

ANNEX SEVEN / Telecommunications

Sub - sector : West Tigris Digital Microwave Link

Site - Name : MAMOUN

Code	Item Description	Unit	Qty	Complementary Items
07-02-01100	SDH Microwave Radio Equipment	Lot	1	
07-02-01101	-STM-1, 6/8 GHZ (3+1), Radio Terminal. With Frequency & Space Diversity all complete.	Set	2	
07-02-01102	-128 QAM Modems Modules.	Set	8	
07-02-01103	-Protection Switch.	Set	2	
07-02-01104	-Engineering order wire channel.	Set	2	
07-02-01105	-2Mb/s auxiliary traffic.	Set	2	
07-02-01106	-Interface to central Network management.	Set	2	
07-02-01107	-Peripherals (Lap Top PC , etc.....)	Set	2	
07-02-01108	-Rack with 48V. d/c unit (duplicated).	Set	3	
07-02-01109	-Installation & Maintenance tools & materials.	Set	3	
07-02-01110	-Spare parts & spare units.	Set	3	
07-02-01111	-Documentation.	Set	1	
07-02-01119	Microwave Antennas	Lot	1	
07-02-01120	-Parabolic Dish (3 - 3.7)m. diameter .	Set	2	
07-02-01121	-Antenna Radiation Element with (1 / 2)Ports.	Set	2	
07-02-01122	-Connector Flanges.	Set	2	
07-02-01123	-Tower Attachment.	Set	2	
07-02-01124	-Installation & Maintenance tools & materials.	Set	2	
07-02-01129	Microwave Feeders	Lot	1	
07-02-01130	-Elliptical waveguide for 8/6 GHZ band .	Meter	250	
07-02-01131	-Medium capacity dehydrator.	Unit	1	
07-02-01132	-Pressure Window.	Unit	6	
07-02-01133	-Fixture clamps.	Set	6	
07-02-01134	-Earthing Kits.	Set	6	
07-02-01135	-Installation materials & tools.	Set	6	
07-02-01136	-Documentation.	Set	1	
07-02-01139	DC Power Plant	Lot	1	
07-02-01140	-Modular switched rectifier system 48V / 30Ampere module (10+2) configuration.	Set	1	
07-02-01141	-48V,1000Ah Lead-Acid Sealed-Batteries(2sets).	Lot	1	
07-02-01142	-Cabinet.	Set	4	
07-02-01143	-Installation materials , cables, tools.	Set	1	
07-02-01144	- Documentation.	Set	1	
07-02-01149	Air Conditioners	Lot	1	
07-02-01150	-Duplicated 18000 / 24000 BTU Unit.	Set	2	
07-02-01151	-Piping & installation materials & fixtures.	Set	2	
07-02-01152	-Spare parts.	Set	2	
07-02-01153	-Documentation.	Set	2	
07-02-01159	Diesel Engine Generator	Lot	1	
07-02-01160	-Capacity 50 KVA, Dual Set.	Set	1	
07-02-01161	-Daily Fuel Tank.	Set	1	
07-02-01162	-Fan.	Set	1	
07-02-01163	-Piping.	Set	1	

07-02-01164	-Control cubicle & Alarms.	Set	1	
07-02-01165	-Installation Materials & Tools.	Set	1	
07-02-01166	-Spare parts & PCB's.	Set	1	
07-02-01167	-Documentation.	Set	1	
07-02-01169	SDH Multiplex Equipment	Lot	1	
07-02-01170	-STM-4 Multiplexer Subrack with redundant common units	Set	4	
07-02-01171	-STM-1 Multiplex Subrack with redundant common units	Set	2	
07-02-01172	-Tributary Cards (3x34Mb/s, 21x2Mb/s,140/155 Mb/s switch , 7x2Mb/s).	Set	10	
07-02-01173	-Access & Connection Modules.	Set	6	
07-02-01174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP contained in subracks with common units & with function units, controllers ,connectors, ETC.....	Lot	6	
07-02-01175	-Full Matrix (duplicated).	Unit	6	
07-02-01176	-Auxiliary /Engineering order wire.	Set	2	
07-02-01177	-Telephone Handset.	Lot	2	
07-02-01178	-Installation Materials & Tools.	Lot	2	
07-02-01179	-Racks with power supply unit (duplicated)and cable head.	Set	6	
07-02-01180	-Digital Distribution Frames.	Set	6	
07-02-01181	-Primary Multiplex (PCM-30CH.) Subrack with common units & channel PCB's of different configurations.	Set	16	
07-02-01182	-Equipment craft terminal for programmed control and display with operation software .	Unit	2	
07-02-01183	-Spare parts & spare units.	Lot	6	
07-02-01184	-Installation materials & tools.	Lot	2	
07-02-01185	-Documentation.	Set	2	
07-02-01189	Network Management Equipment	Lot	1	
07-02-01190	-Central Network Management System platform(Hardware)	Lot	1	
07-02-01191	-Central Network Management System software packages.	Set	1	
07-02-01192	-Local Network Management Equipment (craft terminals).	Lot	1	
07-02-01193	-Mediation , Interface, and connection cards &modules.	Lot	1	
07-02-01194	-Installation Materials & Tools.	Lot	1	
07-02-01195	-Documentation..	Set	1	
07-02-01119	Test Instruments	Lot	1	
07-02-01200	-Digital Multimeter.	Set	2	
07-02-01201	-Frequency Counter .	Set	1	
07-02-01202	-Power Meter .	Set	1	
07-02-01203	-PCM Multiplex Tester .	Set	1	
07-02-01204	-RF Sweep Generator .	Set	0	
07-02-01205	-VSWR Test Set.	Set	0	
07-02-01206	-Scalar Network Analyzer .	Set	0	
07-02-01207	-RF Spectrum Analyzer.	Set	0	
07-02-01208	-SDH Analyzer for STM-1.	Set	1	
07-02-01209	-TX / RX MW Link Analyzer .	Set	0	
07-02-01210	-PDH Analyzer (2Mb/s).	Set	0	
07-02-01211	-Oscilloscope 500 MHZ Dual channel.	Set	0	
07-02-01212	-Video Test Set.	Set	0	
07-02-01213	-RF Attenuators Fixed & Variable (0 - 60)DB.	Set	0	
07-02-01214	-Cables & Adapters.	Set	1	
07-02-01215	-Waveguide / Coax. Adapters.	Set	0	
07-02-01216	-Documentation.	Set	1	

07-02-01219	Specific Tools	Lot	1	
07-02-01220	-20 Ton Lorry with crane & winch.	Unit	0	
07-02-01221	-Specific Maintenance Tools	Lot	1	
07-02-01222	-Station Tools	Lot	1	
07-02-01223	-Special Tools for waveguide.	Lot	1	
07-02-01224	-Installation Tools.	Lot	1	
07-02-01229	Services	Lot	1	
07-02-01230	-Factory Training Abroad.	Trainee	5	
07-02-00231	-Training In Iraq.		8	
07-02-01232	-Supervision Services (Supplier Expert).	Trainee	2	
		Expert		

ANNEX SEVEN / Telecommunications

Sub - sector :West Tigris Digital Microwave Link

Site - Name : MOSUL EXCH.

Code	Item Description	Unit	Qty	Complementary Items
07-02-02100	SDH Microwave Radio Equipment	Lot	1	
07-02-02101	-STM-1,13/11GHZ, (3+1) Radio Terminal With Frequency & Space Diversity all complete.	Set	1	
07-02-02102	-128 QAM Modems Modules.	Set	4	
07-02-02103	-Protection Switch.	Set	1	
07-02-02104	-Engineering order wire channel.	Set	1	
07-02-02105	-2Mb/s auxiliary traffic.	Set	1	
07-02-02106	-Interface to central Network management.	Set	1	
07-02-02107	-Peripherals (Lap Top PC , etc.....)	Set	1	
07-02-02108	-Rack with 48V. d/c unit (duplicated).	Set	2	
07-02-02109	-Installation & Maintenance tools & materials.	Set	2	
07-02-02110	-Spare parts & spare units.	Set	2	
07-02-02111	-Documentation.	Set	1	
07-02-02119	Microwave Antennas	Lot	1	
07-02-02120	-Parabolic Dish (2.4-3) m. diameter .	Set	1	
07-02-02121	-Antenna Radiation Element with (1 / 2)Ports.	Set	1	
07-02-02122	-Connector Flanges.	Set	1	
07-02-02123	-Tower Attachment.	Set	1	
07-02-02124	-Installation & Maintenance tools & materials.	Set	1	
07-02-02129	Microwave Feeders	Lot	1	
07-02-02130	-Elliptical waveguide for 13/11 GHZ band .	Meter	100	
07-02-02131	-Medium capacity dehydrator.	Unit	1	
07-02-02132	-Pressure Window.	Unit	1	
07-02-02133	-Fixture clamps.	Set	1	
07-02-02134	-Earthing Kits.	Set	1	
07-02-02135	-Installation materials & tools.	Set	1	
07-02-02136	-Documentation.	Set	1	
07-02-02139	DC Power Plant	Lot	1	
07-02-02140	-Modular switched rectifier system 48V / 30Ampere module (10+2) configuration.	Set	1	
07-02-02141	-48V,1000Ah Lead-Acid Sealed-Batteries(2sets).	Lot	1	
07-02-02142	-Cabinet.	Set	4	
07-02-02143	-Installation materials , cables, tools.	Set	1	
07-02-02144	- Documentation.	Set	1	
07-02-02149	Air Conditioners	Lot	1	
07-02-02150	-Duplicated 18000 / 24000 BTU Unit.	Set	2	
07-02-02151	-Piping & installation materials & fixtures.	Set	2	
07-02-02152	-Spare parts.	Set	2	
07-02-02153	-Documentation.	Set	2	
07-02-02159	Diesel Engine Generator	Lot	1	
07-02-02160	-Capacity 50 KVA, Dual Set.	Set	1	
07-02-02161	-Daily Fuel Tank.	Set	1	
07-02-02162	-Fan.	Set	1	

07-02-02163	-Piping.	Set	1	
07-02-02164	-Control cubicle & Alarms.	Set	1	
07-02-02165	-Installation Materials & Tools.	Set	1	
07-02-02166	-Spare parts & PCB's.	Set	1	
07-02-02167	-Documentation.	Set	1	
07-02-02169	SDH Multiplex Equipment	Lot	1	
07-02-02170	-STM-4 Multiplexer Subrack with redundant common units	Set	4	
07-02-02171	-STM-1 Multiplex Subrack with redundant common units	Set	2	
07-02-02172	-Tributary Cards (3x34Mb/s, 21x2Mb/s,140/155 Mb/s switch , 7x2Mb/s).	Set	10	
07-02-02173	-Access & Connection Modules.	Set	6	
07-02-02174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP contained in subracks with common units & with function units, controllers ,connectors, ETC.....	Lot	6	
07-02-02175	-Full Matrix (duplicated).	Unit	6	
07-02-02176	-Auxiliary /Engineering order wire.	Set	2	
07-02-02177	-Telephone Handset.	Lot	2	
07-02-02178	-Installation Materials & Tools.	Lot	2	
07-02-02179	-Racks with power supply unit (duplicated)and cable head.	Set	6	
07-02-02180	-Digital Distribution Frames.	Set	6	
07-02-02181	-Primary Multiplex (PCM-30CH.) Subrack with common units & channel PCB's of different configurations.	Set	16	
07-02-02182	-Equipment craft terminal for programmed control and display with operation Software .	Set	2	
07-02-02183	-Spare parts & spare units.	Lot	6	
07-02-02184	-Installation materials & tools.	Lot	2	
07-02-02185	-Documentation.	Set	2	
07-02-02189	Network Management Equipment	Lot	1	
07-02-02190	-Central Network Management System platform(Hardware)	Lot	1	
07-02-02191	-Central Network Management System software packages.	Set	1	
07-02-02192	-Local Network Management Equipment (craft terminals).	Lot	1	
07-02-02193	-Mediation , Interface, and connection cards &modules.	Lot	1	
07-02-02194	-Installation Materials & Tools.	Lot	1	
07-02-02195	-Documentation..	Set	1	
07-02-02119	Test Instruments	Lot	1	
07-02-02200	-Digital Multimeter.	Set	2	
07-02-02201	-Frequency Counter .	Set	1	
07-02-02202	-Power Meter .	Set	1	
07-02-02203	-PCM Multiplex Tester .	Set	1	
07-02-02204	-RF Sweep Generator .	Set	0	
07-02-02205	-VSWR Test Set.	Set	0	
07-02-02206	-Scalar Network Analyzer .	Set	0	
07-02-02207	-RF Spectrum Analyzer.	Set	0	
07-02-02208	-SDH Analyzer for STM-1.	Set	1	
07-02-02209	-TX / RX MW Link Analyzer .	Set	0	
07-02-02210	-PDH Analyzer (2Mb/s).	Set	0	
07-02-02211	-Oscilloscope 500 MHZ Dual channel.	Set	0	
07-02-02212	-Video Test Set.	Set	0	
07-02-02213	-RF Attenuators Fixed & Variable (0 - 60)DB.	Set	0	
07-02-02214	-Cables & Adapters.	Set	1	
07-02-02215	-Waveguide / Coax. Adapters.	Set	0	

07-02-02216	-Documentation.	Set	1	
07-02-02219	Specific Tools	Lot	1	
07-02-02220	-20 Ton Lorry with crane & winch.	Unit	0	
07-02-02221	-Specific Maintenance Tools	Lot	1	
07-02-02222	-Station Tools	Lot	1	
07-02-02223	-Special Tools for waveguide.	Lot	1	
07-02-02224	-Installation Tools.	Lot	1	
07-02-02229	Services	Lot	1	
07-02-02230	-Factory Training Abroad.	Trainee	4	
07-02-02231	-Training In Iraq.		8	
07-02-02232	-Supervision Services (Supplier Expert).	Trainee Expert	2	

ANNEX SEVEN / Telecommunications

Sub - sector : West Tigris Digital Microwave Link

Site - Name : TARMiya

Code	Item Description	Unit	Qty	Complementary Items
07-02-03100	SDH Microwave Radio Equipment	Lot	1	
07-02-03101	-STM-1, 8/6GHZ (3+1), Radio Terminal With Frequency & Space Diversity all complete.	Set	2	
07-02-03102	-128 QAM Modems Modules.	Set	8	
07-02-03103	-Protection Switch.	Set	2	
07-02-03104	-Engineering order wire channel.	Set	2	
07-02-03105	-2Mb/s auxiliary traffic.	Set	2	
07-02-03106	-Interface to central Network management.	Set	2	
07-02-03107	-Peripherals (Lap Top PC , ETC.....)	Set	1	
07-02-03108	-Rack with 48V. d/c unit (duplicated).	Set	4	
07-02-03109	-Installation & Maintenance tools & materials.	Set	2	
07-02-03110	-Spare parts & spare units.	Set	2	
07-02-03111	-Documentation.	Set	1	
07-02-03119	Microwave Antennas	Lot	1	
07-02-03120	-Parabolic Dish (3-3.7)m. diameter .	Set	4	
07-02-03121	-Antenna Radiation Element with (1 / 2)Ports.	Set	4	
07-02-03122	-Connector Flanges.	Set	4	
07-02-03123	-Tower Attachment.	Set	4	
07-02-03124	-Installation & Maintenance tools & materials.	Set	4	
07-02-03129	Microwave Feeders	Lot	1	
07-02-03130	-Elliptical waveguide for 8/6 GHZ band .	Meter	200	
07-02-03131	-Medium capacity dehydrator.	Unit	1	
07-02-03132	-Pressure Window.	Unit	6	
07-02-03133	-Fixture clamps.	Set	6	
07-02-03134	-Earthing Kits.	Set	6	
07-02-03135	-Installation materials & tools.	Set	2	
07-02-03136	-Documentation.	Set	1	
07-02-03139	DC Power Plant	Lot	1	
07-02-03140	-Modular switched rectifier system 48V / 30Ampere module (5+1) configuration.	Set	1	
07-02-03141	-48V, 500Ah Lead-Acid Sealed-Batteries(2sets).	Lot	1	
07-02-03142	-Cabinet.	Set	2	
07-02-03143	-Installation materials , cables, tools.	Set	1	
07-02-03144	-Documentation.	Set	1	
07-02-03149	Air Conditioners	Lot	1	
07-02-03150	-Duplicated 18000 / 24000 BTU Unit.	Set	2	
07-02-03151	-Piping & installation materials & fixtures.	Set	2	
07-02-03152	-Spare parts.	Set	2	
07-02-03153	-Documentation.	Set	2	
07-02-03159	Diesel Engine Generator	Lot	1	
07-02-03160	-Capacity 50 KVA, Dual Set.	Set	1	
07-02-03161	-Daily Fuel Tank.	Set	1	
07-02-03162	-Fan.	Set	1	

07-02-03163	-Piping.	Set	1	
07-02-03164	-Control cubicle & Alarms.	Set	1	
07-02-03165	-Installation Materials & Tools.	Set	1	
07-02-03166	-Spare parts & PCB's.	Set	1	
07-02-03167	-Documentation.	Set	1	
07-02-03169	SDH Multiplex Equipment	Lot	1	
07-02-03170	-STM-4 Multiplexer Subrack with redundant common units	Set	4	
07-02-03171	-STM-1 Multiplex Subrack with redundant common units	Set	2	
07-02-03172	-Tributary Cards (3x34Mb/s, 21x2Mb/s,140/155 Mb/s switch , 7x2Mb/s).	Set	10	
07-02-03173	-Access & Connection Modules.	Set	6	
07-02-03174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP contained in subracks with common units & with function units, controllers ,connectors, ETC.....	Lot	0	
07-02-03175	-Full Matrix (duplicated).	Unit	6	
07-02-03176	-Auxiliary /Engineering order wire.	Set	2	
07-02-03177	-Telephone Handset.	Lot	2	
07-02-03178	-Installation Materials & Tools.	Lot	2	
07-02-03179	-Racks with power supply unit (duplicated)and cable head.	Set	2	
07-02-03180	-Digital Distribution Frames.	Set	2	
07-02-03181	-Primary Multiplex (PCM-30CH.) Subrack with common units & channel PCB's of different configurations.	Set	0	
07-02-03182	-Equipment craft terminal for programmed control and display with operation Software .	Set	2	
07-02-03183	-Spare parts & spare units.	Unit	2	
07-02-03184	-Installation materials & tools.	Lot	2	
07-02-03185	-Documentation.	Set	1	
07-02-03189	Network Management Equipment	Lot	1	
07-02-03190	-Central Network Management System platform(Hardware)	Lot	0	
07-02-03191	-Central Network Management System software packages.	Set	0	
07-02-03192	-Local Network Management Equipment (craft terminals).	Lot	1	
07-02-03193	-Mediation , Interface, and connection cards &modules.	Lot	1	
07-02-03194	-Installation Materials & Tools.	Lot	1	
07-02-03195	-Documentation..	Set	1	
07-02-03119	Test Instruments	Lot	1	
07-02-03200	-Digital Multimeter.	Set	2	
07-02-03201	-Frequency Counter .	Set	1	
07-02-03202	-Power Meter .	Set	1	
07-02-03203	-PCM Multiplex Tester .	Set	1	
07-02-03204	-RF Sweep Generator .	Set	0	
07-02-03205	-VSWR Test Set.	Set	0	
07-02-03206	-Scalar Network Analyzer .	Set	0	
07-02-03207	-RF Spectrum Analyzer.	Set	0	
07-02-03208	-SDH Analyzer for STM-1.	Set	0	
07-02-03209	-TX / RX MW Link Analyzer .	Set	0	
07-02-03210	-PDH Analyzer (2Mb/s).	Set	0	
07-02-03211	-Oscilloscope 500 MHZ Dual channel.	Set	0	
07-02-03212	-Video Test Set.	Set	0	
07-02-03213	-RF Attenuators Fixed & Variable (0 - 60)DB.	Set	0	
07-02-03214	-Cables & Adapters.	Set	1	
07-02-03215	-Waveguide / Coax. Adapters.	Set	0	
07-02-03216	-Documentation.	Set	1	

07-02-03219	Specific Tools	Lot	1	
07-02-03220	-20 Ton Lorry with crane & winch.	Unit	0	
07-02-03221	-Specific Maintenance Tools	Lot	1	
07-02-03222	-Station Tools	Lot	1	
07-02-03223	-Special Tools for waveguide.	Lot	1	
07-02-03224	-Installation Tools.	Lot	1	
07-02-03229	Services	Lot	1	
07-02-03230	-Factory Training Abroad.	Trainee	2	
07-02-03231	-Training In Iraq.		4	
07-02-03232	-Supervision Services (Supplier Expert).	Trainee Expert	1	

ANNEX SEVEN / Telecommunications

Sub - sector : West Tigris Digital Microwave Link

Site - Name : BALAD EXCH.

Code	Item Description	Unit	Qty	Complementary Items
07-02-04100	SDH Microwave Radio Equipment	Lot	1	
07-02-04101	-STM-1,13/11/8/6GHZ (3+1),(1+1) Radio Terminal. With Frequency & Space Diversity all complete.	Set	3	
07-02-04102	-128 QAM Modems Modules.	Set	10	
07-02-04103	-Protection Switch.	Set	3	
07-02-04104	-Engineering order wire channel.	Set	3	
07-02-04105	-2Mb/s auxiliary traffic.	Set	3	
07-02-04106	-Interface to central Network management.	Set	3	
07-02-04107	-Peripherals (Lap Top PC , ETC.....)	Set	1	
07-02-04108	-Rack with 48V. d/c unit (duplicated).	Set	5	
07-02-04109	-Installation & Maintenance tools & materials.	Set	2	
07-02-04110	-Spare parts & spare units.	Set	2	
07-02-04111	-Documentation.	Set	1	
07-02-04119	Microwave Antennas	Lot	1	
07-02-04120	-Parabolic Dish (1.8m.-3.7m. diameter).	Set	5	
07-02-04121	-Antenna Radiation Element with (1 / 2)Ports.	Set	5	
07-02-04122	-Connector Flanges.	Set	5	
07-02-04123	-Tower Attachment.	Set	5	
07-02-04124	-Installation & Maintenance tools & materials.	Set	5	
07-02-04129	Microwave Feeders	Lot	1	
07-02-04130	-Elliptical waveguide for 13/11/8/6 GHZ band .	Meter	500	
07-02-04131	-Medium capacity dehydrator.	Unit	1	
07-02-04132	-Pressure Window.	Unit	12	
07-02-04133	-Fixture clamps.	Set	12	
07-02-04134	-Earthing Kits.	Set	12	
07-02-04135	-Installation materials & tools.	Set	2	
07-02-04136	-Documentation.	Set	1	
07-02-04139	DC Power Plant	Lot	1	
07-02-04140	-Modular switched rectifier system 48V / 30Ampere module (4+1) configuration.	Set	1	
07-02-04141	-48V, 350Ah Lead-Acid Sealed-Batteries(2sets).	Lot	1	
07-02-04142	-Cabinet.	Set	2	
07-02-04143	-Installation materials , cables, tools.	Set	1	
07-02-04144	-Documentation.	Set	1	
07-02-04149	Air Conditioners	Lot	1	
07-02-04150	-Duplicated 18000 / 24000 BTU Unit.	Set	2	
07-02-04151	-Piping & installation materials & fixtures.	Set	2	
07-02-04152	-Spare parts.	Set	2	
07-02-04153	-Documentation.	Set	2	
07-02-04159	Diesel Engine Generator	Lot	1	
07-02-04160	-Capacity 50 KVA, Dual Set.	Set	1	
07-02-04161	-Daily Fuel Tank.	Set	1	
07-02-04162	-Fan.	Set	1	

07-02-04163	-Piping.	Set	1	
07-02-04164	-Control cubicle & Alarms.	Set	1	
07-02-04165	-Installation Materials & Tools.	Set	1	
07-02-04166	-Spare parts & PCB's.	Set	1	
07-02-04167	-Documentation.	Set	1	
07-02-04169	SDH Multiplex Equipment	Lot	1	
07-02-04170	-STM-4 Multiplexer Subrack with redundant common units	Set	2	
07-02-04171	-STM-1 Multiplex Subrack with redundant common units	Set	0	
07-02-04172	-Tributary Cards (3x34Mb/s, 21x2Mb/s,140/155 Mb/s switch , 7x2Mb/s).	Set	2	
07-02-04173	-Access & Connection Modules.	Set	2	
07-02-04174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP contained in subracks with common units & with function units, controllers ,connectors, ETC.....	Lot	3	
07-02-04175	-Full Matrix (duplicated).	Unit	4	
07-02-04176	-Auxiliary /Engineering order wire.	Set	1	
07-02-04177	-Telephone Handset.	Lot	1	
07-02-04178	-Installation Materials & Tools.	Lot	2	
07-02-04179	-Racks with power supply unit (duplicated)and cable head.	Set	4	
07-02-04180	-Digital Distribution Frames.	Set	4	
07-02-04181	-Primary Multiplex (PCM-30CH.) Subrack with common units & channel PCB's of different configurations.	Set	2	
07-02-04182	-Equipment craft terminal for programmed control and display with operation Software .	Set	2	
07-02-04183	-Spare parts & spare units.	Lot	2	
07-02-04184	-Installation materials & tools.	Lot	2	
07-02-04185	-Documentation.	Set	1	
07-02-04189	Network Management Equipment	Lot	1	
07-02-04190	-Central Network Management System platform(Hardware)	Lot	0	
07-02-04191	-Central Network Management System software packages.	Set	0	
07-02-04192	-Local Network Management Equipment (craft terminals).	Lot	1	
07-02-04193	-Mediation , Interface, and connection cards &modules.	Lot	1	
07-02-04194	-Installation Materials & Tools.	Lot	1	
07-02-04195	-Documentation..	Set	1	
07-02-04119	Test Instruments	Lot	1	
07-02-04200	-Digital Multimeter.	Set	1	
07-02-04201	-Frequency Counter .	Set	0	
07-02-04202	-Power Meter .	Set	0	
07-02-04203	-PCM Multiplex Tester .	Set	1	
07-02-04204	-RF Sweep Generator .	Set	0	
07-02-04205	-VSWR Test Set.	Set	0	
07-02-04206	-Scalar Network Analyzer .	Set	0	
07-02-04207	-RF Spectrum Analyzer.	Set	0	
07-02-04208	-SDH Analyzer for STM-1.	Set	0	
07-02-04209	-TX / RX MW Link Analyzer .	Set	0	
07-02-04210	-PDH Analyzer (2Mb/s).	Set	0	
07-02-04211	-Oscilloscope 500 MHZ Dual channel.	Set	0	
07-02-04212	-Video Test Set.	Set	0	
07-02-04213	-RF Attenuators Fixed & Variable (0 - 60)DB.	Set	0	
07-02-04214	-Cables & Adapters.	Set	1	
07-02-04215	-Waveguide / Coax. Adapters.	Set	0	
07-02-04216	-Documentation.	Set	1	

07-02-04219	Specific Tools	Lot	1	
07-02-04220	-20 Ton Lorry with crane & winch.	Unit	0	
07-02-04221	-Specific Maintenance Tools	Lot	1	
07-02-04222	-Station Tools	Lot	1	
07-02-04223	-Special Tools for waveguide.	Lot	1	
07-02-04224	-Installation Tools.	Lot	1	
07-02-04229	Services	Lot	1	
07-02-04230	-Factory Training Abroad.	Trainee	1	
07-02-04231	-Training In Iraq.		3	
07-02-04232	-Supervision Services (Supplier Expert).	Trainee	1	
		Expert		

ANNEX SEVEN / Telecommunications

Sub - sector : West Tigris Digital Microwave Link

Site - Name : SAMARA

Code	Item Description	Unit	Qty	Complementary Items
07-02-05100	SDH Microwave Radio Equipment	Lot	1	
07-02-05101	-STM-1, 8 / 6GHZ (3+1), Radio Terminal With Frequency & Space Diversity all complete.	Set	2	
07-02-05102	-128 QAM Modems Modules.	Set	8	
07-02-05103	-Protection Switch.	Set	2	
07-02-05104	-Engineering order wire channel.	Set	1	
07-02-05105	-2Mb/s auxiliary traffic.	Set	2	
07-02-05106	-Interface to central Network management.	Set	2	
07-02-05107	-Peripherals (Lap Top PC , ETC.....)	Set	1	
07-02-05108	-Rack with 48V. d/c unit (duplicated).	Set	3	
07-02-05109	-Installation & Maintenance tools & materials.	Set	2	
07-02-05110	-Spare parts & spare units.	Set	2	
07-02-05111	-Documentation.	Set	1	
07-02-05119	Microwave Antennas	Lot	1	
07-02-05120	-Parabolic Dish (3-3.7) m. diameter .	Set	4	
07-02-05121	-Antenna Radiation Element with (1 / 2)Ports.	Set	4	
07-02-05122	-Connector Flanges.	Set	4	
07-02-05123	-Tower Attachment.	Set	4	
07-02-05124	-Installation & Maintenance tools & materials.	Set	4	
07-02-05129	Microwave Feeders	Lot	1	
07-02-05130	-Elliptical waveguide for 8/6 GHZ band .	Meter	400	
07-02-05131	-Medium capacity dehydrator.	Unit	1	
07-02-05132	-Pressure Window.	Unit	8	
07-02-05133	-Fixture clamps.	Set	4	
07-02-05134	-Earthing Kits.	Set	4	
07-02-05135	-Installation materials & tools.	Set	2	
07-02-05136	-Documentation.	Set	1	
07-02-05139	DC Power Plant	Lot	1	
07-02-05140	-Modular switched rectifier system 48V / 30Ampere module (3+1) configuration.	Set	1	
07-02-05141	-48V, 250Ah Lead-Acid Sealed-Batteries(2sets).	Lot	1	
07-02-05142	-Cabinet.	Set	2	
07-02-05143	-Installation materials , cables, tools.	Set	1	
07-02-05144	-Documentation.	Set	1	
07-02-05149	Air Conditioners	Lot	1	
07-02-05150	-Duplicated 18000 / 24000 BTU Unit.	Set	2	
07-02-05151	-Piping & installation materials & fixtures.	Set	2	
07-02-05152	-Spare parts.	Set	2	
07-02-05153	-Documentation.	Set	2	
07-02-05159	Diesel Engine Generator	Lot	1	
07-02-05160	-Capacity 50 KVA, Dual Set.	Set	1	
07-02-05161	-Daily Fuel Tank.	Set	1	
07-02-05162	-Fan.	Set	1	
07-02-05163	-Piping.	Set	1	

07-02-05164	-Control cubicle & Alarms.	Set	1	
07-02-05165	-Installation Materials & Tools.	Set	1	
07-02-05166	-Spare parts & PCB's.	Set	1	
07-02-05167	-Documentation.	Set	1	
07-02-05169	SDH Multiplex Equipment	Lot	1	
07-02-05170	-STM-4 Mutlplexer Subrack with redundant common units	Set	2	
07-02-05171	-STM-1 Multiplex Subrack with redundant common units	Set	1	
07-02-05172	-Tributary Cards (3x34Mb/s, 21x2Mb/s,140/155 Mb/s switch , 7x2Mb/s).	Set	3	
07-02-05173	-Access & Connection Modules.	Set	2	
07-02-05174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP containd in subracks with common units & with function units, controllers ,connectors, ETC.....	Lot	0	
07-02-05175	-Full Matrix (duplicated).	Unit	4	
07-02-05176	-Auxiliary /Engineering order wire.	Set	1	
07-02-05177	-Telephone Handset.	Lot	1	
07-02-05178	-Installation Materials & Tools.	Lot	2	
07-02-05179	-Racks with power supply unit (duplicated)and cable head.	Set	4	
07-02-05180	-Digital Distribution Frames.	Set	4	
07-02-05181	-Primary Multiplex (PCM-30CH.) Subrack with common units & channel PCB's of different configurations.	Set	4	
07-02-05182	-Equipment craft terminal for programmed control and display with operation Software .	Set	2	
07-02-05183	-Spare parts & spare units.	Lot	2	
07-02-05184	-Installation materials & tools.	Lot	2	
07-02-05185	-Documentation.	Set	1	
07-02-05189	Network Management Equipment	Lot	1	
07-02-05190	-Central Network Management System platform(Hardware)	Lot	0	
07-02-05191	-Central Network Management System software packages.	Set	0	
07-02-05192	-Local Network Management Equipment (craft terminals).	Lot	1	
07-02-05193	-Mediation , Interface, and connection cards &modules.	Lot	1	
07-02-05194	-Installation Materials & Tools.	Lot	1	
07-02-05195	-Documentation..	Set	1	
07-02-05119	Test Instruments	Lot	1	
07-02-05200	-Digital Multimeter.	Set	1	
07-02-05201	-Frequency Counter .	Set	1	
07-02-05202	-Power Meter .	Set	1	
07-02-05203	-PCM Multiplex Tester .	Set	1	
07-02-05204	-RF Sweep Generator .	Set	0	
07-02-05205	-VSWR Test Set.	Set	0	
07-02-05206	-Scalar Network Analyzer .	Set	0	
07-02-05207	-RF Spectrum Analyzer.	Set	0	
07-02-05208	-SDH Analyzer for STM-1.	Set	1	
07-02-05209	-TX / RX MW Link Analyzer .	Set	0	
07-02-05210	-PDH Analyzer (2Mb/s).	Set	0	
07-02-05211	-Oscilloscope 500 MHZ Dual channel.	Set	0	
07-02-05212	-Video Test Set.	Set	0	
07-02-05213	-RF Attenuators Fixed & Variable (0 - 60)DB.	Set	1	
07-02-05214	-Cables & Adapters.	Set	1	
07-02-05215	-Waveguide / Coax. Adapters.	Set	1	
07-02-05216	-Documentation.	Set	1	

07-02-05219	Specific Tools	Lot	1	
07-02-05220	-20 Ton Lorry with crane & winch.	Unit	0	
07-02-05221	-Specific Maintenance Tools	Lot	1	
07-02-05222	-Station Tools	Lot	1	
07-02-05223	-Special Tools for waveguide.	Lot	1	
07-02-05224	-Installation Tools.	Lot	1	
07-02-05229	Services	Lot	1	
07-02-05230	-Factory Training Abroad.	Trainee	2	
07-02-05231	-Training In Iraq.		4	
07-02-05232	-Supervision Services (Supplier Expert).	Trainee Expert	1	

ANNEX SEVEN / Telecommunications

Sub - sector : West Tigris Digital Microwave Link

Site - Name : SHIRQAT

Code	Item Description	Unit	Qty	Complementary Items
07-02-06100	SDH Microwave Radio Equipment	Lot	1	
07-02-06101	-STM-1, 8/6GHZ (3+1), (1+1) Radio Terminal. With Frequency & Space Diversity all complete.	Set	2	
07-02-06102	-128 QAM Modems Modules.	Set	8	
07-02-06103	-Protection Switch.	Set	2	
07-02-06104	-Engineering order wire channel.	Set	2	
07-02-06105	-2Mb/s auxiliary traffic.	Set	2	
07-02-06106	-Interface to central Network management.	Set	2	
07-02-06107	-Peripherals (Lap Top PC , ETC.....)	Set	1	
07-02-06108	-Rack with 48V. d/c unit (duplicated).	Set	4	
07-02-06109	-Installation & Maintenance tools & materials.	Set	2	
07-02-06110	-Spare parts & spare units.	Set	2	
07-02-06111	-Documentation.	Set	1	
07-02-06119	Microwave Antennas	Lot	1	
07-02-06120	-Parabolic Dish (3-3.7m. diameter).	Set	4	
07-02-06121	-Antenna Radiation Element with (1 / 2)Ports.	Set	4	
07-02-06122	-Connector Flanges.	Set	4	
07-02-06123	-Tower Attachment.	Set	4	
07-02-06124	-Installation & Maintenance tools & materials.	Set	4	
07-02-06129	Microwave Feeders	Lot	1	
07-02-06130	-Elliptical waveguide for 8/6 GHZ band .	Meter	400	
07-02-06131	-Medium capacity dehydrator.	Unit	1	
07-02-06132	-Pressure Window.	Unit	5	
07-02-06133	-Fixture clamps.	Set	5	
07-02-06134	-Earthing Kits.	Set	5	
07-02-06135	-Installation materials & tools.	Set	2	
07-02-06136	-Documentation.	Set	1	
07-02-06139	DC Power Plant	Lot	1	
07-02-06140	-Modular switched rectifier system 48V / 30Ampere module (4+1) configuration.	Set	1	
07-02-06141	-48V, 300Ah Lead-Acid Sealed-Batteries(2sets).	Lot	1	
07-02-06142	-Cabinet.	Set	2	
07-02-06143	-Installation materials , cables, tools.	Set	1	
07-02-06144	-Documentation.	Set	1	
07-02-06149	Air Conditioners	Lot	1	
07-02-06150	-Duplicated 18000 / 24000 BTU Unit.	Set	2	
07-02-06151	-Piping & installation materials & fixtures.	Set	2	
07-02-06152	-Spare parts.	Set	2	
07-02-06153	-Documentation.	Set	2	
07-02-06159	Diesel Engine Generator	Lot	1	
07-02-06160	-Capacity 50 KVA, Dual Set.	Set	1	
07-02-06161	-Daily Fuel Tank.	Set	1	
07-02-06162	-Fan.	Set	1	

07-02-06163	-Piping.	Set	1	
07-02-06164	-Control cubicle & Alarms.	Set	1	
07-02-06165	-Installation Materials & Tools.	Set	1	
07-02-06166	-Spare parts & PCB's.	Set	1	
07-02-06167	-Documentation.	Set	1	
07-02-06169	SDH Multiplex Equipment	Lot	1	
07-02-06170	-STM-4 Multiplexer Subrack with redundant common units	Set	2	
07-02-06171	-STM-1 Multiplex Subrack with redundant common units	Set	1	
07-02-06172	-Tributary Cards (3x34Mb/s, 21x2Mb/s,140/155 Mb/s switch , 7x2Mb/s).	Set	3	
07-02-06173	-Access & Connection Modules.	Set	2	
07-02-06174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP contained in subracks with common units & with function units, controllers ,connectors, ETC.....	Lot	6	
07-02-06175	-Full Matrix (duplicated).	Unit	4	
07-02-06176	-Auxiliary /Engineering order wire.	Set	1	
07-02-06177	-Telephone Handset.	Lot	1	
07-02-06178	-Installation Materials & Tools.	Lot	2	
07-02-06179	-Racks with power supply unit (duplicated)and cable head.	Set	4	
07-02-06180	-Digital Distribution Frames.	Set	4	
07-02-06181	-Primary Multiplex (PCM-30CH.) Subrack with common units & channel PCB's of different configurations.	Set	1	
07-02-06182	-Equipment craft terminal for programmed control and display with operation Software .	Set	2	
07-02-06183	-Spare parts & spare units.	Lot	2	
07-02-06184	-Installation materials & tools.	Lot	2	
07-02-06185	-Documentation.	Set	1	
07-02-06189	Network Management Equipment	Lot	1	
07-02-06190	-Central Network Management System platform(Hardware)	Lot	0	
07-02-06191	-Central Network Management System software packages.	Set	0	
07-02-06192	-Local Network Management Equipment (craft terminals).	Lot	1	
07-02-06193	-Mediation , Interface, and connection cards &modules.	Lot	1	
07-02-06194	-Installation Materials & Tools.	Lot	1	
07-02-06195	-Documentation..	Set	1	
07-02-06119	Test Instruments	Lot	1	
07-02-06200	-Digital Multimeter.	Set	1	
07-02-06201	-Frequency Counter .	Set	0	
07-02-06202	-Power Meter .	Set	0	
07-02-06203	-PCM Multiplex Tester .	Set	1	
07-02-06204	-RF Sweep Generator .	Set	0	
07-02-06205	-VSWR Test Set.	Set	0	
07-02-06206	-Scalar Network Analyzer .	Set	0	
07-02-06207	-RF Spectrum Analyzer.	Set	0	
07-02-06208	-SDH Analyzer for STM-1.	Set	0	
07-02-06209	-TX / RX MW Link Analyzer .	Set	0	
07-02-06210	-PDH Analyzer (2Mb/s).	Set	0	
07-02-06211	-Oscilloscope 500 MHZ Dual channel.	Set	0	
07-02-06212	-Video Test Set.	Set	0	
07-02-06213	-RF Attenuators Fixed & Variable (0 - 60)DB.	Set	0	
07-02-06214	-Cables & Adapters.	Set	1	
07-02-06215	-Waveguide / Coax. Adapters.	Set	1	
07-02-06216	-Documentation.	Set	1	

07-02-06219	Specific Tools	Lot	1	
07-02-06220	-20 Ton Lorry with crane & winch.	Unit	0	
07-02-06221	-Specific Maintenance Tools	Lot	1	
07-02-06222	-Station Tools	Lot	1	
07-02-06223	-Special Tools for waveguide.	Lot	1	
07-02-06224	-Installation Tools.	Lot	1	
07-02-06229	Services	Lot	1	
07-02-06230	-Factory Training Abroad.	Trainee	1	
07-02-06231	-Training In Iraq.		3	
07-02-06232	-Supervision Services (Supplier Expert).	Trainee Expert	1	

ANNEX SEVEN / Telecommunications

Sub - sector : West Tigris Digital Microwave Link

Site - Name : BAIJI

Code	Item Description	Unit	Qty	Complementary Items
07-02-07100	SDH Microwave Radio Equipment	Lot	1	
07-02-07101	-STM-1, 8 / 6GHZ (3+1), Radio Terminal With Frequency & Space Diversity all complete.	Set	2	
07-02-07102	-128 QAM Modems Modules.	Set	8	
07-02-07103	-Protection Switch.	Set	2	
07-02-07104	-Engineering order wire channel.	Set	2	
07-02-07105	-2Mb/s auxiliary traffic.	Set	2	
07-02-07106	-Interface to central Network management.	Set	2	
07-02-07107	-Peripherals (Lap Top PC , ETC.....)	Set	1	
07-02-07108	-Rack with 48V. d/c unit (duplicated).	Set	3	
07-02-07109	-Installation & Maintenance tools & materials.	Set	2	
07-02-07110	-Spare parts & spare units.	Set	2	
07-02-07111	-Documentation.	Set	1	
07-02-07119	Microwave Antennas	Lot	1	
07-02-07120	-Parabolic Dish (3 -3.7m. diameter).	Set	4	
07-02-07121	-Antenna Radiation Element with (1 / 2)Ports.	Set	4	
07-02-07122	-Connector Flanges.	Set	4	
07-02-07123	-Tower Attachment.	Set	4	
07-02-07124	-Installation & Maintenance tools & materials.	Set	4	
07-02-07129	Microwave Feeders	Lot	1	
07-02-07130	-Elliptical waveguide for 8/6 GHZ band .	Meter	400	
07-02-07131	-Medium capacity dehydrator.	Unit	1	
07-02-07132	-Pressure Window.	Unit	4	
07-02-07133	-Fixture clamps.	Set	4	
07-02-07134	-Earthing Kits.	Set	4	
07-02-07135	-Installation materials & tools.	Set	4	
07-02-07136	-Documentation.	Set	1	
07-02-07139	DC Power Plant	Lot	1	
07-02-07140	-Modular switched rectifier system 48V / 30Ampere module (3+1) configuration.	Set	1	
07-02-07141	-48V, 300Ah Lead-Acid Sealed-Batteries(2sets).	Lot	1	
07-02-07142	-Cabinet.	Set	2	
07-02-07143	-Installation materials , cables, tools.	Set	1	
07-02-07144	-Documentation.	Set	1	
07-02-07149	Air Conditioners	Lot	1	
07-02-07150	-Duplicated 18000 / 24000 BTU Unit.	Set	2	
07-02-07151	-Piping & installation materials & fixtures.	Set	2	
07-02-07152	-Spare parts.	Set	2	
07-02-07153	-Documentation.	Set	2	
07-02-07159	Diesel Engine Generator	Lot	1	
07-02-07160	-Capacity 50 KVA, Dual Set.	Set	1	
07-02-07161	-Daily Fuel Tank.	Set	1	

07-02-07162	-Fan.	Set	1	
07-02-07163	-Piping.	Set	1	
07-02-07164	-Control cubicle & Alarms.	Set	1	
07-02-07165	-Installation Materials & Tools.	Set	1	
07-02-07166	-Spare parts & PCB's.	Set	1	
07-02-07167	-Documentation.	Set	1	
07-02-07169	SDH Multiplex Equipment	Lot	1	
07-02-07170	-STM-4 Mutliplexer Subrack with redundant common units	Set	2	
07-02-07171	-STM-1 Multiplex Subrack with redundant common units	Set	0	
07-02-07172	-Tributary Cards (3x34Mb/s, 21x2Mb/s,140/155 Mb/s switch , 7x2Mb/s).	Set	4	
07-02-07173	-Access & Connection Modules.	Set	2	
07-02-07174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP containd in subracks with common units & with function units, controllers ,connectors, ETC.....	Lot	6	
07-02-07175	-Full Matrix (duplicated).	Unit	4	
07-02-07176	-Auxiliary /Engineering order wire.	Set	1	
07-02-07177	-Telephone Handset.	Lot	1	
07-02-07178	-Installation Materials & Tools.	Lot	2	
07-02-07179	-Racks with power supply unit (duplicated)and cable head.	Set	4	
07-02-07180	-Digital Distribution Frames.	Set	4	
07-02-07181	-Primary Multiplex (PCM-30CH.) Subrack with common units & channel PCB's of different configurations.	Set	3	
07-02-07182	-Equipment craft terminal for programmed control and display with operation Software .	Set	2	
07-02-07183	-Spare parts & spare units.	Lot	2	
07-02-07184	-Installation materials & tools.	Lot	2	
07-02-07185	-Documentation.	Set	1	
07-02-07189	Network Management Equipment	Lot	1	
07-02-07190	-Central Network Management System platform(Hardware)	Lot	0	
07-02-07191	-Central Network Management System software packages.	Set	0	
07-02-07192	-Local Network Management Equipment (craft terminals).	Lot	1	
07-02-07193	-Mediation , Interface, and connection cards &modules.	Lot	1	
07-02-07194	-Installation Materials & Tools.	Lot	1	
07-02-07195	-Documentation..	Set	1	
07-02-07119	Test Instruments	Lot	1	
07-02-07200	-Digital Multimeter.	Set	1	
07-02-07201	-Frequency Counter .	Set	0	
07-02-07202	-Power Meter .	Set	0	
07-02-07203	-PCM Multiplex Tester .	Set	1	
07-02-07204	-RF Sweep Generator .	Set	0	
07-02-07205	-VSWR Test Set.	Set	0	
07-02-07206	-Scalar Network Analyzer .	Set	0	
07-02-07207	-RF Spectrum Analyzer.	Set	0	
07-02-07208	-SDH Analyzer for STM-1.	Set	0	
07-02-07209	-TX / RX MW Link Analyzer .	Set	0	
07-02-07210	-PDH Analyzer (2Mb/s).	Set	0	
07-02-07211	-Oscilloscope 500 MHZ Dual channel.	Set	0	
07-02-07212	-Video Test Set.	Set	0	
07-02-07213	-RF Attenuators Fixed & Variable (0 - 60)DB.	Set	0	
07-02-07214	-Cables & Adapters.	Set	1	
07-02-07215	-Waveguide / Coax. Adapters.	Set	1	

07-02-07216	-Documentation.	Set	1	
07-02-07219	Specific Tools	Lot	1	
07-02-07220	-20 Ton Lorry with crane & winch.	Unit	0	
07-02-07221	-Specific Maintenance Tools	Lot	1	
07-02-07222	-Station Tools	Lot	1	
07-02-07223	-Special Tools for waveguide.	Lot	1	
07-02-07224	-Installation Tools.	Lot	1	
07-02-07229	Services	Lot	1	
07-02-07230	-Factory Training Abroad.	Trainee	1	
07-02-07231	-Training In Iraq.		3	
07-02-07232	-Supervision Services (Supplier Expert).	Trainee Expert	1	

ANNEX SEVEN / Telecommunications

Sub - sector : West Tigris Digital Microwave Link

Site - Name : MISHRAQ

Code	Item Description	Unit	Qty	Complementary Items
07-02-08100	SDH Microwave Radio Equipment	Lot	1	
07-02-08101	-STM-1, 8/6 GHZ (3+1) Radio Repeater With Frequency & Space Diversity all complete for 2 directions.	Set	1	
07-02-08102	-128 QAM Modems Modules.	Set	8	
07-02-08103	-Protection Switch.	Set	2	
07-02-08104	-Engineering order wire channel.	Set	2	
07-02-08105	-2Mb/s auxiliary traffic.	Set	2	
07-02-08106	-Interface to central Network management.	Set	2	
07-02-08107	-Peripherals (Lap Top PC , ETC.....)	Set	1	
07-02-08108	-Rack with 48V. d/c unit (duplicated).	Set	3	
07-02-08109	-Installation & Maintenance tools & materials.	Set	2	
07-02-08110	-Spare parts & spare units.	Set	2	
07-02-08111	-Documentation.	Set	1	
07-02-08119	Microwave Antennas	Lot	1	
07-02-08120	-Parabolic Dish (3 -3.7m. diameter).	Set	4	
07-02-08121	-Antenna Radiation Element with (1 / 2)Ports.	Set	4	
07-02-08122	-Connector Flanges.	Set	4	
07-02-08123	-Tower Attachment.	Set	4	
07-02-08124	-Installation & Maintenance tools & materials.	Set	4	
07-02-08129	Microwave Feeders	Lot	1	
07-02-08130	-Elliptical waveguide for 8/6 GHZ band .	Meter	400	
07-02-08131	-Medium capacity dehydrator.	Unit	1	
07-02-08132	-Pressure Window.	Unit	4	
07-02-08133	-Fixture clamps.	Set	4	
07-02-08134	-Earthing Kits.	Set	4	
07-02-08135	-Installation materials & tools.	Set	4	
07-02-08136	-Documentation.	Set	1	
07-02-08139	DC Power Plant	Lot	1	
07-02-08140	-Modular switched rectifier system 48V / 30Ampere module (3+1) configuration.	Set	1	
07-02-08141	-48V, 200Ah Lead-Acid Sealed-Batteries(2sets).	Lot	1	
07-02-08142	-Cabinet.	Set	2	
07-02-08143	-Installation materials , cables, tools.	Set	1	
07-02-08144	-Documentation.	Set	1	
07-02-08149	Air Conditioners	Lot	1	
07-02-08150	-Duplicated 18000 / 24000 BTU Unit.	Set	2	
07-02-08151	-Piping & installation materials & fixtures.	Set	2	
07-02-08152	-Spare parts.	Set	2	
07-02-08153	-Documentation.	Set	2	
07-02-08159	Diesel Engine Generator	Lot	1	
07-02-08160	-Capacity 50 KVA, Dual Set.	Set	1	
07-02-08161	-Daily Fuel Tank.	Set	1	
07-02-08162	-Fan.	Set	1	
07-02-08163	-Piping.	Set	1	

07-02-08164	-Control cubicle & Alarms.	Set	1	
07-02-08165	-Installation Materials & Tools.	Set	1	
07-02-08166	-Spare parts & PCB's.	Set	1	
07-02-08167	-Documentation.	Set	1	
07-02-08169	SDH Multiplex Equipment	Lot	1	
07-02-08170	-STM-4 Mutlplexer Subrack with redundant common units	Set	0	
07-02-08171	-STM-1 Multiplex Subrack with redundant common units	Set	0	
07-02-08172	-Tributary Cards (3x34Mb/s, 21x2Mb/s,140/155 Mb/s switch , 7x2Mb/s).	Set	0	
07-02-08173	-Access & Connection Modules.	Set	0	
07-02-08174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP containd in subracks with common units & with function units, controllers ,connectors, ETC.....	Lot	0	
07-02-08175	-Full Matrix (duplicated).	Unit	0	
07-02-08176	-Auxiliary /Engineering order wire.	Set	0	
07-02-08177	-Telephone Handset.	Lot	0	
07-02-08178	-Installation Materials & Tools.	Lot	0	
07-02-08179	-Racks with power supply unit (duplicated)and cable head.	Set	1	
07-02-08180	-Digital Distribution Frames.	Set	1	
07-02-08181	-Primary Multiplex (PCM-30CH.) Subrack with common units & channel PCB's of different configurations.	Set	0	
07-02-08182	-Equipment craft terminal for programmed control and display with operation Software .	Set	0	
07-02-08183	-Spare parts & spare units.	Lot	1	
07-02-08184	-Installation materials & tools.	Lot	1	
07-02-08185	-Documentation.	Set	1	
07-02-08189	Network Management Equipment	Lot	0	
07-02-08190	-Central Network Management System platform(Hardware)	Lot	0	
07-02-08191	-Central Network Management System software packages.	Set	0	
07-02-08192	-Local Network Management Equipment (craft terminals).	Lot	0	
07-02-08193	-Mediation , Interface, and connection cards &modules.	Lot	0	
07-02-08194	-Installation Materials & Tools.	Lot	0	
07-02-08195	-Documentation..	Set	0	
07-02-08119	Test Instruments	Lot	0	
07-02-08200	-Digital Multimeter.	Set	0	
07-02-08201	-Frequency Counter .	Set	0	
07-02-08202	-Power Meter .	Set	0	
07-02-08203	-PCM Multiplex Tester .	Set	0	
07-02-08204	-RF Sweep Generator .	Set	0	
07-02-08205	-VSWR Test Set.	Set	0	
07-02-08206	-Scalar Network Analyzer .	Set	0	
07-02-08207	-RF Spectrum Analyzer.	Set	0	
07-02-08208	-SDH Analyzer for STM-1.	Set	0	
07-02-08209	-TX / RX MW Link Analyzer .	Set	0	
07-02-08210	-PDH Analyzer (2Mb/s).	Set	0	
07-02-08211	-Oscilloscope 500 MHZ Dual channel.	Set	0	
07-02-08212	-Video Test Set.	Set	0	
07-02-08213	-RF Attenuators Fixed & Variable (0 - 60)DB.	Set	0	
07-02-08214	-Cables & Adapters.	Set	0	
07-02-08215	-Waveguide / Coax. Adapters.	Set	0	
07-02-08216	-Documentation.	Set	0	

07-02-08219	Specific Tools	Lot	0	
07-02-08220	-20 Ton Lorry with crane & winch.	Unit	0	
07-02-08221	-Specific Maintenance Tools	Lot	0	
07-02-08222	-Station Tools	Lot	1	
07-02-08223	-Special Tools for waveguide.	Lot	0	
07-02-08224	-Installation Tools.	Lot	0	
07-02-08229	Services	Lot	1	
07-02-08230	-Factory Training Abroad.	Trainee	0	
07-02-08231	-Training In Iraq.		0	
07-02-08232	-Supervision Services (Supplier Expert).	Trainee	1	
		Expert		

ANNEX SEVEN / Telecommunications

Sub - sector : West Tigris Digital Microwave Link

Site - Name : QAYARA

Code	Item Description	Unit	Qty	Complementary Items
07-02-10100	SDH Microwave Radio Equipment	Lot	1	
07-02-10101	-STM-1, 8/6 GHZ (3+1) Radio Repeater With Frequency & Space Diversity all complete for 2 directions.	Set	1	
07-02-10102	-128 QAM Modems Modules.	Set	8	
07-02-10103	-Protection Switch.	Set	2	
07-02-10104	-Engineering order wire channel.	Set	2	
07-02-10105	-2Mb/s auxiliary traffic.	Set	3	
07-02-10106	-Interface to central Network management.	Set	2	
07-02-10107	-Peripherals (Lap Top PC , ETC.....)	Set	1	
07-02-10108	-Rack with 48V. d/c unit (duplicated).	Set	3	
07-02-10109	-Installation & Maintenance tools & materials.	Set	2	
07-02-10110	-Spare parts & spare units.	Set	2	
07-02-10111	-Documentation.	Set	1	
07-02-10119	Microwave Antennas	Lot	1	
07-02-10120	-Parabolic Dish (3 -3.7m. diameter).	Set	4	
07-02-10121	-Antenna Radiation Element with (1 / 2)Ports.	Set	4	
07-02-10122	-Connector Flanges.	Set	4	
07-02-10123	-Tower Attachment.	Set	4	
07-02-10124	-Installation & Maintenance tools & materials.	Set	4	
07-02-10129	Microwave Feeders	Lot	1	
07-02-10130	-Elliptical waveguide for 8/6 GHZ band .	Meter	400	
07-02-10131	-Medium capacity dehydrator.	Unit	1	
07-02-10132	-Pressure Window.	Unit	4	
07-02-10133	-Fixture clamps.	Set	4	
07-02-10134	-Earthing Kits.	Set	4	
07-02-10135	-Installation materials & tools.	Set	4	
07-02-10136	-Documentation.	Set	1	
07-02-10139	DC Power Plant	Lot	1	
07-02-10140	-Modular switched rectifier system 48V / 30Ampere module (3+1) configuration.	Set	1	
07-02-10141	-48V, 200Ah Lead-Acid Sealed-Batteries(2sets).	Lot	1	
07-02-10142	-Cabinet.	Set	2	
07-02-10143	-Installation materials , cables, tools.	Set	1	
07-02-10144	-Documentation.	Set	1	
07-02-10149	Air Conditioners	Lot	1	
07-02-10150	-Duplicated 18000 / 24000 BTU Unit.	Set	2	
07-02-10151	-Piping & installation materials & fixtures.	Set	2	
07-02-10152	-Spare parts.	Set	2	
07-02-10153	-Documentation.	Set	2	
07-02-10159	Diesel Engine Generator	Lot	1	
07-02-10160	-Capacity 50 KVA, Dual Set.	Set	1	
07-02-10161	-Daily Fuel Tank.	Set	1	
07-02-10162	-Fan.	Set	1	
07-02-10163	-Piping.	Set	1	

07-02-10164	-Control cubicle & Alarms.	Set	1	
07-02-10165	-Installation Materials & Tools.	Set	1	
07-02-10166	-Spare parts & PCB's.	Set	1	
07-02-10167	-Documentation.	Set	1	
07-02-10169	SDH Multiplex Equipment	Lot	1	
07-02-10170	-STM-4 Mutlplexer Subrack with redundant common units	Set	0	
07-02-10171	-STM-1 Multiplex Subrack with redundant common units	Set	0	
07-02-10172	-Tributary Cards (3x34Mb/s, 21x2Mb/s,140/155 Mb/s switch , 7x2Mb/s).	Set	0	
07-02-10173	-Access & Connection Modules.	Set	0	
07-02-10174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP containd in subracks with common units & with function units, controllers ,connectors, ETC.....	Lot	0	
07-02-10175	-Full Matrix (duplicated).	Unit	0	
07-02-10176	-Auxiliary /Engineering order wire.	Set	0	
07-02-10177	-Telephone Handset.	Lot	0	
07-02-10178	-Installation Materials & Tools.	Lot	0	
07-02-10179	-Racks with power supply unit (duplicated)and cable head.	Set	1	
07-02-10180	-Digital Distribution Frames.	Set	1	
07-02-10181	-Primary Multiplex (PCM-30CH.) Subrack with common units & channel PCB's of different configurations.	Set	0	
07-02-10182	-Equipment craft terminal for programmed control and display with operation Software .	Set	0	
07-02-10183	-Spare parts & spare units.	Lot	1	
07-02-10184	-Installation materials & tools.	Lot	1	
07-02-10185	-Documentation.	Set	1	
07-02-10189	Network Management Equipment	Lot	0	
07-02-10190	-Central Network Management System platform(Hardware)	Lot	0	
07-02-10191	-Central Network Management System software packages.	Set	0	
07-02-10192	-Local Network Management Equipment (craft terminals).	Lot	0	
07-02-10193	-Mediation , Interface, and connection cards &modules.	Lot	0	
07-02-10194	-Installation Materials & Tools.	Lot	0	
07-02-10195	-Documentation..	Set	0	
07-02-10119	Test Instruments	Lot	0	
07-02-10200	-Digital Multimeter.	Set	0	
07-02-10201	-Frequency Counter .	Set	0	
07-02-10202	-Power Meter .	Set	0	
07-02-10203	-PCM Multiplex Tester .	Set	0	
07-02-10204	-RF Sweep Generator .	Set	0	
07-02-10205	-VSWR Test Set.	Set	0	
07-02-10206	-Scalar Network Analyzer .	Set	0	
07-02-10207	-RF Spectrum Analyzer.	Set	0	
07-02-10208	-SDH Analyzer for STM-1.	Set	0	
07-02-10209	-TX / RX MW Link Analyzer .	Set	0	
07-02-10210	-PDH Analyzer (2Mb/s).	Set	0	
07-02-10211	-Oscilloscope 500 MHZ Dual channel.	Set	0	
07-02-10212	-Video Test Set.	Set	0	
07-02-10213	-RF Attenuators Fixed & Variable (0 - 60)DB.	Set	0	
07-02-10214	-Cables & Adapters.	Set	0	
07-02-10215	-Waveguide / Coax. Adapters.	Set	0	
07-02-10216	-Documentation.	Set	0	

07-02-10219	Specific Tools	Lot	0	
07-02-10220	-20 Ton Lorry with crane & winch.	Unit	0	
07-02-10221	-Specific Maintenance Tools	Lot	0	
07-02-10222	-Station Tools	Lot	1	
07-02-10223	-Special Tools for waveguide.	Lot	0	
07-02-10224	-Installation Tools.	Lot	0	
07-02-10229	Services	Lot	1	
07-02-10230	-Factory Training Abroad.	Trainee	0	
07-02-10231	-Training In Iraq.		0	
07-02-10232	-Supervision Services (Supplier Expert).	Trainee	1	
		Expert		

ANNEX SEVEN / Telecommunications

Sub - sector : West Tigris Digital Microwave Link

Site - Name : FATHA

Code	Item Description	Unit	Qty	Complementary Items
07-02-13100	SDH Microwave Radio Equipment	Lot	1	
07-02-13101	-STM-1, 8/6 GHZ (3+1) Radio Repeater With Frequency & Space Diversity all complete for 2 directions.	Set	1	
07-02-13102	-128 QAM Modems Modules.	Set	8	
07-02-13103	-Protection Switch.	Set	2	
07-02-13104	-Engineering order wire channel.	Set	2	
07-02-13105	-2Mb/s auxiliary traffic.	Set	2	
07-02-13106	-Interface to central Network management.	Set	2	
07-02-13107	-Peripherals (Lap Top PC , ETC.....)	Set	1	
07-02-13108	-Rack with 48V. d/c unit (duplicated).	Set	3	
07-02-13109	-Installation & Maintenance tools & materials.	Set	2	
07-02-13110	-Spare parts & spare units.	Set	2	
07-02-13111	-Documentation.	Set	1	
07-02-13119	Microwave Antennas	Lot	1	
07-02-13120	-Parabolic Dish (3 -3.7m. diameter).	Set	4	
07-02-13121	-Antenna Radiation Element with (1 / 2)Ports.	Set	4	
07-02-13122	-Connector Flanges.	Set	4	
07-02-13123	-Tower Attachment.	Set	4	
07-02-13124	-Installation & Maintenance tools & materials.	Set	4	
07-02-13129	Microwave Feeders	Lot	1	
07-02-13130	-Elliptical waveguide for 8/6 GHZ band .	Meter	400	
07-02-13131	-Medium capacity dehydrator.	Unit	1	
07-02-13132	-Pressure Window.	Unit	4	
07-02-13133	-Fixture clamps.	Set	4	
07-02-13134	-Earthing Kits.	Set	4	
07-02-13135	-Installation materials & tools.	Set	4	
07-02-13136	-Documentation.	Set	1	
07-02-13139	DC Power Plant	Lot	1	
07-02-13140	-Modular switched rectifier system 48V / 30Ampere module (3+1) configuration.	Set	1	
07-02-13141	-48V, 200Ah Lead-Acid Sealed-Batteries(2sets).	Lot	1	
07-02-13142	-Cabinet.	Set	2	
07-02-13143	-Installation materials , cables, tools.	Set	1	
07-02-13144	-Documentation.	Set	1	
07-02-13149	Air Conditioners	Lot	1	
07-02-13150	-Duplicated 18000 / 24000 BTU Unit.	Set	2	
07-02-13151	-Piping & installation materials & fixtures.	Set	2	
07-02-13152	-Spare parts.	Set	2	
07-02-13153	-Documentation.	Set	2	
07-02-13159	Diesel Engine Generator	Lot	1	
07-02-13160	-Capacity 50 KVA, Dual Set.	Set	1	
07-02-13161	-Daily Fuel Tank.	Set	1	
07-02-13162	-Fan.	Set	1	
07-02-13163	-Piping.	Set	1	

07-02-13164	-Control cubicle & Alarms.	Set	1	
07-02-13165	-Installation Materials & Tools.	Set	1	
07-02-13166	-Spare parts & PCB's.	Set	1	
07-02-13167	-Documentation.	Set	1	
07-02-13169	SDH Multiplex Equipment	Lot	1	
07-02-13170	-STM-4 Mutlplexer Subrack with redundant common units	Set	0	
07-02-13171	-STM-1 Multiplex Subrack with redundant common units	Set	0	
07-02-13172	-Tributary Cards (3x34Mb/s, 21x2Mb/s,140/155 Mb/s switch , 7x2Mb/s).	Set	0	
07-02-13173	-Access & Connection Modules.	Set	0	
07-02-13174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP containd in subracks with common units & with function units, controllers ,connectors, ETC.....	Lot	0	
07-02-13175	-Full Matrix (duplicated).	Unit	0	
07-02-13176	-Auxiliary /Engineering order wire.	Set	0	
07-02-13177	-Telephone Handset.	Lot	0	
07-02-13178	-Installation Materials & Tools.	Lot	0	
07-02-13179	-Racks with power supply unit (duplicated)and cable head.	Set	1	
07-02-13180	-Digital Distribution Frames.	Set	1	
07-02-13181	-Primary Multiplex (PCM-30CH.) Subrack with common units & channel PCB's of different configurations.	Set	0	
07-02-13182	-Equipment craft terminal for programmed control and display with operation Software .	Set	0	
07-02-13183	-Spare parts & spare units.	Lot	1	
07-02-13184	-Installation materials & tools.	Lot	1	
07-02-13185	-Documentation.	Set	1	
07-02-13189	Network Management Equipment	Lot	0	
07-02-13190	-Central Network Management System platform(Hardware)	Lot	0	
07-02-13191	-Central Network Management System software packages.	Set	0	
07-02-13192	-Local Network Management Equipment (craft terminals).	Lot	0	
07-02-13193	-Mediation , Interface, and connection cards &modules.	Lot	0	
07-02-13194	-Installation Materials & Tools.	Lot	0	
07-02-13195	-Documentation..	Set	0	
07-02-13119	Test Instruments	Lot	0	
07-02-13200	-Digital Multimeter.	Set	0	
07-02-13201	-Frequency Counter .	Set	0	
07-02-13202	-Power Meter .	Set	0	
07-02-13203	-PCM Multiplex Tester .	Set	0	
07-02-13204	-RF Sweep Generator .	Set	0	
07-02-13205	-VSWR Test Set.	Set	0	
07-02-13206	-Scalar Network Analyzer .	Set	0	
07-02-13207	-RF Spectrum Analyzer.	Set	0	
07-02-13208	-SDH Analyzer for STM-1.	Set	0	
07-02-13209	-TX / RX MW Link Analyzer .	Set	0	
07-02-13210	-PDH Analyzer (2Mb/s).	Set	0	
07-02-13211	-Oscilloscope 500 MHZ Dual channel.	Set	0	
07-02-13212	-Video Test Set.	Set	0	
07-02-13213	-RF Attenuators Fixed & Variable (0 - 60)DB.	Set	0	
07-02-13214	-Cables & Adapters.	Set	0	
07-02-13215	-Waveguide / Coax. Adapters.	Set	0	
07-02-13216	-Documentation.	Set	0	

07-02-13219	Specific Tools	Lot	0	
07-02-13220	-20 Ton Lorry with crane & winch.	Unit	0	
07-02-13221	-Specific Maintenance Tools	Lot	0	
07-02-13222	-Station Tools	Lot	1	
07-02-13223	-Special Tools for waveguide.	Lot	0	
07-02-13224	-Installation Tools.	Lot	0	
07-02-13229	Services	Lot	1	
07-02-13230	-Factory Training Abroad.		0	
07-02-13231	-Training In Iraq.	Trainee	0	
07-02-13232	-Supervision Services (Supplier Expert).		1	
		Trainee Expert		

ANNEX SEVEN / Telecommunications

Sub - sector : West Tigris Digital Microwave Link

Site - Name : ASSAS

Code	Item Description	Unit	Qty	Complementary Items
07-02-14100	SDH Microwave Radio Equipment	Lot	1	
07-02-14101	-STM-1, 8/6 GHZ (3+1) Radio Repeater With Frequency & Space Diversity all complete for 2 directions.	Set	1	
07-02-14102	-128 QAM Modems Modules.	Set	8	
07-02-14103	-Protection Switch.	Set	2	
07-02-14104	-Engineering order wire channel.	Set	2	
07-02-14105	-2Mb/s auxiliary traffic.	Set	2	
07-02-14106	-Interface to central Network management.	Set	2	
07-02-14107	-Peripherals (Lap Top PC , ETC.....)	Set	1	
07-02-14108	-Rack with 48V. d/c unit (duplicated).	Set	3	
07-02-14109	-Installation & Maintenance tools & materials.	Set	2	
07-02-14110	-Spare parts & spare units.	Set	2	
07-02-14111	-Documentation.	Set	1	
07-02-14119	Microwave Antennas	Lot	1	
07-02-14120	-Parabolic Dish (3 -3.7m. diameter).	Set	4	
07-02-14121	-Antenna Radiation Element with (1 / 2)Ports.	Set	4	
07-02-14122	-Connector Flanges.	Set	4	
07-02-14123	-Tower Attachment.	Set	4	
07-02-14124	-Installation & Maintenance tools & materials.	Set	4	
07-02-14129	Microwave Feeders	Lot	1	
07-02-14130	-Elliptical waveguide for 8/6 GHZ band .	Meter	400	
07-02-14131	-Medium capacity dehydrator.	Unit	1	
07-02-14132	-Pressure Window.	Unit	4	
07-02-14133	-Fixture clamps.	Set	4	
07-02-14134	-Earthing Kits.	Set	4	
07-02-14135	-Installation materials & tools.	Set	4	
07-02-14136	-Documentation.	Set	1	
07-02-14139	DC Power Plant	Lot	1	
07-02-14140	-Modular switched rectifier system 48V / 30Ampere module (3+1) configuration.	Set	1	
07-02-14141	-48V, 200Ah Lead-Acid Sealed-Batteries(2sets).	Lot	1	
07-02-14142	-Cabinet.	Set	2	
07-02-14143	-Installation materials , cables, tools.	Set	1	
07-02-14144	-Documentation.	Set	1	
07-02-14149	Air Conditioners	Lot	1	
07-02-14150	-Duplicated 18000 / 24000 BTU Unit.	Set	2	
07-02-14151	-Piping & installation materials & fixtures.	Set	2	
07-02-14152	-Spare parts.	Set	2	
07-02-14153	-Documentation.	Set	2	
07-02-14159	Diesel Engine Generator	Lot	1	
07-02-14160	-Capacity 50 KVA, Dual Set.	Set	1	
07-02-14161	-Daily Fuel Tank.	Set	1	
07-02-14162	-Fan.	Set	1	
07-02-14163	-Piping.	Set	1	

07-02-14164	-Control cubicle & Alarms.	Set	1	
07-02-14165	-Installation Materials & Tools.	Set	1	
07-02-14166	-Spare parts & PCB's.	Set	1	
07-02-14167	-Documentation.	Set	1	
07-02-14169	SDH Multiplex Equipment	Lot	1	
07-02-14170	-STM-4 Mutlplexer Subrack with redundant common units	Set	0	
07-02-14171	-STM-1 Multiplex Subrack with redundant common units	Set	0	
07-02-14172	-Tributary Cards (3x34Mb/s, 21x2Mb/s,140/155 Mb/s switch , 7x2Mb/s).	Set	0	
07-02-14173	-Access & Connection Modules.	Set	0	
07-02-14174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP containd in subracks with common units & with function units, controllers ,connectors, ETC.....	Lot	0	
07-02-14175	-Full Matrix (duplicated).	Unit	0	
07-02-14176	-Auxiliary /Engineering order wire.	Set	0	
07-02-14177	-Telephone Handset.	Lot	0	
07-02-14178	-Installation Materials & Tools.	Lot	0	
07-02-14179	-Racks with power supply unit (duplicated)and cable head.	Set	1	
07-02-14180	-Digital Distribution Frames.	Set	1	
07-02-14181	-Primary Multiplex (PCM-30CH.) Subrack with common units & channel PCB's of different configurations.	Set	0	
07-02-14182	-Equipment craft terminal for programmed control and display with operation Software .	Set	0	
07-02-14183	-Spare parts & spare units.	Lot	1	
07-02-14184	-Installation materials & tools.	Lot	1	
07-02-14185	-Documentation.	Set	1	
07-02-14189	Network Management Equipment	Lot	0	
07-02-14190	-Central Network Management System platform(Hardware)	Lot	0	
07-02-14191	-Central Network Management System software packages.	Set	0	
07-02-14192	-Local Network Management Equipment (craft terminals).	Lot	0	
07-02-14193	-Mediation , Interface, and connection cards &modules.	Lot	0	
07-02-14194	-Installation Materials & Tools.	Lot	0	
07-02-14195	-Documentation..	Set	0	
07-02-14119	Test Instruments	Lot	0	
07-02-14200	-Digital Multimeter.	Set	0	
07-02-14201	-Frequency Counter .	Set	0	
07-02-14202	-Power Meter .	Set	0	
07-02-14203	-PCM Multiplex Tester .	Set	0	
07-02-14204	-RF Sweep Generator .	Set	0	
07-02-14205	-VSWR Test Set.	Set	0	
07-02-14206	-Scalar Network Analyzer .	Set	0	
07-02-14207	-RF Spectrum Analyzer.	Set	0	
07-02-14208	-SDH Analyzer for STM-1.	Set	0	
07-02-14209	-TX / RX MW Link Analyzer .	Set	0	
07-02-14210	-PDH Analyzer (2Mb/s).	Set	0	
07-02-14211	-Oscilloscope 500 MHZ Dual channel.	Set	0	
07-02-14212	-Video Test Set.	Set	0	
07-02-14213	-RF Attenuators Fixed & Variable (0 - 60)DB.	Set	0	
07-02-14214	-Cables & Adapters.	Set	0	
07-02-14215	-Waveguide / Coax. Adapters.	Set	0	
07-02-14216	-Documentation.	Set	0	

07-02-14219	Specific Tools	Lot	0	
07-02-14220	-20 Ton Lorry with crane & winch.	Unit	0	
07-02-14221	-Specific Maintenance Tools	Lot	0	
07-02-14222	-Station Tools	Lot	1	
07-02-14223	-Special Tools for waveguide.	Lot	0	
07-02-14224	-Installation Tools.	Lot	0	
07-02-14229	Services	Lot	1	
07-02-14230	-Factory Training Abroad.		0	
07-02-14231	-Training In Iraq.	Trainee	0	
07-02-14232	-Supervision Services (Supplier Expert).		1	
		Trainee Expert		

ANNEX SEVEN / Telecommunications

Sub - sector : West Tigris Digital Microwave Link

Site - Name : TIKRIT

Code	Item Description	Unit	Qty	Complementary Items
07-02-09100	SDH Microwave Radio Equipment	Lot	1	
07-02-09101	-STM-1, 8/6GHZ (3+1), (1+1) Radio Terminal With Frequency & Space Diversity all complete.	Set	3	
07-02-09102	-128 QAM Modems Modules.	Set	10	
07-02-09103	-Protection Switch.	Set	3	
07-02-09104	-Engineering order wire channel.	Set	2	
07-02-09105	-2Mb/s auxiliary traffic.	Set	3	
07-02-09106	-Interface to central Network management.	Set	3	
07-02-09107	-Peripherals (Lap Top PC , ETC.....)	Set	1	
07-02-09108	-Rack with 48V. d/c unit (duplicated).	Set	4	
07-02-09109	-Installation & Maintenance tools & materials.	Set	2	
07-02-09110	-Spare parts & spare units.	Set	2	
07-02-09111	-Documentation.	Set	1	
07-02-09119	Microwave Antennas	Lot	1	
07-02-09120	-Parabolic Dish (3 -3.7m. diameter).	Set	5	
07-02-09121	-Antenna Radiation Element with (1 / 2)Ports.	Set	5	
07-02-09122	-Connector Flanges.	Set	5	
07-02-09123	-Tower Attachment.	Set	5	
07-02-09124	-Installation & Maintenance tools & materials.	Set	5	
07-02-09129	Microwave Feeders	Lot	1	
07-02-09130	-Elliptical waveguide for 8/6 GHZ band .	Meter	500	
07-02-09131	-Medium capacity dehydrator.	Unit	1	
07-02-09132	-Pressure Window.	Unit	5	
07-02-09133	-Fixture clamps.	Set	5	
07-02-09134	-Earthing Kits.	Set	5	
07-02-09135	-Installation materials & tools.	Set	2	
07-02-09136	-Documentation.	Set	1	
07-02-09139	DC Power Plant	Lot	1	
07-02-09140	-Modular switched rectifier system 48V / 30Ampere module (4+1) configuration.	Set	1	
07-02-09141	-48V, 300Ah Lead-Acid Sealed-Batteries(2sets).	Lot	1	
07-02-09142	-Cabinet.	Set	2	
07-02-09143	-Installation materials , cables, tools.	Set	1	
07-02-09144	-Documentation.	Set	1	
07-02-09149	Air Conditioners	Lot	1	
07-02-09150	-Duplicated 18000 / 24000 BTU Unit.	Set	2	
07-02-09151	-Piping & installation materials & fixtures.	Set	2	
07-02-09152	-Spare parts.	Set	2	
07-02-09153	-Documentation.	Set	2	
07-02-09159	Diesel Engine Generator	Lot	1	
07-02-09160	-Capacity 50 KVA, Dual Set.	Set	1	
07-02-09161	-Daily Fuel Tank.	Set	1	
07-02-09162	-Fan.	Set	1	

07-02-09163	-Piping.	Set	1	
07-02-09164	-Control cubicle & Alarms.	Set	1	
07-02-09165	-Installation Materials & Tools.	Set	1	
07-02-09166	-Spare parts & PCB's.	Set	1	
07-02-09167	-Documentation.	Set	1	
07-02-09169	SDH Multiplex Equipment	Lot	1	
07-02-09170	-STM-4 Multiplexer Subrack with redundant common units	Set	2	
07-02-09171	-STM-1 Multiplex Subrack with redundant common units	Set	1	
07-02-09172	-Tributary Cards (3x34Mb/s, 21x2Mb/s,140/155 Mb/s switch , 7x2Mb/s).	Set	3	
07-02-09173	-Access & Connection Modules.	Set	2	
07-02-09174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP contained in subracks with common units & with function units, controllers ,connectors, ETC.....	Lot	7	
07-02-09175	-Full Matrix (duplicated).	Unit	4	
07-02-09176	-Auxiliary /Engineering order wire.	Set	1	
07-02-09177	-Telephone Handset.	Lot	1	
07-02-09178	-Installation Materials & Tools.	Lot	2	
07-02-09179	-Racks with power supply unit (duplicated)and cable head.	Set	4	
07-02-09180	-Digital Distribution Frames.	Set	4	
07-02-09181	-Primary Multiplex (PCM-30CH.) Subrack with common units & channel PCB's of different configurations.	Set	1	
07-02-09182	-Equipment craft terminal for programmed control and display with operation Software .	Set	2	
07-02-09183	-Spare parts & spare units.	Lot	2	
07-02-09184	-Installation materials & tools.	Lot	2	
07-02-09185	-Documentation.	Set	1	
07-02-09189	Network Management Equipment	Lot	1	
07-02-09190	-Central Network Management System platform(Hardware)	Lot	0	
07-02-09191	-Central Network Management System software packages.	Set	0	
07-02-09192	-Local Network Management Equipment (craft terminals).	Lot	0	
07-02-09193	-Mediation , Interface, and connection cards &modules.	Lot	0	
07-02-09194	-Installation Materials & Tools.	Lot	0	
07-02-09195	-Documentation..	Set	0	
07-02-09119	Test Instruments	Lot	1	
07-02-09200	-Digital Multimeter.	Set	1	
07-02-09201	-Frequency Counter .	Set	0	
07-02-09202	-Power Meter .	Set	0	
07-02-09203	-PCM Multiplex Tester .	Set	1	
07-02-09204	-RF Sweep Generator .	Set	0	
07-02-09205	-VSWR Test Set.	Set	0	
07-02-09206	-Scalar Network Analyzer .	Set	0	
07-02-09207	-RF Spectrum Analyzer.	Set	0	
07-02-09208	-SDH Analyzer for STM-1.	Set	0	
07-02-09209	-TX / RX MW Link Analyzer .	Set	0	
07-02-09210	-PDH Analyzer (2Mb/s).	Set	0	
07-02-09211	-Oscilloscope 500 MHZ Dual channel.	Set	0	
07-02-09212	-Video Test Set.	Set	0	
07-02-09213	-RF Attenuators Fixed & Variable (0 - 60)DB.	Set	0	
07-02-09214	-Cables & Adapters.	Set	1	
07-02-09215	-Waveguide / Coax. Adapters.	Set	1	
07-02-09216	-Documentation.	Set	1	

07-02-09219	Specific Tools	Lot	1	
07-02-09220	-20 Ton Lorry with crane & winch.	Unit	0	
07-02-09221	-Specific Maintenance Tools	Lot	1	
07-02-09222	-Station Tools	Lot	1	
07-02-09223	-Special Tools for waveguide.	Lot	1	
07-02-09224	-Installation Tools.	Lot	1	
07-02-09229	Services	Lot	1	
07-02-09230	-Factory Training Abroad.		1	
07-02-09231	-Training In Iraq.	Trainee	3	
07-02-09232	-Supervision Services (Supplier Expert).	Trainee	1	
		Expert		

ANNEX SEVEN / Telecommunications

Sub - sector : West Tigris Digital Microwave Link

Site - Name : FALLUJA

Code	Item Description	Unit	Qty	Complementary Items
07-02-11100	SDH Microwave Radio Equipment	Lot	1	
07-02-11101	-STM-1, 8/6GHZ (3+1), Radio Terminal With Frequency & Space Diversity all complete.	Set	2	
07-02-11102	-128 QAM Modems Modules.	Set	8	
07-02-11103	-Protection Switch.	Set	2	
07-02-11104	-Engineering order wire channel.	Set	2	
07-02-11105	-2Mb/s auxiliary traffic.	Set	2	
07-02-11106	-Interface to central Network management.	Set	2	
07-02-11107	-Peripherals (Lap Top PC , ETC.....)	Set	1	
07-02-11108	-Rack with 48V. d/c unit (duplicated).	Set	4	
07-02-11109	-Installation & Maintenance tools & materials.	Set	2	
07-02-11110	-Spare parts & spare units.	Set	2	
07-02-11111	-Documentation.	Set	1	
07-02-11119	Microwave Antennas	Lot	1	
07-02-11120	-Parabolic Dish (3 -3.7m. diameter).	Set	4	
07-02-11121	-Antenna Radiation Element with (1 / 2)Ports.	Set	4	
07-02-11122	-Connector Flanges.	Set	4	
07-02-11123	-Tower Attachment.	Set	4	
07-02-11124	-Installation & Maintenance tools & materials.	Set	4	
07-02-11129	Microwave Feeders	Lot	1	
07-02-11130	-Elliptical waveguide for 8/6 GHZ band .	Meter	400	
07-02-11131	-Medium capacity dehydrator.	Unit	1	
07-02-11132	-Pressure Window.	Unit	5	
07-02-11133	-Fixture clamps.	Set	5	
07-02-11134	-Earthing Kits.	Set	5	
07-02-11135	-Installation materials & tools.	Set	2	
07-02-11136	-Documentation.	Set	1	
07-02-11139	DC Power Plant	Lot	1	
07-02-11140	-Modular switched rectifier system 48V / 30Ampere module (4+1) configuration.	Set	1	
07-02-11141	-48V, 300Ah Lead-Acid Sealed-Batteries(2sets).	Lot	1	
07-02-11142	-Cabinet.	Set	2	
07-02-11143	-Installation materials , cables, tools.	Set	1	
07-02-11144	-Documentation.	Set	1	
07-02-11149	Air Conditioners	Lot	1	
07-02-11150	-Duplicated 18000 / 24000 BTU Unit.	Set	2	
07-02-11151	-Piping & installation materials & fixtures.	Set	2	
07-02-11152	-Spare parts.	Set	2	
07-02-11153	-Documentation.	Set	2	
07-02-11159	Diesel Engine Generator	Lot	1	
07-02-11160	-Capacity 50 KVA, Dual Set.	Set	1	
07-02-11161	-Daily Fuel Tank.	Set	1	
07-02-11162	-Fan.	Set	1	

07-02-11163	-Piping.	Set	1	
07-02-11164	-Control cubicle & Alarms.	Set	1	
07-02-11165	-Installation Materials & Tools.	Set	1	
07-02-11166	-Spare parts & PCB's.	Set	1	
07-02-11167	-Documentation.	Set	1	
07-02-11169	SDH Multiplex Equipment	Lot	1	
07-02-11170	-STM-4 Multiplexer Subrack with redundant common units	Set	2	
07-02-11171	-STM-1 Multiplex Subrack with redundant common units	Set	1	
07-02-11172	-Tributary Cards (3x34Mb/s, 21x2Mb/s,140/155 Mb/s switch , 7x2Mb/s).	Set	3	
07-02-11173	-Access & Connection Modules.	Set	2	
07-02-11174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP contained in subracks with common units & with function units, controllers ,connectors, ETC.....	Lot	6	
07-02-11175	-Full Matrix (duplicated).	Unit	4	
07-02-11176	-Auxiliary /Engineering order wire.	Set	1	
07-02-11177	-Telephone Handset.	Lot	1	
07-02-11178	-Installation Materials & Tools.	Lot	2	
07-02-11179	-Racks with power supply unit (duplicated)and cable head.	Set	4	
07-02-11180	-Digital Distribution Frames.	Set	4	
07-02-11181	-Primary Multiplex (PCM-30CH.) Subrack with common units & channel PCB's of different configurations.	Set	1	
07-02-11182	-Equipment craft terminal for programmed control and display with operation Software .	Set	2	
07-02-11183	-Spare parts & spare units.	Lot	2	
07-02-11184	-Installation materials & tools.	Lot	2	
07-02-11185	-Documentation.	Set	1	
07-02-11189	Network Management Equipment	Lot	1	
07-02-11190	-Central Network Management System platform(Hardware)	Lot	0	
07-02-11191	-Central Network Management System software packages.	Set	0	
07-02-11192	-Local Network Management Equipment (craft terminals).	Lot	0	
07-02-11193	-Mediation , Interface, and connection cards &modules.	Lot	0	
07-02-11194	-Installation Materials & Tools.	Lot	0	
07-02-11195	-Documentation..	Set	0	
07-02-11119	Test Instruments	Lot	1	
07-02-11200	-Digital Multimeter.	Set	1	
07-02-11201	-Frequency Counter .	Set	1	
07-02-11202	-Power Meter .	Set	1	
07-02-11203	-PCM Multiplex Tester .	Set	1	
07-02-11204	-RF Sweep Generator .	Set	0	
07-02-11205	-VSWR Test Set.	Set	0	
07-02-11206	-Scalar Network Analyzer .	Set	0	
07-02-11207	-RF Spectrum Analyzer.	Set	0	
07-02-11208	-SDH Analyzer for STM-1.	Set	0	
07-02-11209	-TX / RX MW Link Analyzer .	Set	0	
07-02-11210	-PDH Analyzer (2Mb/s).	Set	0	
07-02-11211	-Oscilloscope 500 MHZ Dual channel.	Set	0	
07-02-11212	-Video Test Set.	Set	0	
07-02-11213	-RF Attenuators Fixed & Variable (0 - 60)DB.	Set	0	
07-02-11214	-Cables & Adapters.	Set	1	
07-02-11215	-Waveguide / Coax. Adapters.	Set	1	
07-02-11216	-Documentation.	Set	1	

07-02-11219	Specific Tools	Lot	1	
07-02-11220	-20 Ton Lorry with crane & winch.	Unit	0	
07-02-11221	-Specific Maintenance Tools	Lot	1	
07-02-11222	-Station Tools	Lot	1	
07-02-11223	-Special Tools for waveguide.	Lot	1	
07-02-11224	-Installation Tools.	Lot	1	
07-02-11229	Services	Lot	1	
07-02-11230	-Factory Training Abroad.		1	
07-02-11231	-Training In Iraq.	Trainee	3	
07-02-11232	-Supervision Services (Supplier Expert).	Trainee	1	
		Expert		

ANNEX SEVEN / Telecommunications

Sub - sector : West Tigris Digital Microwave Link

Site - Name : RAMADI

Code	Item Description	Unit	Qty	Complementary Items
07-02-12100	SDH Microwave Radio Equipment	Lot	1	
07-02-12101	-STM-1, 11/8/6GHZ (3+1), Radio Terminal With Frequency & Space Diversity all complete.	Set	3	
07-02-12102	-128 QAM Modems Modules.	Set	10	
07-02-12103	-Protection Switch.	Set	3	
07-02-12104	-Engineering order wire channel.	Set	2	
07-02-12105	-2Mb/s auxiliary traffic.	Set	3	
07-02-12106	-Interface to central Network management.	Set	3	
07-02-12107	-Peripherals (Lap Top PC , ETC.....)	Set	1	
07-02-12108	-Rack with 48V. d/c unit (duplicated).	Set	4	
07-02-12109	-Installation & Maintenance tools & materials.	Set	2	
07-02-12110	-Spare parts & spare units.	Set	2	
07-02-12111	-Documentation.	Set	1	
07-02-12119	Microwave Antennas	Lot	1	
07-02-12120	-Parabolic Dish (1.8m.-3.7m. diameter).	Set	3	
07-02-12121	-Antenna Radiation Element with (1 / 2)Ports.	Set	3	
07-02-12122	-Connector Flanges.	Set	3	
07-02-12123	-Tower Attachment.	Set	3	
07-02-12124	-Installation & Maintenance tools & materials.	Set	3	
07-02-12129	Microwave Feeders	Lot	1	
07-02-12130	-Elliptical waveguide for 13/11/8/6 GHZ band .	Meter	300	
07-02-12131	-Medium capacity dehydrator.	Unit	1	
07-02-12132	-Pressure Window.	Unit	5	
07-02-12133	-Fixture clamps.	Set	5	
07-02-12134	-Earthing Kits.	Set	5	
07-02-12135	-Installation materials & tools.	Set	2	
07-02-12136	-Documentation.	Set	1	
07-02-12139	DC Power Plant	Lot	1	
07-02-12140	-Modular switched rectifier system 48V / 30Ampere module (4+1) configuration.	Set	1	
07-02-12141	-48V, 300Ah Lead-Acid Sealed-Batteries(2sets).	Lot	1	
07-02-12142	-Cabinet.	Set	2	
07-02-12143	-Installation materials , cables, tools.	Set	1	
07-02-12144	-Documentation.	Set	1	
07-02-12149	Air Conditioners	Lot	1	
07-02-12150	-Duplicated 18000 / 24000 BTU Unit.	Set	2	
07-02-12151	-Piping & installation materials & fixtures.	Set	2	
07-02-12152	-Spare parts.	Set	2	
07-02-12153	-Documentation.	Set	2	
07-02-12159	Diesel Engine Generator	Lot	1	
07-02-12160	-Capacity 50 KVA, Dual Set.	Set	1	
07-02-12161	-Daily Fuel Tank.	Set	1	
07-02-12162	-Fan.	Set	1	
07-02-12163	-Piping.	Set	1	

07-02-12164	-Control cubicle & Alarms.	Set	1	
07-02-12165	-Installation Materials & Tools.	Set	1	
07-02-12166	-Spare parts & PCB's.	Set	1	
07-02-12167	-Documentation.	Set	1	
07-02-12169	SDH Multiplex Equipment	Lot	1	
07-02-12170	-STM-4 Mutlplexer Subrack with redundant common units	Set	2	
07-02-12171	-STM-1 Multiplex Subrack with redundant common units	Set	1	
07-02-12172	-Tributary Cards (3x34Mb/s, 21x2Mb/s,140/155 Mb/s switch , 7x2Mb/s).	Set	1	
07-02-12173	-Access & Connection Modules.	Set	2	
07-02-12174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP containd in subracks with common units & with function units, controllers ,connectors, ETC.....	Lot	0	
07-02-12175	-Full Matrix (duplicated).	Unit	4	
07-02-12176	-Auxiliary /Engineering order wire.	Set	1	
07-02-12177	-Telephone Handset.	Lot	1	
07-02-12178	-Installation Materials & Tools.	Lot	2	
07-02-12179	-Racks with power supply unit (duplicated)and cable head.	Set	2	
07-02-12180	-Digital Distribution Frames.	Set	2	
07-02-12181	-Primary Multiplex (PCM-30CH.) Subrack with common units & channel PCB's of different configurations.	Set	1	
07-02-12182	-Equipment craft terminal for programmed control and display with operation Software .	Set	1	
07-02-12183	-Spare parts & spare units.	Lot	2	
07-02-12184	-Installation materials & tools.	Lot	2	
07-02-12185	-Documentation.	Set	1	
07-02-12189	Network Management Equipment	Lot	1	
07-02-12190	-Central Network Management System platform(Hardware)	Lot	0	
07-02-12191	-Central Network Management System software packages.	Set	0	
07-02-12192	-Local Network Management Equipment (craft terminals).	Lot	1	
07-02-12193	-Mediation , Interface, and connection cards &modules.	Lot	1	
07-02-12194	-Installation Materials & Tools.	Lot	1	
07-02-12195	-Documentation..	Set	1	
07-02-12119	Test Instruments	Lot	1	
07-02-12200	-Digital Multimeter.	Set	1	
07-02-12201	-Frequency Counter .	Set	1	
07-02-12202	-Power Meter .	Set	1	
07-02-12203	-PCM Multiplex Tester .	Set	1	
07-02-12204	-RF Sweep Generator .	Set	0	
07-02-12205	-VSWR Test Set.	Set	0	
07-02-12206	-Scalar Network Analyzer .	Set	0	
07-02-12207	-RF Spectrum Analyzer.	Set	0	
07-02-12208	-SDH Analyzer for STM-1.	Set	0	
07-02-12209	-TX / RX MW Link Analyzer .	Set	0	
07-02-12210	-PDH Analyzer (2Mb/s).	Set	0	
07-02-12211	-Oscilloscope 500 MHZ Dual channel.	Set	0	
07-02-12212	-Video Test Set.	Set	0	
07-02-12213	-RF Attenuators Fixed & Variable (0 - 60)DB.	Set	1	
07-02-12214	-Cables & Adapters.	Set	1	
07-02-12215	-Waveguide / Coax. Adapters.	Set	1	
07-02-12216	-Documentation.	Set	1	

07-02-12219	Specific Tools	Lot	1	
07-02-12220	-20 Ton Lorry with crane & winch.	Unit	0	
07-02-12221	-Specific Maintenance Tools	Lot	0	
07-02-12222	-Station Tools	Lot	1	
07-02-12223	-Special Tools for waveguide.	Lot	1	
07-02-12224	-Installation Tools.	Lot	1	
07-02-12229	Services	Lot	1	
07-02-12230	-Factory Training Abroad.		1	
07-02-12231	-Training In Iraq.	Trainee	3	
07-02-12232	-Supervision Services (Supplier Expert).		1	
		Trainee Expert		

ANNEX SEVEN / Telecommunications

Sub - sector : West Tigris Digital Microwave Link

Site - Name : MOSUL T.

Code	Item Description	Unit	Qty	Complementary Items
07-02-15100	SDH Microwave Radio Equipment	Lot	1	
07-02-15101	-STM-1,13/11/8/6GHZ (3+1),(1+1) Radio Terminal With Frequency & Space Diversity all complete.	Set	3	
07-02-15102	-128 QAM Modems Modules.	Set	10	
07-02-15103	-Protection Switch.	Set	3	
07-02-15104	-Engineering order wire channel.	Set	2	
07-02-15105	-2Mb/s auxiliary traffic.	Set	2	
07-02-15106	-Interface to central Network management.	Set	2	
07-02-15107	-Peripherals (Lap Top PC , ETC.....)	Set	1	
07-02-15108	-Rack with 48V. d/c unit (duplicated).	Set	4	
07-02-15109	-Installation & Maintenance tools & materials.	Set	2	
07-02-15110	-Spare parts & spare units.	Set	2	
07-02-15111	-Documentation.	Set	1	
07-02-15119	Microwave Antennas	Lot	1	
07-02-15120	-Parabolic Dish (2.4 -3.7m. diameter).	Set	4	
07-02-15121	-Antenna Radiation Element with (1 / 2)Ports.	Set	4	
07-02-15122	-Connector Flanges.	Set	4	
07-02-15123	-Tower Attachment.	Set	4	
07-02-15124	-Installation & Maintenance tools & materials.	Set	4	
07-02-15129	Microwave Feeders	Lot	1	
07-02-15130	-Elliptical waveguide for 13/11/8/6 GHZ band .	Meter	400	
07-02-15131	-Medium capacity dehydrator.	Unit	1	
07-02-15132	-Pressure Window.	Unit	3	
07-02-15133	-Fixture clamps.	Set	3	
07-02-15134	-Earthing Kits.	Set	3	
07-02-15135	-Installation materials & tools.	Set	3	
07-02-15136	-Documentation.	Set	1	
07-02-15139	DC Power Plant	Lot	1	
07-02-15140	-Modular switched rectifier system 48V / 30Ampere module (4+1) configuration.	Set	1	
07-02-15141	-48V, 300Ah Lead-Acid Sealed-Batteries(2sets).	Lot	1	
07-02-15142	-Cabinet.	Set	2	
07-02-15143	-Installation materials , cables, tools.	Set	1	
07-02-15144	-Documentation.	Set	1	
07-02-15149	Air Conditioners	Lot	1	
07-02-15150	-Duplicated 18000 / 24000 BTU Unit.	Set	2	
07-02-15151	-Piping & installation materials & fixtures.	Set	2	
07-02-15152	-Spare parts.	Set	2	
07-02-15153	-Documentation.	Set	2	
07-02-15159	Diesel Engine Generator	Lot	1	
07-02-15160	-Capacity 50 KVA, Dual Set.	Set	1	
07-02-15161	-Daily Fuel Tank.	Set	1	
07-02-15162	-Fan.	Set	1	

07-02-15163	-Piping.	Set	1	
07-02-15164	-Control cubicle & Alarms.	Set	1	
07-02-15165	-Installation Materials & Tools.	Set	1	
07-02-15166	-Spare parts & PCB's.	Set	1	
07-02-15167	-Documentation.	Set	1	
07-02-15169	SDH Multiplex Equipment	Lot	1	
07-02-15170	-STM-4 Multiplexer Subrack with redundant common units	Set	2	
07-02-15171	-STM-1 Multiplex Subrack with redundant common units	Set	1	
07-02-15172	-Tributary Cards (3x34Mb/s, 21x2Mb/s,140/155 Mb/s switch , 7x2Mb/s).	Set	3	
07-02-15173	-Access & Connection Modules.	Set	2	
07-02-15174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP contained in subracks with common units & with function units, controllers ,connectors, ETC.....	Lot	5	
07-02-15175	-Full Matrix (duplicated).	Unit	4	
07-02-15176	-Auxiliary /Engineering order wire.	Set	1	
07-02-15177	-Telephone Handset.	Lot	1	
07-02-15178	-Installation Materials & Tools.	Lot	2	
07-02-15179	-Racks with power supply unit (duplicated)and cable head.	Set	3	
07-02-15180	-Digital Distribution Frames.	Set	3	
07-02-15181	-Primary Multiplex (PCM-30CH.) Subrack with common units & channel PCB's of different configurations.	Set	1	
07-02-15182	-Equipment craft terminal for programmed control and display with operation Software .	Set	1	
07-02-15183	-Spare parts & spare units.	Lot	2	
07-02-15184	-Installation materials & tools.	Lot	2	
07-02-15185	-Documentation.	Set	1	
07-02-15189	Network Management Equipment	Lot	1	
07-02-15190	-Central Network Management System platform(Hardware)	Lot	0	
07-02-15191	-Central Network Management System software packages.	Set	0	
07-02-15192	-Local Network Management Equipment (craft terminals).	Lot	1	
07-02-15193	-Mediation , Interface, and connection cards &modules.	Lot	1	
07-02-15194	-Installation Materials & Tools.	Lot	1	
07-02-15195	-Documentation..	Set	1	
07-02-15119	Test Instruments	Lot	1	
07-02-15200	-Digital Multimeter.	Set	1	
07-02-15201	-Frequency Counter .	Set	1	
07-02-15202	-Power Meter .	Set	1	
07-02-15203	-PCM Multiplex Tester .	Set	1	
07-02-15204	-RF Sweep Generator .	Set	0	
07-02-15205	-VSWR Test Set.	Set	0	
07-02-15206	-Scalar Network Analyzer .	Set	0	
07-02-15207	-RF Spectrum Analyzer.	Set	0	
07-02-15208	-SDH Analyzer for STM-1.	Set	0	
07-02-15209	-TX / RX MW Link Analyzer .	Set	0	
07-02-15210	-PDH Analyzer (2Mb/s).	Set	0	
07-02-15211	-Oscilloscope 500 MHZ Dual channel.	Set	1	
07-02-15212	-Video Test Set.	Set	1	
07-02-15213	-RF Attenuators Fixed & Variable (0 - 60)DB.	Set	1	
07-02-15214	-Cables & Adapters.	Set	1	
07-02-15215	-Waveguide / Coax. Adapters.	Set	1	
07-02-15216	-Documentation.	Set	1	

07-02-15219	Specific Tools	Lot	1	
07-02-15220	-20 Ton Lorry with crane & winch.	Unit	0	
07-02-15221	-Specific Maintenance Tools	Lot	0	
07-02-15222	-Station Tools	Lot	1	
07-02-15223	-Special Tools for waveguide.	Lot	1	
07-02-15224	-Installation Tools.	Lot	1	
07-02-15229	Services	Lot	1	
07-02-15230	-Factory Training Abroad.		1	
07-02-15231	-Training In Iraq.	Trainee	3	
07-02-15232	-Supervision Services (Supplier Expert).	Trainee	1	
		Expert		

ANNEX SEVEN / Telecommunications

Sub - sector : West Tigris Digital Microwave Link

Site - Name : RAMADI EXCH.

Code	Item Description	Unit	Qty	Complementary Items
07-02-16100	SDH Microwave Radio Equipment	Lot	1	
07-02-16101	-STM-1,13/11/8/6GHZ (3+1), Radio Terminal With Frequency & Space Diversity all complete.	Set	2	
07-02-16102	-128 QAM Modems Modules.	Set	4	
07-02-16103	-Protection Switch.	Set	1	
07-02-16104	-Engineering order wire channel.	Set	2	
07-02-16105	-2Mb/s auxiliary traffic.	Set	2	
07-02-16106	-Interface to central Network management.	Set	2	
07-02-16107	-Peripherals (Lap Top PC , ETC.....)	Set	1	
07-02-16108	-Rack with 48V. d/c unit (duplicated).	Set	3	
07-02-16109	-Installation & Maintenance tools & materials.	Set	2	
07-02-16110	-Spare parts & spare units.	Set	2	
07-02-16111	-Documentation.	Set	1	
07-02-16119	Microwave Antennas	Lot	1	
07-02-16120	-Parabolic Dish (1.8m. diameter).	Set	1	
07-02-16121	-Antenna Radiation Element with (1 / 2)Ports.	Set	1	
07-02-16122	-Connector Flanges.	Set	1	
07-02-16123	-Tower Attachment.	Set	1	
07-02-16124	-Installation & Maintenance tools & materials.	Set	1	
07-02-16129	Microwave Feeders	Lot	1	
07-02-16130	-Elliptical waveguide for 13/11/8/6 GHZ band .	Meter	100	
07-02-16131	-Medium capacity dehydrator.	Unit	1	
07-02-16132	-Pressure Window.	Unit	2	
07-02-16133	-Fixture clamps.	Set	2	
07-02-16134	-Earthing Kits.	Set	2	
07-02-16135	-Installation materials & tools.	Set	2	
07-02-16136	-Documentation.	Set	1	
07-02-16138	Self Supporting Steel Tower 80Mt. Complete With all accessories, installation & painting materials.	Lot	0	
07-02-16139	DC Power Plant	Lot	1	
07-02-16140	-Modular switched rectifier system 48V / 30Ampere module (3+1) configuration.	Set	1	
07-02-16141	-48V, 250Ah Lead-Acid Sealed-Batteries(2sets).	Lot	1	
07-02-16142	-Cabinet.	Set	2	
07-02-16143	-Installation materials , cables, tools.	Set	1	
07-02-16144	-Documentation.	Set	1	
07-02-16149	Air Conditioners	Lot	1	
07-02-16150	-Duplicated 18000 / 24000 BTU Unit.	Set	2	
07-02-16151	-Piping & installation materials & fixtures.	Set	2	
07-02-16152	-Spare parts.	Set	2	
07-02-16153	-Documentation.	Set	2	
07-02-16159	Diesel Engine Generator	Lot	1	
07-02-16160	-Capacity 50 KVA, Dual Set.	Set	1	

07-02-16161	-Daily Fuel Tank.	Set	1	
07-02-16162	-Fan.	Set	1	
07-02-16163	-Piping.	Set	1	
07-02-16164	-Control cubicle & Alarms.	Set	1	
07-02-16165	-Installation Materials & Tools.	Set	1	
07-02-16166	-Spare parts & PCB's.	Set	1	
07-02-16167	-Documentation.	Set	1	
07-02-16169	SDH Multiplex Equipment	Lot	1	
07-02-16170	-STM-4 Multiplexer Subrack with redundant common units	Set	2	
07-02-16171	-STM-1 Multiplex Subrack with redundant common units	Set	1	
07-02-16172	-Tributary Cards (3x34Mb/s, 21x2Mb/s,140/155 Mb/s switch , 7x2Mb/s).	Set	3	
07-02-16173	-Access & Connection Modules.	Set	2	
07-02-16174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP contained in subracks with common units & with function units, controllers ,connectors, ETC.....	Lot	0	
07-02-16175	-Full Matrix (duplicated).	Unit	4	
07-02-16176	-Auxiliary /Engineering order wire.	Set	1	
07-02-16177	-Telephone Handset.	Lot	1	
07-02-16178	-Installation Materials & Tools.	Lot	2	
07-02-16179	-Racks with power supply unit (duplicated)and cable head.	Set	3	
07-02-16180	-Digital Distribution Frames.	Set	3	
07-02-16181	-Primary Multiplex (PCM-30CH.) Subrack with common units & channel PCB's of different configurations.	Set	10	
07-02-16182	-Equipment craft terminal for programmed control and display with operation Software .	Set	1	
07-02-16183	-Spare parts & spare units.	Lot	2	
07-02-16184	-Installation materials & tools.	Lot	2	
07-02-16185	-Documentation.	Set	1	
07-02-16189	Network Management Equipment	Lot	1	
07-02-16190	-Central Network Management System platform(Hardware)	Lot	0	
07-02-16191	-Central Network Management System software packages.	Set	0	
07-02-16192	-Local Network Management Equipment (craft terminals).	Lot	1	
07-02-16193	-Mediation , Interface, and connection cards &modules.	Lot	1	
07-02-16194	-Installation Materials & Tools.	Lot	1	
07-02-16195	-Documentation..	Set	1	
07-02-16119	Test Instruments	Lot	1	
07-02-16200	-Digital Multimeter.	Set	2	
07-02-16201	-Frequency Counter .	Set	1	
07-02-16202	-Power Meter .	Set	1	
07-02-16203	-PCM Multiplex Tester .	Set	1	
07-02-16204	-RF Sweep Generator .	Set	0	
07-02-16205	-VSWR Test Set.	Set	0	
07-02-16206	-Scalar Network Analyzer .	Set	0	
07-02-16207	-RF Spectrum Analyzer.	Set	0	
07-02-16208	-SDH Analyzer for STM-1.	Set	1	
07-02-16209	-TX / RX MW Link Analyzer .	Set	0	
07-02-16210	-PDH Analyzer (2Mb/s).	Set	1	
07-02-16211	-Oscilloscope 500 MHZ Dual channel.	Set	0	
07-02-16212	-Video Test Set.	Set	0	
07-02-16213	-RF Attenuators Fixed & Variable (0 - 60)DB.	Set	1	
07-02-16214	-Cables & Adapters.	Set	1	

07-02-16215	-Waveguide / Coax. Adapters.	Set	1	
07-02-16216	-Documentation.	Set	1	
07-02-16219	Specific Tools	Lot	1	
07-02-16220	-20 Ton Lorry with crane & winch.	Unit	0	
07-02-16221	-Specific Maintenance Tools	Lot	1	
07-02-16222	-Station Tools	Lot	1	
07-02-16223	-Special Tools for waveguide.	Lot	1	
07-02-16224	-Installation Tools.	Lot	1	
07-02-16229	Services	Lot	1	
07-02-16230	-Factory Training Abroad.		2	
07-02-16231	-Training In Iraq.	Trainee	6	
07-02-16232	-Supervision Services (Supplier Expert).	Trainee	2	
		Expert		

ANNEX SEVEN / Telecommunications

Sub - sector : West Tigris Digital Microwave Link

Site - Name : TIKRIT T.

Code	Item Description	Unit	Qty	Complementary Items
07-02-21100	SDH Microwave Radio Equipment	Lot	1	
07-02-21101	-STM-1,13/11GHZ (1+1) Radio Terminal With Frequency & Space Diversity all complete.	Set	1	
07-02-21102	-128 QAM Modems Modules.	Set	2	
07-02-21103	-Protection Switch.	Set	1	
07-02-21104	-Engineering order wire channel.	Set	1	
07-02-21105	-2Mb/s auxiliary traffic.	Set	1	
07-02-21106	-Interface to central Network management.	Set	1	
07-02-21107	-Peripherals (Lap Top PC , ETC.....)	Set	1	
07-02-21108	-Rack with 48V. d/c unit (duplicated).	Set	1	
07-02-21109	-Installation & Maintenance tools & materials.	Set	1	
07-02-21110	-Spare parts & spare units.	Set	1	
07-02-21111	-Documentation.	Set	1	
07-02-21119	Microwave Antennas	Lot	1	
07-02-21120	-Parabolic Dish (1.8m.-3.7m. diameter).	Set	1	
07-02-21121	-Antenna Radiation Element with (1 / 2)Ports.	Set	1	
07-02-21122	-Connector Flanges.	Set	1	
07-02-21123	-Tower Attachment.	Set	1	
07-02-21124	-Installation & Maintenance tools & materials.	Set	1	
07-02-21129	Microwave Feeders	Lot	1	
07-02-21130	-Elliptical waveguide for 13/11 GHZ band .	Meter	100	
07-02-21131	-Medium capacity dehydrator.	Unit	1	
07-02-21132	-Pressure Window.	Unit	2	
07-02-21133	-Fixture clamps.	Set	2	
07-02-21134	-Earthing Kits.	Set	2	
07-02-21135	-Installation materials & tools.	Set	2	
07-02-21136	-Documentation.	Set	1	
07-02-21139	DC Power Plant	Lot	1	
07-02-21140	-Modular switched rectifier system 48V / 30Ampere module (2+1) configuration.	Set	1	
07-02-21141	-48V, 75Ah Lead-Acid Sealed-Batteries(2sets).	Lot	1	
07-02-21142	-Cabinet.	Set	2	
07-02-21143	-Installation materials , cables, tools.	Set	1	
07-02-21144	-Documentation.	Set	1	
07-02-21149	Air Conditioners	Lot	1	
07-02-21150	-Duplicated 18000 / 24000 BTU Unit.	Set	2	
07-02-21151	-Piping & installation materials & fixtures.	Set	2	
07-02-21152	-Spare parts.	Set	2	
07-02-21153	-Documentation.	Set	2	
07-02-21159	Diesel Engine Generator	Lot	1	
07-02-21160	-Capacity 50 KVA, Dual Set.	Set	1	
07-02-21161	-Daily Fuel Tank.	Set	1	
07-02-21162	-Fan.	Set	1	

07-02-21163	-Piping.	Set	1	
07-02-21164	-Control cubicle & Alarms.	Set	1	
07-02-21165	-Installation Materials & Tools.	Set	1	
07-02-21166	-Spare parts & PCB's.	Set	1	
07-02-21167	-Documentation.	Set	1	
07-02-21169	SDH Multiplex Equipment	Lot	1	
07-02-21170	-STM-4 Multiplexer Subrack with redundant common units	Set	0	
07-02-21171	-STM-1 Multiplex Subrack with redundant common units	Set	1	
07-02-21172	-Tributary Cards (3x34Mb/s, 21x2Mb/s,140/155 Mb/s switch , 7x2Mb/s).	Set	3	
07-02-21173	-Access & Connection Modules.	Set	2	
07-02-21174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP contained in subracks with common units & with function units, controllers ,connectors, ETC.....	Lot	6	
07-02-21175	-Full Matrix (duplicated).	Unit	0	
07-02-21176	-Auxiliary /Engineering order wire.	Set	1	
07-02-21177	-Telephone Handset.	Lot	1	
07-02-21178	-Installation Materials & Tools.	Lot	1	
07-02-21179	-Racks with power supply unit (duplicated)and cable head.	Set	3	
07-02-21180	-Digital Distribution Frames.	Set	3	
07-02-21181	-Primary Multiplex (PCM-30CH.) Subrack with common units & channel PCB's of different configurations.	Set	1	
07-02-21182	-Equipment craft terminal for programmed control and display with operation Software .	Set	1	
07-02-21183	-Spare parts & spare units.	Lot	1	
07-02-21184	-Installation materials & tools.	Lot	1	
07-02-21185	-Documentation.	Set	1	
07-02-21189	Network Management Equipment	Lot	1	
07-02-21190	-Central Network Management System platform(Hardware)	Lot	0	
07-02-21191	-Central Network Management System software packages.	Set	0	
07-02-21192	-Local Network Management Equipment (craft terminals).	Lot	1	
07-02-21193	-Mediation , Interface, and connection cards &modules.	Lot	1	
07-02-21194	-Installation Materials & Tools.	Lot	1	
07-02-21195	-Documentation..	Set	1	
07-02-21119	Test Instruments	Lot	1	
07-02-21200	-Digital Multimeter.	Set	1	
07-02-21201	-Frequency Counter .	Set	0	
07-02-21202	-Power Meter .	Set	0	
07-02-21203	-PCM Multiplex Tester .	Set	1	
07-02-21204	-RF Sweep Generator .	Set	0	
07-02-21205	-VSWR Test Set.	Set	0	
07-02-21206	-Scalar Network Analyzer .	Set	0	
07-02-21207	-RF Spectrum Analyzer.	Set	0	
07-02-21208	-SDH Analyzer for STM-1.	Set	0	
07-02-21209	-TX / RX MW Link Analyzer .	Set	0	
07-02-21210	-PDH Analyzer (2Mb/s).	Set	0	
07-02-21211	-Oscilloscope 500 MHZ Dual channel.	Set	0	
07-02-21212	-Video Test Set.	Set	0	
07-02-21213	-RF Attenuators Fixed & Variable (0 - 60)DB.	Set	0	
07-02-21214	-Cables & Adapters.	Set	0	
07-02-21215	-Waveguide / Coax. Adapters.	Set	0	
07-02-21216	-Documentation.	Set	1	

07-02-21219	Specific Tools	Lot	1	
07-02-21220	-20 Ton Lorry with crane & winch.	Unit	0	
07-02-21221	-Specific Maintenance Tools	Lot	1	
07-02-21222	-Station Tools	Lot	1	
07-02-21223	-Special Tools for waveguide.	Lot	1	
07-02-21224	-Installation Tools.	Lot	1	
07-02-21229	Services	Lot	1	
07-02-21230	-Factory Training Abroad.		1	
07-02-21231	-Training In Iraq.	Trainee	3	
07-02-21232	-Supervision Services (Supplier Expert).	Trainee	1	
		Expert		

ANNEX SEVEN / Telecommunications

Sub - sector : West Tigris Digital Microwave Link

Site - Name : BALAD T.

Code	Item Description	Unit	Qty	Complementary Items
07-02-22100	SDH Microwave Radio Equipment	Lot	1	
07-02-22101	-STM-1,13/11GHZ ,(1+1) Radio Terminal With Frequency & Space Diversity all complete.	Set	1	
07-02-22102	-128 QAM Modems Modules.	Set	2	
07-02-22103	-Protection Switch.	Set	1	
07-02-22104	-Engineering order wire channel.	Set	1	
07-02-22105	-2Mb/s auxiliary traffic.	Set	1	
07-02-22106	-Interface to central Network management.	Set	1	
07-02-22107	-Peripherals (Lap Top PC , ETC.....)	Set	1	
07-02-22108	-Rack with 48V. d/c unit (duplicated).	Set	1	
07-02-22109	-Installation & Maintenance tools & materials.	Set	1	
07-02-22110	-Spare parts & spare units.	Set	1	
07-02-22111	-Documentation.	Set	1	
07-02-22119	Microwave Antennas	Lot	1	
07-02-22120	-Parabolic Dish (1.8m.-3.7m. diameter).	Set	1	
07-02-22121	-Antenna Radiation Element with (1 / 2)Ports.	Set	1	
07-02-22122	-Connector Flanges.	Set	1	
07-02-22123	-Tower Attachment.	Set	1	
07-02-22124	-Installation & Maintenance tools & materials.	Set	1	
07-02-22129	Microwave Feeders	Lot	1	
07-02-22130	-Elliptical waveguide for 13/11 GHZ band .	Meter	100	
07-02-22131	-Medium capacity dehydrator.	Unit	1	
07-02-22132	-Pressure Window.	Unit	2	
07-02-22133	-Fixture clamps.	Set	2	
07-02-22134	-Earthing Kits.	Set	2	
07-02-22135	-Installation materials & tools.	Set	2	
07-02-22136	-Documentation.	Set	1	
07-02-22139	DC Power Plant	Lot	1	
07-02-22140	-Modular switched rectifier system 48V / 30Ampere module (2+1) configuration.	Set	1	
07-02-22141	-48V, 200Ah Lead-Acid Sealed-Batteries(2sets).	Lot	1	
07-02-22142	-Cabinet.	Set	2	
07-02-22143	-Installation materials , cables, tools.	Set	1	
07-02-22144	-Documentation.	Set	1	
07-02-22149	Air Conditioners	Lot	1	
07-02-22150	-Duplicated 18000 / 24000 BTU Unit.	Set	2	
07-02-22151	-Piping & installation materials & fixtures.	Set	2	
07-02-22152	-Spare parts.	Set	2	
07-02-22153	-Documentation.	Set	2	
07-02-22159	Diesel Engine Generator	Lot	1	
07-02-22160	-Capacity 50 KVA, Dual Set.	Set	1	
07-02-22161	-Daily Fuel Tank.	Set	1	
07-02-22162	-Fan.	Set	1	

07-02-22163	-Piping.	Set	1	
07-02-22164	-Control cubicle & Alarms.	Set	1	
07-02-22165	-Installation Materials & Tools.	Set	1	
07-02-22166	-Spare parts & PCB's.	Set	1	
07-02-22167	-Documentation.	Set	1	
07-02-22169	SDH Multiplex Equipment	Lot	1	
07-02-22170	-STM-4 Multiplexer Subrack with redundant common units	Set	0	
07-02-22171	-STM-1 Multiplex Subrack with redundant common units	Set	1	
07-02-22172	-Tributary Cards (3x34Mb/s, 21x2Mb/s,140/155 Mb/s switch , 7x2Mb/s).	Set	3	
07-02-22173	-Access & Connection Modules.	Set	2	
07-02-22174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP contained in subracks with common units & with function units, controllers ,connectors, ETC.....	Lot	6	
07-02-22175	-Full Matrix (duplicated).	Unit	0	
07-02-22176	-Auxiliary /Engineering order wire.	Set	1	
07-02-22177	-Telephone Handset.	Lot	1	
07-02-22178	-Installation Materials & Tools.	Lot	1	
07-02-22179	-Racks with power supply unit (duplicated)and cable head.	Set	3	
07-02-22180	-Digital Distribution Frames.	Set	3	
07-02-22181	-Primary Multiplex (PCM-30CH.) Subrack with common units & channel PCB's of different configurations.	Set	1	
07-02-22182	-Equipment craft terminal for programmed control and display with operation Software .	Set	1	
07-02-22183	-Spare parts & spare units.	Lot	1	
07-02-22184	-Installation materials & tools.	Lot	1	
07-02-22185	-Documentation.	Set	1	
07-02-22189	Network Management Equipment	Lot	1	
07-02-22190	-Central Network Management System platform(Hardware)	Lot	0	
07-02-22191	-Central Network Management System software packages.	Set	0	
07-02-22192	-Local Network Management Equipment (craft terminals).	Lot	1	
07-02-22193	-Mediation , Interface, and connection cards &modules.	Lot	1	
07-02-22194	-Installation Materials & Tools.	Lot	1	
07-02-22195	-Documentation..	Set	1	
07-02-22119	Test Instruments	Lot	1	
07-02-22200	-Digital Multimeter.	Set	1	
07-02-22201	-Frequency Counter .	Set	0	
07-02-22202	-Power Meter .	Set	0	
07-02-22203	-PCM Multiplex Tester .	Set	1	
07-02-22204	-RF Sweep Generator .	Set	0	
07-02-22205	-VSWR Test Set.	Set	0	
07-02-22206	-Scalar Network Analyzer .	Set	0	
07-02-22207	-RF Spectrum Analyzer.	Set	0	
07-02-22208	-SDH Analyzer for STM-1.	Set	0	
07-02-22209	-TX / RX MW Link Analyzer .	Set	0	
07-02-22210	-PDH Analyzer (2Mb/s).	Set	0	
07-02-22211	-Oscilloscope 500 MHZ Dual channel.	Set	0	
07-02-22212	-Video Test Set.	Set	0	
07-02-22213	-RF Attenuators Fixed & Variable (0 - 60)DB.	Set	0	
07-02-22214	-Cables & Adapters.	Set	0	
07-02-22215	-Waveguide / Coax. Adapters.	Set	0	
07-02-22216	-Documentation.	Set	1	

07-02-22219	Specific Tools	Lot	1	
07-02-22220	-20 Ton Lorry with crane & winch.	Unit	0	
07-02-22221	-Specific Maintenance Tools	Lot	1	
07-02-22222	-Station Tools	Lot	1	
07-02-22223	-Special Tools for waveguide.	Lot	1	
07-02-22224	-Installation Tools.	Lot	1	
07-02-22229	Services	Lot	1	
07-02-22230	-Factory Training Abroad.		0	
07-02-22231	-Training In Iraq.	Trainee	0	
07-02-22232	-Supervision Services (Supplier Expert).		0	
		Trainee		
		Expert		

ANNEX SEVEN / Telecommunications

Sub - sector : West Tigris Digital Microwave Link

Site - Name : BAGHDAD MAINTENANCE CENTER

Code	Item Description	Unit	Qty.	Complementary Items
07-02-27100	SDH Microwave Radio Equipment	Lot	1	
07-02-27101	-STM-1, 6 GHZ (3+1) Radio Terminal with Frequency & Space Diversity Receiver modules.	Set	2	
07-02-27102	-128 QAM Modems Modules.	Set	8	
07-02-27103	-Protection Switch.	Set	1	
07-02-27104	-Engineering order wire channel.	Set	1	
07-02-27105	-2Mb/s auxiliary traffic.	Set	1	
07-02-27106	-Interface to central network management.	Set	1	
07-02-27107	-Peripherals (Lap Top PC ,ETC.....).	Set	1	
07-02-27108	-Rack with 48V. d/c unit & Duplexers.	Set	3	
07-02-27109	-Installation & Maintenance tools & materials.	Set	1	
07-02-27110	-Spare parts & spare units.	Set	1	
07-02-27111	-Documentation.	Set	1	
07-02-27119	Microwave Antennas	Lot	0	
07-02-27120	-Parabolic Dish (1.8m. , 2.4m. diameter).	Set	0	
07-02-27121	-Antenna Radiation Element with (one/two)Ports.	Set	0	
07-02-27122	-Connector Flanges.	Set	0	
07-02-27123	-Tower Attachment.	Set	0	
07-02-27124	-Installation & Maintenance tools & materials.	Set	0	
07-02-27129	Microwave Feeders	Lot	1	
07-02-27130	-Elliptical waveguide for 11/13 GHZ band .	Meter	20	
07-02-27131	-Medium capacity dehydrator.	Unit	1	
07-02-27132	-Pressure Window.	Unit	1	
07-02-27133	-Fixture clamps.	Set	1	
07-02-27134	-Earthing Kits.	Set	1	
07-02-27135	-Installation materials & tools.	Set	1	
07-02-27136	-Documentation.	Set	1	
07-02-27139	DC Power Plant	Lot	1	
07-02-27140	-Modular switched rectifier system 48V / 30A per module (2+1) configuration.	Set	1	
07-02-27141	-48V,200Ah Lead-Acid Sealed-Batteries(2sets).	Set	1	
07-02-27142	-Cabinet.	Set	1	
07-02-27143	-Installation materials , cables, & tools.	Set	1	
07-02-27144	-Documentation.	Set	1	
07-02-27149	Air Conditioners	Lot	1	
07-02-27150	-Duplicated 18000 / 24000 BTU Unit.	Set	2	
07-02-27151	-Piping & installation materials & fixtures.	Set	2	
07-02-27152	-Spare parts.	Set	2	
07-02-27153	-Documentation.	Set	2	
07-02-27159	Diesel Engine Generator	Lot	0	
07-02-27160	-Capacity 50 KVA, Dual Set.	Set	0	
07-02-27161	-Daily Fuel Tank.	Set	0	
07-02-27162	-Fan.	Set	0	

07-02-27163	-Piping.	Set	0	
07-02-27164	-Control cubicle & Alarms.	Set	0	
07-02-27165	-Installation Materials & Tools.	Set	0	
07-02-27166	-Spare parts & PCB's.	Set	0	
07-02-27167	-Documentation.	Set	0	
07-02-27169	SDH Multiplex Equipment	Lot	1	
07-02-27170	-STM- 4 Mutlplexer Subrack with redundant common units.	Set	2	
07-02-27171	-STM-1 Multiplex Subrack with redundant common units.	Set	2	
07-02-27172	-Tributary Cards (3x34Mb/s, 21x2Mb/s,140/155 Mb/s switch, 7x2Mb/setc.	Set	2	
07-02-27173	-Access & Connection Modules.	Set	2	
07-02-27174	-S4.1 Aggregate port FC / PC (duplicated).	Set	0	
07-02-27175	-Full Matrix (duplicated).	Set	2	
07-02-27176	-Auxiliary /Engineering order wire.	Set	2	
07-02-27177	-Telephone Handset.	Unit	2	
07-02-27178	-Installation Materials & Tools.	Set	2	
07-02-27179	-Racks with power supply unit (duplicated) and cable head.	Set	4	
07-02-27180	-Digital Distribution Frames.	Set	1	
07-02-27181	-Primary Multiplex (PCM-30CH.) Subrack with common units & channel PCB's of different configurations.	Set	1	
07-02-27182	-Equipment craft terminal for programmed control and display for operation and maintenance.	Unit	2	
07-02-27183	-Spare parts & spare units.	Set	2	
07-02-27184	-Installation materials & tools.	Set	1	
07-02-27185	-Documentation.	Set	1	
07-02-27189	Network Management Equipment	Lot	1	
07-02-27190	-Central Network Management System platform (Hardware).	Lot	1	
07-02-27191	-Central Network Management System software packages.	Lot	1	
07-02-27192	-Local Network Management Equipment (craft terminals).	Set	1	
07-02-27193	-Mediation , Interface, & connection cards & modules.	Lot	1	
07-02-27194	-Installation Materials & Tools.	Set	1	
07-02-27195	-Documentation..	Set	1	
07-02-27196	HDLSL Equipment with all Function &Management modules, DDF, Cables, Software &Doc.s	Lot	2	
07-02-27199	Test Instruments	Lot	1	
07-02-27200	-Digital Multimeter.	Set	2	
07-02-27201	-Frequency Counter .	Set	2	
07-02-27202	-Power Meter .	Set	2	
07-02-27203	-PCM Multiplex Tester .	Set	2	
07-02-27204	-RF Sweep Generator .	Set	1	
07-02-27205	-VSWR Test Set.	Set	3	
07-02-27206	-Scalar Network Analyzer .	Set	1	
07-02-27207	-RF Spectrum Analyzer.	Set	1	
07-02-27208	-SDH Analyzer for STM-1.	Set	1	
07-02-27209	-TX / RX MW Link Analyzer .	Set	1	

07-02-27210	-PDH Analyzer (2 - 140 Mb/s).	Set	1	
07-02-27211	-Oscilloscope 500 MHZ Dual channel.	Set	1	
07-02-27212	-Vedio Test Set.	Set	1	
07-02-27213	-RF Attenuators Fixed & Variable (0 - 60)DB.	Set	1	
07-02-27214	-Cables & Adapters.	Set	2	
07-02-27215	-Waveguide / Coax. Adapters.	Set	2	
07-02-27216	-Documentation.	Set	1	
07-02-27219	Specific Tools	Lot	1	
07-02-27220	-20 Ton Lorry with crane & winch.	Unit	1	
07-02-27221	-Specific Maintenance Tools Bag.	Unit	4	
07-02-27222	-Station Tools Bag.	Unit	4	
07-02-27223	-Special Tools for waveguide.	Unit	4	
07-02-27224	-Installation Tools.	Unit	1	
07-02-27229	Services	Lot	1	
07-02-27230	-Factory Training Abroad.	Trainee	10	
07-02-27231	-Training In Iraq.	Trainee	12	
07-02-27232	-Supervision Services (Supplier Expert).	Expert	8	

Sub - sector : West Tigris Digital Microwave Link
Site - Name : MOSUL MAINTENANCE CENTER

Code	Item Description	Unit	Qty.	Complementary Items
07-02-28100	SDH Microwave Radio Equipment	Lot	1	
07-02-28101	-STM-1, 6/8 GHZ (3+1) Radio Terminal with Frequency & Space Diversity Receiver modules.	Set	2	
07-02-28102	-128 QAM Modems Modules.	Set	8	
07-02-28103	-Protection Switch.	Set	1	
07-02-28104	-Engineering order wire channel.	Set	1	
07-02-28105	-2Mb/s auxiliary traffic.	Set	1	
07-02-28106	-Interface to central network management.	Set	1	
07-02-28107	-Peripherals (Lap Top PC ,ETC.....).	Set	1	
07-02-28108	-Rack with 48V. d/c unit & Duplexers.	Set	3	
07-02-28109	-Installation & Maintenance tools & materials.	Set	1	
07-02-28110	-Spare parts & spare units.	Set	1	
07-02-28111	-Documentation.	Set	1	
07-02-28119	Microwave Antennas	Lot	0	
07-02-28120	-Parabolic Dish (1.8m. , 2.4m. diameter).	Set	0	
07-02-28121	-Antenna Radiation Element with (one/two)Ports.	Set	0	
07-02-28122	-Connector Flanges.	Set	0	
07-02-28123	-Tower Attachment.	Set	0	
07-02-28124	-Installation & Maintenance tools & materials.	Set	0	
07-02-28129	Microwave Feeders	Lot	1	
07-02-28130	-Elliptical waveguide for 11/13 GHZ band .	Meter	20	
07-02-28131	-Medium capacity dehydrator.	Unit	1	
07-02-28132	-Pressure Window.	Unit	1	
07-02-28133	-Fixture clamps.	Set	1	
07-02-28134	-Earthing Kits.	Set	1	
07-02-28135	-Installation materials & tools.	Set	1	
07-02-28136	-Documentation.	Set	1	
07-02-28139	DC Power Plant	Lot	1	
07-02-28140	-Modular switched rectifier system 48V / 30A per module (2+1) configuration.	Set	1	
07-02-28141	-48V,200Ah Lead-Acid Sealed-Batteries(2sets).	Set	1	
07-02-28142	-Cabinet.	Set	1	
07-02-28143	-Installation materials , cables, & tools.	Set	1	
07-02-28144	-Documentation.	Set	1	
07-02-28149	Air Conditioners	Lot	1	
07-02-28150	-Duplicated 18000 / 24000 BTU Unit.	Set	2	
07-02-28151	-Piping & installation materials & fixtures.	Set	2	
07-02-28152	-Spare parts.	Set	2	
07-02-28153	-Documentation.	Set	2	
07-02-28159	Diesel Engine Generator	Lot	0	
07-02-28160	-Capacity 50 KVA, Dual Set.	Set	0	
07-02-28161	-Daily Fuel Tank.	Set	0	
07-02-28162	-Fan.	Set	0	
07-02-28163	-Piping.	Set	0	
07-02-28164	-Control cubicle & Alarms.	Set	0	

07-02-28165	-Installation Materials & Tools.	Set	0	
07-02-28166	-Spare parts & PCB's.	Set	0	
07-02-28167	-Documentation.	Set	0	
07-02-28169	SDH Multiplex Equipment	Lot	1	
07-02-28170	-STM- 4 Mutliplexer Subrack with redundant common units.	Set	2	
07-02-28171	-STM-1 Multiplex Subrack with redundant common units.	Set	2	
07-02-28172	-Tributary Cards (3x34Mb/s, 21x2Mb/s,140/155 Mb/s switch, 7x2Mb/setc.	Set	2	
07-02-28173	-Access & Connection Modules.	Set	2	
07-02-28174	-S4.1 Aggregate port FC / PC (duplicated).	Set	0	
07-02-28175	-Full Matrix (duplicated).	Set	2	
07-02-28176	-Auxiliary /Engineering order wire.	Set	2	
07-02-28177	-Telephone Handset.	Unit	2	
07-02-28178	-Installation Materials & Tools.	Set	2	
07-02-28179	-Racks with power supply unit (duplicated) and cable head.	Set	4	
07-02-28180	-Digital Distribution Frames.	Set	1	
07-02-28181	-Primary Multiplex (PCM-30CH.) Subrack with common units & channel PCB's of different configurations.	Set	1	
07-02-28182	-Equipment craft terminal for programmed control and display for operation and maintenance.	Unit	2	
07-02-28183	-Spare parts & spare units.	Set	2	
07-02-28184	-Installation materials & tools.	Set	1	
07-02-28185	-Documentation.	Set	1	
07-02-28189	Network Management Equipment	Lot	0	
07-02-28190	-Central Network Management System platform (Hardware).	Lot	0	
07-02-28191	-Central Network Management System software packages.	Lot	0	
07-02-28192	-Local Network Management Equipment (craft terminals).	Set	1	
07-02-28193	-Mediation , Interface, and connection cards & modules.	Lot	1	
07-02-28194	-Installation Materials & Tools.	Set	12	
07-02-28195	-Documentation..	Set		
07-02-28199	Test Instruments	Lot	1	
07-02-28200	-Digital Multimeter.	Set	2	
07-02-28201	-Frequency Counter .	Set	2	
07-02-28202	-Power Meter .	Set	2	
07-02-28203	-PCM Multiplex Tester .	Set	2	
07-02-28204	-RF Sweep Generator .	Set	1	
07-02-28205	-VSWR Test Set.	Set	2	
07-02-28206	-Scalar Network Analyzer .	Set	1	
07-02-28207	-RF Spectrum Analyzer.	Set	1	
07-02-28208	-SDH Analyzer for STM-1.	Set	1	
07-02-28209	-TX / RX MW Link Analyzer .	Set	1	
07-02-28210	-PDH Analyzer (2 - 140 Mb/s).	Set	1	
07-02-28211	-Oscilloscope 500 MHZ Dual channel.	Set	1	
07-02-28212	-Vedio Test Set.	Set	1	
07-02-28213	-RF Attenuators Fixed & Variable (0 - 60)DB.	Set	1	

07-02-28214	-Cables & Adapters.	Set	1	
07-02-28215	-Waveguide / Coax. Adapters.	Set	1	
07-02-28216	-Documentation.	Set		
07-02-28219	Specific Tools	Lot	1	
07-02-28220	-20 Ton Lorry with crane & winch.	Unit	1	
07-02-28221	-Specific Maintenance Tools Bag.	Unit	4	
07-02-28222	-Station Tools Bag.	Unit	4	
07-02-28223	-Special Tools for waveguide.	Unit	4	
07-02-28224	-Installation Tools.	Unit	1	
07-02-28229	Services	Lot	1	
07-02-28230	-Factory Training Abroad.	Trainee	9	
07-02-28231	-Training In Iraq.	Trainee	12	
07-02-28232	-Supervision Services (Supplier Expert).	Expert	8	

ANNEX SEVEN / Telecommunications

Sub - sector : West Tigris Digital Microwave Link

Site - Name : BAGHDAD TRAINING CENTER

Code	Item Description	Unit	Qty.	Complementary Items
07-02-29100	SDH Microwave Radio Equipment	Lot	1	
07-02-29101	-STM-1, 6/8 GHZ (3+1) Radio Terminal with Frequency & Space Diversity Receiver modules.	Set	2	
07-02-29102	-128 QAM Modems Modules.	Set	8	
07-02-29103	-Protection Switch.	Set	1	
07-02-29104	-Engineering order wire channel.	Set	1	
07-02-29105	-2Mb/s auxiliary traffic.	Set	1	
07-02-29106	-Interface to central network management.	Set	1	
07-02-29107	-Peripherals (Lap Top PC ,ETC.....).	Set	1	
07-02-29108	-Rack with 48V. d/c unit & Duplexers.	Set	3	
07-02-29109	-Installation & Maintenance tools & materials.	Set	1	
07-02-29110	-Spare parts & spare units.	Set	1	
07-02-29111	-Documentation.	Set	1	
07-02-29119	Microwave Antennas	Lot	0	
07-02-29120	-Parabolic Dish (1.8m. , 2.4m. diameter).	Set	0	
07-02-29121	-Antenna Radiation Element with (one/two)Ports.	Set	0	
07-02-29122	-Connector Flanges.	Set	0	
07-02-29123	-Tower Attachment.	Set	0	
07-02-29124	-Installation & Maintenance tools & materials.	Set	0	
07-02-29129	Microwave Feeders	Lot	1	
07-02-29130	-Elliptical waveguide for 11/13 GHZ band .	Meter	20	
07-02-29131	-Medium capacity dehydrator.	Unit	1	
07-02-29132	-Pressure Window.	Unit	1	
07-02-29133	-Fixture clamps.	Set	1	
07-02-29134	-Earthing Kits.	Set	1	
07-02-29135	-Installation materials & tools.	Set	1	
07-02-29136	-Documentation.	Set	1	
07-02-29139	DC Power Plant	Lot	1	
07-02-29140	-Modular switched rectifier system 48V / 30A per module (2+1) configuration.	Set	1	
07-02-29141	-48V,200Ah Lead-Acid Sealed-Batteries(2sets).	Set	1	
07-02-29142	-Cabinet.	Set	1	
07-02-29143	-Installation materials , cables, & tools.	Set	1	
07-02-29144	-Documentation.	Set	1	
07-02-29149	Air Conditioners	Lot	1	
07-02-29150	-Duplicated 18000 / 24000 BTU Unit.	Set	2	
07-02-29151	-Piping & installation materials & fixtures.	Set	2	
07-02-29152	-Spare parts.	Set	2	
07-02-29153	-Documentation.	Set	2	
07-02-29159	Diesel Engine Generator	Lot	0	
07-02-29160	-Capacity 50 KVA, Dual Set.	Set	0	
07-02-29161	-Daily Fuel Tank.	Set	0	
07-02-29162	-Fan.	Set	0	
07-02-29163	-Piping.	Set	0	
07-02-29164	-Control cubicle & Alarms.	Set	0	
07-02-29165	-Installation Materials & Tools.	Set	0	
07-02-29166	-Spare parts & PCB's.	Set	0	

07-02-29167	-Documentation.	Set	0	
07-02-29169	SDH Multiplex Equipment	Lot	1	
07-02-29170	-STM- 4 Mutlplexer Subrack with redundant common units.	Set	0	
07-02-29171	-STM-1 Multiplex Subrack with redundant common units.	Set	0	
07-02-29172	-Tributary Cards (3x34Mb/s, 21x2Mb/s,140/155 Mb/s switch, 7x2Mb/setc.	Set	0	
07-02-29173	-Access & Connection Modules.	Set	0	
07-02-29174	-S4.1 Aggregate port FC / PC (duplicated).	Set	0	
07-02-29175	-Full Matrix (duplicated).	Set	0	
07-02-29176	-Auxiliary /Engineering order wire.	Set	0	
07-02-29177	-Telephone Handset.	Unit	0	
07-02-29178	-Installation Materials & Tools.	Set	0	
07-02-29179	-Racks with power supply unit (duplicated) and cable head.	Set	0	
07-02-29180	-Digital Distribution Frames.	Set	0	
07-02-29181	-Primary Multiplex (PCM-30CH.) Subrack with common units & channel PCB's of different configurations.	Set	1	
07-02-29182	-Equipment craft terminal for programmed control and display for operation and maintenance.	Unit	0	
07-02-29183	-Spare parts & spare units.	Set	0	
07-02-29184	-Installation materials & tools.	Set	0	
07-02-29185	-Documentation.	Set	0	
07-02-29189	Network Management Equipment	Lot	0	
07-02-29190	-Central Network Management System platform (Hardware).	Lot	0	
07-02-29191	-Central Network Management System software packages.	Lot	0	
07-02-29192	-Local Network Management Equipment (craft terminals & software kits).	Set	1	
07-02-29193	-Mediation , Interface, and connection cards & modules.	Lot	1	
07-02-29194	-Installation Materials & Tools.	Set	1	
07-02-29195	-Documentation..	Set	1	
07-02-29199	Test Instruments	Lot	1	
07-02-29200	-Digital Multimeter.	Set	1	
07-02-29201	-Frequency Counter .	Set	1	
07-02-29202	-Power Meter .	Set	1	
07-02-29203	-PCM Multiplex Tester .	Set	1	
07-02-29204	-RF Sweep Generator .	Set	1	
07-02-29205	-VSWR Test Set.	Set	1	
07-02-29206	-Scalar Network Analyzer .	Set	1	
07-02-29207	-RF Spectrum Analyzer.	Set	1	
07-02-29208	-SDH Analyzer for STM-1.	Set	1	
07-02-29209	-TX / RX MW Link Analyzer .	Set	1	
07-02-29210	-PDH Analyzer (2Mb/s).	Set	1	
07-02-29211	-Oscilloscope 500 MHZ Dual channel.	Set	1	
07-02-29212	-Video Test Set.	Set	1	
07-02-29213	-RF Attenuators Fixed & Variable (0 - 60)DB.	Set	1	
07-02-29214	-Cables & Adapters.	Set	1	
07-02-29215	-Waveguide / Coax. Adapters.	Set	1	

07-02-29216	-Documentation.	Set	1	
07-02-29219	Specific Tools	Lot	1	
07-02-29220	-20 Ton Lorry with crane & winch.	Unit	1	
07-02-29221	-Specific Maintenance Tools Bag.	Unit	1	
07-02-29222	-Station Tools Bag.	Unit	1	
07-02-29223	-Special Tools for waveguide.	Unit	1	
07-02-29224	-Installation Tools.	Unit	1	
07-02-29229	Services	Lot	1	
07-02-29230	-Factory Training Abroad.	Trainee	3	
07-02-29231	-Training In Iraq.	Trainee	6	
07-02-29232	-Supervision Services (Supplier Expert).	Expert	1	