	-Installation Materials & Tools.			
07-03-03166	-Spare parts & PCB's.			
07-03-03167	-Documentation.			
07-03-03169	SDH Multiplex Equipment			
07-03-03170	-STM-4 Mutlplexer Subrack with redundant common units			

07-03-03171	-STM-1 Multiplex Subrack with redundant common units			
07-03-03172	-Tributary Cards ( 3x34Mb/s, 6x(21x2Mb/s),4x(140/155			
07-03-03173	Mb/s).			
07-03-03174	-Access & Connection Modules.			
07-03-03175	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP containd in subracks with			
07-03-03176	common units & with function units,controllers ,connectors, ETC.....			
07-03-03177	-Full Matrix ( duplicated).			
07-03-03178	-Auxiliary /Engineering order wire.			
07-03-03179	-Telephone Handset.			
07-03-03180	-Installation Materials & Tools.			
07-03-03181	-Racks with power supply unit (duplicated)and cable head.			
07-03-03182	-Digital Distribution Frames.			
07-03-03183	-Primary Multiplex ( PCM-30CH.) Subrack with common units & channel PCB's of			
07-03-03184	different configurations.			
07-03-03185	-Equipment craft terminal for programmed control			
	and display with operation soft ware .			
	-Spare parts & spare units.			
	-Installation materials & tools.			
	-Documentation.			
07-03-03189	Network Management Equipment			
07-03-03190	-Central Network Management System platform(Hard ware)			
07-03-03191	-Central Network Management System software packages.			
07-03-03192	-Local Network Management Equipment ( craft terminals).			
07-03-03193	-Mediation , Interface, and connection cards &modules.			
07-03-03194	-Installation Materials & Tools.			
07-03-03195	-Documentation..			
07-03-03119	Test Instruments			
07-03-03200	-Digital Multimeter.			
07-03-03201	-Frequency Counter .			
07-03-03202	-Power Meter .			
07-03-03203	-PCM Multiplex Tester .			
07-03-03204	-RF Sweep Generator .			
07-03-03205	-VSWR Test Set.			
07-03-03206	-Scalar Network Analyzer .			
07-03-03207	-RF Spectrum Analyzer.			
07-03-03208	-SDH Analyzer for STM-1.			
07-03-03209	-TX / RX MW Link Analyzer .			
07-03-03210	-PDH Analyzer ( 2Mb/s ).			
07-03-03211	-Oscilloscope 500 MHZ Dual channel.			
07-03-03212	-Vedio Test Set.			
07-03-03213	-RF Attenuators Fixed & Variable ( 0 - 60 )DB.			
07-03-03214	-Cables & Adapters.			
07-03-03215	-Waveguide / Coax. Adapters.			
07-03-03216	-Documentation.			
07-03-03219	Specific Tools			
07-03-03220	-20 Ton Lorry with crane & winch.			
07-03-03221	-Specific Maintenance Tools			
07-03-03222	-Station Tools			
07-03-03223	-Special Tools for waveguide.			
07-03-03224	-Installation Tools			
07-03-03229	Services			
07-03-03230	-Factory Training Abroad.			
07-03-03231	-Training In Iraq.			
07-03-03232	-Supervision Services (Supplier Expert).			

**ANNEX SEVEN / Telecommunications**  
**Sub - sector : : Upper Euphratus Digital Microwave ( Baghdad –Qaim )**  
**Site - Name : Faluja**

Code	Item Description			
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07-03-04100	SDH Microwave Radio Equipment			
07-03-04101	-STM-1,6GHZ (4+1)&(2+1) 6 G, Radio Terminal. With Frequency Diversity / Space Diversity all complete.			
07-03-04102	-128(64) QAM Modems Modules.			
07-03-04103	-Protection Switch.			
07-03-04104	-Engineering order wire channel.			
07-03-04105	-2Mb/s auxiliary traffic.			
07-03-04106	-Interface to central Network management.			
07-03-04107	-Peripherals ( Lap Top PC , ETC..... )			
07-03-04108	-Rack with 48V. d/c unit (duplicated ).			
07-03-04109	-Installation & Maintenance tools & materials.			
07-03-04110	-Spare parts & spare units.			
07-03-04111	-Documentation.			
07-03-04119	Microwave Antennas			
07-03-04120	-Parabolic Dish ( 1.8m.-3.7m. diameter ).			
07-03-04121	-Antenna Radiation Element with ( 1 / 2 / 4)Ports.			
07-03-04122	-Connector Flanges.			
07-03-04123	-Tower Attachment.			
07-03-04124	-Installation & Maintenance tools & materials.			
07-03-04129	Microwave Feeders			
07-03-04130	-Elliptical waveguide for 13/11/8/6 GHZ band .			
07-03-04131	-Medium capacity dehydrator.			
07-03-04132	-Pressure Window.			
07-03-04133	-Fixture clamps.			
07-03-04134	-Earthing Kits.			
07-03-04135	-Installation materials & tools.			
07-03-04136	-Documentation.			
07-03-04139	DC Power Plant			
07-03-04140	-Modular switched rectifier system 48V / 30Ampere module (3+1) configuration.			
07-03-04141	-48V, 200Ah Lead-Acid Sealed-Batteries(2sets).			
07-03-04142	-Cabinet.			
07-03-04143	-Installation materials , cables, tools.			
07-03-04144	-Documentation.			
07-03-04149	Air Conditioners			
07-03-04150	-Duplicated 18000 / 24000 BTU Unit.			
07-03-04151	-Piping & installation materials & fixtures.			
07-03-04152	-Spare parts.			
07-03-04153	-Documentation.			
07-03-04159	Diesel Engine Generator			
07-03-04160	-Capacity 50 KVA, Dual Set.			
07-03-04161	-Daily Fuel Tank.			
07-03-04162	-Fan.			
07-03-04163	-Piping.			
07-03-04164	-Control cubicle & Alarms.			
07-03-04165	-Installation Materials & Tools.			
07-03-04166	-Spare parts & PCB's.			
07-03-04167	-Documentation.			
07-03-04169	SDH Multiplex Equipment			
07-03-04170	-STM-4 Mutliplexer Subrack with redundant common units			
07-03-04171	-STM-1 Multiplex Subrack with redundant common units			
07-03-04172	-Tributary Cards ( 3x34Mb/s,6(21x2Mb/s),4x(140/155 Mb/s).			
07-03-04173	-Access & Connection Modules.			
07-03-04174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP containd in subracks with common units & with function units,controllers ,connectors, ETC.....			
07-03-04175	-Full Matrix ( duplicated).			
07-03-04176	-Auxiliary /Engineering order wire.			
07-03-04177	-Telephone Handset.			
07-03-04178	-Installation Materials & Tools.			

07-03-04179	-Racks with power supply unit (duplicated)and cable head.			
07-03-04180	-Digital Distribution Frames.			
07-03-04181	-Primary Multiplex ( PCM-30CH.) Subrack with common units & channel PCB's of different configurations.			
07-03-04182	-Equipment craft terminal for programmed control and display with operation software .			
07-03-04183	-Spare parts & spare units.			
07-03-04184	-Installation materials & tools.			
07-03-04185	-Documentation.			
07-03-04189	Network Management Equipment			
07-03-04190	-Central Network Management System platform(Hard ware)			
07-03-04191	-Central Network Management System software packages.			
07-03-04192	-Local Network Management Equipment ( craft terminals).			
07-03-04193	-Mediation , Interface, and connection cards &modules.			
07-03-04194	-Installation Materials & Tools.			
07-03-04195	-Documentation..			
07-03-04119	Test Instruments			
07-03-04200	-Digital Multimeter.			
07-03-04201	-Frequency Counter .			
07-03-04202	-Power Meter .			
07-03-04203	-PCM Multiplex Tester .			
07-03-04204	-RF Sweep Generator .			
07-03-04205	-VSWR Test Set.			
07-03-04206	-Scalar Network Analyzer .			
07-03-04207	-RF Spectrum Analyzer.			
07-03-04208	-SDH Analyzer for STM-1.			
07-03-04209	-TX / RX MW Link Analyzer .			
07-03-04210	-PDH Analyzer ( 2Mb/s ).			
07-03-04211	-Oscilloscope 500 MHZ Dual channel.			
07-03-04212	-Vedio Test Set.			
07-03-04213	-RF Attenuators Fixed & Variable ( 0 - 60 )DB.			
07-03-04214	-Cables & Adapters.			
07-03-04215	-Waveguide / Coax. Adapters.			
07-03-04216	-Documentation.			
07-03-04219	Specific Tools			
07-03-04220	-20 Ton Lorry with crane & winch.			
07-03-04221	-Specific Maintenance Tools			
07-03-04222	-Station Tools			
07-03-04223	-Special Tools for waveguide.			
07-03-04224	-Installation Tools.			
07-03-04229	Services			
07-03-04230	-Factory Training Abroad.			
07-03-04231	-Training In Iraq.			
07-03-04232	-Supervision Services (Supplier Expert).			

**ANNEX SEVEN / Telecommunications**  
**Sub - sector : : Upper Euphratus Digital Microwave ( Baghdad –Qaim )**  
**Site - Name : Ramadi-T**

Code	Item Description			
07-03-05100	SDH Microwave Radio Equipment			
07-03-05101	-STM-1 6GHZ, (4+1),& (1+1) ,11GHZ Radio Terminals With Frequency &Space Diversity all complete.			
07-03-05102	-128(64) QAM Modems Modules.			
07-03-05103	-Protection Switch.			
07-03-05104	-Engineering order wire channel.			
07-03-05105	-2Mb/s auxiliary traffic.			
07-03-05106	-Interface to central Network management.			
07-03-05107	-Peripherals ( Lap Top PC , etc..... )			

07-03-05108	-Rack with 48V. d/c unit (duplicated ).			
07-03-05109	-Installation & Maintenance tools & materials.			
07-03-05110	-Spare parts & spare units.			
07-03-05111	-Documentation.			
07-03-05119	Microwave Antennas			
07-03-05120	-Parabolic Dish ( 1.8m.-3.7m. diameter ).			
07-03-05121	-Antenna Radiation Element with ( 1 / 2 / 4)Ports.			
07-03-05122	-Connector Flanges.			
07-03-05123	-Tower Attachment.			
07-03-05124	-Installation & Maintenance tools & materials.			
07-03-05129	Microwave Feeders			
07-03-05130	-Elliptical waveguide for 13/11/6 GHZ band .			
07-03-05131	-Medium capacity dehydrator.			
07-03-05132	-Pressure Window.			
07-03-05133	-Fixture clamps.			
07-03-05134	-Earthing Kits.			
07-03-05135	-Installation materials & tools.			
07-03-05136	-Documentation.			
07-03-05139	DC Power Plant			
07-03-05140	-Modular switched rectifier system 48V / 30Ampere module (2+1) configuration.			
07-03-05141	-48V, 200Ah Lead-Acid Sealed-Batteries(2sets).			
07-03-05142	-Cabinet.			
07-03-05143	-Installation materials , cables, tools.			
07-03-05144	- Documentation.			
07-03-05149	Air Conditioners			
07-03-05150	-Duplicated 18000 / 24000 BTU Unit.			
07-03-05151	-Piping & installation materials & fixtures.			
07-03-05152	-Spare parts.			
07-03-05153	-Documentation.			
07-03-05159	Diesel Engine Generator			
07-03-05160	-Capacity 50 KVA, Dual Set.			
07-03-05161	-Daily Fuel Tank.			
07-03-05162	-Fan.			
07-03-05163	-Piping.			
07-03-05164	-Control cubicle & Alarms.			
07-03-05165	-Installation Materials & Tools.			
07-03-05166	-Spare parts & PCB's.			
07-03-05167	-Documentation.			
07-03-05169	SDH Multiplex Equipment			
07-03-05170	-STM-4 Mutliplexer Subrack with redundant common units			
07-03-05171	-STM-1 Multiplex Subrack with redundant common units			
07-03-05172	-Tributary Cards ( 3x34Mb/s,6x(21x2Mb/s),4x(140/155			
07-03-05173	Mb/s).			
07-03-05174	-Access & Connection Modules.			
07-03-05175	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP contained in subracks with common units & with function units,controllers ,connectors, ETC...with compression			
07-03-05176	eq.....			
07-03-05177	-Full Matrix ( duplicated).			
07-03-05178	-Auxiliary /Engineering order wire.			
07-03-05179	-Telephone Handset.			
07-03-05180	-Installation Materials & Tools.			
07-03-05181	-Racks with power supply unit (duplicated)and cable head.			
07-03-05182	-Digital Distribution Frames for 300systems.			
07-03-05183	-Primary Multiplex ( PCM-30CH.) Subrack with			
07-03-05184	common units & channel PCB's of different			
07-03-05185	configurations.			
	-Equipment craft terminal for programmed control			

	and display with operation soft ware . -Spare parts & spare units. -Installation materials & tools. -Documentation.			
07-03-05189	Network Management Equipment			
07-03-05190	-Central Network Management System platform(Hard ware)			
07-03-05191	-Central Network Management System software packages.			
07-03-05192	-Local Network Management Equipment ( craft terminals).			
07-03-05193	-Mediation , Interface, and connection cards &modules.			
07-03-05194	-Installation Materials & Tools.			
07-03-05195	-Documentation..			
07-03-05119	Test Instruments			
07-03-05200	-Digital Multimeter.			
07-03-05201	-Frequency Counter .			
07-03-05202	-Power Meter .			
07-03-05203	-PCM Multiplex Tester .			
07-03-05204	-RF Sweep Generator .			
07-03-05205	-VSWR Test Set.			
07-03-05206	-Scalar Network Analyzer .			
07-03-05207	-RF Spectrum Analyzer.			
07-03-05208	-SDH Analyzer for STM-1.			
07-03-05209	-TX / RX MW Link Analyzer .			
07-03-05210	-PDH Analyzer ( 2Mb/s ).			
07-03-05211	-Oscilloscope 500 MHZ Dual channel.			
07-03-05212	-Vedio Test Set.			
07-03-05213	-RF Attenuators Fixed & Variable ( 0 - 60 )DB.			
07-03-05214	-Cables & Adapters.			
07-03-05215	-Waveguide / Coax. Adapters.			
07-03-05216	-Documentation.			
07-03-05219	Specific Tools			
07-03-05220	-20 Ton Lorry with crane & winch.			
07-03-05221	-Specific Maintenance Tools			
07-03-05222	-Station Tools			
07-03-05223	-Special Tools for waveguide.			
07-03-05224	-Installation Tools.			
07-03-05229	Services			
07-03-05230	-Factory Training Abroad.			
07-03-05231	-Training In Iraq.			
07-03-05232	-Supervision Services (Supplier Expert).			

**ANNEX SEVEN / Telecommunications**  
**Sub - sector : : Upper Euphratus Digital Microwave ( Baghdad –Qaim )**  
**Site - Name : Ramadi ex**

Code	Item Description			
07-03-18100	SDH Microwave Radio Equipment			
07-03-18101	-STM-1, 11 GHZ(3+1) Radio terminal equip. With Frequency & Space Diversity all complete.			
07-03-18102	-128(64) QAM Modems Modules.			
07-03-18103	-Protection Switch.			
07-03-18104	-Engineering order wire channel.			
07-03-18105	-2Mb/s auxiliary traffic.			
07-03-18106	-Interface to central Network management.			
07-03-18107	-Peripherals ( Lap Top PC , ETC..... )			
07-03-18108	-Rack with 48V. d/c unit (duplicated ).			
07-03-18109	-Installation & Maintenance tools & materials.			
07-03-18110	-Spare parts & spare units.			
07-03-18111	-Documentation.			



07-03-18112			
07-03-18113	Microwave Antennas		
07-03-18120	-Parabolic Dish ( 3 -3.7m. diameter ).		
07-03-18121	-Antenna Radiation Element with ( 1 / 2 )Ports.		
07-03-18122	-Connector Flanges.		
07-03-18123	-Tower Attachment.		
07-03-18124	-Installation & Maintenance tools & materials.		
07-03-18129	Microwave Feeders		
07-03-18130	-Elliptical waveguide for 8/6 GHZ band .		
07-03-18131	-Medium capacity dehydrator.		
07-03-18132	-Pressure Window.		
07-03-18133	-Fixture clamps.		
07-03-18134	-Earthing Kits.		
07-03-18135	-Installation materials & tools.		
07-03-18136	-Documentation.		
07-03-18139	DC Power Plant		
07-03-18140	-Modular switched rectifier system 48V / 30Ampere module (2+1) configuration.		
07-03-18141	-48V, 200Ah Lead-Acid Sealed-Batteries(2sets).		
07-03-18142	-Cabinet.		
07-03-18143	-Installation materials , cables, tools.		
07-03-18144	-Documentation.		
07-03-18149	Air Conditioners		
07-03-18150	-Duplicated 24000 BTU Unit.		
07-03-18151	-Piping & installation materials & fixtures.		
07-03-18152	-Spare parts.		
07-03-18153	-Documentation.		
07-03-18159	Diesel Engine Generator		
07-03-18160	-Capacity 50 KVA, triple Set.		
07-03-18161	-Daily Fuel Tank.		
07-03-18162	-Fan.		
07-03-18163	-Piping.		
07-03-18164	-Control cubicle & Alarms.		
07-03-18165	-Installation Materials & Tools.		
07-03-18166	-Spare parts & PCB's.		
07-03-18167	-Documentation.		
07-03-18169	SDH Multiplex Equipment		
07-03-18170	-STM-4 Mutliplexer Subrack with redundant common units		
07-03-18171	-STM-1 Multiplex Subrack with redundant common units		
07-03-18172	-Tributary Cards ( 3x34Mb/s),6x( 21x2Mb/s),4x(140/155 Mb/s ).		
07-03-18173	-Access & Connection Modules.		
07-03-18174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP contain		
07-03-18175	in subracks with common units & with function units,		
07-03-18176	controllers ,connectors, ETC.....		
07-03-18177	-Full Matrix ( duplicated).		
07-03-18178	-Auxiliary /Engineering order wire.		
07-03-18179	-Telephone Handset.		
07-03-18180	-Installation Materials & Tools.		
07-03-18181	-Racks with power supply unit (duplicated)and cable head.		
07-03-18182	-Digital Distribution Frames.		
07-03-18183	-Primary Multiplex ( PCM-30CH.) Subrack with common units & channel PCB's of different configurations.		
07-03-18184	-Equipment craft terminal for programmed control and display with operation software .		
07-03-18185	-Spare parts & spare units.		
	-Installation materials & tools.		
	-Documentation.		
07-03-18189	Network Management Equipment		
07-03-18190	-Central Network Management System platform(Hard ware)		
07-03-18191	-Central Network Management System software packages.		

07-03-18192	-Local Network Management Equipment ( craft terminals).			
07-03-18193	-Mediation , Interface, and connection cards &modules.			
07-03-18194	-Installation Materials & Tools.			
07-03-18195	-Documentation..			
07-03-18119	Test Instruments			
07-03-18200	-Digital Multimeter.			
07-03-18201	-Frequency Counter .			
07-03-18202	-Power Meter .			
07-03-18203	-PCM Multiplex Tester .			
07-03-18204	-RF Sweep Generator .			
07-03-18205	-VSWR Test Set.			
07-03-18206	-Scalar Network Analyzer .			
07-03-18207	-RF Spectrum Analyzer.			
07-03-18208	-SDH Analyzer for STM-1.			
07-03-18209	-TX / RX MW Link Analyzer .			
07-03-18210	-PDH Analyzer ( 2Mb/s ).			
07-03-18211	-Oscilloscope 500 MHZ Dual channel.			
07-03-18212	-Vedio Test Set.			
07-03-18213	-RF Attenuators Fixed & Variable ( 0 - 60 )DB.			
07-03-18214	-Cables & Adapters.			
07-03-18215	-Waveguide / Coax. Adapters.			
07-03-18216	-Documentation.			
07-03-18219	Specific Tools			
07-03-18220	-20 Ton Lorry with crane & winch.			
07-03-18221	-Specific Maintenance Tools			
07-03-18222	-Station Tools			
07-03-18223	-Special Tools for waveguide.			
07-03-18224	-Installation Tools.			
07-03-18229	Services			
07-03-18230	-Factory Training Abroad.			
07-03-18231	-Training In Iraq.			
07-03-18232	-Supervision Services (Supplier Expert).			

**ANNEX SEVEN / Telecommunications**

**Sub - sector : : Upper Euphratus Digital Microwave ( Baghdad –Qaim )**

**Site - Name : Mohamdiat**

Code	Item Description			
07-03-06100	SDH Microwave Radio Equipment			
07-03-06101	-STM-1 6GHZ, (3+1), 6 GHZ Radio Terminals With Frequency &Space Diversity all complete.			
07-03-06102	-128 (64)QAM Modems Modules.			
07-03-06103	-Protection Switch.			
07-03-06104	-Engineering order wire channel.			
07-03-06105	-2Mb/s auxiliary traffic.			
07-03-06106	-Interface to central Network management.			
07-03-06107	-Peripherals ( Lap Top PC , etc..... )			
07-03-06108	-Rack with 48V. d/c unit (duplicated ).			
07-03-06109	-Installation & Maintenance tools & materials.			
07-03-06110	-Spare parts & spare units.			
07-03-06111	-Documentation.			
07-03-06119	Microwave Antennas			
07-03-06120	-Parabolic Dish ( 1.8m.-3.7m. diameter ).			
07-03-06121	-Antenna Radiation Element with ( 1 / 2 / 4)Ports.			
07-03-06122	-Connector Flanges.			
07-03-06123	-Tower Attachment.			
07-03-06124	-Installation & Maintenance tools & materials.			
07-03-06129	Microwave Feeders			

07-03-06130	-Elliptical waveguide for 6/13/11/ GHZ band .		
07-03-06131	-Medium capacity dehydrator.		
07-03-06132	-Pressure Window.		
07-03-06133	-Fixture clamps.		
07-03-06134	-Earthing Kits.		
07-03-06135	-Installation materials & tools.		
07-03-06136	-Documentation.		
07-03-06139	DC Power Plant		
07-03-06140	-Modular switched rectifier system 48V / 30Ampere module (2+1) configuration.		
07-03-06141	-48V, 200Ah Lead-Acid Sealed-Batteries(2sets).		
07-03-06142	-Cabinet.		
07-03-06143	-Installation materials , cables, tools.		
07-03-06144	- Documentation.		
07-03-06149	Air Conditioners		
07-03-06150	-Duplicated 18000 / 24000 BTU Unit.		
07-03-06151	-Piping & installation materials & fixtures.		
07-03-06152	-Spare parts.		
07-03-06153	-Documentation.		
07-03-06159	Diesel Engine Generator		
07-03-06160	-Capacity 50 KVA, Triple Set.		
07-03-06161	-Daily Fuel Tank.		
07-03-06162	-Fan.		
07-03-06163	-Piping.		
07-03-06164	-Control cubicle & Alarms.		
07-03-06165	-Installation Materials & Tools.		
07-03-06166	-Spare parts & PCB's.		
07-03-06167	-Documentation.		
07-03-06169	SDH Multiplex Equipment		
07-03-06170	-STM-4 Multiplexer Subrack with redundant common units		
07-03-06171	-STM-1 Multiplex Subrack with redundant common units		
07-03-06172	-Tributary Cards ( 3x34Mb/s,6x(21x2Mb/s),4x(140/155 Mb/s).		
07-03-06173	-Access & Connection Modules.		
07-03-06174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP contained in subracks with common units & with function units,controllers ,connectors, ETC.....		
07-03-06175	-Full Matrix ( duplicated).		
07-03-06176	-Auxiliary /Engineering order wire.		
07-03-06177	-Telephone Handset.		
07-03-06178	-Installation Materials & Tools.		
07-03-06179	-Racks with power supply unit (duplicated)and cable head.		
07-03-06180	-Digital Distribution Frames for 300systems.		
07-03-06181	-Spare parts & spare units.		
07-03-06182	common units & channel PCB's of different		
07-03-06183	configurations.		
07-03-06184	-Equipment craft terminal for programmed control		
07-03-06185	and display with operation software .		
	-Spare parts & spare units.		
	-Installation materials & tools.		
	-Documentation.		
07-03-06189	Network Management Equipment		
07-03-06190	-Central Network Management System platform(Hardware)		
07-03-06191	-Central Network Management System software packages.		
07-03-06192	-Local Network Management Equipment ( craft terminals).		
07-03-06193	-Mediation , Interface, and connection cards &modules.		
07-03-06194	-Installation Materials & Tools.		
07-03-06195	-Documentation..		
07-03-06119	Test Instruments		
07-03-06200	-Digital Multimeter.		
07-03-06201	-Frequency Counter .		
07-03-06202	-Power Meter .		

07-03-06203	-PCM Multiplex Tester .			
07-03-06204	-RF Sweep Generator .			
07-03-06205	-VSWR Test Set.			
07-03-06206	-Scalar Network Analyzer .			
07-03-06207	-RF Spectrum Analyzer.			
07-03-06208	-SDH Analyzer for STM-1.			
07-03-06209	-TX / RX MW Link Analyzer .			
07-03-06210	-PDH Analyzer ( 2Mb/s ).			
07-03-06211	-Oscilloscope 500 MHZ Dual channel.			
07-03-06212	-Vedio Test Set.			
07-03-06213	-RF Attenuators Fixed & Variable ( 0 - 60 )DB.			
07-03-06214	-Cables & Adapters.			
07-03-06215	-Waveguide / Coax. Adapters.			
07-03-06216	-Documentation.			
07-03-06219	Specific Tools			
07-03-06220	-20 Ton Lorry with crane & winch.			
07-03-06221	-Specific Maintenance Tools			
07-03-06222	-Station Tools			
07-03-06223	-Special Tools for waveguide.			
07-03-06224	-Installation Tools.			
07-03-06229	Services			
07-03-06230	-Factory Training Abroad.			
07-03-06231	-Training In Iraq.			
07-03-06232	-Supervision Services (Supplier Expert).			

**ANNEX SEVEN / Telecommunications**

**Sub - : Upper Euphratus Digital Microwave ( Baghdad –Qaim )**

**Site - Name : Heet Ex**

Code	Item Description			
07-03-07100	SDH Microwave Radio Equipment			
07-03-07101	-STM-1, 6GHZ (3+1), Radio terminal eq .			
07-03-07102	With Frequency & Space Diversity all complete.			
07-03-07103	-128(64) QAM Modems Modules.			
07-03-07104	-Protection Switch.			
07-03-07105	-Engineering order wire channel.			
07-03-07106	-2Mb/s auxiliary traffic.			
07-03-07107	-Interface to central Network management.			
07-03-07108	-Peripherals ( Lap Top PC , ETC..... )			
07-03-07109	-Rack with 48V. d/c unit (duplicated ) .			
07-03-07110	-Installation & Maintenance tools & materials.			
07-03-07111	-Spare parts & spare units.			
	-Documentation.			
07-03-07119	Microwave Antennas			
07-03-07120	-Parabolic Dish ( 1.8m.-3.0m. diameter ).			
07-03-07121	-Antenna Radiation Element with ( 1 / 2 )Ports.			
07-03-07122	-Connector Flanges.			
07-03-07123	-Tower Attachment.			
07-03-07124	-Installation & Maintenance tools & materials.			
07-03-07129	Microwave Feeders			
07-03-07130	-Elliptical waveguide for 13/11/6 GHZ band .			
07-03-07131	-Medium capacity dehydrator.			
07-03-07132	-Pressure Window.			
07-03-07133	-Fixture clamps.			
07-03-07134	-Earthing Kits.			
07-03-07135	-Installation materials & tools.			
07-03-07136	-Documentation.			
07-03-07139	DC Power Plant			

07-03-07140	-Modular switched rectifier system 48V / 30Ampere module (3+1) configuration.			
07-03-07141	-48V, 200Ah Lead-Acid Sealed-Batteries(2sets).			
07-03-07142	-Cabinet.			
07-03-07143	-Installation materials , cables, tools.			
07-03-07144	-Documentation.			
07-03-07149	Air Conditioners			
07-03-07150	-Duplicated 24000 BTU Unit.			
07-03-07151	-Piping & installation materials & fixtures.			
07-03-07152	-Spare parts.			
07-03-07153	-Documentation.			
07-03-07159	Diesel Engine Generator			
07-03-07160	-Capacity 50 KVA, Dual Set.			
07-03-07161	-Daily Fuel Tank.			
07-03-07162	-Fan.			
07-03-07163	-Piping.			
07-03-07164	-Control cubicle & Alarms.			
07-03-07165	-Installation Materials & Tools.			
07-03-07166	-Spare parts & PCB's.			
07-03-07167	-Documentation.			
07-03-07169	SDH Multiplex Equipment			
07-03-07170	-STM-4 Multiplexer Subrack with redundant common units			
07-03-07171	-STM-1 Multiplex Subrack with redundant common units			
07-03-07172	-Tributary Cards ( 3x34Mb/s, 6x(21x2Mb/s),4x(140/155 Mb/s).			
07-03-07173	-Access & Connection Modules.			
07-03-07174	-V-S Encoding-Decoding Equipment 34Mb/s IP/17*2OP contained in subracks with common units & with function units, controllers ,connectors, ETC.....			
07-03-07175	-Full Matrix ( duplicated).			
07-03-07176	-Auxiliary /Engineering order wire.			
07-03-07177	-Telephone Handset.			
07-03-07178	-Installation Materials & Tools.			
07-03-07179	-Racks with power supply unit (duplicated)and cable head.			
07-03-07180	-Digital Distribution Frames.			
07-03-07181	-Primary Multiplex ( PCM-30CH.) Subrack with common units & channel PCB's of different configurations.			
07-03-07182	-Equipment craft terminal for programmed control and display with operation software .			
07-03-07183	-Spare parts & spare units.			
07-03-07184	-Installation materials & tools.			
07-03-07185	-Documentation.			
07-03-07189	Network Management Equipment			
07-03-07190	-Central Network Management System platform(Hardware)			
07-03-07191	-Central Network Management System software packages.			
07-03-07192	-Local Network Management Equipment ( craft terminals).			
07-03-07193	-Mediation , Interface, and connection cards &modules.			
07-03-07194	-Installation Materials & Tools.			
07-03-07195	-Documentation..			
07-03-07119	Test Instruments			
07-03-07200	-Digital Multimeter.			
07-03-07201	-Frequency Counter .			
07-03-07202	-Power Meter .			
07-03-07203	-PCM Multiplex Tester .			
07-03-07204	-RF Sweep Generator .			
07-03-07205	-VSWR Test Set.			
07-03-07206	-Scalar Network Analyzer .			
07-03-07207	-RF Spectrum Analyzer.			
07-03-07208	-SDH Analyzer for STM-1.			
07-03-07209	-TX / RX MW Link Analyzer .			
07-03-07210	-PDH Analyzer ( 2Mb/s ).			
07-03-07211	-Oscilloscope 500 MHZ Dual channel.			

07-03-07212	-Vedio Test Set.			
07-03-07213	-RF Attenuators Fixed & Variable ( 0 - 60 )DB.			
07-03-07214	-Cables & Adapters.			
07-03-07215	-Waveguide / Coax. Adapters.			
07-03-07216	-Documentation.			
07-03-07219	Specific Tools			
07-03-07220	-20 Ton Lorry with crane & winch.			
07-03-07221	-Specific Maintenance Tools			
07-03-07222	-Station Tools			
07-03-07223	-Special Tools for waveguide.			
07-03-07224	-Installation Tools.			
07-03-07229	Services			
07-03-07230	-Factory Training Abroad.			
07-03-07231	-Training In Iraq.			
07-03-07232	-Supervision Services (Supplier Expert).			

**ANNEX SEVEN / Telecommunications**

**Sub - sector : : Upper Euphratus Digital Microwave ( Baghdad –Qaim ).**

**Site - Name : HEET 2**

Code	Item Description			
07-03-08100	SDH Microwave Radio Equipment			
07-03-08101	-STM-1, 6or11GHZ (2+1), Radio terminal eq With Frequency & Space Diversity all complete.			
07-03-08102	-128(64) QAM Modems Modules.			
07-03-08103	-Protection Switch.			
07-03-08104	-Engineering order wire channel.			
07-03-08105	-2Mb/s auxiliary traffic.			
07-03-08106	-Interface to central Network management.			
07-03-08107	-Peripherals ( Lap Top PC , ETC..... )			
07-03-08108	-Rack with 48V. d/c unit (duplicated ).			
07-03-08109	-Installation & Maintenance tools & materials.			
07-03-08110	-Spare parts & spare units.			
07-03-08111	-Documentation.			
07-03-08112	-(40-100)m. High self supporting steel tower for(4x3.6) m. dia. parabolic mw. Antennas, all complete with access ladder ,rest platforms, earthing, lighting ,lightning protection and painting ...etc			
07-03-08119	Microwave Antennas			
07-03-08120	-Parabolic Dish (1.8 -2.4- 3) m. diameter .			
07-03-08121	-Antenna Radiation Element with ( 1 / 2 )Ports.			
07-03-08122	-Connector Flanges.			
07-03-08123	-Tower Attachment.			
07-03-08124	-Installation & Maintenance tools & materials.			
07-03-08129	Microwave Feeders			
07-03-08130	-Elliptical waveguide for 8/6 GHZ band .			
07-03-08131	-Medium capacity dehydrator.			
07-03-08132	-Pressure Window.			
07-03-08133	-Fixture clamps.			
07-03-08134	-Earthing Kits.			
07-03-08135	-Installation materials & tools.			
07-03-08136	-Documentation.			
07-03-08139	DC Power Plant			
07-03-08140	-Modular switched rectifier system 48V / 30Ampere module (2+1) configuration.			
07-03-08141	-48V,200Ah Lead-Acid Sealed-Batteries(2sets).			
07-03-08142	-Cabinet.			
07-03-08143	-Installation materials , cables, tools.			
07-03-08144	-Documentation.			
07-03-08149	Air Conditioners			

07-03-08150	-Duplicated 24000 BTU Unit.			
07-03-08151	-Piping & installation materials & fixtures.			
07-03-08152	-Spare parts.			
07-03-08153	-Documentation.			
07-03-08159	Diesel Engine Generator			
07-03-08160	-Capacity 50 KVA, Triple Set.			
07-03-08161	-Daily Fuel Tank.			
07-03-08162	-Fan.			
07-03-08163	-Piping.			
07-03-08164	-Control cubicle & Alarms.			
07-03-08165	-Installation Materials & Tools.			
07-03-08166	-Spare parts & PCB's.			
07-03-08167	-Documentation.			
07-03-08169	SDH Multiplex Equipment			
07-03-08170	-STM-4 Multiplexer Subrack with redundant common units			
07-03-08171	-STM-1 Multiplex Subrack with redundant common units			
07-03-08172	-Tributary Cards ( 3x34Mb/s,6x(21x2Mb/s),4x(140/155 Mb/s).			
07-03-08173	-Access & Connection Modules.			
07-03-08174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP contained in subracks with common units & with function units,controllers ,connectors, ETC.....			
07-03-08175	-Full Matrix ( duplicated).			
07-03-08176	-Auxiliary /Engineering order wire.			
07-03-08177	-Telephone Handset.			
07-03-08178	-Installation Materials & Tools.			
07-03-08179	-Racks with power supply unit (duplicated)and cable head.			
07-03-08180	-Digital Distribution Frames.			
07-03-08181	-Primary Multiplex ( PCM-30CH.) Subrack with common units & channel PCB's of different configurations.			
07-03-08182	-Equipment craft terminal for programmed control and display with operation software .			
07-03-08183	-Spare parts & spare units.			
07-03-08184	-Installation materials & tools.			
07-03-08185	-Documentation.			
07-03-08189	Network Management Equipment			
07-03-08190	-Central Network Management System platform(Hard ware)			
07-03-08191	-Central Network Management System software packages.			
07-03-08192	-Local Network Management Equipment ( craft terminals).			
07-03-08193	-Mediation , Interface, and connection cards &modules.			
07-03-08194	-Installation Materials & Tools.			
07-03-08195	-Documentation..			
07-03-08119	Test Instruments			
07-03-08200	-Digital Multimeter.			
07-03-08201	-Frequency Counter .			
07-03-08202	-Power Meter .			
07-03-08203	-PCM Multiplex Tester .			
07-03-08204	-RF Sweep Generator .			
07-03-08205	-VSWR Test Set.			
07-03-08206	-Scalar Network Analyzer .			
07-03-08207	-RF Spectrum Analyzer.			
07-03-08208	-SDH Analyzer for STM-1.			
07-03-08209	-TX / RX MW Link Analyzer .			
07-03-08210	-PDH Analyzer ( 2Mb/s ).			
07-03-08211	-Oscilloscope 500 MHZ Dual channel.			
07-03-08212	-Vedio Test Set.			
07-03-08213	-RF Attenuators Fixed & Variable ( 0 - 60 )DB.			
07-03-08214	-Cables & Adapters.			
07-03-08215	-Waveguide / Coax. Adapters.			
07-03-08216	-Documentation.			
07-03-08219	Specific Tools			

07-03-08220	-20 Ton Lorry with crane & winch.			
07-03-08221	-Specific Maintenance Tools			
07-03-08222	-Station Tools			
07-03-08223	-Special Tools for waveguide.			
07-03-08224	-Installation Tools.			
07-03-08229	Services			
07-03-08230	-Factory Training Abroad.			
07-03-08231	-Training In Iraq.			
07-03-08232	-Supervision Services (Supplier Expert).			

**ANNEX SEVEN / Telecommunications**

**Sub - sector : : Upper Euphratus Digital Microwave ( Baghdad –Qaim )**

**Site - Name : Baghdadi**

Code	Item Description			
07-03-09100	SDH Microwave Radio Equipment			
07-03-09101	-STM-1, 6GHZ (4+1) Radio Terminal.			
07-03-09102	With Frequency & Space Diversity all complete.			
07-03-09103	-128(64) QAM Modems Modules.			
07-03-09104	-Protection Switch.			
07-03-09105	-Engineering order wire channel.			
07-03-09106	-2Mb/s auxiliary traffic.			
07-03-09107	-Interface to central Network management.			
07-03-09108	-Peripherals ( Lap Top PC , ETC..... )			
07-03-09109	-Rack with 48V. d/c unit (duplicated ).			
07-03-09110	-Installation & Maintenance tools & materials.			
07-03-09111	-Spare parts & spare units.			
07-03-09112	-Documentation. (40-100)m. High self supporting steel tower for(4x3.6) m. dia. parabolic mw. Antennas, all complete with access ladder ,rest platforms, earthing, lighting ,lightning protection and painting ...etc .			
07-03-09119	Microwave Antennas			
07-03-09120	-Parabolic Dish (2.4-3.0m diameter ).			
07-03-09121	-Antenna Radiation Element with ( 1 / 2 )Ports.			
07-03-09122	-Connector Flanges.			
07-03-09123	-Tower Attachment.			
07-03-09124	-Installation & Maintenance tools & materials.			
07-03-09129	Microwave Feeders			
07-03-09130	-Elliptical waveguide for 8/6 GHZ band .			
07-03-09131	-Medium capacity dehydrator.			
07-03-09132	-Pressure Window.			
07-03-09133	-Fixture clamps.			
07-03-09134	-Earthing Kits.			
07-03-09135	-Installation materials & tools.			
07-03-09136	-Documentation.			
07-03-09139	DC Power Plant			
07-03-09140	-Modular switched rectifier system 48V / 30Ampere module (2+1) configuration.			
07-03-09141	-48V, 200Ah Lead-Acid Sealed-Batteries(2sets).			
07-03-09142	-Cabinet.			
07-03-09143	-Installation materials , cables, tools.			
07-03-09144	-Documentation.			
07-03-09149	Air Conditioners			
07-03-09150	-Duplicated 24000 BTU Unit.			
07-03-09151	-Piping & installation materials & fixtures.			
07-03-09152	-Spare parts.			
07-03-09153	-Documentation.			
07-03-09159	Diesel Engine Generator			
07-03-09160	-Capacity 50 KVA, Triple Set.			
07-03-09161	-Daily Fuel Tank.			



07-03-09162	-Fan.			
07-03-09163	-Piping.			
07-03-09164	-Control cubicle & Alarms.			
07-03-09165	-Installation Materials & Tools.			
07-03-09166	-Spare parts & PCB's.			
07-03-09167	-Documentation.			
07-03-09169	SDH Multiplex Equipment			
07-03-09170	-STM-4 Multiplexer Subrack with redundant common units			
07-03-09171	-STM-1 Multiplex Subrack with redundant common units			
07-03-09172	-Tributary Cards ( 3x34Mb/s, 21x2Mb/s),4x(140/155 Mb/s).			
07-03-09173	-Access & Connection Modules.			
07-03-09174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP contained in subracks with common units & with function units,			
07-03-09175	controllers ,connectors, ETC.....			
07-03-09176	-Full Matrix ( duplicated).			
07-03-09178	-Auxiliary /Engineering order wire.			
07-03-09179	-Telephone Handset.			
07-03-09180	-Installation Materials & Tools.			
07-03-09181	-Racks with power supply unit (duplicated)and cable head.			
07-03-09182	-Digital Distribution Frames.			
07-03-09183	-Primary Multiplex ( PCM-30CH.) Subrack with common units & channel PCB's of different configurations.			
07-03-09184	-Equipment craft terminal for programmed control and display with operation software .			
07-03-09185	-Spare parts & spare units. -Installation materials & tools. -Documentation.			
07-03-09189	Network Management Equipment			
07-03-09190	-Central Network Management System platform(Hard ware)			
07-03-09191	-Central Network Management System software packages.			
07-03-09192	-Local Network Management Equipment ( craft terminals).			
07-03-09193	-Mediation , Interface, and connection cards &modules.			
07-03-09194	-Installation Materials & Tools.			
07-03-09195	-Documentation..			
07-03-09119	Test Instruments			
07-03-09200	-Digital Multimeter.			
07-03-09201	-Frequency Counter .			
07-03-09202	-Power Meter .			
07-03-09203	-PCM Multiplex Tester .			
07-03-09204	-RF Sweep Generator .			
07-03-09205	-VSWR Test Set.			
07-03-09206	-Scalar Network Analyzer .			
07-03-09207	-RF Spectrum Analyzer.			
07-03-09208	-SDH Analyzer for STM-1.			
07-03-09209	-TX / RX MW Link Analyzer .			
07-03-09210	-PDH Analyzer ( 2Mb/s ).			
07-03-09211	-Oscilloscope 500 MHZ Dual channel.			
07-03-09212	-Vedio Test Set.			
07-03-09213	-RF Attenuators Fixed & Variable ( 0 - 60 )DB.			
07-03-09214	-Cables & Adapters.			
07-03-09215	-Waveguide / Coax. Adapters.			
07-03-09216	-Documentation.			
07-03-09219	Specific Tools			
07-03-09220	-20 Ton Lorry with crane & winch.			
07-03-09221	-Specific Maintenance Tools			
07-03-09222	-Station Tools			
07-03-09223	-Special Tools for waveguide.			
07-03-09224	-Installation Tools.			
07-03-09229	Services			
07-03-09230	-Factory Training Abroad.			

07-03-09231	-Training In Iraq.			
07-03-09232	-Supervision Services (Supplier Expert).			

**ANNEX SEVEN / Telecommunications**  
**Sub - sector : : Upper Euphratus Digital Microwave ( Baghdad –Qaim )**  
**Site - Name :Hadeetha**

Code	Item Description			
07-03-10100	SDH Microwave Radio Equipment			
07-03-10101	-STM-1, 6& 11GHZ (3+1),& 2+1 Radio terminal With Frequency & Space Diversity all complete.			
07-03-10102	-128(64) QAM Modems Modules.			
07-03-10103	-Protection Switch.			
07-03-10104	-Engineering order wire channel.			
07-03-10105	-2Mb/s auxiliary traffic.			
07-03-10106	-Interface to central Network management.			
07-03-10107	-Peripherals ( Lap Top PC , ETC..... )			
07-03-10108	-Rack with 48V. d/c unit (duplicated ).			
07-03-10109	-Installation & Maintenance tools & materials.			
07-03-10110	-Spare parts & spare units.			
07-03-10111	-Documentation.			
07-03-10112	-70 m. High self supporting steel tower for (4x3.6) m. Dia. parabolic mw. Antennas, all complete with access ladder ,rest platforms, earthing , lighting ,lightning protection and painting ...etc .			
07-03-10119	Microwave Antennas			
07-03-10120	-Parabolic Dish ( 3 -3.7m.&1.8,2.4m diameter ).			
07-03-10121	-Antenna Radiation Element with ( 1 / 2 )Ports.			
07-03-10122	-Connector Flanges.			
07-03-10123	-Tower Attachment.			
07-03-10124	-Installation & Maintenance tools & materials.			
07-03-10129	Microwave Feeders			
07-03-10130	-Elliptical waveguide for 11&6 GHZ band .			
07-03-10131	-Medium capacity dehydrator.			
07-03-10132	-Pressure Window.			
07-03-10133	-Fixture clamps.			
07-03-10134	-Earthing Kits.			
07-03-10135	-Installation materials & tools.			
07-03-10136	-Documentation.			
07-03-10139	DC Power Plant			
07-03-10140	-Modular switched rectifier system 48V / 30Ampere module (3+1) configuration.			
07-03-10141	-48V, 200Ah Lead-Acid Sealed-Batteries(2sets).			
07-03-10142	-Cabinet.			
07-03-10143	-Installation materials , cables, tools.			
07-03-10144	-Documentation.			
07-03-10149	Air Conditioners			
07-03-10150	-Duplicated 18000 / 24000 BTU Unit.			
07-03-10151	-Piping & installation materials & fixtures.			
07-03-10152	-Spare parts.			
07-03-10153	-Documentation.			
07-03-10159	Diesel Engine Generator			
07-03-10160	-Capacity 50 KVA, dual Set.			
07-03-10161	-Daily Fuel Tank.			
07-03-10162	-Fan.			
07-03-10163	-Piping.			
07-03-10164	-Control cubicle & Alarms.			
07-03-10165	-Installation Materials & Tools.			
07-03-10166	-Spare parts & PCB's.			
07-03-10167	-Documentation.			
07-03-10169	SDH Multiplex Equipment			
07-03-10170	-STM-4 Mutlplexer Subrack with redundant common units			

07-03-10171	-STM-1 Multiplex Subrack with redundant common units			
07-03-10172	-Tributary Cards(3x34Mb/s),6x(21x2Mb/s),4x(140/155) Mb/s.			
07-03-10173	-Access & Connection Modules.			
07-03-10174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP contained in subracks with common units & with function units, controllers ,connectors, ETC.....			
07-03-10175	-Full Matrix ( duplicated).			
07-03-10176	-Auxiliary /Engineering order wire.			
07-03-10177	-Telephone Handset.			
07-03-10178	-Installation Materials & Tools.			
07-03-10179	-Racks with power supply unit (duplicated)and cable head.			
07-03-10180	-Digital Distribution Frames.			
07-03-10181	-Primary Multiplex ( PCM-30CH.) Subrack with common units & channel PCB's of different configurations.			
07-03-10182	-Equipment craft terminal for programmed control and display with operation software .			
07-03-10183	-Spare parts & spare units.			
07-03-10184	-Installation materials & tools.			
07-03-10185	-Documentation.			
07-03-10189	Network Management Equipment			
07-03-10190	-Central Network Management System platform(Hard ware)			
07-03-10191	-Central Network Management System software packages.			
07-03-10192	-Local Network Management Equipment ( craft terminals).			
07-03-10193	-Mediation , Interface, and connection cards &modules.			
07-03-10194	-Installation Materials & Tools.			
07-03-10195	-Documentation..			
07-03-10119	Test Instruments			
07-03-10200	-Digital Multimeter.			
07-03-10201	-Frequency Counter .			
07-03-10202	-Power Meter .			
07-03-10203	-PCM Multiplex Tester .			
07-03-10204	-RF Sweep Generator .			
07-03-10205	-VSWR Test Set.			
07-03-10206	-Scalar Network Analyzer .			
07-03-10207	-RF Spectrum Analyzer.			
07-03-10208	-SDH Analyzer for STM-1.			
07-03-10209	-TX / RX MW Link Analyzer .			
07-03-10210	-PDH Analyzer ( 2Mb/s ).			
07-03-10211	-Oscilloscope 500 MHZ Dual channel.			
07-03-10212	-Vedio Test Set.			
07-03-10213	-RF Attenuators Fixed & Variable ( 0 - 60 )DB.			
07-03-10214	-Cables & Adapters.			
07-03-10215	-Waveguide / Coax. Adapters.			
07-03-10216	-Documentation.			
07-03-10219	Specific Tools			
07-03-10220	-20 Ton Lorry with crane & winch.			
07-03-10221	-Specific Maintenance Tools			
07-03-10222	-Station Tools			
07-03-10223	-Special Tools for waveguide.			
07-03-10224	-Installation Tools.			
07-03-10229	Services			
07-03-10230	-Factory Training Abroad.			
07-03-10231	-Training In Iraq.			
07-03-10232	-Supervision Services (Supplier Expert).			

**ANNEX SEVEN / Telecommunications**

**Sub - sector : Upper Euphratus Digital Microwave ( Baghdad –Qaim )**

**Site - Name : Hadeetha T**

Code	Item Description			
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07-03-09100	SDH Microwave Radio Equipment			
07-03-09101	-STM-1, 6GHZ (3+1) Radio Terminal.			
07-03-09102	With Frequency & Space Diversity all complete.			
07-03-09103	-128(64) QAM Modems Modules.			
07-03-09104	-Protection Switch.			
07-03-09105	-Engineering order wire channel.			
07-03-09106	-2Mb/s auxiliary traffic.			
07-03-09107	-Interface to central Network management.			
07-03-09108	-Peripherals ( Lap Top PC , ETC..... )			
07-03-09109	-Rack with 48V. d/c unit (duplicated ).			
07-03-09110	-Installation & Maintenance tools & materials.			
07-03-09111	-Spare parts & spare units.			
07-03-09112	-Documentation. -(40-100) m. high self supporting steel tower for (4x3.6) m.dia. parabolic mw. Antennas, all complete with access ladder ,rest platforms, earthing , lighting ,lightning protection and painting ...etc .			
07-03-09119	Microwave Antennas			
07-03-09120	-Parabolic Dish (2.4-3.0m diameter ).			
07-03-09121	-Antenna Radiation Element with ( 1 / 2 )Ports.			
07-03-09122	-Connector Flanges.			
07-03-09123	-Tower Attachment.			
07-03-09124	-Installation & Maintenance tools & materials.			
07-03-09129	Microwave Feeders			
07-03-09130	-Elliptical waveguide for 8/6 GHZ band .			
07-03-09131	-Medium capacity dehydrator.			
07-03-09132	-Pressure Window.			
07-03-09133	-Fixture clamps.			
07-03-09134	-Earthing Kits.			
07-03-09135	-Installation materials & tools.			
07-03-09136	-Documentation.			
07-03-09139	DC Power Plant			
07-03-09140	-Modular switched rectifier system 48V / 30Ampere module (2+1) configuration.			
07-03-09141	-48V, 200Ah Lead-Acid Sealed-Batteries(2sets).			
07-03-09142	-Cabinet.			
07-03-09143	-Installation materials , cables, tools.			
07-03-09144	-Documentation.			
07-03-09149	Air Conditioners			
07-03-09150	-Duplicated 24000 BTU Unit.			
07-03-09151	-Piping & installation materials & fixtures.			
07-03-09152	-Spare parts.			
07-03-09153	-Documentation.			
07-03-09159	Diesel Engine Generator			
07-03-09160	-Capacity 50 KVA, Triplel Set.			
07-03-09161	-Daily Fuel Tank.			
07-03-09162	-Fan.			
07-03-09163	-Piping.			
07-03-09164	-Control cubicle & Alarms.			
07-03-09165	-Installation Materials & Tools.			
07-03-09166	-Spare parts & PCB's.			
07-03-09167	-Documentation.			
07-03-09169	SDH Multiplex Equipment			
07-03-09170	-STM-4 Mutliplexer Subrack with redundant common units			
07-03-09171	-STM-1 Multiplex Subrack with redundant common units			
07-03-09172	-Tributary Cards ( 3x34Mb/s, 6x(21x2Mb/s),4x(140/155 Mb/s).			
07-03-09173	-Access & Connection Modules.			
07-03-09174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP contain			
07-03-09175	in subracks with common units & with function units,			
07-03-09176	controllers ,connectors, ETC.....			
07-03-09177	-Full Matrix ( duplicated).			

07-03-09178	-Auxiliary /Engineering order wire.			
07-03-09179	-Telephone Handset.			
07-03-09180	-Installation Materials & Tools.			
07-03-09181	-Racks with power supply unit (duplicated)and cable head.			
07-03-09182	-Digital Distribution Frames.			
07-03-09183	-Primary Multiplex ( PCM-30CH.) Subrack with common units & channel PCB's of different configurations.			
07-03-09184	-Equipment craft terminal for programmed control and display with operation software .			
07-03-09185	-Spare parts & spare units. -Installation materials & tools. -Documentation.			
07-03-09189	Network Management Equipment			
07-03-09190	-Central Network Management System platform(Hard ware)			
07-03-09191	-Central Network Management System software packages.			
07-03-09192	-Local Network Management Equipment ( craft terminals).			
07-03-09193	-Mediation , Interface, and connection cards &modules.			
07-03-09194	-Installation Materials & Tools.			
07-03-09195	-Documentation..			
07-03-09119	Test Instruments			
07-03-09200	-Digital Multimeter.			
07-03-09201	-Frequency Counter .			
07-03-09202	-Power Meter .			
07-03-09203	-PCM Multiplex Tester .			
07-03-09204	-RF Sweep Generator .			
07-03-09205	-VSWR Test Set.			
07-03-09206	-Scalar Network Analyzer .			
07-03-09207	-RF Spectrum Analyzer.			
07-03-09208	-SDH Analyzer for STM-1.			
07-03-09209	-TX / RX MW Link Analyzer .			
07-03-09210	-PDH Analyzer ( 2Mb/s ).			
07-03-09211	-Oscilloscope 500 MHZ Dual channel.			
07-03-09212	-Vedio Test Set.			
07-03-09213	-RF Attenuators Fixed & Variable ( 0 - 60 )DB.			
07-03-09214	-Cables & Adapters.			
07-03-09215	-Waveguide / Coax. Adapters.			
07-03-09216	-Documentation.			
07-03-09219	Specific Tools			
07-03-09220	-20 Ton Lorry with crane & winch.			
07-03-09221	-Specific Maintenance Tools			
07-03-09222	-Station Tools			
07-03-09223	-Special Tools for waveguide.			
07-03-09224	-Installation Tools.			
07-03-09229	Services			
07-03-09230	-Factory Training Abroad.			
07-03-09231	-Training In Iraq.			
07-03-09232	-Supervision Services (Supplier Expert).			

### ANNEX SEVEN / Telecommunications

Sub - sector : : Upper Euphratus Digital Microwave ( Baghdad –Qaim )

Site - Name :Reih ana

Code	Item Description		
07-03-12100	SDH Microwave Radio Equipment		
07-03-12101	-STM-1, 6 GHZ (3+1) Radio terminal equip. With Frequency & Space Diversity all complete.		
07-03-12102	-128(64) QAM Modems Modules.		
07-03-12103	-Protection Switch.		
07-03-12104	-Engineering order wire channel.		
07-03-12105	-2Mb/s auxiliary traffic.		

07-03-12106	-Interface to central Network management.		
07-03-12107	-Peripherals ( Lap Top PC , ETC..... )		
07-03-12108	-Rack with 48V. d/c unit (duplicated ).		
07-03-12109	-Installation & Maintenance tools & materials.		
07-03-12110	-Spare parts & spare units.		
07-03-12111	-Documentation.		
07-03-12112			
07-03-12119	Microwave Antennas		
07-03-12120	-Parabolic Dish (2.4-3.7m. diameter ).		
07-03-12121	-Antenna Radiation Element with ( 1 / 2 )Ports.		
07-03-12122	-Connector Flanges.		
07-03-12123	-Tower Attachment.		
07-03-12124	-Installation & Maintenance tools & materials.		
07-03-12129	Microwave Feeders		
07-03-12130	-Elliptical waveguide for 8/6 GHZ band .		
07-03-12131	-Medium capacity dehydrator.		
07-03-12132	-Pressure Window.		
07-03-12133	-Fixture clamps.		
07-03-12134	-Earthing Kits.		
07-03-12135	-Installation materials & tools.		
07-03-12136	-Documentation.		
07-03-12139	DC Power Plant		
07-03-12140	-Modular switched rectifier system 48V / 30Ampere module (2+1) configuration.		
07-03-12141	-48V, 200Ah Lead-Acid Sealed-Batteries(2sets).		
07-03-12142	-Cabinet.		
07-03-12143	-Installation materials , cables, tools.		
07-03-12144	-Documentation.		
07-03-12149	Air Conditioners		
07-03-12150	-Duplicated 24000 BTU Unit.		
07-03-12151	-Piping & installation materials & fixtures.		
07-03-12152	-Spare parts.		
07-03-12153	-Documentation.		
07-03-12159	Diesel Engine Generator		
07-03-12160	-Capacity 50 KVA, Triple Set.or dual		
07-03-12161	-Daily Fuel Tank.		
07-03-12162	-Fan.		
07-03-12163	-Piping.		
07-03-12164	-Control cubicle & Alarms.		
07-03-12165	-Installation Materials & Tools.		
07-03-12166	-Spare parts & PCB's.		
07-03-12167	-Documentation.		
07-03-12169	SDH Multiplex Equipment		
07-03-12170	-STM-4 Mutliplexer Subrack with redundant common units		
07-03-12171	-STM-1 Multiplex Subrack with redundant common units		
07-03-12172	-Tributary Cards ( 3x34Mb/s,6x(21x2Mb/s),4x(140/155 Mb/s).		
07-03-12173	-Access & Connection Modules.		
07-03-12174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP containd in subracks with common units & with function units,		
07-03-12175	controllers ,connectors, ETC.....		
07-03-12176	-Full Matrix ( duplicated).		
07-03-12177	-Auxiliary /Engineering order wire.		
07-03-12178	-Telephone Handset.		
07-03-12179	-Installation Materials & Tools.		
07-03-12180	-Racks with power supply unit (duplicated)and cable head.		
07-03-12181	-Digital Distribution Frames.		
07-03-12182	-Primary Multiplex ( PCM-30CH.) Subrack with common units & channel PCB's of different configurations.		
07-03-12183	-Equipment craft terminal for programmed control and display with operation software .		

07-03-12184	-Spare parts & spare units.		
07-03-12185	-Installation materials & tools. -Documentation.		
07-03-12189	Network Management Equipment		
07-03-12190	-Central Network Management System platform(Hard ware)		
07-03-12191	-Central Network Management System software packages.		
07-03-12192	-Local Network Management Equipment ( craft terminals).		
07-03-12193	-Mediation , Interface, and connection cards &modules.		
07-03-12194	-Installation Materials & Tools.		
07-03-12195	-Documentation..		
07-03-12119	Test Instruments		
07-03-12200	-Digital Multimeter.		
07-03-12201	-Frequency Counter .		
07-03-12202	-Power Meter .		
07-03-12203	-PCM Multiplex Tester .		
07-03-12204	-RF Sweep Generator .		
07-03-12205	-VSWR Test Set.		
07-03-12206	-Scalar Network Analyzer .		
07-03-12207	-RF Spectrum Analyzer.		
07-03-12208	-SDH Analyzer for STM-1.		
07-03-12209	-TX / RX MW Link Analyzer .		
07-03-12210	-PDH Analyzer ( 2Mb/s ).		
07-03-12211	-Oscilloscope 500 MHZ Dual channel.		
07-03-12212	-Vedio Test Set.		
07-03-12213	-RF Attenuators Fixed & Variable ( 0 - 60 )DB.		
07-03-12214	-Cables & Adapters.		
07-03-12215	-Waveguide / Coax. Adapters.		
07-03-12216	-Documentation.		
07-03-12219	Specific Tools		
07-03-12220	-20 Ton Lorry with crane & winch.		
07-03-12221	-Specific Maintenance Tools		
07-03-12222	-Station Tools		
07-03-12223	-Special Tools for waveguide.		
07-03-12224	-Installation Tools.		
07-03-12229	Services		
07-03-12230	-Factory Training Abroad.		
07-03-12231	-Training In Iraq.		
07-03-12232	-Supervision Services (Supplier Expert).		

### ANNEX SEVEN / Telecommunications

**Sub - sector : : Upper Euphratus Digital Microwave ( Baghdad –Qaim )**

**Site - Name : Aana**

Code	Item Description		
07-03-12100	SDH Microwave Radio Equipment		
07-03-12101	-STM-1, 6 GHZ (3+1) Radio terminal equip. With Frequency & Space Diversity all complete.		
07-03-12102	-128(64) QAM Modems Modules.		
07-03-12103	-Protection Switch.		
07-03-12104	-Engineering order wire channel.		
07-03-12105	-2Mb/s auxiliary traffic.		
07-03-12106	-Interface to central Network management.		
07-03-12107	-Peripherals ( Lap Top PC , ETC..... )		
07-03-12108	-Rack with 48V. d/c unit (duplicated ).		
07-03-12109	-Installation & Maintenance tools & materials.		
07-03-12110	-Spare parts & spare units.		
07-03-12111	-Documentation.		

07-03-12112	-(40-100)m. High self supporting steel tower for(4x3.6) m. dia. parabolic mw. Antennas, all complete with access ladder ,rest platforms, earthing, lighting ,lightning protection and painting ...etc .			
07-03-12119	Microwave Antennas			
07-03-12120	-Parabolic Dish (2.4-3.7m. diameter ).			
07-03-12121	-Antenna Radiation Element with ( 1 / 2 )Ports.			
07-03-12122	-Connector Flanges.			
07-03-12123	-Tower Attachment.			
07-03-12124	-Installation & Maintenance tools & materials.			
07-03-12129	Microwave Feeders			
07-03-12130	-Elliptical waveguide for 8/6 GHZ band .			
07-03-12131	-Medium capacity dehydrator.			
07-03-12132	-Pressure Window.			
07-03-12133	-Fixture clamps.			
07-03-12134	-Earthing Kits.			
07-03-12135	-Installation materials & tools.			
07-03-12136	-Documentation.			
07-03-12139	DC Power Plant			
07-03-12140	-Modular switched rectifier system 48V / 30Ampere module (2+1) configuration.			
07-03-12141	-48V, 200Ah Lead-Acid Sealed-Batteries(2sets).			
07-03-12142	-Cabinet.			
07-03-12143	-Installation materials , cables, tools.			
07-03-12144	-Documentation.			
07-03-12149	Air Conditioners			
07-03-12150	-Duplicated 24000 BTU Unit.			
07-03-12151	-Piping & installation materials & fixtures.			
07-03-12152	-Spare parts.			
07-03-12153	-Documentation.			
07-03-12159	Diesel Engine Generator			
07-03-12160	-Capacity 50 KVA, Triple Set.or dual			
07-03-12161	-Daily Fuel Tank.			
07-03-12162	-Fan.			
07-03-12163	-Piping.			
07-03-12164	-Control cubicle & Alarms.			
07-03-12165	-Installation Materials & Tools.			
07-03-12166	-Spare parts & PCB's.			
07-03-12167	-Documentation.			
07-03-12169	SDH Multiplex Equipment			
07-03-12170	-STM-4 Mutlplexer Subrack with redundant common units			
07-03-12171	-STM-1 Multiplex Subrack with redundant common units			
07-03-12172	-Tributary Cards ( 3x34Mb/s,6x(21x2Mb/s),4x(140/155 Mb/s).			
07-03-12173	-Access & Connection Modules.			
07-03-12174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP containd in subracks with common units & with function units,			
07-03-12175	controllers ,connectors, ETC.....			
07-03-12176	-Full Matrix ( duplicated).			
07-03-12177	-Auxiliary /Engineering order wire.			
07-03-12178	-Telephone Handset.			
07-03-12179	-Installation Materials & Tools.			
07-03-12180	-Racks with power supply unit (duplicated)and cable head.			
07-03-12181	-Digital Distribution Frames.			
07-03-12182	-Primary Multiplex ( PCM-30CH.) Subrack with common units & channel PCB's of different configurations.			
07-03-12183	-Equipment craft terminal for programmed control and display with operation soft ware .			
07-03-12184	-Spare parts & spare units.			
07-03-12185	-Installation materials & tools.			
	-Documentation.			



07-03-12189	Network Management Equipment			
07-03-12190	-Central Network Management System platform(Hard ware)			
07-03-12191	-Central Network Management System software packages.			
07-03-12192	-Local Network Management Equipment ( craft terminals).			
07-03-12193	-Mediation , Interface, and connection cards &modules.			
07-03-12194	-Installation Materials & Tools.			
07-03-12195	-Documentation..			
07-03-12119	Test Instruments			
07-03-12200	-Digital Multimeter.			
07-03-12201	-Frequency Counter .			
07-03-12202	-Power Meter .			
07-03-12203	-PCM Multiplex Tester .			
07-03-12204	-RF Sweep Generator .			
07-03-12205	-VSWR Test Set.			
07-03-12206	-Scalar Network Analyzer .			
07-03-12207	-RF Spectrum Analyzer.			
07-03-12208	-SDH Analyzer for STM-1.			
07-03-12209	-TX / RX MW Link Analyzer .			
07-03-12210	-PDH Analyzer ( 2Mb/s ).			
07-03-12211	-Oscilloscope 500 MHZ Dual channel.			
07-03-12212	-Vedio Test Set.			
07-03-12213	-RF Attenuators Fixed & Variable ( 0 - 60 )DB.			
07-03-12214	-Cables & Adapters.			
07-03-12215	-Waveguide / Coax. Adapters.			
07-03-12216	-Documentation.			
07-03-12219	Specific Tools			
07-03-12220	-20 Ton Lorry with crane & winch.			
07-03-12221	-Specific Maintenance Tools			
07-03-12222	-Station Tools			
07-03-12223	-Special Tools for waveguide.			
07-03-12224	-Installation Tools.			
07-03-12229	Services			
07-03-12230	-Factory Training Abroad.			
07-03-12231	-Training In Iraq.			
07-03-12232	-Supervision Services (Supplier Expert).			

### ANNEX SEVEN / Telecommunications

Sub - sector : : Upper Euphratus Digital Microwave ( Baghdad –Qaim )

Site - Name : Rawa-

Code	Item Description			
07-03-13100	SDH Microwave Radio Equipment			
07-03-13101	-STM-1, 6 GHZ (3+1)&GHZ& 6GHZ Radio Terminal With Frequency & Space Diversity all complete.			
07-03-13102	-128 QAM Modems Modules.			
07-03-13103	-Protection Switch.			
07-03-13104	-Engineering order wire channel.			
07-03-13105	-2Mb/s auxiliary traffic.			
07-03-13106	-Interface to central Network management.			
07-03-13107	-Peripherals ( Lap Top PC , ETC..... )			
07-03-13108	-Rack with 48V. d/c unit (duplicated ).			
07-03-13109	-Installation & Maintenance tools & materials.			
07-03-13110	-Spare parts & spare units.			
07-03-13111	-Documentation.			
07-03-13112	-Galvanized steel self suboorted (40-100)m high microwave Tower all complet with earthing, Painting ,lighting &fightning subsystem (concrete fowdatwns)			
07-03-13119	Microwave Antennas			

07-03-13120	-Parabolic Dish (2.4-3.7)m. diameter ).			
07-03-13121	-Antenna Radiation Element with ( 1 / 2 )Ports.			
07-03-13122	-Connector Flanges.			
07-03-13123	-Tower Attachment.			
07-03-13124	-Installation & Maintenance tools & materials			
07-03-13129	Microwave Feeders			
07-03-13130	-Elliptical waveguide for 8/6 GHZ band .			
07-03-13131	-Medium capacity dehydrator.			
07-03-13132	-Pressure Window.			
07-03-13133	-Fixture clamps.			
07-03-13134	-Earthing Kits.			
07-03-13135	-Installation materials & tools.			
07-03-13136	-Documentation.			
07-03-13139	DC Power Plant			
07-03-13140	-Modular switched rectifier system 48V / 30Ampere module (2+1) configuration.			
07-03-13141	-48V, 200Ah Lead-Acid Sealed-Batteries(2sets).			
07-03-13142	-Cabinet.			
07-03-13143	-Installation materials , cables, tools.			
07-03-13144	-Documentation.			
07-03-13149	Air Conditioners			
07-03-13150	-Duplicated 24000 BTU Unit.			
07-03-13151	-Piping & installation materials & fixtures.			
07-03-13152	-Spare parts.			
07-03-13153	-Documentation.			
07-03-13159	Diesel Engine Generator			
07-03-13160	-Capacity 50 KVA, Dual Set.			
07-03-13161	-Daily Fuel Tank.			
07-03-13162	-Fan.			
07-03-13163	-Piping.			
07-03-13164	-Control cubicle & Alarms.			
07-03-13165	-Installation Materials & Tools.			
07-03-13166	-Spare parts & PCB's.			
07-03-13167	-Documentation.			
07-03-13169	SDH Multiplex Equipment			
07-03-13170	-STM-4 Multiplexer Subrack with redundant common units			
07-03-13171	-STM-1 Multiplex Subrack with redundant common units			
07-03-13172	-Tributary Cards ( 3x34Mb/s, 6x(21x2Mb/s),4x(140/155 Mb/s).			
07-03-13173	-Access & Connection Modules.			
07-03-13174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP contain			
07-03-13175	in subracks with common units & with function units,			
07-03-13176	controllers ,connectors, ETC.....			
07-03-13177	-Full Matrix ( duplicated).			
07-03-13178	-Auxiliary /Engineering order wire.			
07-03-13179	-Telephone Handset.			
07-03-13180	-Installation Materials & Tools.			
07-03-13181	-Racks with power supply unit (duplicated)and cable head.			
07-03-13182	-Digital Distribution Frames.			
07-03-13183	-Primary Multiplex ( PCM-30CH.) Subrack with common units & channel PCB's of different configurations.			
07-03-13184	-Equipment craft terminal for programmed control and display with operation software .			
07-03-13185	-Spare parts & spare units.			
	-Installation materials & tools.			
	-Documentation.			
07-03-13189	Network Management Equipment			
07-03-13190	-Central Network Management System platform(Hard ware)			
07-03-13191	-Central Network Management System software packages.			
07-03-13192	-Local Network Management Equipment ( craft terminals).			
07-03-13193	-Mediation , Interface, and connection cards &modules.			

07-03-13194	-Installation Materials & Tools.			
07-03-13195	-Documentation..			
07-03-13119	Test Instruments			
07-03-13200	-Digital Multimeter.			
07-03-13201	-Frequency Counter .			
07-03-13202	-Power Meter .			
07-03-13203	-PCM Multiplex Tester .			
07-03-13204	-RF Sweep Generator .			
07-03-13205	-VSWR Test Set.			
07-03-13206	-Scalar Network Analyzer .			
07-03-13207	-RF Spectrum Analyzer.			
07-03-13208	-SDH Analyzer for STM-1.			
07-03-13209	-TX / RX MW Link Analyzer .			
07-03-13210	-PDH Analyzer ( 2Mb/s ).			
07-03-13211	-Oscilloscope 500 MHZ Dual channel.			
07-03-13212	-Vedio Test Set.			
07-03-13213	-RF Attenuators Fixed & Variable ( 0 - 60 )DB.			
07-03-13214	-Cables & Adapters.			
07-03-13215	-Waveguide / Coax. Adapters.			
07-03-13216	-Documentation.			
07-03-13219	Specific Tools			
07-03-13220	-20 Ton Lorry with crane & winch.			
07-03-13221	-Specific Maintenance Tools			
07-03-13222	-Station Tools			
07-03-13223	-Special Tools for waveguide.			
07-03-13224	-Installation Tools.			
07-03-13229	Services			
07-03-13230	-Factory Training Abroad.			
07-03-13231	-Training In Iraq.			
07-03-13232	-Supervision Services (Supplier Expert).			

**ANNEX SEVEN / Telecommunications**

**Sub - sector : : Upper Euphratus Digital Microwave ( Baghdad –Qaim ).**

**Site - Name : .Dier**

Code	Item Description			
07-03-14100	SDH Microwave Radio Equipment			
07-03-14101	-STM-1, 6 GHZ (3+1)&GHZ& 6GHZ Radio Terminal With Frequency & Space Diversity all complete.			
07-03-14102	-128 QAM Modems Modules.			
07-03-14103	-Protection Switch.			
07-03-14104	-Engineering order wire channel.			
07-03-14105	-2Mb/s auxiliary traffic.			
07-03-14106	-Interface to central Network management.			
07-03-14107	-Peripherals ( Lap Top PC , ETC..... )			
07-03-14108	-Rack with 48V. d/c unit (duplicated ).			
07-03-14109	-Installation & Maintenance tools & materials.			
07-03-14110	-Spare parts & spare units.			
07-03-14111	-Documentation.			
07-03-14112	-Galvanized steel self suboorted (40-100)m high microwave Tower all complet with earthing, Painting .lighting &fightning subsystem (concrete fowdatwns)			
07-03-14113				
07-03-14119	Microwave Antennas			
07-03-14120	-Parabolic Dish (-2.4-3.0 –3.7)m. diameter ).			
07-03-14121	-Antenna Radiation Element with ( 1 / 2 )Ports.			
07-03-14122	-Connector Flanges.			
07-03-14123	-Tower Attachment.			
07-03-14124	-Installation & Maintenance tools & materials.			

07-03-14129	Microwave Feeders			
07-03-14130	-Elliptical waveguide for 11GHZ band .			
07-03-14131	-Medium capacity dehydrator.			
07-03-14132	-Pressure Window.			
07-03-14133	-Fixture clamps.			
07-03-14134	-Earthing Kits.			
07-03-14135	-Installation materials & tools.			
07-03-14136	-Documentation.			
07-03-14139	DC Power Plant			
07-03-14140	-Modular switched rectifier system 48V / 30Ampere module (2+1) configuration.			
07-03-14141	-48V, 200Ah Lead-Acid Sealed-Batteries(2sets).			
07-03-14142	-Cabinet.			
07-03-14143	-Installation materials , cables, tools.			
07-03-14144	-Documentation.			
07-03-14149	Air Conditioners			
07-03-14150	-Duplicated 24000 BTU Unit.			
07-03-14151	-Piping & installation materials & fixtures.			
07-03-14152	-Spare parts.			
07-03-14153	-Documentation.			
07-03-14159	Diesel Engine Generator			
07-03-14160	-Capacity 50 KVA,3,2(dual .trible )Set.			
07-03-14161	-Daily Fuel Tank.			
07-03-14162	-Fan.			
07-03-14163	-Piping.			
07-03-14164	-Control cubicle & Alarms.			
07-03-14165	-Installation Materials & Tools.			
07-03-14166	-Spare parts & PCB's.			
07-03-14167	-Documentation.			
07-03-14169	SDH Multiplex Equipment			
07-03-14170	-STM-4 Mutliplexer Subrack with redundant common units			
07-03-14171	-STM-1 Multiplex Subrack with redundant common units			
07-03-14172	-Tributary Cards ( 3x34Mb/s, 21x3.Mb/s,140/155 Mb/s switch , 7x2Mb/s).			
07-03-14173	-Access & Connection Modules.			
07-03-14174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP contain			
07-03-14175	in subracks with common units & with function units,			
07-03-14176	controllers ,connectors, ETC.....			
07-03-14177	-Full Matrix ( duplicated).			
07-03-14178	-Auxiliary /Engineering order wire.			
07-03-14179	-Telephone Handset.			
07-03-14180	-Installation Materials & Tools.			
07-03-14181	-Racks with power supply unit (duplicated)and cable head.			
07-03-14182	-Digital Distribution Frames.			
07-03-14183	-Primary Multiplex ( PCM-30CH.) Subrack with common units & channel PCB's of different configurations.			
07-03-14184	-Equipment craft terminal for programmed control and display with operation software .			
07-03-14185	-Spare parts & spare units.			
	-Installation materials & tools.			
	-Documentation.			
07-03-14189	Network Management Equipment			
07-03-14190	-Central Network Management System platform(Hard ware)			
07-03-14191	-Central Network Management System software packages.			
07-03-14192	-Local Network Management Equipment ( craft terminals).			
07-03-14193	-Mediation , Interface, and connection cards &modules.			
07-03-14194	-Installation Materials & Tools.			
07-03-14195	-Documentation..			
07-03-14119	Test Instruments			
07-03-14200	-Digital Multimeter.			
07-03-14201	-Frequency Counter .			

07-03-14202	-Power Meter .			
07-03-14203	-PCM Multiplex Tester .			
07-03-14204	-RF Sweep Generator .			
07-03-14205	-VSWR Test Set.			
07-03-14206	-Scalar Network Analyzer .			
07-03-14207	-RF Spectrum Analyzer.			
07-03-14208	-SDH Analyzer for STM-1.			
07-03-14209	-TX / RX MW Link Analyzer .			
07-03-14210	-PDH Analyzer ( 2Mb/s ).			
07-03-14211	-Oscilloscope 500 MHZ Dual channel.			
07-03-14212	-Vedio Test Set.			
07-03-14213	-RF Attenuators Fixed & Variable ( 0 - 60 )DB.			
07-03-14214	-Cables & Adapters.			
07-03-14215	-Waveguide / Coax. Adapters.			
07-03-14216	-Documentation.			
07-03-14219	Specific Tools			
07-03-14220	-20 Ton Lorry with crane & winch.			
07-03-14221	-Specific Maintenance Tools			
07-03-14222	-Station Tools			
07-03-14223	-Special Tools for waveguide.			
07-03-14224	-Installation Tools.			
07-03-14229	Services			
07-03-14230	-Factory Training Abroad.			
07-03-14231	-Training In Iraq.			
07-03-14232	-Supervision Services (Supplier Expert).			

**ANNEX SEVEN / Telecommunications**  
**Sub - sector : : Upper Euphratus Digital Microwave ( Baghdad –Qaim )**  
**Site - Name : Al-qaim T**

Code	Item Description			
07-03-15100	SDH Microwave Radio Equipment			
07-03-15101	-STM-1, 6GHZ (3+1)Radio Terminal With Frequency & Space Diversity all complete.+(3+1)11GHZ+(1+1)6GHZ			
07-03-15102	-128(64) QAM Modems Modules.			
07-03-15103	-Protection Switch.			
07-03-15104	-Engineering order wire channel.			
07-03-15105	-2Mb/s auxiliary traffic.			
07-03-15106	-Interface to central Network management.			
07-03-15107	-Peripherals ( Lap Top PC , ETC..... )			
07-03-15108	-Rack with 48V. d/c unit (duplicated ).			
07-03-15109	-Installation & Maintenance tools & materials.			
07-03-15110	-Spare parts & spare units.			
07-03-15111	-Documentation.			
07-03-15119	Microwave Antennas			
07-03-15120	-Parabolic Dish (2.4-3.7m. diameter ).			
07-03-15121	-Antenna Radiation Element with ( 1 / 2 )Ports.			
07-03-15122	-Connector Flanges.			
07-03-15123	-Tower Attachment.			
07-03-15124	-Installation & Maintenance tools & materials.			
07-03-15129	Microwave Feeders			
07-03-15130	-Elliptical waveguide for 8/6 GHZ band .			
07-03-15131	-Medium capacity dehydrator.			
07-03-15132	-Pressure Window.			
07-03-15133	-Fixture clamps.			
07-03-15134	-Earthing Kits.			
07-03-15135	-Installation materials & tools.			
07-03-15136	-Documentation.			

07-03-15139	DC Power Plant			
07-03-15140	-Modular switched rectifier system 48V / 30Ampere module (3+1) configuration.			
07-03-15141	-48V,200Ah Lead-Acid Sealed-Batteries(2sets).			
07-03-15142	-Cabinet.			
07-03-15143	-Installation materials , cables, tools.			
07-03-15144	-Documentation.			
07-03-15149	Air Conditioners			
07-03-15150	-Duplicated 24000 BTU Unit.			
07-03-15151	-Piping & installation materials & fixtures.			
07-03-15152	-Spare parts.			
07-03-15153	-Documentation.			
07-03-15159	Diesel Engine Generator			
07-03-15160	-Capacity 50 KVA, dual Set.			
07-03-15161	-Daily Fuel Tank.			
07-03-15162	-Fan.			
07-03-15163	-Piping.			
07-03-15164	-Control cubicle & Alarms.			
07-03-15165	-Installation Materials & Tools.			
07-03-15166	-Spare parts & PCB's.			
07-03-15167	-Documentation.			
07-03-15169	SDH Multiplex Equipment			
07-03-15170	-STM-4 Multiplexer Subrack with redundant common units			
07-03-15171	-STM-1 Multiplex Subrack with redundant common units			
07-03-15172	-Tributary Cards ( 3x34Mb/s, 6*(21x2Mb/s),10*(140/155) Mb/s switch ,			
07-03-15173	-Access & Connection Modules.			
07-03-15174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP contain			
07-03-15175	in subracks with common units & with function units,			
07-03-15176	controllers ,connectors, ETC..with compression equip.....			
07-03-15177	-Full Matrix ( duplicated).			
07-03-15178	-Auxiliary /Engineering order wire.			
07-03-15179	-Telephone Handset.			
07-03-15180	-Installation Materials & Tools.			
07-03-15181	-Racks with power supply unit (duplicated)and cable head.			
07-03-15182	-Digital Distribution Frames.			
07-03-15183	-Primary Multiplex ( PCM-30CH.) Subrack with common units & channel PCB's of different configurations.			
07-03-15184	-Equipment craft terminal for programmed control and display with operation software .			
07-03-15185	-Spare parts & spare units.			
	-Installation materials & tools.			
	-Documentation.			
07-03-15189	Network Management Equipment			
07-03-15190	-Central Network Management System platform(Hard ware)			
07-03-15191	-Central Network Management System software packages.			
07-03-15192	-Local Network Management Equipment ( craft terminals).			
07-03-15193	-Mediation , Interface, and connection cards &modules.			
07-03-15194	-Installation Materials & Tools.			
07-03-15195	-Documentation..			
07-03-15119	Test Instruments			
07-03-15200	-Digital Multimeter.			
07-03-15201	-Frequency Counter .			
07-03-15202	-Power Meter .			
07-03-15203	-PCM Multiplex Tester .			
07-03-15204	-RF Sweep Generator .			
07-03-15205	-VSWR Test Set.			
07-03-15206	-Scalar Network Analyzer .			
07-03-15207	-RF Spectrum Analyzer.			
07-03-15208	-SDH Analyzer for STM-1.			
07-03-15209	-TX / RX MW Link Analyzer .			

07-03-15210	-PDH Analyzer ( 2Mb/s ).			
07-03-15211	-Oscilloscope 500 MHZ Dual channel.			
07-03-15212	-Vedio Test Set.			
07-03-15213	-RF Attenuators Fixed & Variable ( 0 - 60 )DB.			
07-03-15214	-Cables & Adapters.			
07-03-15215	-Waveguide / Coax. Adapters.			
07-03-15216	-Documentation.			
07-03-15219	Specific Tools			
07-03-15220	-20 Ton Lorry with crane & winch.			
07-03-15221	-Specific Maintenance Tools			
07-03-15222	-Station Tools			
07-03-15223	-Special Tools for waveguide.			
07-03-15224	-Installation Tools.			
07-03-15229	Services			
07-03-15230	-Factory Training Abroad.			
07-03-15231	-Training In Iraq.			
07-03-15232	-Supervision Services (Supplier Expert).			

### ANNEX SEVEN / Telecommunications

**Sub - sector : Upper Euphratus Digital Microwave ( Baghdad –Qaim )**

**Site - Name : Qaim -ex**

Code	Item Description			
07-03-16100	SDH Microwave Radio Equipment			
07-03-16101	-STM-1, 6 GHZ (3+1)&GHZ& 6GHZ Radio Terminal With Frequency & Space Diversity all complete.			
07-03-16102	-128 QAM Modems Modules.			
07-03-16103	-Protection Switch.			
07-03-16104	-Engineering order wire channel.			
07-03-16105	-2Mb/s auxiliary traffic.			
07-03-16106	-Interface to central Network management.			
07-03-16107	-Peripherals ( Lap Top PC , ETC..... )			
07-03-16108	-Rack with 48V. d/c unit (duplicated ).			
07-03-16109	-Installation & Maintenance tools & materials.			
07-03-16110	-Spare parts & spare units.			
07-03-16111	-Documentation. -Galvanized steel self suboorted (30-100)m high microwave Tower all complet with earthing, Painting .lighting &fightning subsystem (concrete fowdatwns)			
07-03-16119	Microwave Antennas			
07-03-16120	-Parabolic Dish ( 3 -3.7m. diameter ).			
07-03-16121	-Antenna Radiation Element with ( 1 / 2 )Ports.			
07-03-16122	-Connector Flanges.			
07-03-16123	-Tower Attachment.			
07-03-16124	-Installation & Maintenance tools & materials.			
07-03-16129	Microwave Feeders			
07-03-16130	-Elliptical waveguide for 8/6 GHZ band .			
07-03-16131	-Medium capacity dehydrator.			
07-03-16132	-Pressure Window.			
07-03-16133	-Fixture clamps.			
07-03-16134	-Earthing Kits.			
07-03-16135	-Installation materials & tools.			
07-03-16136	-Documentation.			
07-03-16139	DC Power Plant			
07-03-16140	-Modular switched rectifier system 48V / 30Ampere module (2+1) configuration.			
07-03-16141	-48V, 200Ah Lead-Acid Sealed-Batteries(2sets).			

07-03-16142	-Cabinet.			
07-03-16143	-Installation materials , cables, tools.			
07-03-16144	-Documentation.			
07-03-16149	Air Conditioners			
07-03-16150	-Duplicated 24000 BTU Unit.			
07-03-16151	-Piping & installation materials & fixtures.			
07-03-16152	-Spare parts.			
07-03-16153	-Documentation.			
07-03-16159	Diesel Engine Generator			
07-03-16160	-Capacity 50 KVA, Triple Set.			
07-03-16161	-Daily Fuel Tank.			
07-03-16162	-Fan.			
07-03-16163	-Piping.			
07-03-16164	-Control cubicle & Alarms.			
07-03-16165	-Installation Materials & Tools.			
07-03-16166	-Spare parts & PCB's.			
07-03-16167	-Documentation.			
07-03-16169	SDH Multiplex Equipment			
07-03-16170	-STM-4 Mutlplexer Subrack with redundant common units			
07-03-16171	-STM-1 Multiplex Subrack with redundant common units			
07-03-16172	-Tributary Cards ( 3x34Mb/s, 21x2Mb/s,140/155 Mb/s switch , 7x2Mb/s).			
07-03-16173	-Access & Connection Modules.			
07-03-16171	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP contain			
07-03-16175	nd in subracks with common units & with function units,			
07-03-16176	controllers ,connectors, ETC.....			
07-03-16177	-Full Matrix ( duplicated).			
07-03-16178	-Auxiliary /Engineering order wire.			
07-03-16179	-Telephone Handset.			
07-03-16180	-Installation Materials & Tools.			
07-03-16181	-Racks with power supply unit (duplicated)and cable head.			
07-03-16182	-Digital Distribution Frames.			
07-03-16183	-Primary Multiplex ( PCM-30CH.) Subrack with common units & channel PCB's of different configurations.			
07-03-16184	-Equipment craft terminal for programmed control and display with operation software .			
07-03-16185	-Spare parts & spare units. -Installation materials & tools. -Documentation.			
07-03-16189	Network Management Equipment			
07-03-16190	-Central Network Management System platform(Hard ware)			
07-03-16191	-Central Network Management System software packages.			
07-03-16192	-Local Network Management Equipment ( craft terminals).			
07-03-16193	-Mediation , Interface, and connection cards &modules.			
07-03-16194	-Installation Materials & Tools.			
07-03-16195	-Documentation..			
07-03-16119	Test Instruments			
07-03-16200	-Digital Multimeter.			
07-03-16201	-Frequency Counter .			
07-03-16202	-Power Meter .			
07-03-16203	-PCM Multiplex Tester .			
07-03-16204	-RF Sweep Generator .			
07-03-16205	-VSWR Test Set.			
07-03-16206	-Scalar Network Analyzer .			
07-03-16207	-RF Spectrum Analyzer.			
07-03-16208	-SDH Analyzer for STM-1.			
07-03-16209	-TX / RX MW Link Analyzer .			
07-03-16210	-PDH Analyzer ( 2Mb/s ).			
07-03-16211	-Oscilloscope 500 MHZ Dual channel.			
07-03-16212	-Vedio Test Set.			
07-03-16213	-RF Attenuators Fixed & Variable ( 0 - 60 )DB.			



07-03-16214	-Cables & Adapters.			
07-03-16215	-Waveguide / Coax. Adapters.			
07-03-16216	-Documentation.			
07-03-16219	Specific Tools			
07-03-16220	-20 Ton Lorry with crane & winch.			
07-03-16221	-Specific Maintenance Tools			
07-03-16222	-Station Tools			
07-03-16223	-Special Tools for waveguide.			
07-03-16224	-Installation Tools.			
07-03-16229	Services			
07-03-16230	-Factory Training Abroad.			
07-03-16231	-Training In Iraq.			
07-03-16232	-Supervision Services (Supplier Expert).			

**ANNEX SEVEN / Telecommunications**

**Sub - sector : : Upper Euphratus Digital Microwave ( Baghdad –Qaim ).**

**Site - Name : abu-kamal -syria**

Code	Item Description			
07-03-17100	SDH Microwave Radio Equipment			
07-03-17101	-STM-1, 6 GHZ (1+1) Radio Repeater With Frequency & Space Diversity all complete.			
07-03-17102	-128(64) QAM Modems Modules.			
07-03-17103	-Protection Switch.			
07-03-17104	-Engineering order wire channel.			
07-03-17105	-2Mb/s auxiliary traffic.			
07-03-17106	-Interface to central Network management.			
07-03-17107	-Peripherals ( Lap Top PC , ETC..... )			
07-03-17108	-Rack with 48V. d/c unit (duplicated ).			
07-03-17109	-Installation & Maintenance tools & materials.			
07-03-17110	-Spare parts & spare units.			
07-03-17111	-Documentation.			
07-03-17112	Microwave Antennas			
07-03-17120	-Parabolic Dish ( 2.4,3 -3.7m. diameter ).			
07-03-17121	-Antenna Radiation Element with ( 1 / 2 )Ports.			
07-03-17122	-Connector Flanges.			
07-03-17123	-Tower Attachment.			
07-03-17124	-Installation & Maintenance tools & materials.			
07-03-17129	Microwave Feeders			
07-03-17130	-Elliptical waveguide for 8/6 GHZ band .			
07-03-17131	-Medium capacity dehydrator.			
07-03-17132	-Pressure Window.			
07-03-17133	-Fixture clamps.			
07-03-17134	-Earthing Kits.			
07-03-17135	-Installation materials & tools.			
07-03-17136	-Documentation.			
07-03-17139	DC Power Plant			
07-03-17140	-Modular switched rectifier system 48V / 30Ampere module (2+1) configuration.			
07-03-17141	-48V, 200Ah Lead-Acid Sealed-Batteries(2sets).			
07-03-17142	-Cabinet.			
07-03-17143	-Installation materials , cables, tools.			
07-03-17144	-Documentation.			
07-03-17149	Air Conditioners			
07-03-17150	-Duplicated 24000 BTU Unit.			
07-03-17151	-Piping & installation materials & fixtures.			
07-03-17152	-Spare parts.			

07-03-17153	-Documentation.			
07-03-17159	Diesel Engine Generator			
07-03-17160	-Capacity 50 KVA, Triple Set.			
07-03-17161	-Daily Fuel Tank.			
07-03-17162	-Fan.			
07-03-17163	-Piping.			
07-03-17164	-Control cubicle & Alarms.			
07-03-17165	-Installation Materials & Tools.			
07-03-17166	-Spare parts & PCB's.			
07-03-17167	-Documentation.			
07-03-17169	SDH Multiplex Equipment			
07-03-17170	-STM-4 Multiplexer Subrack with redundant common units			
07-03-17171	-STM-1 Multiplex Subrack with redundant common units			
07-03-17172	-Tributary Cards ( 3x34Mb/s, 3(21x2Mb/s),140/155 Mb/s switch ).			
07-03-17173	-Access & Connection Modules.			
07-03-17174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP contained in subracks with common units & with function units,controllers ,connectors, ETC.....			
07-03-17175	-Full Matrix ( duplicated).			
07-03-17176	-Auxiliary /Engineering order wire.			
07-03-17177	-Telephone Handset.			
07-03-17178	-Installation Materials & Tools.			
07-03-17179	-Racks with power supply unit (duplicated)and cable head.			
07-03-17180	-Digital Distribution Frames.			
07-03-17181	-Primary Multiplex ( PCM-30CH.) Subrack with common units & channel PCB's of different configurations.			
07-03-17182	-Equipment craft terminal for programmed control and display with operation software .			
07-03-17183	-Spare parts & spare units.			
07-03-17184	-Installation materials & tools.			
07-03-17185	-Documentation.			
07-03-17189	Network Management Equipment			
07-03-17190	-Central Network Management System platform(Hard ware)			
07-03-17191	-Central Network Management System software packages.			
07-03-17192	-Local Network Management Equipment ( craft terminals).			
07-03-17193	-Mediation , Interface, and connection cards &modules.			
07-03-17194	-Installation Materials & Tools.			
07-03-17195	-Documentation..			
07-03-17119	Test Instruments			
07-03-17200	-Digital Multimeter.			
07-03-17201	-Frequency Counter .			
07-03-17202	-Power Meter .			
07-03-17203	-PCM Multiplex Tester .			
07-03-17204	-RF Sweep Generator .			
07-03-17205	-VSWR Test Set.			
07-03-17206	-Scalar Network Analyzer .			
07-03-17207	-RF Spectrum Analyzer.			
07-03-17208	-SDH Analyzer for STM-1.			
07-03-17209	-TX / RX MW Link Analyzer .			
07-03-17210	-PDH Analyzer ( 2Mb/s ).			
07-03-17211	-Oscilloscope 500 MHZ Dual channel.			
07-03-17212	-Vedio Test Set.			
07-03-17213	-RF Attenuators Fixed & Variable ( 0 - 60 )DB.			
07-03-17214	-Cables & Adapters.			
07-03-17215	-Waveguide / Coax. Adapters.			
07-03-17216	-Documentation.			
07-03-17219	Specific Tools			
07-03-17220	-20 Ton Lorry with crane & winch.			
07-03-17221	-Specific Maintenance Tools			
07-03-17222	-Station Tools			

07-03-17223	-Special Tools for waveguide.			
07-03-17224	-Installation Tools.			
07-03-17229	Services			
07-03-17230	-Factory Training Abroad.			
07-03-17231	-Training In Iraq.			
07-03-17232	-Supervision Services (Supplier Expert).			

**ANNEX SEVEN / Telecommunications**

**Sub - sector : : Upper Euphratus Digital Microwave ( Baghdad –Qaim )**

**Site - Name : Qaim-R1**

Code	Item Description			
07-03-18100	SDH Microwave Radio Equipment			
07-03-18101	-STM-1, 6 GHZ (3+1)&GHZ& 6GHZ Radio Terminal With Frequency & Space Diversity all complete.			
07-03-18102	-128 QAM Modems Modules.			
07-03-18103	-Protection Switch.			
07-03-18104	-Engineering order wire channel.			
07-03-18105	-2Mb/s auxiliary traffic.			
07-03-18106	-Interface to central Network management.			
07-03-18107	-Peripherals ( Lap Top PC , ETC..... )			
07-03-18108	-Rack with 48V. d/c unit (duplicated ).			
07-03-18109	-Installation & Maintenance tools & materials.			
07-03-18110	-Spare parts & spare units.			
07-03-18111	-Documentation.			
07-03-18112	-Galvanized steel self suboorted (40-100)m high microwave Tower all complet with earthing, Painting ,lighting &fightning subsystem (concrete fowdatwns)			
07-03-18119	Microwave Antennas			
07-03-18120	-Parabolic Dish ( 3 -3.7m. diameter ).			
07-03-18121	-Antenna Radiation Element with ( 1 / 2 )Ports.			
07-03-18122	-Connector Flanges.			
07-03-18123	-Tower Attachment.			
07-03-18124	-Installation & Maintenance tools & materials.			
07-03-18129	Microwave Feeders			
07-03-18130	-Elliptical waveguide for 8/6 GHZ band .			
07-03-18131	-Medium capacity dehydrator.			
07-03-18132	-Pressure Window.			
07-03-18133	-Fixture clamps.			
07-03-18134	-Earthing Kits.			
07-03-18135	-Installation materials & tools.			
07-03-18136	-Documentation.			
07-03-18139	DC Power Plant			
07-03-18140	-Modular switched rectifier system 48V / 30Ampere module (2+1) configuration.			
07-03-18141	-48V, 200Ah Lead-Acid Sealed-Batteries(2sets).			
07-03-18142	-Cabinet.			
07-03-18143	-Installation materials , cables, tools.			
07-03-18144	-Documentation.			
07-03-18149	Air Conditioners			
07-03-18150	-Duplicated 24000 BTU Unit.			
07-03-18151	-Piping & installation materials & fixtures.			
07-03-18152	-Spare parts.			
07-03-18153	-Documentation.			
07-03-18159	Diesel Engine Generator			
07-03-18160	-Capacity 50 KVA, triple Set.			
07-03-18161	-Daily Fuel Tank.			
07-03-18162	-Fan.			
07-03-18163	-Piping.			

07-03-18164	-Control cubicle & Alarms.			
07-03-18165	-Installation Materials & Tools.			
07-03-18166	-Spare parts & PCB's.			
07-03-18167	-Documentation.			
07-03-18169	SDH Multiplex Equipment			
07-03-18170	-STM-4 Multiplexer Subrack with redundant common units			
07-03-18171	-STM-1 Multiplex Subrack with redundant common units			
07-03-18172	-Tributary Cards ( 3x34Mb/s,3( 21x2Mb/s),140/155 Mb/s switch , ).			
07-03-18173	-Access & Connection Modules.			
07-03-18174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP contain			
07-03-18175	in subracks with common units & with function units,			
07-03-18176	controllers ,connectors, ETC.....			
07-03-18177	-Full Matrix ( duplicated).			
07-03-18178	-Auxiliary /Engineering order wire.			
07-03-18179	-Telephone Handset.			
07-03-18180	-Installation Materials & Tools.			
07-03-18181	-Racks with power supply unit (duplicated)and cable head.			
07-03-18182	-Digital Distribution Frames.			
07-03-18183	-Primary Multiplex ( PCM-30CH.) Subrack with common units & channel PCB's of different configurations.			
07-03-18184	-Equipment craft terminal for programmed control and display with operation software .			
07-03-18185	-Spare parts & spare units. -Installation materials & tools. -Documentation.			
07-03-18189	Network Management Equipment			
07-03-18190	-Central Network Management System platform(Hard ware)			
07-03-18191	-Central Network Management System software packages.			
07-03-18192	-Local Network Management Equipment ( craft terminals).			
07-03-18193	-Mediation , Interface, and connection cards &modules.			
07-03-18194	-Installation Materials & Tools.			
07-03-18195	-Documentation..			
07-03-18119	Test Instruments			
07-03-18200	-Digital Multimeter.			
07-03-18201	-Frequency Counter .			
07-03-18202	-Power Meter .			
07-03-18203	-PCM Multiplex Tester .			
07-03-18204	-RF Sweep Generator .			
07-03-18205	-VSWR Test Set.			
07-03-18206	-Scalar Network Analyzer .			
07-03-18207	-RF Spectrum Analyzer.			
07-03-18208	-SDH Analyzer for STM-1.			
07-03-18209	-TX / RX MW Link Analyzer .			
07-03-18210	-PDH Analyzer ( 2Mb/s).			
07-03-18211	-Oscilloscope 500 MHZ Dual channel.			
07-03-18212	-Vedio Test Set.			
07-03-18213	-RF Attenuators Fixed & Variable ( 0 – 60 )DB.			
07-03-18214	-Cables & Adapters.			
07-03-18215	-Waveguide / Coax. Adapters.			
07-03-18216	-Documentation.			
07-03-18219	Specific Tools			
07-03-18220	-20 Ton Lorry with crane & winch.			
07-03-18221	-Specific Maintenance Tools			
07-03-18222	-Station Tools			
07-03-18223	-Special Tools for waveguide.			
07-03-18224	-Installation Tools.			
07-03-18229	Services			
07-03-18230	-Factory Training Abroad.			
07-03-18231	-Training In Iraq.			
07-03-18232	-Supervision Services (Supplier Expert).			



**ANNEX SEVEN / Telecommunications**

**Sub - sector : : Upper Euphratus Digital Microwave ( Baghdad –Qaim )**

**Site - Name : Qaim-R2**

<b>Code</b>	<b>Item Description</b>			
07-03-18100	SDH Microwave Radio Equipment			
07-03-18101	-STM-1, 6 GHZ (3+1)&GHZ& 6GHZ Radio Terminal With Frequency & Space Diversity all complete.			
07-03-18102	-128 QAM Modems Modules.			
07-03-18103	-Protection Switch.			
07-03-18104	-Engineering order wire channel.			
07-03-18105	-2Mb/s auxiliary traffic.			
07-03-18106	-Interface to central Network management.			
07-03-18107	-Peripherals ( Lap Top PC , ETC..... )			
07-03-18108	-Rack with 48V. d/c unit (duplicated ).			
07-03-18109	-Installation & Maintenance tools & materials.			
07-03-18110	-Spare parts & spare units.			
07-03-18111	-Documentation.			
07-03-18112	-Galvanized steel self suboorted (40-100)m high microwave Tower all complet with earthing, Painting ,lighting &fightning subsystem (concrete fowdatwns)			
07-03-18119	Microwave Antennas			
07-03-18120	-Parabolic Dish ( 3 -3.7m. diameter ).			
07-03-18121	-Antenna Radiation Element with ( 1 / 2 )Ports.			
07-03-18122	-Connector Flanges.			
07-03-18123	-Tower Attachment.			
07-03-18124	-Installation & Maintenance tools & materials.			
07-03-18129	Microwave Feeders			
07-03-18130	-Elliptical waveguide for 8/6 GHZ band .			
07-03-18131	-Medium capacity dehydrator.			
07-03-18132	-Pressure Window.			
07-03-18133	-Fixture clamps.			
07-03-18134	-Earthing Kits.			
07-03-18135	-Installation materials & tools.			
07-03-18136	-Documentation.			
07-03-18139	DC Power Plant			
07-03-18140	-Modular switched rectifier system 48V / 30Ampere module (2+1) configuration.			
07-03-18141	-48V, 200Ah Lead-Acid Sealed-Batteries(2sets).			
07-03-18142	-Cabinet.			
07-03-18143	-Installation materials , cables, tools.			
07-03-18144	-Documentation.			
07-03-18149	Air Conditioners			
07-03-18150	-Duplicated 24000 BTU Unit.			
07-03-18151	-Piping & installation materials & fixtures.			
07-03-18152	-Spare parts.			
07-03-18153	-Documentation.			
07-03-18159	Diesel Engine Generator			
07-03-18160	-Capacity 50 KVA, triple Set.			
07-03-18161	-Daily Fuel Tank.			
07-03-18162	-Fan.			
07-03-18163	-Piping.			
07-03-18164	-Control cubicle & Alarms.			
07-03-18165	-Installation Materials & Tools.			
07-03-18166	-Spare parts & PCB's.			
07-03-18167	-Documentation.			
07-03-18169	SDH Multiplex Equipment			
07-03-18170	-STM-4 Mutlplexer Subrack with redundant common units			
07-03-18171	-STM-1 Multiplex Subrack with redundant common units			

07-03-18172	-Tributary Cards ( 3x34Mb/s, 21x2Mb/s,140/155 Mb/s switch , 7x2Mb/s).			
07-03-18173	-Access & Connection Modules.			
07-03-18174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP contain			
07-03-18175	nd in subracks with common units & with function units,			
07-03-18176	controllers ,connectors, ETC.....			
07-03-18177	-Full Matrix ( duplicated).			
07-03-18178	-Auxiliary /Engineering order wire.			
07-03-18179	-Telephone Handset.			
07-03-18180	-Installation Materials & Tools.			
07-03-18181	-Racks with power supply unit (duplicated)and cable head.			
07-03-18182	-Digital Distribution Frames.			
07-03-18183	-Primary Multiplex ( PCM-30CH.) Subrack with common units & channel PCB's of different configurations.			
07-03-18184	-Equipment craft terminal for programmed control and display with operation software .			
07-03-18185	-Spare parts & spare units. -Installation materials & tools. -Documentation.			
07-03-18189	Network Management Equipment			
07-03-18190	-Central Network Management System platform(Hard ware)			
07-03-18191	-Central Network Management System software packages.			
07-03-18192	-Local Network Management Equipment ( craft terminals).			
07-03-18193	-Mediation , Interface, and connection cards &modules.			
07-03-18194	-Installation Materials & Tools.			
07-03-18195	-Documentation..			

#### ANNEX SEVEN / Telecommunications

Sub - sector : : Upper Euphratus Digital Microwave ( Baghdad –Qaim )

Site - Name : Akkashat

Code	Item Description			
07-03-18100	SDH Microwave Radio Equipment			
07-03-18101	-STM-1, 6 GHZ (3+1)&GHZ& 6GHZ Radio Terminal With Frequency & Space Diversity all complete.			
07-03-18102	-128 QAM Modems Modules.			
07-03-18103	-Protection Switch.			
07-03-18104	-Engineering order wire channel.			
07-03-18105	-2Mb/s auxiliary traffic.			
07-03-18106	-Interface to central Network management.			
07-03-18107	-Peripherals ( Lap Top PC , ETC..... )			
07-03-18108	-Rack with 48V. d/c unit (duplicated ).			
07-03-18109	-Installation & Maintenance tools & materials.			
07-03-18110	-Spare parts & spare units.			
07-03-18111	-Documentation.			
07-03-18112	-Galvanized steel self suboorted (40-100)m high microwave Tower all complet with earthing, Painting ,lighting &fightning subsystem (concrete fowdatwns)			
07-03-18119	Microwave Antennas			
07-03-18120	-Parabolic Dish ( 3 -3.7m. diameter ).			
07-03-18121	-Antenna Radiation Element with ( 1 / 2 )Ports.			
07-03-18122	-Connector Flanges.			
07-03-18123	-Tower Attachment.			
07-03-18124	-Installation & Maintenance tools & materials.			
07-03-18129	Microwave Feeders			
07-03-18130	-Elliptical waveguide for 8/6 GHZ band .			
07-03-18131	-Medium capacity dehydrator.			
07-03-18132	-Pressure Window.			
07-03-18133	-Fixture clamps.			
07-03-18134	-Earthing Kits.			
07-03-18135	-Installation materials & tools.			
07-03-18136	-Documentation.			

07-03-18139	DC Power Plant		
07-03-18140	-Modular switched rectifier system 48V / 30Ampere module (2+1) configuration.		
07-03-18141	-48V, 200Ah Lead-Acid Sealed-Batteries(2sets).		
07-03-18142	-Cabinet.		
07-03-18143	-Installation materials , cables, tools.		
07-03-18144	-Documentation.		
07-03-18149	Air Conditioners		
07-03-18150	-Duplicated 24000 BTU Unit.		
07-03-18151	-Piping & installation materials & fixtures.		
07-03-18152	-Spare parts.		
07-03-18153	-Documentation.		
07-03-18159	Diesel Engine Generator		
07-03-18160	-Capacity 50 KVA, triple Set.		
07-03-18161	-Daily Fuel Tank.		
07-03-18162	-Fan.		
07-03-18163	-Piping.		
07-03-18164	-Control cubicle & Alarms.		
07-03-18165	-Installation Materials & Tools.		
07-03-18166	-Spare parts & PCB's.		
07-03-18167	-Documentation.		
07-03-18169	SDH Multiplex Equipment		
07-03-18170	-STM-4 Multiplexer Subrack with redundant common units		
07-03-18171	-STM-1 Multiplex Subrack with redundant common units		
07-03-18172	-Tributary Cards ( 3x34Mb/s, 6(21x2Mb/s),8*140/155 Mb/s switch , .		
07-03-18173	-Access & Connection Modules.		
07-03-18174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP contain		
07-03-18175	in subracks with common units & with function units,		
07-03-18176	controllers ,connectors, ETC.....		
07-03-18177	-Full Matrix ( duplicated).		
07-03-18178	-Auxiliary /Engineering order wire.		
07-03-18179	-Telephone Handset.		
07-03-18180	-Installation Materials & Tools.		
07-03-18181	-Racks with power supply unit (duplicated)and cable head.		
07-03-18182	-Digital Distribution Frames.		
07-03-18183	-Primary Multiplex ( PCM-30CH.) Subrack with common units & channel PCB's of different configurations.		
07-03-18184	-Equipment craft terminal for programmed control and display with operation software .		
07-03-18185	-Spare parts & spare units. -Installation materials & tools. -Documentation.		
07-03-18189	Network Management Equipment		
07-03-18190	-Central Network Management System platform(Hard ware)		
07-03-18191	-Central Network Management System software packages.		
07-03-18192	-Local Network Management Equipment ( craft terminals).		
07-03-18193	-Mediation , Interface, and connection cards &modules.		
07-03-18194	-Installation Materials & Tools.		
07-03-18195	-Documentation..		
07-03-18119	Test Instruments		
07-03-18200	-Digital Multimeter.		
07-03-18201	-Frequency Counter .		
07-03-18202	-Power Meter .		
07-03-18203	-PCM Multiplex Tester .		
07-03-18204	-RF Sweep Generator .		
07-03-18205	-VSWR Test Set.		
07-03-18206	-Scalar Network Analyzer .		
07-03-18207	-RF Spectrum Analyzer.		
07-03-18208	-SDH Analyzer for STM-1.		



07-03-18209	-TX / RX MW Link Analyzer .		
07-03-18210	-PDH Analyzer ( 2Mb/s ).		
07-03-18211	-Oscilloscope 500 MHZ Dual channel.		
07-03-18212	-Vedio Test Set.		
07-03-18213	-RF Attenuators Fixed & Variable ( 0 - 60 )DB.		
07-03-18214	-Cables & Adapters.		
07-03-18215	-Waveguide / Coax. Adapters.		
07-03-18216	-Documentation.		
07-03-18219	Specific Tools		
07-03-18220	-20 Ton Lorry with crane & winch.		
07-03-18221	-Specific Maintenance Tools		
07-03-18222	-Station Tools		
07-03-18223	-Special Tools for waveguide.		
07-03-18224	-Installation Tools.		
07-03-18229	Services		
07-03-18230	-Factory Training Abroad.		
07-03-18231	-Training In Iraq.		
07-03-18232	-Supervision Services (Supplier Expert).		

### ANNEX SEVEN / Telecommunications

Sub - sector : : Upper Euphratus Digital Microwave ( Baghdad –Qaim )

Site - Name : Akkashat-R1

Code	Item Description			
07-03-18100	SDH Microwave Radio Equipment			
07-03-18101	-STM-1, 6 GHZ(3+1) Radio drop repeater With Frequency & Space Diversity all complete.			
07-03-18102	-128(64) QAM Modems Modules.			
07-03-18103	-Protection Switch.			
07-03-18104	-Engineering order wire channel.			
07-03-18105	-2Mb/s auxiliary traffic.			
07-03-18106	-Interface to central Network management.			
07-03-18107	-Peripherals ( Lap Top PC , ETC..... )			
07-03-18108	-Rack with 48V. d/c unit (duplicated ).			
07-03-18109	-Installation & Maintenance tools & materials.			
07-03-18110	-Spare parts & spare units.			
07-03-18111	-Documentation.			
07-03-18112				
07-03-18119	Microwave Antennas			
07-03-18120	-Parabolic Dish ( 3 -3.7m. diameter ).			
07-03-18121	-Antenna Radiation Element with ( 1 / 2 )Ports.			
07-03-18122	-Connector Flanges.			
07-03-18123	-Tower Attachment.			
07-03-18124	-Installation & Maintenance tools & materials.			
07-03-18129	Microwave Feeders			
07-03-18130	-Elliptical waveguide for 8/6 GHZ band .			
07-03-18131	-Medium capacity dehydrator.			
07-03-18132	-Pressure Window.			
07-03-18133	-Fixture clamps.			
07-03-18134	-Earthing Kits.			
07-03-18135	-Installation materials & tools.			
07-03-18136	-Documentation.			
07-03-18139	DC Power Plant			
07-03-18140	-Modular switched rectifier system 48V / 30Ampere module (2+1) configuration.			
07-03-18141	-48V, 200Ah Lead-Acid Sealed-Batteries(2sets).			
07-03-18142	-Cabinet.			
07-03-18143	-Installation materials , cables, tools.			

07-03-18144	-Documentation.			
07-03-18149	Air Conditioners			
07-03-18150	-Duplicated 24000 BTU Unit.			
07-03-18151	-Piping & installation materials & fixtures.			
07-03-18152	-Spare parts.			
07-03-18153	-Documentation.			
07-03-18159	Diesel Engine Generator			
07-03-18160	-Capacity 50 KVA, triple Set.			
07-03-18161	-Daily Fuel Tank.			
07-03-18162	-Fan.			
07-03-18163	-Piping.			
07-03-18164	-Control cubicle & Alarms.			
07-03-18165	-Installation Materials & Tools.			
07-03-18166	-Spare parts & PCB's.			
07-03-18167	-Documentation.			
07-03-18169	SDH Multiplex Equipment			
07-03-18170	-STM-4 Multiplexer Subrack with redundant common units			
07-03-18171	-STM-1 Multiplex Subrack with redundant common units			
07-03-18172	-Tributary Cards ( 3x34Mb/s, 21x2Mb/s,140/155 Mb/s switch , 7x2Mb/s).			
07-03-18173	-Access & Connection Modules.			
07-03-18174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP contained in subracks with common units & with function units,			
07-03-18175	controllers ,connectors, ETC.....			
07-03-18176	-Full Matrix ( duplicated).			
07-03-18178	-Auxiliary /Engineering order wire.			
07-03-18179	-Telephone Handset.			
07-03-18180	-Installation Materials & Tools.			
07-03-18181	-Racks with power supply unit (duplicated)and cable head.			
07-03-18182	-Digital Distribution Frames.			
07-03-18183	-Primary Multiplex ( PCM-30CH.) Subrack with common units & channel PCB's of different configurations.			
07-03-18184	-Equipment craft terminal for programmed control and display with operation software .			
07-03-18185	-Spare parts & spare units. -Installation materials & tools. -Documentation.			
07-03-18189	Network Management Equipment			
07-03-18190	-Central Network Management System platform(Hard ware)			
07-03-18191	-Central Network Management System software packages.			
07-03-18192	-Local Network Management Equipment ( craft terminals).			
07-03-18193	-Mediation , Interface, and connection cards &modules.			
07-03-18194	-Installation Materials & Tools.			
07-03-18195	-Documentation..			

**ANNEX SEVEN / Telecommunications**

**Sub - sector : : Upper Euphratus Digital Microwave ( Baghdad –Qaim )**

**Site - Name : Akkashat-R2**

Code	Item Description			
07-03-18100	SDH Microwave Radio Equipment			
07-03-18101	-STM-1, 6 GHZ (3+1)&GHZ& 6GHZ Radio Terminal With Frequency & Space Diversity all complete.			
07-03-18102	-128 QAM Modems Modules.			
07-03-18103	-Protection Switch.			
07-03-18104	-Engineering order wire channel.			
07-03-18105	-2Mb/s auxiliary traffic.			
07-03-18106	-Interface to central Network management.			
07-03-18107	-Peripherals ( Lap Top PC , ETC..... )			
07-03-18108	-Rack with 48V. d/c unit (duplicated ).			

07-03-18109	-Installation & Maintenance tools & materials.			
07-03-18110	-Spare parts & spare units.			
07-03-18111	-Documentation.			
07-03-18112	-Galvanized steel self suboorted (40-100)m high microwave Tower all complet with earthing, Painting ,lighting &fightning subsystem (concrete fowdatwns)			
07-03-18119	Microwave Antennas			
07-03-18120	-Parabolic Dish ( 3 -3.7m. diameter ).			
07-03-18121	-Antenna Radiation Element with ( 1 / 2 )Ports.			
07-03-18122	-Connector Flanges.			
07-03-18123	-Tower Attachment.			
07-03-18124	-Installation & Maintenance tools & materials.			
07-03-18129	Microwave Feeders			
07-03-18130	-Elliptical waveguide for 8/6 GHZ band .			
07-03-18131	-Medium capacity dehydrator.			
07-03-18132	-Pressure Window.			
07-03-18133	-Fixture clamps.			
07-03-18134	-Earthing Kits.			
07-03-18135	-Installation materials & tools.			
07-03-18136	-Documentation.			
07-03-18139	DC Power Plant			
07-03-18140	-Modular switched rectifier system 48V / 30Ampere module (2+1) configuration.			
07-03-18141	-48V, 200Ah Lead-Acid Sealed-Batteries(2sets).			
07-03-18142	-Cabinet.			
07-03-18143	-Installation materials , cables, tools.			
07-03-18144	-Documentation.			
07-03-18149	Air Conditioners			
07-03-18150	-Duplicated 24000 BTU Unit.			
07-03-18151	-Piping & installation materials & fixtures.			
07-03-18152	-Spare parts.			
07-03-18153	-Documentation.			
07-03-18159	Diesel Engine Generator			
07-03-18160	-Capacity 50 KVA, triple Set.			
07-03-18161	-Daily Fuel Tank.			
07-03-18162	-Fan.			
07-03-18163	-Piping.			
07-03-18164	-Control cubicle & Alarms.			
07-03-18165	-Installation Materials & Tools.			
07-03-18166	-Spare parts & PCB's.			
07-03-18167	-Documentation.			
07-03-18169	SDH Multiplex Equipment			
07-03-18170	-STM-4 Mutliplexer Subrack with redundant common units			
07-03-18171	-STM-1 Multiplex Subrack with redundant common units			
07-03-18172	-Tributary Cards ( 3x34Mb/s, 21x2Mb/s,140/155 Mb/s switch , 7x2Mb/s).			
07-03-18173	-Access & Connection Modules.			
07-03-18174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP contain			
07-03-18175	nd in subracks with common units & with function units,			
07-03-18176	controllers ,connectors, ETC.....			
07-03-18177	-Full Matrix ( duplicated).			
07-03-18178	-Auxiliary /Engineering order wire.			
07-03-18179	-Telephone Handset.			
07-03-18180	-Installation Materials & Tools.			
07-03-18181	-Racks with power supply unit (duplicated)and cable head.			

07-03-18182	-Digital Distribution Frames.			
07-03-18183	-Primary Multiplex ( PCM-30CH.) Subrack with common units & channel PCB's of different configurations.			
07-03-18184	-Equipment craft terminal for programmed control and display with operation soft ware .			
07-03-18185	-Spare parts & spare units. -Installation materials & tools. -Documentation.			
07-03-18189	Network Management Equipment			
07-03-18190	-Central Network Management System platform(Hard ware)			
07-03-18191	-Central Network Management System software packages.			
07-03-18192	-Local Network Management Equipment ( craft terminals).			
07-03-18193	-Mediation , Interface, and connection cards &modules.			
07-03-18194	-Installation Materials & Tools.			
07-03-18195	-Documentation..			

**ANNEX SEVEN / Telecommunications**

**Sub - sector : : Upper Euphratus Digital Microwave ( Baghdad –Qaim )**

**Site - Name : ARTHUMA-R**

Code	Item Description			
07-03-18100	SDH Microwave Radio Equipment			
07-03-18101	-STM-1, 6 GHZ(3+1) Radio drop repeater With Frequency & Space Diversity all complete.			
07-03-18102	-128(64) QAM Modems Modules.			
07-03-18103	-Protection Switch.			
07-03-18104	-Engineering order wire channel.			
07-03-18105	-2Mb/s auxiliary traffic.			
07-03-18106	-Interface to central Network management.			
07-03-18107	-Peripherals ( Lap Top PC , ETC..... )			
07-03-18108	-Rack with 48V. d/c unit (duplicated ).			
07-03-18109	-Installation & Maintenance tools & materials.			
07-03-18110	-Spare parts & spare units.			
07-03-18111	-Documentation.			
07-03-18112				
07-03-18119	Microwave Antennas			
07-03-18120	-Parabolic Dish ( 3 -3.7m. diameter ).			
07-03-18121	-Antenna Radiation Element with ( 1 / 2 )Ports.			
07-03-18122	-Connector Flanges.			
07-03-18123	-Tower Attachment.			
07-03-18124	-Installation & Maintenance tools & materials.			
07-03-18129	Microwave Feeders			
07-03-18130	-Elliptical waveguide for 8/6 GHZ band .			
07-03-18131	-Medium capacity dehydrator.			
07-03-18132	-Pressure Window.			
07-03-18133	-Fixture clamps.			
07-03-18134	-Earthing Kits.			
07-03-18135	-Installation materials & tools.			
07-03-18136	-Documentation.			
07-03-18139	DC Power Plant			
07-03-18140	-Modular switched rectifier system 48V / 30Ampere module (2+1) configuration.			
07-03-18141	-48V, 200Ah Lead-Acid Sealed-Batteries(2sets).			
07-03-18142	-Cabinet.			
07-03-18143	-Installation materials , cables, tools.			
07-03-18144	-Documentation.			

07-03-18149	Air Conditioners			
07-03-18150	-Duplicated 24000 BTU Unit.			
07-03-18151	-Piping & installation materials & fixtures.			
07-03-18152	-Spare parts.			
07-03-18153	-Documentation.			
07-03-18159	Diesel Engine Generator			
07-03-18160	-Capacity 50 KVA, triple Set.			
07-03-18161	-Daily Fuel Tank.			
07-03-18162	-Fan.			
07-03-18163	-Piping.			
07-03-18164	-Control cubicle & Alarms.			
07-03-18165	-Installation Materials & Tools.			
07-03-18166	-Spare parts & PCB's.			
07-03-18167	-Documentation.			
07-03-18169	SDH Multiplex Equipment			
07-03-18170	-STM-4 Multiplexer Subrack with redundant common units			
07-03-18171	-STM-1 Multiplex Subrack with redundant common units			
07-03-18172	-Tributary Cards ( 3x34Mb/s, 21x2Mb/s,140/155 Mb/s switch , 7x2Mb/s).			
07-03-18173	-Access & Connection Modules.			
07-03-18174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP contained in subracks with common units & with function units,			
07-03-18175	controllers ,connectors, ETC.....			
07-03-18176	-Full Matrix ( duplicated).			
07-03-18178	-Auxiliary /Engineering order wire.			
07-03-18179	-Telephone Handset.			
07-03-18180	-Installation Materials & Tools.			
07-03-18181	-Racks with power supply unit (duplicated)and cable head.			
07-03-18182	-Digital Distribution Frames.			
07-03-18183	-Primary Multiplex ( PCM-30CH.) Subrack with common units & channel PCB's of different configurations.			
07-03-18184	-Equipment craft terminal for programmed control and display with operation soft ware .			
07-03-18185	-Spare parts & spare units. -Installation materials & tools. -Documentation.			
07-03-18189	Network Management Equipment			
07-03-18190	-Central Network Management System platform(Hard ware)			
07-03-18191	-Central Network Management System software packages.			
07-03-18192	-Local Network Management Equipment ( craft terminals).			
07-03-18193	-Mediation , Interface, and connection cards &modules.			
07-03-18194	-Installation Materials & Tools.			
07-03-18195	-Documentation..			

**ANNEX SEVEN / Telecommunications**  
**Sub - sector : : Upper Euphratus Digital Microwave ( Baghdad –Qaim )**  
**Site - Name : Rutba**

Code	Item Description			
07-03-19100	SDH Microwave Radio Equipment			
07-03-19101	-STM-1, 6 GHZ (3+1) RadioTerminal With Frequency & Space Diversity all complete.			
07-03-19102	-128 QAM Modems Modules.			
07-03-19103	-Protection Switch.			
07-03-19104	-Engineering order wire channel.			

07-03-19105	-2Mb/s auxiliary traffic.			
07-03-19106	-Interface to central Network management.			
07-03-19107	-Peripherals ( Lap Top PC , ETC..... )			
07-03-19108	-Rack with 48V. d/c unit (duplicated ).			
07-03-19109	-Installation & Maintenance tools & materials.			
07-03-19110	-Spare parts & spare units.			
07-03-19111	-Documentation.			
07-03-19112				
07-03-19119	Microwave Antennas			
07-03-19120	-Parabolic Dish ( 3 -3.7m. diameter ).			
07-03-19121	-Antenna Radiation Element with ( 1 / 2 )Ports.			
07-03-19122	-Connector Flanges.			
07-03-19123	-Tower Attachment.			
07-03-19124	-Installation & Maintenance tools & materials.			
07-03-19129	Microwave Feeders			
07-03-19130	-Elliptical waveguide for 8/6 GHZ band .			
07-03-19131	-Medium capacity dehydrator.			
07-03-19132	-Pressure Window.			
07-03-19133	-Fixture clamps.			
07-03-19134	-Earthing Kits.			
07-03-19135	-Installation materials & tools.			
07-03-19136	-Documentation.			
07-03-19139	DC Power Plant			
07-03-19140	-Modular switched rectifier system 48V / 30Ampere module (2+1) configuration.			
07-03-19141	-48V, 200Ah Lead-Acid Sealed-Batteries(2sets).			
07-03-19142	-Cabinet.			
07-03-19143	-Installation materials , cables, tools.			
07-03-19144	-Documentation.			
07-03-19149	Air Conditioners			
07-03-19150	-Duplicated 24000 BTU Unit.			
07-03-19151	-Piping & installation materials & fixtures.			
07-03-19152	-Spare parts.			
07-03-19153	-Documentation.			
07-03-19159	Diesel Engine Generator			
07-03-19160	-Capacity 50 KVA, Dual Set.			
07-03-19161	-Daily Fuel Tank.			
07-03-19162	-Fan.			
07-03-19163	-Piping.			
07-03-19164	-Control cubicle & Alarms.			
07-03-19165	-Installation Materials & Tools.			
07-03-19166	-Spare parts & PCB's.			
07-03-19167	-Documentation.			
07-03-19169	SDH Multiplex Equipment			
07-03-19170	-STM-4 Mutliplexer Subrack with redundant common units			
07-03-19171	-STM-1 Multiplex Subrack with redundant common units			
07-03-19172	-Tributary Cards ( 3x34Mb/s,6*( 21x2Mb/s),4*140/155 Mb/s switch ,			
07-03-19173	-Access & Connection Modules.			
07-03-19174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP contain-			
07-03-19175	nd in subracks with common units & with function units,			
07-03-19176	controllers ,connectors, ETC.....			
07-03-19177	-Full Matrix ( duplicated).			
07-03-19178	-Auxiliary /Engineering order wire.			
07-03-19179	-Telephone Handset.			
07-03-19180	-Installation Materials & Tools.			

07-03-19181	-Racks with power supply unit (duplicated)and cable head.			
07-03-19182	-Digital Distribution Frames.			
07-03-19183	-Primary Multiplex ( PCM-30CH.) Subrack with common units & channel PCB's of different configurations.			
07-03-19184	-Equipment craft terminal for programmed control and display with operation soft ware .			
07-03-19185	-Spare parts & spare units. -Installation materials & tools. -Documentation.			
07-03-19189	Network Management Equipment			
07-03-19190	-Central Network Management System platform(Hard ware)			
07-03-19191	-Central Network Management System software packages.			
07-03-19192	-Local Network Management Equipment ( craft terminals).			
07-03-19193	-Mediation , Interface, and connection cards &modules.			
07-03-19194	-Installation Materials & Tools.			
07-03-19195	-Documentation..			
07-03-19119	Test Instruments			
07-03-19200	-Digital Multimeter.			
07-03-19201	-Frequency Counter .			
07-03-19202	-Power Meter .			
07-03-19203	-PCM Multiplex Tester .			
07-03-19204	-RF Sweep Generator .			
07-03-19205	-VSWR Test Set.			
07-03-19206	-Scalar Network Analyzer .			
07-03-19207	-RF Spectrum Analyzer.			
07-03-19208	-SDH Analyzer for STM-1.			
07-03-19209	-TX / RX MW Link Analyzer .			
07-03-19210	-PDH Analyzer ( 2Mb/s ).			
07-03-19211	-Oscilloscope 500 MHZ Dual channel.			
07-03-19212	-Vedio Test Set.			
07-03-19213	-RF Attenuators Fixed & Variable ( 0 - 60 )DB.			
07-03-19214	-Cables & Adapters.			
07-03-19215	-Waveguide / Coax. Adapters.			
07-03-19216	-Documentation.			
07-03-19219	Specific Tools			
07-03-19220	-20 Ton Lorry with crane & winch.			
07-03-19221	-Specific Maintenance Tools			
07-03-19222	-Station Tools			
07-03-19223	-Special Tools for waveguide.			
07-03-19224	-Installation Tools.			
07-03-19229	Services			
07-03-19230	-Factory Training Abroad.			
07-03-19231	-Training In Iraq.			
07-03-19232	-Supervision Services (Supplier Expert).			

**ANNEX SEVEN / Telecommunications**

**Sub - sector : : Upper Euphratus Digital Microwave ( Baghdad –Qaim )**

**Site - Name : Hadeetha-R1**

Code	Item Description			
07-03-18100	SDH Microwave Radio Equipment			
07-03-18101	-STM-1, 6 GHZ (3+1)&GHZ& 6GHZ Radio Terminal With Frequency & Space Diversity all complete.			
07-03-18102	-128 QAM Modems Modules.			
07-03-18103	-Protection Switch.			

07-03-18104	-Engineering order wire channel.			
07-03-18105	-2Mb/s auxiliary traffic.			
07-03-18106	-Interface to central Network management.			
07-03-18107	-Peripherals ( Lap Top PC , ETC..... )			
07-03-18108	-Rack with 48V. d/c unit (duplicated ).			
07-03-18109	-Installation & Maintenance tools & materials.			
07-03-18110	-Spare parts & spare units.			
07-03-18111	-Documentation.			
07-03-18112	-Galvanized steel self suboorted (40-100)m high microwave Tower all complet with earthing, Painting ,lighting &fightning subsystem (concrete fowdatwns)			
07-03-18119	Microwave Antennas			
07-03-18120	-Parabolic Dish ( 3 -3.7m. diameter ).			
07-03-18121	-Antenna Radiation Element with ( 1 / 2 )Ports.			
07-03-18122	-Connector Flanges.			
07-03-18123	-Tower Attachment.			
07-03-18124	-Installation & Maintenance tools & materials.			
07-03-18129	Microwave Feeders			
07-03-18130	-Elliptical waveguide for 8/6 GHZ band .			
07-03-18131	-Medium capacity dehydrator.			
07-03-18132	-Pressure Window.			
07-03-18133	-Fixture clamps.			
07-03-18134	-Earthing Kits.			
07-03-18135	-Installation materials & tools.			
07-03-18136	-Documentation.			
07-03-18139	DC Power Plant			
07-03-18140	-Modular switched rectifier system 48V / 30Ampere module (2+1) configuration.			
07-03-18141	-48V, 200Ah Lead-Acid Sealed-Batteries(2sets).			
07-03-18142	-Cabinet.			
07-03-18143	-Installation materials , cables, tools.			
07-03-18144	-Documentation.			
07-03-18149	Air Conditioners			
07-03-18150	-Duplicated 24000 BTU Unit.			
07-03-18151	-Piping & installation materials & fixtures.			
07-03-18152	-Spare parts.			
07-03-18153	-Documentation.			
07-03-18159	Diesel Engine Generator			
07-03-18160	-Capacity 50 KVA, triple Set.			
07-03-18161	-Daily Fuel Tank.			
07-03-18162	-Fan.			
07-03-18163	-Piping.			
07-03-18164	-Control cubicle & Alarms.			
07-03-18165	-Installation Materials & Tools.			
07-03-18166	-Spare parts & PCB's.			
07-03-18167	-Documentation.			
07-03-18169	SDH Multiplex Equipment			
07-03-18170	-STM-4 Mutlplexer Subrack with redundant common units			
07-03-18171	-STM-1 Multiplex Subrack with redundant common units			
07-03-18172	-Tributary Cards ( 3x34Mb/s, 21x2Mb/s,140/155 Mb/s switch , 7x2Mb/s).			
07-03-18173	-Access & Connection Modules.			
07-03-18174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP contain			
07-03-18175	nd in subracks with common units & with function units,			
07-03-18176	controllers ,connectors, ETC.....			



07-03-18177	-Full Matrix ( duplicated).			
07-03-18178	-Auxiliary /Engineering order wire.			
07-03-18179	-Telephone Handset.			
07-03-18180	-Installation Materials & Tools.			
07-03-18181	-Racks with power supply unit (duplicated)and cable head.			
07-03-18182	-Digital Distribution Frames.			
07-03-18183	-Primary Multiplex ( PCM-30CH.) Subrack with common units & channel PCB's of different configurations.			
07-03-18184	-Equipment craft terminal for programmed control and display with operation soft ware .			
07-03-18185	-Spare parts & spare units. -Installation materials & tools. -Documentation.			
07-03-18189	Network Management Equipment			
07-03-18190	-Central Network Management System platform(Hard ware)			
07-03-18191	-Central Network Management System software packages.			
07-03-18192	-Local Network Management Equipment ( craft terminals).			
07-03-18193	-Mediation , Interface, and connection cards &modules.			
07-03-18194	-Installation Materials & Tools.			
07-03-18195	-Documentation..			

#### ANNEX SEVEN / Telecommunications

**Sub - sector : : Upper Euphratus Digital Microwave ( Baghdad –Qaim )**

**Site - Name : Hadeetha-R2**

Code	Item Description			
07-03-18100	SDH Microwave Radio Equipment			
07-03-18101	-STM-1, 6 GHZ (3+1)&GHZ& 6GHZ Radio Terminal With Frequency & Space Diversity all complete.			
07-03-18102	-128 QAM Modems Modules.			
07-03-18103	-Protection Switch.			
07-03-18104	-Engineering order wire channel.			
07-03-18105	-2Mb/s auxiliary traffic.			
07-03-18106	-Interface to central Network management.			
07-03-18107	-Peripherals ( Lap Top PC , ETC..... )			
07-03-18108	-Rack with 48V. d/c unit (duplicated ).			
07-03-18109	-Installation & Maintenance tools & materials.			
07-03-18110	-Spare parts & spare units.			
07-03-18111	-Documentation.			
07-03-18112	-Galvanized steel self suboorted (40-100)m high microwave Tower all complet with earthing, Painting .lighting &fightning subsystem (concrete fowdatwns)			
07-03-18119	Microwave Antennas			
07-03-18120	-Parabolic Dish ( 3 -3.7m. diameter ).			
07-03-18121	-Antenna Radiation Element with ( 1 / 2 )Ports.			
07-03-18122	-Connector Flanges.			
07-03-18123	-Tower Attachment.			
07-03-18124	-Installation & Maintenance tools & materials.			
07-03-18129	Microwave Feeders			
07-03-18130	-Elliptical waveguide for 8/6 GHZ band .			
07-03-18131	-Medium capacity dehydrator.			
07-03-18132	-Pressure Window.			
07-03-18133	-Fixture clamps.			
07-03-18134	-Earthing Kits.			
07-03-18135	-Installation materials & tools.			
07-03-18136	-Documentation.			

07-03-18139	DC Power Plant			
07-03-18140	-Modular switched rectifier system 48V / 30Ampere module (2+1) configuration.			
07-03-18141	-48V, 200Ah Lead-Acid Sealed-Batteries(2sets).			
07-03-18142	-Cabinet.			
07-03-18143	-Installation materials , cables, tools.			
07-03-18144	-Documentation.			
07-03-18149	Air Conditioners			
07-03-18150	-Duplicated 24000 BTU Unit.			
07-03-18151	-Piping & installation materials & fixtures.			
07-03-18152	-Spare parts.			
07-03-18153	-Documentation.			
07-03-18159	Diesel Engine Generator			
07-03-18160	-Capacity 50 KVA, triple Set.			
07-03-18161	-Daily Fuel Tank.			
07-03-18162	-Fan.			
07-03-18163	-Piping.			
07-03-18164	-Control cubicle & Alarms.			
07-03-18165	-Installation Materials & Tools.			
07-03-18166	-Spare parts & PCB's.			
07-03-18167	-Documentation.			
07-03-18169	SDH Multiplex Equipment			
07-03-18170	-STM-4 Multiplexer Subrack with redundant common units			
07-03-18171	-STM-1 Multiplex Subrack with redundant common units			
07-03-18172	-Tributary Cards ( 3x34Mb/s, 21x2Mb/s,140/155 Mb/s switch , 7x2Mb/s).			
07-03-18173	-Access & Connection Modules.			
07-03-18174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP contained in subracks with common units & with function units,			
07-03-18175	controllers ,connectors, ETC.....			
07-03-18176	-Full Matrix ( duplicated).			
07-03-18177	-Auxiliary /Engineering order wire.			
07-03-18178	-Telephone Handset.			
07-03-18179	-Installation Materials & Tools.			
07-03-18180	-Racks with power supply unit (duplicated)and cable head.			
07-03-18181	-Digital Distribution Frames.			
07-03-18182	-Primary Multiplex ( PCM-30CH.) Subrack with common units & channel PCB's of different configurations.			
07-03-18183	-Equipment craft terminal for programmed control and display with operation software .			
07-03-18184	-Spare parts & spare units.			
07-03-18185	-Installation materials & tools.			
07-03-18189	-Documentation.			
07-03-18189	Network Management Equipment			
07-03-18190	-Central Network Management System platform(Hard ware)			
07-03-18191	-Central Network Management System software packages.			
07-03-18192	-Local Network Management Equipment ( craft terminals).			
07-03-18193	-Mediation , Interface, and connection cards &modules.			
07-03-18194	-Installation Materials & Tools.			
07-03-18195	-Documentation..			
07-03-18119	Test Instruments			
07-03-18200	-Digital Multimeter.			
07-03-18201	-Frequency Counter .			
07-03-18202	-Power Meter .			
07-03-18203	-PCM Multiplex Tester .			

07-03-18204	-RF Sweep Generator .			
07-03-18205	-VSWR Test Set.			
07-03-18206	-Scalar Network Analyzer .			
07-03-18207	-RF Spectrum Analyzer.			
07-03-18208	-SDH Analyzer for STM-1.			
07-03-18209	-TX / RX MW Link Analyzer .			
07-03-18210	-PDH Analyzer ( 2Mb/s ).			
07-03-18211	-Oscilloscope 500 MHZ Dual channel.			
07-03-18212	-Vedio Test Set.			
07-03-18213	-RF Attenuators Fixed & Variable ( 0 - 60 )DB.			
07-03-18214	-Cables & Adapters.			
07-03-18215	-Waveguide / Coax. Adapters.			
07-03-18216	-Documentation.			
07-03-18219	Specific Tools			
07-03-18220	-20 Ton Lorry with crane & winch.			
07-03-18221	-Specific Maintenance Tools			
07-03-18222	-Station Tools			
07-03-18223	-Special Tools for waveguide.			
07-03-18224	-Installation Tools.			
07-03-18229	Services			
07-03-18230	-Factory Training Abroad.			
07-03-18231	-Training In Iraq.			
07-03-18232	-Supervision Services (Supplier Expert).			

#### ANNEX SEVEN / Telecommunications

**Sub - sector : : Upper Euphratus Digital Microwave ( Baghdad –Qaim )**

**Site - Name : Baiji-R**

Code	Item Description			
07-03-18100	SDH Microwave Radio Equipment			
07-03-18101	-STM-1, 6 GHZ (3+1)&GHZ& 6GHZ Radio Terminal With Frequency & Space Diversity all complete.			
07-03-18102	-128 QAM Modems Modules.			
07-03-18103	-Protection Switch.			
07-03-18104	-Engineering order wire channel.			
07-03-18105	-2Mb/s auxiliary traffic.			
07-03-18106	-Interface to central Network management.			
07-03-18107	-Peripherals ( Lap Top PC , ETC..... )			
07-03-18108	-Rack with 48V. d/c unit (duplicated ).			
07-03-18109	-Installation & Maintenance tools & materials.			
07-03-18110	-Spare parts & spare units.			
07-03-18111	-Documentation.			
07-03-18112	-Galvanized steel self suboorted (40-100)m high microwave Tower all complet with earthing, Painting ,lighting &fightning subsystem (concrete fowdatwns)			
07-03-18119	Microwave Antennas			
07-03-18120	-Parabolic Dish ( 3 -3.7m. diameter ).			
07-03-18121	-Antenna Radiation Element with ( 1 / 2 )Ports.			
07-03-18122	-Connector Flanges.			
07-03-18123	-Tower Attachment.			
07-03-18124	-Installation & Maintenance tools & materials.			
07-03-18129	Microwave Feeders			
07-03-18130	-Elliptical waveguide for 8/6 GHZ band .			
07-03-18131	-Medium capacity dehydrator.			
07-03-18132	-Pressure Window.			

07-03-18133	-Fixture clamps.			
07-03-18134	-Earthing Kits.			
07-03-18135	-Installation materials & tools.			
07-03-18136	-Documentation.			
07-03-18139	DC Power Plant			
07-03-18140	-Modular switched rectifier system 48V / 30Ampere module (2+1) configuration.			
07-03-18141	-48V, 200Ah Lead-Acid Sealed-Batteries(2sets).			
07-03-18142	-Cabinet.			
07-03-18143	-Installation materials , cables, tools.			
07-03-18144	-Documentation.			
07-03-18149	Air Conditioners			
07-03-18150	-Duplicated 24000 BTU Unit.			
07-03-18151	-Piping & installation materials & fixtures.			
07-03-18152	-Spare parts.			
07-03-18153	-Documentation.			
07-03-18159	Diesel Engine Generator			
07-03-18160	-Capacity 50 KVA, triple Set.			
07-03-18161	-Daily Fuel Tank.			
07-03-18162	-Fan.			
07-03-18163	-Piping.			
07-03-18164	-Control cubicle & Alarms.			
07-03-18165	-Installation Materials & Tools.			
07-03-18166	-Spare parts & PCB's.			
07-03-18167	-Documentation.			
07-03-18169	SDH Multiplex Equipment			
07-03-18170	-STM-4 Multiplexer Subrack with redundant common units			
07-03-18171	-STM-1 Multiplex Subrack with redundant common units			
07-03-18172	-Tributary Cards ( 3x34Mb/s, 21x2Mb/s,140/155 Mb/s switch , 7x2Mb/s).			
07-03-18173	-Access & Connection Modules.			
07-03-18174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP contained in subracks with common units & with function units,			
07-03-18175	controllers ,connectors, ETC.....			
07-03-18176				
07-03-18177	-Full Matrix ( duplicated).			
07-03-18178	-Auxiliary /Engineering order wire.			
07-03-18179	-Telephone Handset.			
07-03-18180	-Installation Materials & Tools.			
07-03-18181	-Racks with power supply unit (duplicated)and cable head.			
07-03-18182	-Digital Distribution Frames.			
07-03-18183	-Primary Multiplex ( PCM-30CH.) Subrack with common units & channel PCB's of different configurations.			
07-03-18184	-Equipment craft terminal for programmed control and display with operation software .			
07-03-18185	-Spare parts & spare units.			
	-Installation materials & tools.			
	-Documentation.			
07-03-18189	Network Management Equipment			
07-03-18190	-Central Network Management System platform(Hard ware)			
07-03-18191	-Central Network Management System software packages.			
07-03-18192	-Local Network Management Equipment ( craft terminals).			
07-03-18193	-Mediation , Interface, and connection cards &modules.			
07-03-18194	-Installation Materials & Tools.			
07-03-18195	-Documentation..			

**ANNEX SEVEN / Telecommunications**

**Sub - sector : : Upper Euphratus Digital Microwave ( Baghdad –Qaim )**

**Site - Name : Baiji-ex**

<b>Code</b>	<b>Item Description</b>			
07-03-18100	SDH Microwave Radio Equipment			
07-03-18101	-STM-1, 6 GHZ(3+1) Radio terminal equip. With Frequency & Space Diversity all complete.			
07-03-18102	-128(64) QAM Modems Modules.			
07-03-18103	-Protection Switch.			
07-03-18104	-Engineering order wire channel.			
07-03-18105	-2Mb/s auxiliary traffic.			
07-03-18106	-Interface to central Network management.			
07-03-18107	-Peripherals ( Lap Top PC , ETC..... )			
07-03-18108	-Rack with 48V. d/c unit (duplicated ).			
07-03-18109	-Installation & Maintenance tools & materials.			
07-03-18110	-Spare parts & spare units.			
07-03-18111	-Documentation.			
07-03-18112				
07-03-18119	Microwave Antennas			
07-03-18120	-Parabolic Dish ( 3 -3.7m. diameter ).			
07-03-18121	-Antenna Radiation Element with ( 1 / 2 )Ports.			
07-03-18122	-Connector Flanges.			
07-03-18123	-Tower Attachment.			
07-03-18124	-Installation & Maintenance tools & materials.			
07-03-18129	Microwave Feeders			
07-03-18130	-Elliptical waveguide for 8/6 GHZ band .			
07-03-18131	-Medium capacity dehydrator.			
07-03-18132	-Pressure Window.			
07-03-18133	-Fixture clamps.			
07-03-18134	-Earthing Kits.			
07-03-18135	-Installation materials & tools.			
07-03-18136	-Documentation.			
07-03-18139	DC Power Plant			
07-03-18140	-Modular switched rectifier system 48V / 30Ampere module (2+1) configuration.			
07-03-18141	-48V, 200Ah Lead-Acid Sealed-Batteries(2sets).			
07-03-18142	-Cabinet.			
07-03-18143	-Installation materials , cables, tools.			
07-03-18144	-Documentation.			
07-03-18149	Air Conditioners			
07-03-18150	-Duplicated 24000 BTU Unit.			
07-03-18151	-Piping & installation materials & fixtures.			
07-03-18152	-Spare parts.			
07-03-18153	-Documentation.			
07-03-18159	Diesel Engine Generator			
07-03-18160	-Capacity 50 KVA, triple Set.			
07-03-18161	-Daily Fuel Tank.			
07-03-18162	-Fan.			
07-03-18163	-Piping.			
07-03-18164	-Control cubicle & Alarms.			
07-03-18165	-Installation Materials & Tools.			
07-03-18166	-Spare parts & PCB's.			
07-03-18167	-Documentation.			
07-03-18169	SDH Multiplex Equipment			

07-03-18170	-STM-4 Mutliplexer Subrack with redundant common units			
07-03-18171	-STM-1 Multiplex Subrack with redundant common units			
07-03-18172	-Tributary Cards ( 3x34Mb/s, 6*21x2Mb/s,4*140/155 Mb/s switch ,			
07-03-18173	-Access & Connection Modules.			
07-03-18174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP contain			
07-03-18175	nd in subracks with common units & with function units,			
07-03-18176	controllers ,connectors, ETC.....			
07-03-18177	-Full Matrix ( duplicated).			
07-03-18178	-Auxiliary /Engineering order wire.			
07-03-18179	-Telephone Handset.			
07-03-18180	-Installation Materials & Tools.			
07-03-18181	-Racks with power supply unit (duplicated)and cable head.			
07-03-18182	-Digital Distribution Frames.			
07-03-18183	-Primary Multiplex ( PCM-30CH.) Subrack with common units & channel PCB's of different configurations.			
07-03-18184	-Equipment craft terminal for programmed control and display with operation soft ware .			
07-03-18185	-Spare parts & spare units. -Installation materials & tools. -Documentation.			
07-03-18189	Network Management Equipment			
07-03-18190	-Central Network Management System platform(Hard ware)			
07-03-18191	-Central Network Management System software packages.			
07-03-18192	-Local Network Management Equipment ( craft terminals).			
07-03-18193	-Mediation , Interface, and connection cards &modules.			
07-03-18194	-Installation Materials & Tools.			
07-03-18195	-Documentation..			
07-03-18119	Test Instruments			
07-03-18200	-Digital Multimeter.			
07-03-18201	-Frequency Counter .			
07-03-18202	-Power Meter .			
07-03-18203	-PCM Multiplex Tester .			
07-03-18204	-RF Sweep Generator .			
07-03-18205	-VSWR Test Set.			
07-03-18206	-Scalar Network Analyzer .			
07-03-18207	-RF Spectrum Analyzer.			
07-03-18208	-SDH Analyzer for STM-1.			
07-03-18209	-TX / RX MW Link Analyzer .			
07-03-18210	-PDH Analyzer ( 2Mb/s ).			
07-03-18211	-Oscilloscope 500 MHZ Dual channel.			
07-03-18212	-Vedio Test Set.			
07-03-18213	-RF Attenuators Fixed & Variable ( 0 - 60 )DB.			
07-03-18214	-Cables & Adapters.			
07-03-18215	-Waveguide / Coax. Adapters.			
07-03-18216	-Documentation.			
07-03-18219	Specific Tools			
07-03-18220	-20 Ton Lorry with crane & winch.			
07-03-18221	-Specific Maintenance Tools			
07-03-18222	-Station Tools			
07-03-18223	-Special Tools for waveguide.			
07-03-18224	-Installation Tools.			
07-03-18229	Services			
07-03-18230	-Factory Training Abroad.			
07-03-18231	-Training In Iraq.			
07-03-18232	-Supervision Services (Supplier Expert).			

**ANNEX SEVEN / Telecommunications**

**Sub - sector: : Upper Euphratus Digital Microwave ( Baghdad –Qaim )**

**Site - Name : Salhiya**

<b>Code</b>	<b>Item Description</b>			
07-03-21100	SDH Microwave Radio Equipment			
07-03-21101	-STM-1, (2+1) 11GHZRadio Terminal With Frequency & Space Diversity all complete.			
07-03-21102	-128 QAM Modems Modules.			
07-03-21103	-Protection Switch.			
07-03-21104	-Engineering order wire channel.			
07-03-21105	-2Mb/s auxiliary traffic.			
07-03-21106	-Interface to central Network management.			
07-03-21107	-Peripherals ( Lap Top PC , ETC..... )			
07-03-21108	-Rack with 48V. d/c unit (duplicated ).			
07-03-21109	-Installation & Maintenance tools & materials.			
07-03-21110	-Spare parts & spare units.			
07-03-21111	-Documentation.			
07-03-21112	<i>-80 meter high self supporting steel tower for 4x3.6m dia. antennas complete with installation materials, erathing, lightning protection and painting etc.</i>			
07-03-21119	Microwave Antennas			
07-03-21120	-Parabolic Dish (2.4-3.7m. diameter ).			
07-03-21121	-Antenna Radiation Element with ( 1 / 2 )Ports.			
07-03-21122	-Connector Flanges.			
07-03-21123	-Tower Attachment.			
07-03-21124	-Installation & Maintenance tools & materials.			
07-03-21129	Microwave Feeders			
07-03-21130	-Elliptical waveguide for 8/6 GHZ band .			
07-03-21131	-Medium capacity dehydrator.			
07-03-21132	-Pressure Window.			
07-03-21133	-Fixture clamps.			
07-03-21134	-Earthing Kits.			
07-03-21135	-Installation materials & tools.			
07-03-21136	-Documentation.			
07-03-21139	DC Power Plant			
07-03-21142	-Modular switched rectifier system 48V / 30Ampere module (4+1) configuration.			
07-03-21141	-48V, 300Ah Lead-Acid Sealed-Batteries(2sets).			
07-03-21142	-Cabinet.			
07-03-21143	-Installation materials , cables, tools.			
07-03-21144	-Documentation.			
07-03-21149	Air Conditioners			
07-03-21150	-Duplicated 24000 BTU Unit.			
07-03-21151	-Piping & installation materials & fixtures.			
07-03-21152	-Spare parts.			
07-03-21153	-Documentation.			
07-03-21159	Diesel Engine Generator			
07-03-21160	-Capacity 50 KVA, Dual Set.			
07-03-21161	-Daily Fuel Tank.			
07-03-21162	-Fan.			
07-03-21163	-Piping.			
07-03-21164	-Control cubicle & Alarms.			
07-03-21165	-Installation Materials & Tools.			
07-03-21166	-Spare parts & PCB's.			
07-03-21167	-Documentation.			

07-03-21169	SDH Multiplex Equipment			
07-03-21170	-STM-4 Mutliplexer Subrack with redundant common units			
07-03-21171	-STM-1 Multiplex Subrack with redundant common units			
07-03-21172	-Tributary Cards ( 3x34Mb/s, 21x2Mb/s,140/155 Mb/s switch ,			
07-03-21173	-Access & Connection Modules.			
07-03-21174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP contain			
07-03-21175	nd in subracks with common units & with function units,			
07-03-21176	controllers ,connectors, ETC.....			
07-03-21177	-Full Matrix ( duplicated).			
07-03-21178	-Auxiliary /Engineering order wire.			
07-03-21179	-Telephone Handset.			
07-03-21180	-Installation Materials & Tools.			
07-03-21181	-Racks with power supply unit (duplicated)and cable head.			
07-03-21182	-Digital Distribution Frames.			
07-03-21183	-Primary Multiplex ( PCM-30CH.) Subrack with common units & channel PCB's of different configurations.			
07-03-21184	-Equipment craft terminal for programmed control and display with operation soft ware .			
07-03-21182	-Spare parts & spare units. -Installation materials & tools. -Documentation.			
07-03-21189	Network Management Equipment			
07-03-21190	-Central Network Management System platform(Hard ware)			
07-03-21191	-Central Network Management System software packages.			
07-03-21192	-Local Network Management Equipment ( craft terminals).			
07-03-21193	-Mediation , Interface, and connection cards &modules.			
07-03-21194	-Installation Materials & Tools.			
07-03-21195	-Documentation..			
07-03-21119	Test Instruments			
07-03-21200	-Digital Multimeter.			
07-03-21201	-Frequency Counter .			
07-03-21202	-Power Meter .			
07-03-21203	-PCM Multiplex Tester .			
07-03-21204	-RF Sweep Generator .			
07-03-21205	-VSWR Test Set.			
07-03-21206	-Scalar Network Analyzer .			
07-03-21207	-RF Spectrum Analyzer.			
07-03-21208	-SDH Analyzer for STM-1.			
07-03-21209	-TX / RX MW Link Analyzer .			
07-03-21210	-PDH Analyzer ( 2Mb/s ).			
07-03-21211	-Oscilloscope 500 MHZ Dual channel.			
07-03-21212	-Vedio Test Set.			
07-03-21213	-RF Attenuators Fixed & Variable ( 0 - 60 )DB.			
07-03-21214	-Cables & Adapters.			
07-03-21215	-Waveguide / Coax. Adapters.			
07-03-21216	-Documentation.			
07-03-21219	Specific Tools			
07-03-21220	-20 Ton Lorry with crane & winch.			
07-03-21221	-Specific Maintenance Tools			
07-03-21222	-Station Tools			
07-03-21223	-Special Tools for waveguide.			
07-03-21224	-Installation Tools.			
07-03-21229	Services			
07-03-21230	-Factory Training Abroad.			



07-03-21231	-Training In Iraq.			
07-03-21232	-Supervision Services (Supplier Expert).			

**ANNEX SEVEN / Telecommunications**

**Sub - sector : : Upper Euphratus Digital Microwave ( Baghdad –Qaim )**

**Site - Name : Mosul ex.**

Code	Item Description			
07-03-08100	SDH Microwave Radio Equipment			
07-03-08101	-STM-1, 6or11GHZ (3+1), Radio terminal eq With Frequency & Space Diversity all complete.			
07-03-08102	-128(64) QAM Modems Modules.			
07-03-08103	-Protection Switch.			
07-03-08104	-Engineering order wire channel.			
07-03-08105	-2Mb/s auxiliary traffic.			
07-03-08106	-Interface to central Network management.			
07-03-08107	-Peripherals ( Lap Top PC , ETC..... )			
07-03-08108	-Rack with 48V. d/c unit (duplicated ).			
07-03-08109	-Installation & Maintenance tools & materials.			
07-03-08110	-Spare parts & spare units.			
07-03-08111	-Documentation.			
07-03-08112				
07-03-08119	Microwave Antennas			
07-03-08120	-Parabolic Dish (1.8 -2.4- 3) m. diameter .			
07-03-08121	-Antenna Radiation Element with ( 1 / 2 )Ports.			
07-03-08122	-Connector Flanges.			
07-03-08123	-Tower Attachment.			
07-03-08124	-Installation & Maintenance tools & materials.			
07-03-08129	Microwave Feeders			
07-03-08130	-Elliptical waveguide for 8/6 GHZ band .			
07-03-08131	-Medium capacity dehydrator.			
07-03-08132	-Pressure Window.			
07-03-08133	-Fixture clamps.			
07-03-08134	-Earthing Kits.			
07-03-08135	-Installation materials & tools.			
07-03-08136	-Documentation.			
07-03-08139	DC Power Plant			
07-03-08140	-Modular switched rectifier system 48V / 30Ampere module (2+1) configuration.			
07-03-08141	-48V,200Ah Lead-Acid Sealed-Batteries(2sets).			
07-03-08142	-Cabinet.			
07-03-08143	-Installation materials , cables, tools.			
07-03-08144	-Documentation.			
07-03-08149	Air Conditioners			
07-03-08150	-Duplicated 24000 BTU Unit.			
07-03-08151	-Piping & installation materials & fixtures.			
07-03-08152	-Spare parts.			
07-03-08153	-Documentation.			
07-03-08159	Diesel Engine Generator			
07-03-08160	-Capacity 50 KVA, Triple Set.			
07-03-08161	-Daily Fuel Tank.			
07-03-08162	-Fan.			
07-03-08163	-Piping.			
07-03-08164	-Control cubicle & Alarms.			
07-03-08165	-Installation Materials & Tools.			
07-03-08166	-Spare parts & PCB's.			

07-03-08167	-Documentation.			
07-03-08169	SDH Multiplex Equipment			
07-03-08170	-STM-4 Mutliplexer Subrack with redundant common units			
07-03-08171	-STM-1 Multiplex Subrack with redundant common units			
07-03-08172	-Tributary Cards ( 3x34Mb/s, 6x(21x2Mb/s),4x(140/155 Mb/s).			
07-03-08173	-Access & Connection Modules.			
07-03-08174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP containd in subracks with common units & with function units,controllers ,connectors, ETC.....			
07-03-08175	-Full Matrix ( duplicated).			
07-03-08176	-Auxiliary /Engineering order wire.			
07-03-08177	-Telephone Handset.			
07-03-08178	-Installation Materials & Tools.			
07-03-08179	-Racks with power supply unit (duplicated)and cable head.			
07-03-08180	-Digital Distribution Frames.			
07-03-08181	-Primary Multiplex ( PCM-30CH.) Subrack with common units & channel PCB's of different configurations.			
07-03-08182	-Equipment craft terminal for programmed control and display with operation soft ware .			
07-03-08183	-Spare parts & spare units.			
07-03-08184	-Installation materials & tools.			
07-03-08185	-Documentation.			
07-03-08189	Network Management Equipment			
07-03-08190	-Central Network Management System platform(Hard ware)			
07-03-08191	-Central Network Management System software packages.			
07-03-08192	-Local Network Management Equipment ( craft terminals).			
07-03-08193	-Mediation , Interface, and connection cards &modules.			
07-03-08194	-Installation Materials & Tools.			
07-03-08195	-Documentation..			
07-03-08119	Test Instruments			
07-03-08200	-Digital Multimeter.			
07-03-08201	-Frequency Counter .			
07-03-08202	-Power Meter .			
07-03-08203	-PCM Multiplex Tester .			
07-03-08204	-RF Sweep Generator .			
07-03-08205	-VSWR Test Set.			
07-03-08206	-Scalar Network Analyzer .			
07-03-08207	-RF Spectrum Analyzer.			
07-03-08208	-SDH Analyzer for STM-1.			
07-03-08209	-TX / RX MW Link Analyzer .			
07-03-08210	-PDH Analyzer ( 2Mb/s ).			
07-03-08211	-Oscilloscope 500 MHZ Dual channel.			
07-03-08212	-Vedio Test Set.			
07-03-08213	-RF Attenuators Fixed & Variable ( 0 - 60 )DB.			
07-03-08214	-Cables & Adapters.			
07-03-08215	-Waveguide / Coax. Adapters.			
07-03-08216	-Documentation.			
07-03-08219	Specific Tools			
07-03-08220	-20 Ton Lorry with crane & winch.			
07-03-08221	-Specific Maintenance Tools			
07-03-08222	-Station Tools			
07-03-08223	-Special Tools for waveguide.			
07-03-08224	-Installation Tools.			
07-03-08229	Services			
07-03-08230	-Factory Training Abroad.			

07-03-08231	-Training In Iraq.			
07-03-08232	-Supervision Services (Supplier Expert).			

**ANNEX SEVEN / Telecommunications**

**Sub - sector : : Upper Euphratus Digital Microwave ( Baghdad –Qaim )**

**Site - Name : Mosul T**

Code	Item Description			
07-03-08100	SDH Microwave Radio Equipment			
07-03-08101	-STM-1, 6or11GHZ (3+1), Radio terminal eq With Frequency & Space Diversity all complete.			
07-03-08102	-128(64) QAM Modems Modules.			
07-03-08103	-Protection Switch.			
07-03-08104	-Engineering order wire channel.			
07-03-08105	-2Mb/s auxiliary traffic.			
07-03-08106	-Interface to central Network management.			
07-03-08107	-Peripherals ( Lap Top PC , ETC..... )			
07-03-08108	-Rack with 48V. d/c unit (duplicated ).			
07-03-08109	-Installation & Maintenance tools & materials.			
07-03-08110	-Spare parts & spare units.			
07-03-08111	-Documentation.			
07-03-08112	.			
07-03-08119	Microwave Antennas			
07-03-08120	-Parabolic Dish (1.8 -2.4- 3) m. diameter .			
07-03-08121	-Antenna Radiation Element with ( 1 / 2 )Ports.			
07-03-08122	-Connector Flanges.			
07-03-08123	-Tower Attachment.			
07-03-08124	-Installation & Maintenance tools & materials.			
07-03-08129	Microwave Feeders			
07-03-08130	-Elliptical waveguide for 8/6 GHZ band .			
07-03-08131	-Medium capacity dehydrator.			
07-03-08132	-Pressure Window.			
07-03-08133	-Fixture clamps.			
07-03-08134	-Earthing Kits.			
07-03-08135	-Installation materials & tools.			
07-03-08136	-Documentation.			
07-03-08139	DC Power Plant			
07-03-08140	-Modular switched rectifier system 48V / 30Ampere module (2+1) configuration.			
07-03-08141	-48V,200Ah Lead-Acid Sealed-Batteries(2sets).			
07-03-08142	-Cabinet.			
07-03-08143	-Installation materials , cables, tools.			
07-03-08144	-Documentation.			
07-03-08149	Air Conditioners			
07-03-08150	-Duplicated 24000 BTU Unit.			
07-03-08151	-Piping & installation materials & fixtures.			
07-03-08152	-Spare parts.			
07-03-08153	-Documentation.			
07-03-08159	Diesel Engine Generator			
07-03-08160	-Capacity 50 KVA, Triple Set.			
07-03-08161	-Daily Fuel Tank.			
07-03-08162	-Fan.			
07-03-08163	-Piping.			
07-03-08164	-Control cubicle & Alarms.			
07-03-08165	-Installation Materials & Tools.			

07-03-08166	-Spare parts & PCB's.			
07-03-08167	-Documentation.			
07-03-08169	SDH Multiplex Equipment			
07-03-08170	-STM-4 Mutliplexer Subrack with redundant common units			
07-03-08171	-STM-1 Multiplex Subrack with redundant common units			
07-03-08172	-Tributary Cards ( 3x34Mb/s, 6x(21x2Mb/s),4x(140/155 Mb/s).			
07-03-08173	-Access & Connection Modules.			
07-03-08174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP containd in subracks with common units & with function units,controllers ,connectors, ETC.....			
07-03-08175	-Full Matrix ( duplicated).			
07-03-08176	-Auxiliary /Engineering order wire.			
07-03-08177	-Telephone Handset.			
07-03-08178	-Installation Materials & Tools.			
07-03-08179	-Racks with power supply unit (duplicated)and cable head.			
07-03-08180	-Digital Distribution Frames.			
07-03-08181	-Primary Multiplex ( PCM-30CH.) Subrack with common units & channel PCB's of different configurations.			
07-03-08182	-Equipment craft terminal for programmed control and display with operation soft ware .			
07-03-08183	-Spare parts & spare units.			
07-03-08184	-Installation materials & tools.			
07-03-08185	-Documentation.			
07-03-08189	Network Management Equipment			
07-03-08190	-Central Network Management System platform(Hard ware)			
07-03-08191	-Central Network Management System software packages.			
07-03-08192	-Local Network Management Equipment ( craft terminals).			
07-03-08193	-Mediation , Interface, and connection cards &modules.			
07-03-08194	-Installation Materials & Tools.			
07-03-08195	-Documentation..			
07-03-08119	Test Instruments			
07-03-08200	-Digital Multimeter.			
07-03-08201	-Frequency Counter .			
07-03-08202	-Power Meter .			
07-03-08203	-PCM Multiplex Tester .			
07-03-08204	-RF Sweep Generator .			
07-03-08205	-VSWR Test Set.			
07-03-08206	-Scalar Network Analyzer .			
07-03-08207	-RF Spectrum Analyzer.			
07-03-08208	-SDH Analyzer for STM-1.			
07-03-08209	-TX / RX MW Link Analyzer .			
07-03-08210	-PDH Analyzer ( 2Mb/s ).			
07-03-08211	-Oscilloscope 500 MHZ Dual channel.			
07-03-08212	-Vedio Test Set.			
07-03-08213	-RF Attenuators Fixed & Variable ( 0 - 60 )DB.			
07-03-08214	-Cables & Adapters.			
07-03-08215	-Waveguide / Coax. Adapters.			
07-03-08216	-Documentation.			
07-03-08219	Specific Tools			
07-03-08220	-20 Ton Lorry with crane & winch.			
07-03-08221	-Specific Maintenance Tools			
07-03-08222	-Station Tools			
07-03-08223	-Special Tools for waveguide.			
07-03-08224	-Installation Tools.			
07-03-08229	Services			

07-03-08230	-Factory Training Abroad.			
07-03-08231	-Training In Iraq.			
07-03-08232	-Supervision Services (Supplier Expert).			

**ANNEX SEVEN / Telecommunications**

**Sub - sector : : Upper Euphratus Digital Microwave ( Baghdad –Qaim )**

**Site - Name : Halabia**

Code	Item Description			
07-03-08100	SDH Microwave Radio Equipment			
07-03-08101	-STM-1, 6or11GHZ (3+1), Radio terminal eq With Frequency & Space Diversity all complete.			
07-03-08102	-128(64) QAM Modems Modules.			
07-03-08103	-Protection Switch.			
07-03-08104	-Engineering order wire channel.			
07-03-08105	-2Mb/s auxiliary traffic.			
07-03-08106	-Interface to central Network management.			
07-03-08107	-Peripherals ( Lap Top PC , ETC..... )			
07-03-08108	-Rack with 48V. d/c unit (duplicated ).			
07-03-08109	-Installation & Maintenance tools & materials.			
07-03-08110	-Spare parts & spare units.			
07-03-08111	-Documentation.			
07-03-08112	.			
07-03-08119	Microwave Antennas			
07-03-08120	-Parabolic Dish (1.8 -2.4- 3) m. diameter .			
07-03-08121	-Antenna Radiation Element with ( 1 / 2 )Ports.			
07-03-08122	-Connector Flanges.			
07-03-08123	-Tower Attachment.			
07-03-08124	-Installation & Maintenance tools & materials.			
07-03-08129	Microwave Feeders			
07-03-08130	-Elliptical waveguide for 8/6 GHZ band .			
07-03-08131	-Medium capacity dehydrator.			
07-03-08132	-Pressure Window.			
07-03-08133	-Fixture clamps.			
07-03-08134	-Earthing Kits.			
07-03-08135	-Installation materials & tools.			
07-03-08136	-Documentation.			
07-03-08139	DC Power Plant			
07-03-08140	-Modular switched rectifier system 48V / 30Ampere module (2+1) configuration.			
07-03-08141	-48V,200Ah Lead-Acid Sealed-Batteries(2sets).			
07-03-08142	-Cabinet.			
07-03-08143	-Installation materials , cables, tools.			
07-03-08144	-Documentation.			
07-03-08149	Air Conditioners			
07-03-08150	-Duplicated 24000 BTU Unit.			
07-03-08151	-Piping & installation materials & fixtures.			
07-03-08152	-Spare parts.			
07-03-08153	-Documentation.			
07-03-08159	Diesel Engine Generator			
07-03-08160	-Capacity 50 KVA, Triple Set.			
07-03-08161	-Daily Fuel Tank.			
07-03-08162	-Fan.			
07-03-08163	-Piping.			
07-03-08164	-Control cubicle & Alarms.			
07-03-08165	-Installation Materials & Tools.			

07-03-08166	-Spare parts & PCB's.			
07-03-08167	-Documentation.			
07-03-08169	SDH Multiplex Equipment			
07-03-08170	-STM-4 Mutliplexer Subrack with redundant common units			
07-03-08171	-STM-1 Multiplex Subrack with redundant common units			
07-03-08172	-Tributary Cards ( 3x34Mb/s, 6x(21x2Mb/s),4x(140/155 Mb/s).			
07-03-08173	-Access & Connection Modules.			
07-03-08174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP containd in subracks with common units & with function units,controllers ,connectors, ETC.....			
07-03-08175	-Full Matrix ( duplicated).			
07-03-08176	-Auxiliary /Engineering order wire.			
07-03-08177	-Telephone Handset.			
07-03-08178	-Installation Materials & Tools.			
07-03-08179	-Racks with power supply unit (duplicated)and cable head.			
07-03-08180	-Digital Distribution Frames.			
07-03-08181	-Primary Multiplex ( PCM-30CH.) Subrack with common units & channel PCB's of different configurations.			
07-03-08182	-Equipment craft terminal for programmed control and display with operation soft ware .			
07-03-08183	-Spare parts & spare units.			
07-03-08184	-Installation materials & tools.			
07-03-08185	-Documentation.			
07-03-08189	Network Management Equipment			
07-03-08190	-Central Network Management System platform(Hard ware)			
07-03-08191	-Central Network Management System software packages.			
07-03-08192	-Local Network Management Equipment ( craft terminals).			
07-03-08193	-Mediation , Interface, and connection cards &modules.			
07-03-08194	-Installation Materials & Tools.			
07-03-08195	-Documentation..			
07-03-08119	Test Instruments			
07-03-08200	-Digital Multimeter.			
07-03-08201	-Frequency Counter .			
07-03-08202	-Power Meter .			
07-03-08203	-PCM Multiplex Tester .			
07-03-08204	-RF Sweep Generator .			
07-03-08205	-VSWR Test Set.			
07-03-08206	-Scalar Network Analyzer .			
07-03-08207	-RF Spectrum Analyzer.			
07-03-08208	-SDH Analyzer for STM-1.			
07-03-08209	-TX / RX MW Link Analyzer .			
07-03-08210	-PDH Analyzer ( 2Mb/s ).			
07-03-08211	-Oscilloscope 500 MHZ Dual channel.			
07-03-08212	-Vedio Test Set.			
07-03-08213	-RF Attenuators Fixed & Variable ( 0 - 60 )DB.			
07-03-08214	-Cables & Adapters.			
07-03-08215	-Waveguide / Coax. Adapters.			
07-03-08216	-Documentation.			
07-03-08219	Specific Tools			
07-03-08220	-20 Ton Lorry with crane & winch.			
07-03-08221	-Specific Maintenance Tools			
07-03-08222	-Station Tools			
07-03-08223	-Special Tools for waveguide.			
07-03-08224	-Installation Tools.			
07-03-08229	Services			

07-03-08230	-Factory Training Abroad.			
07-03-08231	-Training In Iraq.			
07-03-08232	-Supervision Services (Supplier Expert).			

**ANNEX SEVEN / Telecommunications**

**Sub - sector : : Upper Euphratus Digital Microwave ( Baghdad –Qaim )**

**Site - Name : Khubaza**

Code	Item Description			
07-03-08100	SDH Microwave Radio Equipment			
07-03-08101	-STM-1, 6or11GHZ (3+1) 3*(1+1), Radio terminal eq With Frequency & Space Diversity all complete.			
07-03-08102	-128(64) QAM Modems Modules.			
07-03-08103	-Protection Switch.			
07-03-08104	-Engineering order wire channel.			
07-03-08105	-2Mb/s auxiliary traffic.			
07-03-08106	-Interface to central Network management.			
07-03-08107	-Peripherals ( Lap Top PC , ETC..... )			
07-03-08108	-Rack with 48V. d/c unit (duplicated ).			
07-03-08109	-Installation & Maintenance tools & materials.			
07-03-08110	-Spare parts & spare units.			
07-03-08111	-Documentation.			
07-03-08112				
07-03-08119	Microwave Antennas			
07-03-08120	-Parabolic Dish (1.8 -2.4- 3) m. diameter .			
07-03-08121	-Antenna Radiation Element with ( 1 / 2 )Ports.			
07-03-08122	-Connector Flanges.			
07-03-08123	-Tower Attachment.			
07-03-08124	-Installation & Maintenance tools & materials.			
07-03-08129	Microwave Feeders			
07-03-08130	-Elliptical waveguide for 8/6 GHZ band .			
07-03-08131	-Medium capacity dehydrator.			
07-03-08132	-Pressure Window.			
07-03-08133	-Fixture clamps.			
07-03-08134	-Earthing Kits.			
07-03-08135	-Installation materials & tools.			
07-03-08136	-Documentation.			
07-03-08139	DC Power Plant			
07-03-08140	-Modular switched rectifier system 48V / 30Ampere module (2+1) configuration.			
07-03-08141	-48V,200Ah Lead-Acid Sealed-Batteries(2sets).			
07-03-08142	-Cabinet.			
07-03-08143	-Installation materials , cables, tools.			
07-03-08144	-Documentation.			
07-03-08149	Air Conditioners			
07-03-08150	-Duplicated 24000 BTU Unit.			
07-03-08151	-Piping & installation materials & fixtures.			
07-03-08152	-Spare parts.			
07-03-08153	-Documentation.			
07-03-08159	Diesel Engine Generator			
07-03-08160	-Capacity 50 KVA, Triple Set.			
07-03-08161	-Daily Fuel Tank.			
07-03-08162	-Fan.			
07-03-08163	-Piping.			
07-03-08164	-Control cubicle & Alarms.			
07-03-08165	-Installation Materials & Tools.			

07-03-08166	-Spare parts & PCB's.			
07-03-08167	-Documentation.			
07-03-08169	SDH Multiplex Equipment			
07-03-08170	-STM-4 Mutliplexer Subrack with redundant common units			
07-03-08171	-STM-1 Multiplex Subrack with redundant common units			
07-03-08172	-Tributary Cards ( 3x34Mb/s, 6x(21x2Mb/s),4x(140/155 Mb/s).			
07-03-08173	-Access & Connection Modules.			
07-03-08174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP containd in subracks with common units & with function units,controllers ,connectors, ETC.....			
07-03-08175	-Full Matrix ( duplicated).			
07-03-08176	-Auxiliary /Engineering order wire.			
07-03-08177	-Telephone Handset.			
07-03-08178	-Installation Materials & Tools.			
07-03-08179	-Racks with power supply unit (duplicated)and cable head.			
07-03-08180	-Digital Distribution Frames.			
07-03-08181	-Primary Multiplex ( PCM-30CH.) Subrack with common units & channel PCB's of different configurations.			
07-03-08182	-Equipment craft terminal for programmed control and display with operation soft ware .			
07-03-08183	-Spare parts & spare units.			
07-03-08184	-Installation materials & tools.			
07-03-08185	-Documentation.			
07-03-08189	Network Management Equipment			
07-03-08190	-Central Network Management System platform(Hard ware)			
07-03-08191	-Central Network Management System software packages.			
07-03-08192	-Local Network Management Equipment ( craft terminals).			
07-03-08193	-Mediation , Interface, and connection cards &modules.			
07-03-08194	-Installation Materials & Tools.			
07-03-08195	-Documentation..			
07-03-08119	Test Instruments			
07-03-08200	-Digital Multimeter.			
07-03-08201	-Frequency Counter .			
07-03-08202	-Power Meter .			
07-03-08203	-PCM Multiplex Tester .			
07-03-08204	-RF Sweep Generator .			
07-03-08205	-VSWR Test Set.			
07-03-08206	-Scalar Network Analyzer .			
07-03-08207	-RF Spectrum Analyzer.			
07-03-08208	-SDH Analyzer for STM-1.			
07-03-08209	-TX / RX MW Link Analyzer .			
07-03-08210	-PDH Analyzer ( 2Mb/s ).			
07-03-08211	-Oscilloscope 500 MHZ Dual channel.			
07-03-08212	-Vedio Test Set.			
07-03-08213	-RF Attenuators Fixed & Variable ( 0 - 60 )DB.			
07-03-08214	-Cables & Adapters.			
07-03-08215	-Waveguide / Coax. Adapters.			
07-03-08216	-Documentation.			
07-03-08219	Specific Tools			
07-03-08220	-20 Ton Lorry with crane & winch.			
07-03-08221	-Specific Maintenance Tools			
07-03-08222	-Station Tools			
07-03-08223	-Special Tools for waveguide.			
07-03-08224	-Installation Tools.			
07-03-08229	Services			



07-03-08230	-Factory Training Abroad.			
07-03-08231	-Training In Iraq.			
07-03-08232	-Supervision Services (Supplier Expert).			

**ANNEX SEVEN / Telecommunications**

**Sub - sector : : Upper Euphratus Digital Microwave ( Baghdad –Qaim )**

**Site - Name : Sinjar.**

Code	Item Description			
07-03-08100	SDH Microwave Radio Equipment			
07-03-08101	-STM-1, 6or11GHZ (2+1) Radio terminal eq With Frequency & Space Diversity all complete.			
07-03-08102	-128(64) QAM Modems Modules.			
07-03-08103	-Protection Switch.			
07-03-08104	-Engineering order wire channel.			
07-03-08105	-2Mb/s auxiliary traffic.			
07-03-08106	-Interface to central Network management.			
07-03-08107	-Peripherals ( Lap Top PC , ETC..... )			
07-03-08108	-Rack with 48V. d/c unit (duplicated ).			
07-03-08109	-Installation & Maintenance tools & materials.			
07-03-08110	-Spare parts & spare units.			
07-03-08111	-Documentation.			
07-03-08112				
07-03-08119	Microwave Antennas			
07-03-08120	-Parabolic Dish (1.8 -2.4- 3) m. diameter .			
07-03-08121	-Antenna Radiation Element with ( 1 / 2 )Ports.			
07-03-08122	-Connector Flanges.			
07-03-08123	-Tower Attachment.			
07-03-08124	-Installation & Maintenance tools & materials.			
07-03-08129	Microwave Feeders			
07-03-08130	-Elliptical waveguide for 8/6 GHZ band .			
07-03-08131	-Medium capacity dehydrator.			
07-03-08132	-Pressure Window.			
07-03-08133	-Fixture clamps.			
07-03-08134	-Earthing Kits.			
07-03-08135	-Installation materials & tools.			
07-03-08136	-Documentation.			
07-03-08139	DC Power Plant			
07-03-08140	-Modular switched rectifier system 48V / 30Ampere module (2+1) configuration.			
07-03-08141	-48V,200Ah Lead-Acid Sealed-Batteries(2sets).			
07-03-08142	-Cabinet.			
07-03-08143	-Installation materials , cables, tools.			
07-03-08144	-Documentation.			
07-03-08149	Air Conditioners			
07-03-08150	-Duplicated 24000 BTU Unit.			
07-03-08151	-Piping & installation materials & fixtures.			
07-03-08152	-Spare parts.			
07-03-08153	-Documentation.			
07-03-08159	Diesel Engine Generator			
07-03-08160	-Capacity 50 KVA, Triple Set.			
07-03-08161	-Daily Fuel Tank.			
07-03-08162	-Fan.			
07-03-08163	-Piping.			
07-03-08164	-Control cubicle & Alarms.			

07-03-08165	-Installation Materials & Tools.			
07-03-08166	-Spare parts & PCB's.			
07-03-08167	-Documentation.			
07-03-08169	SDH Multiplex Equipment			
07-03-08170	-STM-4 Multiplexer Subrack with redundant common units			
07-03-08171	-STM-1 Multiplex Subrack with redundant common units			
07-03-08172	-Tributary Cards ( 3x34Mb/s, 6x(21x2Mb/s),4x(140/155 Mb/s).			
07-03-08173	-Access & Connection Modules.			
07-03-08174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP contained in subracks with common units & with function units,controllers ,connectors, ETC.....			
07-03-08175	-Full Matrix ( duplicated).			
07-03-08176	-Auxiliary /Engineering order wire.			
07-03-08177	-Telephone Handset.			
07-03-08178	-Installation Materials & Tools.			
07-03-08179	-Racks with power supply unit (duplicated)and cable head.			
07-03-08180	-Digital Distribution Frames.			
07-03-08181	-Primary Multiplex ( PCM-30CH.) Subrack with common units & channel PCB's of different configurations.			
07-03-08182	-Equipment craft terminal for programmed control and display with operation software .			
07-03-08183	-Spare parts & spare units.			
07-03-08184	-Installation materials & tools.			
07-03-08185	-Documentation.			
07-03-08189	Network Management Equipment			
07-03-08190	-Central Network Management System platform(Hardware)			
07-03-08191	-Central Network Management System software packages.			
07-03-08192	-Local Network Management Equipment ( craft terminals).			
07-03-08193	-Mediation , Interface, and connection cards &modules.			
07-03-08194	-Installation Materials & Tools.			
07-03-08195	-Documentation..			
07-03-08119	Test Instruments			
07-03-08200	-Digital Multimeter.			
07-03-08201	-Frequency Counter .			
07-03-08202	-Power Meter .			
07-03-08203	-PCM Multiplex Tester .			
07-03-08204	-RF Sweep Generator .			
07-03-08205	-VSWR Test Set.			
07-03-08206	-Scalar Network Analyzer .			
07-03-08207	-RF Spectrum Analyzer.			
07-03-08208	-SDH Analyzer for STM-1.			
07-03-08209	-TX / RX MW Link Analyzer .			
07-03-08210	-PDH Analyzer ( 2Mb/s ).			
07-03-08211	-Oscilloscope 500 MHZ Dual channel.			
07-03-08212	-Video Test Set.			
07-03-08213	-RF Attenuators Fixed & Variable ( 0 - 60 )DB.			
07-03-08214	-Cables & Adapters.			
07-03-08215	-Waveguide / Coax. Adapters.			
07-03-08216	-Documentation.			
07-03-08219	Specific Tools			
07-03-08220	-20 Ton Lorry with crane & winch.			
07-03-08221	-Specific Maintenance Tools			
07-03-08222	-Station Tools			
07-03-08223	-Special Tools for waveguide.			
07-03-08224	-Installation Tools.			

07-03-08229	Services			
07-03-08230	-Factory Training Abroad.			
07-03-08231	-Training In Iraq.			
07-03-08232	-Supervision Services (Supplier Expert).			

**ANNEX SEVEN / Telecommunications**

**Sub - sector : : Upper Euphratus Digital Microwave ( Baghdad –Qaim )**

**Site - Name : Al-petra Syria**

Code	Item Description			
07-03-08100	SDH Microwave Radio Equipment			
07-03-08101	-STM-1, 6or11GHZ (2+1) Radio terminal eq With Frequency & Space Diversity all complete.			
07-03-08102	-128(64) QAM Modems Modules.			
07-03-08103	-Protection Switch.			
07-03-08104	-Engineering order wire channel.			
07-03-08105	-2Mb/s auxiliary traffic.			
07-03-08106	-Interface to central Network management.			
07-03-08107	-Peripherals ( Lap Top PC , ETC..... )			
07-03-08108	-Rack with 48V. d/c unit (duplicated ).			
07-03-08109	-Installation & Maintenance tools & materials.			
07-03-08110	-Spare parts & spare units.			
07-03-08111	-Documentation.			
07-03-08112				
07-03-08119	Microwave Antennas			
07-03-08120	-Parabolic Dish (1.8 -2.4- 3) m. diameter .			
07-03-08121	-Antenna Radiation Element with ( 1 / 2 )Ports.			
07-03-08122	-Connector Flanges.			
07-03-08123	-Tower Attachment.			
07-03-08124	-Installation & Maintenance tools & materials.			
07-03-08129	Microwave Feeders			
07-03-08130	-Elliptical waveguide for 8/6 GHZ band .			
07-03-08131	-Medium capacity dehydrator.			
07-03-08132	-Pressure Window.			
07-03-08133	-Fixture clamps.			
07-03-08134	-Earthing Kits.			
07-03-08135	-Installation materials & tools.			
07-03-08136	-Documentation.			
07-03-08139	DC Power Plant			
07-03-08140	-Modular switched rectifier system 48V / 30Ampere module (2+1) configuration.			
07-03-08141	-48V,200Ah Lead-Acid Sealed-Batteries(2sets).			
07-03-08142	-Cabinet.			
07-03-08143	-Installation materials , cables, tools.			
07-03-08144	-Documentation.			
07-03-08149	Air Conditioners			
07-03-08150	-Duplicated 24000 BTU Unit.			
07-03-08151	-Piping & installation materials & fixtures.			
07-03-08152	-Spare parts.			
07-03-08153	-Documentation.			
07-03-08159	Diesel Engine Generator			
07-03-08160	-Capacity 50 KVA, Triple Set.			
07-03-08161	-Daily Fuel Tank.			
07-03-08162	-Fan.			
07-03-08163	-Piping.			
07-03-08164	-Control cubicle & Alarms.			

07-03-08165	-Installation Materials & Tools.			
07-03-08166	-Spare parts & PCB's.			
07-03-08167	-Documentation.			
07-03-08169	SDH Multiplex Equipment			
07-03-08170	-STM-4 Multiplexer Subrack with redundant common units			
07-03-08171	-STM-1 Multiplex Subrack with redundant common units			
07-03-08172	-Tributary Cards ( 3x34Mb/s, 6x(21x2Mb/s),4x(140/155 Mb/s).			
07-03-08173	-Access & Connection Modules.			
07-03-08174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP contained in subracks with common units & with function units,controllers ,connectors, ETC.....			
07-03-08175	-Full Matrix ( duplicated).			
07-03-08176	-Auxiliary /Engineering order wire.			
07-03-08177	-Telephone Handset.			
07-03-08178	-Installation Materials & Tools.			
07-03-08179	-Racks with power supply unit (duplicated)and cable head.			
07-03-08180	-Digital Distribution Frames.			
07-03-08181	-Primary Multiplex ( PCM-30CH.) Subrack with common units & channel PCB's of different configurations.			
07-03-08182	-Equipment craft terminal for programmed control and display with operation software .			
07-03-08183	-Spare parts & spare units.			
07-03-08184	-Installation materials & tools.			
07-03-08185	-Documentation.			
07-03-08189	Network Management Equipment			
07-03-08190	-Central Network Management System platform(Hardware)			
07-03-08191	-Central Network Management System software packages.			
07-03-08192	-Local Network Management Equipment ( craft terminals).			
07-03-08193	-Mediation , Interface, and connection cards &modules.			
07-03-08194	-Installation Materials & Tools.			
07-03-08195	-Documentation..			
07-03-08119	Test Instruments			
07-03-08200	-Digital Multimeter.			
07-03-08201	-Frequency Counter .			
07-03-08202	-Power Meter .			
07-03-08203	-PCM Multiplex Tester .			
07-03-08204	-RF Sweep Generator .			
07-03-08205	-VSWR Test Set.			
07-03-08206	-Scalar Network Analyzer .			
07-03-08207	-RF Spectrum Analyzer.			
07-03-08208	-SDH Analyzer for STM-1.			
07-03-08209	-TX / RX MW Link Analyzer .			
07-03-08210	-PDH Analyzer ( 2Mb/s ).			
07-03-08211	-Oscilloscope 500 MHZ Dual channel.			
07-03-08212	-Video Test Set.			
07-03-08213	-RF Attenuators Fixed & Variable ( 0 - 60 )DB.			
07-03-08214	-Cables & Adapters.			
07-03-08215	-Waveguide / Coax. Adapters.			
07-03-08216	-Documentation.			
07-03-08219	Specific Tools			
07-03-08220	-20 Ton Lorry with crane & winch.			
07-03-08221	-Specific Maintenance Tools			
07-03-08222	-Station Tools			
07-03-08223	-Special Tools for waveguide.			

07-03-08224	-Installation Tools.			
07-03-08229	Services			
07-03-08230	-Factory Training Abroad.			
07-03-08231	-Training In Iraq.			
07-03-08232	-Supervision Services (Supplier Expert).			

**ANNEX SEVEN / Telecommunications**

**Sub - sector : : Upper Euphratus Digital Microwave ( Baghdad –Qaim )**

**Site - Name : Makhfar Al-nahar.**

Code	Item Description			
07-03-08100	SDH Microwave Radio Equipment			
07-03-08101	-STM-1, 6or11GHZ (2+1) Radio terminal eq With Frequency & Space Diversity all complete.			
07-03-08102	-128(64) QAM Modems Modules.			
07-03-08103	-Protection Switch.			
07-03-08104	-Engineering order wire channel.			
07-03-08105	-2Mb/s auxiliary traffic.			
07-03-08106	-Interface to central Network management.			
07-03-08107	-Peripherals ( Lap Top PC , ETC..... )			
07-03-08108	-Rack with 48V. d/c unit (duplicated ).			
07-03-08109	-Installation & Maintenance tools & materials.			
07-03-08110	-Spare parts & spare units.			
07-03-08111	-Documentation.			
07-03-08112				
07-03-08119	Microwave Antennas			
07-03-08120	-Parabolic Dish (1.8 -2.4- 3) m. diameter .			
07-03-08121	-Antenna Radiation Element with ( 1 / 2 )Ports.			
07-03-08122	-Connector Flanges.			
07-03-08123	-Tower Attachment.			
07-03-08124	-Installation & Maintenance tools & materials.			
07-03-08129	Microwave Feeders			
07-03-08130	-Elliptical waveguide for 8/6 GHZ band .			
07-03-08131	-Medium capacity dehydrator.			
07-03-08132	-Pressure Window.			
07-03-08133	-Fixture clamps.			
07-03-08134	-Earthing Kits.			
07-03-08135	-Installation materials & tools.			
07-03-08136	-Documentation.			
07-03-08139	DC Power Plant			
07-03-08140	-Modular switched rectifier system 48V / 30Ampere module (2+1) configuration.			
07-03-08141	-48V,200Ah Lead-Acid Sealed-Batteries(2sets).			
07-03-08142	-Cabinet.			
07-03-08143	-Installation materials , cables, tools.			
07-03-08144	-Documentation.			
07-03-08149	Air Conditioners			
07-03-08150	-Duplicated 24000 BTU Unit.			
07-03-08151	-Piping & installation materials & fixtures.			
07-03-08152	-Spare parts.			
07-03-08153	-Documentation.			
07-03-08159	Diesel Engine Generator			
07-03-08160	-Capacity 50 KVA, Triple Set.			
07-03-08161	-Daily Fuel Tank.			
07-03-08162	-Fan.			
07-03-08163	-Piping.			

07-03-08164	-Control cubicle & Alarms.			
07-03-08165	-Installation Materials & Tools.			
07-03-08166	-Spare parts & PCB's.			
07-03-08167	-Documentation.			
07-03-08169	SDH Multiplex Equipment			
07-03-08170	-STM-4 Multiplexer Subrack with redundant common units			
07-03-08171	-STM-1 Multiplex Subrack with redundant common units			
07-03-08172	-Tributary Cards ( 3x34Mb/s, 6x(21x2Mb/s),4x(140/155 Mb/s).			
07-03-08173	-Access & Connection Modules.			
07-03-08174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP contained in subracks with common units & with function units,controllers ,connectors, ETC.....			
07-03-08175	-Full Matrix ( duplicated).			
07-03-08176	-Auxiliary /Engineering order wire.			
07-03-08177	-Telephone Handset.			
07-03-08178	-Installation Materials & Tools.			
07-03-08179	-Racks with power supply unit (duplicated)and cable head.			
07-03-08180	-Digital Distribution Frames.			
07-03-08181	-Primary Multiplex ( PCM-30CH.) Subrack with common units & channel PCB's of different configurations.			
07-03-08182	-Equipment craft terminal for programmed control and display with operation software .			
07-03-08183	-Spare parts & spare units.			
07-03-08184	-Installation materials & tools.			
07-03-08185	-Documentation.			
07-03-08189	Network Management Equipment			
07-03-08190	-Central Network Management System platform(Hardware)			
07-03-08191	-Central Network Management System software packages.			
07-03-08192	-Local Network Management Equipment ( craft terminals).			
07-03-08193	-Mediation , Interface, and connection cards &modules.			
07-03-08194	-Installation Materials & Tools.			
07-03-08195	-Documentation..			
07-03-08119	Test Instruments			
07-03-08200	-Digital Multimeter.			
07-03-08201	-Frequency Counter .			
07-03-08202	-Power Meter .			
07-03-08203	-PCM Multiplex Tester .			
07-03-08204	-RF Sweep Generator .			
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