

ANNEX SEVEN / Telecommunications

Sub - sector : Interconnection network between local exchanges in Baghdad.

Site - Name : MAMOUN

Code	Item Description	Unit	Qty.	Complement ary Items
07-01-01100	SDH Microwave Radio Equipment, STM-1, 13GHZ(2+1) Frequency Diversity Radio Terminal All Complete with Transmitters, Receivers, 128 QAM Modems Modules ,Protection Switch, Engineering order wire channel, 2Mb/s auxiliary traffic, Interface to central Network management, Peripherals (Lap Top PC , ETC.....), Installed in Rack with 48V. d/c unit (duplicated).	Lot	5	
07-01-01101	-Installation materials.	Lot	5	
07-01-01102	-Spare parts & spare units.	Lot	5	
07-01-01103	-Documentation.	Set	1	
07-01-01104	Microwave Parabolic Dish (1.8m., 2.4m.)Antenna with (one/ two)Polarization's all complete with Connector Flanges, Tower Attachment, Installation materials & Documentation.	Lot	5	
07-01-01105	-Microwave Elliptical waveguide Feeder Run, 11/13 GHZ band all complete with Pressure Window, Fixture clamps, Earthing Kits, Installation materials & Documentation.	Lot	5	
07-01-01106	-Medium Capacity Dehydrator.	Unit	1	
07-01-01107	-10% Spares.	Lot	1	
07-01-01108	-DC Power Plant Including Modular Switched Rectifier system 48V/30A. module(3+1)configuration, 48V, 250Ah Lead- Acid Sealed- Batteries (2sets), Cabinets, Installation materials, cables, tools & Documentation.	Lot	1	
07-01-01109	-Spare Parts & Spare Units.	Lot	1	
07-01-01110	-Air Conditioners, Duplicated 18000 / 24000 BTU Unit All Complete With, Piping & installation materials & fixtures, Spare parts & Documentation.	Lot	2	
07-01-01111	AC Power Plant Including Diesel Engine Generator Capacity 50 KVA, Dual Set, all complete with, Daily Fuel Tank, Fan, Piping, Control cubicle & Alarms, Installation Materials, Documentation & Tools	Lot	1	
07-01-01112	-Spare parts & PCB's.	Lot	1	
07-01-01113	-SDH Multiplex Equipment Including STM-16 Mutlplexer , STM-4,STM-1Multiplexer Subrack with redundant common units ADM, Terminal configuration , Tributary & Elect. Aggregate Cards (3x34Mb/s, 21x2Mb/s,140/155Mb/s switch, 7x2Mb/s) Access &Connection Modules, Full Matrix (duplicated),Auxiliary /Engineering order wire, Installation Materials & Tools, Racks with power supply unit (duplicated) and cable head, Digital Distribution Frames & Documentation for each .	Lot	1	

07-01-01114	-Primary Multiplex (PCM-30CH.) Subrack with common units & channel PCB's of different configs. Installed in Racks with power supply units, cable head & Digital Distribution Frames.	Lot	1	
07-01-01115	-Spare parts & spare units.			
07-01-01116	-Installation materials & tools.			
07-01-01117	-Network Management Equipment consisting of Central Network Management System platform (Hard ware),System software packages all complete with craft terminals, Mediation , Interface, and connection cards & modules, Installation Materials & Tools, Documentation & Spare Parts for each item.	Lot	1	
07-01-01118	Test Instruments including : Digital Multimeter, Frequency Counter, Power Meter , PCM Multiplex Tester , RF Sweep Generator ,VSWR Test Set, Scalar Network Analyzer , RF Spectrum Analyzer, SDH Analyzer for STM-1,TX / RX MW Link Analyzer, PDH Analyzer (2Mb/s),Oscilloscope 500 MHZ Dual channel, Vedio Test Set, RF Attenuators Fixed & Variable (0 - 60)DB, Cables & Adapters Waveguide / Coax. Adapters & relevant Documentation.	Lot	1	
07-01-01119	-Specific Tools including: Specific Maintenance Tools Station Tools, Special Tools for waveguide & General Installation Tools.	Lot	1	
07-01-01120	-Factory Training Abroad.	Trainee	8	
07-01-01121	-Training In Iraq.	Trainee	8	
07-01-01222	-Supervision Services (Supplier Expert).	Expert	2	

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Sub - sector : Interconnection network between local exchanges in Baghdad.

Site - Name : SINEK

Code	Item Description	Unit	Qty.	Complement ary Items
07-01-02100	SDH Microwave Radio Equipment, STM-1, 13GHZ(2+1) Frequency Diversity Radio Terminal All Complete with Transmitters, Receivers, 128 QAM Modems Modules ,Protection Switch, Engineering order wire channel, 2Mb/s auxiliary traffic, Interface to central Network management, Peripherals (Lap Top PC , ETC.....), Installed in Rack with 48V. d/c unit (duplicated).	Lot	8	
07-01-02101	-Installation materials.	Lot	8	
07-01-02102	-Spare parts & spare units.	Lot	8	
07-01-02103	-Documentation.	Set	1	
07-01-02104	Microwave Parabolic Dish (1.8m., 2.4m.)Antenna with (one/ two)Polarization's all complete with Connector Flanges, Tower Attachment, Installation materials & Documentation.	Lot	8	
07-01-02105	-Microwave Elliptical waveguide Feeder Run, 11/13 GHZ band all complete with Pressure Window, Fixture clamps, Earthing Kits, Installation materials & Documentation.	Lot	8	
07-01-02106	-Medium Capacity Dehydrator.	Unit	1	
07-01-02107	-10% Spares.	Lot	1	
07-01-02108	-DC Power Plant Including Modular Switched Rectifier system 48V/30A. module(3+1)configuration, 48V, 250Ah Lead- Acid Sealed- Batteries (2sets), Cabinets, Installation materials, cables, tools & Documentation.	Lot	1	
07-01-02109	-Spare Parts & Spare Units.	Lot	1	
07-01-02110	-Air Conditioners, Duplicated 18000 / 24000 BTU Unit All Complete With, Piping & installation materials & fixtures, Spare parts & Documentation.	Lot	2	
07-01-02111	AC Power Plant Including Diesel Engine Generator Capacity 50 KVA, Dual Set, all complete with, Daily Fuel Tank, Fan, Piping, Control cubicle & Alarms, Installation Materials, Documentation & Tools	Lot	1	
07-01-02112	-Spare parts & PCB's.	Lot	1	
07-01-02113	-SDH Multiplex Equipment Including STM-16 Mutliplexer , STM-4,STM-1Multiplexer Subrack with redundant common units ADM, Terminal configuration , Tributary & Elect. Aggregate Cards (3x34Mb/s, 21x2Mb/s,140/155Mb/s switch, 7x2Mb/s) Access &Connection Modules, Full Matrix (duplicated),Auxiliary /Engineering order wire, Installation Materials & Tools, Racks with power supply unit (duplicated) and cable head, Digital	Lot	1	

07-01-02114	Distribution Frames & Documentation for each .	Lot	1	
07-01-02115	-Primary Multiplex (PCM-30CH.) Subrack with common units & channel PCB's of different configs. Installed in Racks with power supply units, cable head & Digital Distribution Frames.			
07-01-02116	-Spare parts & spare units.			
	-Installation materials & tools.			
07-01-02117	-Network Management Equipment consisting of Central Network Management System platform (Hard ware),System software packages all complete with craft terminals, Mediation , Interface, and connection cards & modules, Installation Materials & Tools, Documentation & Spare Parts for each item.	Lot	0	
07-01-02118	Test Instruments including : Digital Multimeter, Frequency Counter, Power Meter , PCM Multiplex Tester , RF Sweep Generator ,VSWR Test Set, Scalar Network Analyzer , RF Spectrum Analyzer, SDH Analyzer for STM-1,TX / RX MW Link Analyzer, PDH Analyzer (2Mb/s),Oscilloscope 500 MHZ Dual channel, Vedio Test Set, RF Attenuators Fixed & Variable (0 - 60)DB, Cables & Adapters Waveguide / Coax. Adapters & relevant Documentation.	Lot	1	
07-01-02119	-Specific Tools including: Specific Maintenance Tools Station Tools, Special Tools for waveguide & General Installation Tools.	Lot	1	
07-01-02120	-Factory Training Abroad.	Trainee	8	
07-01-02121	-Training In Iraq.	Trainee	8	
07-01-02222	-Supervision Services (Supplier Expert).	Expert	2	

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Sub - sector : Interconnection network between local exchanges in Baghdad.

Site - Name : ALWIYA

Code	Item Description	Unit	Qty.	Complement ary Items
07-01-03100	SDH Microwave Radio Equipment, STM-1, 13GHZ(2+1) Frequency Diversity Radio Terminal All Complete with Transmitters, Receivers, 128 QAM Modems Modules ,Protection Switch, Engineering order wire channel, 2Mb/s auxiliary traffic, Interface to central Network management, Peripherals (Lap Top PC , ETC.....), Installed in Rack with 48V. d/c unit (duplicated).	Lot	4	
07-01-03101	-Installation materials.	Lot	4	
07-01-03102	-Spare parts & spare units.	Lot	4	
07-01-03103	-Documentation.	Set	1	
07-01-03104	Microwave Parabolic Dish (1.8m., 2.4m.)Antenna with (one/ two)Polarization's all complete with Connector Flanges, Tower Attachment, Installation materials & Documentation.	Lot	4	
07-01-03105	-Microwave Elliptical waveguide Feeder Run, 11/13 GHZ band all complete with Pressure Window, Fixture clamps, Earthing Kits, Installation materials & Documentation.	Lot	4	
07-01-03106	-Medium Capacity Dehydrator.	Unit	1	
07-01-03107	-10% Spares.	Lot	1	
07-01-03108	-DC Power Plant Including Modular Switched Rectifier system 48V/30A. module(3+1)configuration, 48V, 250Ah Lead- Acid Sealed- Batteries (2sets), Cabinets, Installation materials, cables, tools & Documentation.	Lot	1	
07-01-03109	-Spare Parts & Spare Units.	Lot	1	
07-01-03110	-Air Conditioners, Duplicated 18000 / 24000 BTU Unit All Complete With, Piping & installation materials & fixtures, Spare parts & Documentation.	Lot	2	
07-01-03111	AC Power Plant Including Diesel Engine Generator Capacity 50 KVA, Dual Set, all complete with, Daily Fuel Tank, Fan, Piping, Control cubicle & Alarms, Installation Materials, Documentation & Tools	Lot	1	
07-01-03112	-Spare parts & PCB's.	Lot	1	
07-01-03113	-SDH Multiplex Equipment Including STM-16 Mutlplexer , STM-4,STM-1Multiplexer Subrack with redundant common units ADM, Terminal configuration , Tributary & Elect. Aggregate Cards (3x34Mb/s, 21x2Mb/s,140/155Mb/s switch, 7x2Mb/s) Access &Connection Modules, Full Matrix (duplicated),Auxiliary /Engineering order wire, Installation Materials & Tools, Racks with power	Lot	1	

	supply unit (duplicated) and cable head, Digital Distribution Frames & Documentation for each .			
07-01-03114	-Primary Multiplex (PCM-30CH.) Subrack with common units & channel PCB's of different configs. Installed in Racks with power supply units, cable head & Digital Distribution Frames.	Lot	1	
07-01-03115	-Spare parts & spare units.			
07-01-03116	-Installation materials & tools.			
07-01-03117	-Network Management Equipment consisting of Local Network Management System platform (Hard ware),System software packages all complete with craft terminals, Mediation , Interface, and connection cards & modules, Installation Materials & Tools, Documentation & Spare Parts for each item.	Lot	1	
07-01-03118	Test Instruments including : Digital Multimeter, Frequency Counter, Power Meter , PCM Multiplex Tester , RF Sweep Generator ,VSWR Test Set, Scalar Network Analyzer , RF Spectrum Analyzer, SDH Analyzer for STM-1,TX / RX MW Link Analyzer, PDH Analyzer (2Mb/s),Oscilloscope 500 MHZ Dual channel, Vedio Test Set, RF Attenuators Fixed & Variable (0 - 60)DB, Cables & Adapters Waveguide / Coax. Adapters & relevant Documentation.	Lot	1	
07-01-03119	-Specific Tools including: Specific Maintenance Tools Station Tools, Special Tools for waveguide & General Installation Tools.	Lot	1	
07-01-03120	-Factory Training Abroad.	Trainee	2	
07-01-03121	-Training In Iraq.	Trainee	4	
07-01-03222	-Supervision Services (Supplier Expert).	Expert	1	

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Sub - sector : Interconnection network between local exchanges in Baghdad.

Site - Name SUBAABKAR

Code	Item Description	Unit	Qty.	Complement ary Items
07-01-04100	SDH Microwave Radio Equipment, STM-1, 13GHZ(2+1) Frequency Diversity Radio Terminal All Complete with Transmitters, Receivers, 128 QAM Modems Modules ,Protection Switch, Engineering order wire channel, 2Mb/s auxiliary traffic, Interface to central Network management, Peripherals (Lap Top PC , ETC.....), Installed in Rack with 48V. d/c unit (duplicated).	Lot	3	
07-01-04101	-Installation materials.	Lot	3	
07-01-04102	-Spare parts & spare units.	Lot	3	
07-01-04103	-Documentation.	Set	1	
07-01-04104	Microwave Parabolic Dish (1.8m., 2.4m.)Antenna with (one/ two)Polarization's all complete with Connector Flanges, Tower Attachment, Installation materials & Documentation.	Lot	3	
07-01-04105	-Microwave Elliptical waveguide Feeder Run, 11/13 GHZ band all complete with Pressure Window, Fixture clamps, Earthing Kits, Installation materials & Documentation.	Lot	3	
07-01-04106	-Medium Capacity Dehydrator.	Unit	1	
07-01-04107	-10% Spares.	Lot	1	
07-01-04108	-DC Power Plant Including Modular Switched Rectifier system 48V/30A. module(3+1)configuration, 48V, 250Ah Lead- Acid Sealed- Batteries (2sets), Cabinets, Installation materials, cables, tools & Documentation.	Lot	1	
07-01-04109	-Spare Parts & Spare Units.	Lot	1	
07-01-04110	-Air Conditioners, Duplicated 18000 / 24000 BTU Unit All Complete With, Piping & installation materials & fixtures, Spare parts & Documentation.	Lot	2	
07-01-04111	AC Power Plant Including Diesel Engine Generator Capacity 50 KVA, Dual Set, all complete with, Daily Fuel Tank, Fan, Piping, Control cubicle & Alarms, Installation Materials, Documentation & Tools	Lot	1	
07-01-04112	-Spare parts & PCB's.	Lot	1	
07-01-04113	-SDH Multiplex Equipment Including STM-16 Mutliplexer , STM-4,STM-1Multiplexer Subrack with redundant common units ADM, Terminal configuration , Tributary & Elect. Aggregate Cards (3x34Mb/s, 21x2Mb/s,140/155Mb/s switch, 7x2Mb/s) Access &Connection Modules, Full Matrix (duplicated),Auxiliary /Engineering order wire, Installation Materials & Tools, Racks with power supply unit (duplicated) and cable head, Digital	Lot	1	

07-01-04114	Distribution Frames & Documentation for each .			
07-01-04115	-Primary Multiplex (PCM-30CH.) Subrack with common units & channel PCB's of different configs. Installed in Racks with power supply units, cable head & Digital Distribution Frames.	Lot	1	
07-01-04116	-Spare parts & spare units.			
	-Installation materials & tools.			
07-01-04117	-Network Management Equipment consisting of Local Network Management System platform (Hard ware),System software packages all complete with craft terminals, Mediation , Interface, and connection cards & modules, Installation Materials & Tools, Documentation & Spare Parts for each item.	Lot	1	
07-01-04118	Test Instruments including : Digital Multimeter, Frequency Counter, Power Meter , PCM Multiplex Tester , RF Sweep Generator ,VSWR Test Set, Scalar Network Analyzer , RF Spectrum Analyzer, SDH Analyzer for STM-1,TX / RX MW Link Analyzer, PDH Analyzer (2Mb/s),Oscilloscope 500 MHZ Dual channel, Vedio Test Set, RF Attenuators Fixed & Variable (0 - 60)DB, Cables & Adapters Waveguide / Coax. Adapters & relevant Documentation.	Lot	1	
07-01-04119	-Specific Tools including: Specific Maintenance Tools Station Tools, Special Tools for waveguide & General Installation Tools.	Lot	1	
07-01-04120	-Factory Training Abroad.	Trainee	1	
07-01-04121	-Training In Iraq.	Trainee	2	
07-01-04222	-Supervision Services (Supplier Expert).	Expert	1	

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Sub - sector : Interconnection network between local exchanges in Baghdad.

Site - Name JADIRIYA

Code	Item Description	Unit	Qty.	Complement ary Items
07-01-05100	SDH Microwave Radio Equipment, STM-1, 13GHZ(2+1) Frequency Diversity Radio Terminal All Complete with Transmitters, Receivers, 128 QAM Modems Modules ,Protection Switch, Engineering order wire channel, 2Mb/s auxiliary traffic, Interface to central Network management, Peripherals (Lap Top PC , ETC.....), Installed in Rack with 48V. d/c unit (duplicated).	Lot	3	
07-01-05101	-Installation materials.	Lot	3	
07-01-05102	-Spare parts & spare units.	Lot	3	
07-01-05103	-Documentation.	Set	1	
07-01-05104	Microwave Parabolic Dish (1.8m., 2.4m.)Antenna with (one/ two)Polarization's all complete with Connector Flanges, Tower Attachment, Installation materials & Documentation.	Lot	3	
07-01-05105	-Microwave Elliptical waveguide Feeder Run, 11/13 GHZ band all complete with Pressure Window, Fixture clamps, Earthing Kits, Installation materials & Documentation.	Lot	3	
07-01-05106	-Medium Capacity Dehydrator.	Unit	1	
07-01-05107	-10% Spares.	Lot	1	
07-01-05108	-DC Power Plant Including Modular Switched Rectifier system 48V/30A. module(3+1)configuration, 48V, 250Ah Lead- Acid Sealed- Batteries (2sets), Cabinets, Installation materials, cables, tools & Documentation.	Lot	1	
07-01-05109	-Spare Parts & Spare Units.	Lot	1	
07-01-05110	-Air Conditioners, Duplicated 18000 / 24000 BTU Unit All Complete With, Piping & installation materials & fixtures, Spare parts & Documentation.	Lot	2	
07-01-05111	AC Power Plant Including Diesel Engine Generator Capacity 50 KVA, Dual Set, all complete with, Daily Fuel Tank, Fan, Piping, Control cubicle & Alarms, Installation Materials, Documentation & Tools	Lot	1	
07-01-05112	-Spare parts & PCB's.	Lot	1	
07-01-05113	-SDH Multiplex Equipment Including STM-16 Mutliplexer , STM-4,STM-1Multiplexer Subrack with redundant common units ADM, Terminal configuration , Tributary & Elect. Aggregate Cards (3x34Mb/s, 21x2Mb/s,140/155Mb/s switch, 7x2Mb/s) Access &Connection Modules, Full Matrix (duplicated),Auxiliary /Engineering order wire, Installation Materials & Tools, Racks with power supply unit (duplicated) and cable head, Digital	Lot	1	

07-01-05114	Distribution Frames & Documentation for each . -Primary Multiplex (PCM-30CH.) Subrack with common units & channel PCB's of different configs. Installed in Racks with power supply units, cable head & Digital Distribution Frames.	Lot	1	
07-01-05115	-Spare parts & spare units.			
07-01-05116	-Installation materials & tools.			
07-01-05117	-Network Management Equipment consisting of Local Network Management System platform (Hard ware),System software packages all complete with craft terminals, Mediation , Interface, and connection cards & modules, Installation Materials & Tools, Documentation & Spare Parts for each item.	Lot	1	
07-01-05118	Test Instruments including : Digital Multimeter, Frequency Counter, Power Meter , PCM Multiplex Tester , RF Sweep Generator ,VSWR Test Set, Scalar Network Analyzer , RF Spectrum Analyzer, SDH Analyzer for STM-1,TX / RX MW Link Analyzer, PDH Analyzer (2Mb/s),Oscilloscope 500 MHZ Dual channel, Vedio Test Set, RF Attenuators Fixed & Variable (0 - 60)DB, Cables & Adapters Waveguide / Coax. Adapters & relevant Documentation.	Lot	1	
07-01-05119	-Specific Tools including: Specific Maintenance Tools Station Tools, Special Tools for waveguide & General Installation Tools.	Lot	1	
07-01-05120	-Factory Training Abroad.	Trainee	1	
07-01-05121	-Training In Iraq.	Trainee	2	
07-01-05222	-Supervision Services (Supplier Expert).	Expert	1	

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Sub - sector : Interconnection network between local exchanges in Baghdad.

Site - Name ADHMIYA

Code	Item Description	Unit	Qty.	Complement ary Items
07-01-06100	SDH Microwave Radio Equipment, STM-1, 13GHZ(2+1) Frequency Diversity Radio Terminal All Complete with Transmitters, Receivers, 128 QAM Modems Modules ,Protection Switch, Engineering order wire channel, 2Mb/s auxiliary traffic, Interface to central Network management, Peripherals (Lap Top PC , ETC.....), Installed in Rack with 48V. d/c unit (duplicated).	Lot	3	
07-01-06101	-Installation materials.	Lot	3	
07-01-06102	-Spare parts & spare units.	Lot	3	
07-01-06103	-Documentation.	Set	1	
07-01-06104	Microwave Parabolic Dish (1.8m., 2.4m.)Antenna with (one/ two)Polarization's all complete with Connector Flanges, Tower Attachment, Installation materials & Documentation.	Lot	3	
07-01-06105	-Microwave Elliptical waveguide Feeder Run, 11/13 GHZ band all complete with Pressure Window, Fixture clamps, Earthing Kits, Installation materials & Documentation.	Lot	3	
07-01-06106	-Medium Capacity Dehydrator.	Unit	1	
07-01-06107	-10% Spares.	Lot	1	
07-01-06108	-DC Power Plant Including Modular Switched Rectifier system 48V/30A. module(3+1)configuration, 48V, 250Ah Lead- Acid Sealed- Batteries (2sets), Cabinets, Installation materials, cables, tools & Documentation.	Lot	1	
07-01-06109	-Spare Parts & Spare Units.	Lot	1	
07-01-06110	-Air Conditioners, Duplicated 18000 / 24000 BTU Unit All Complete With, Piping & installation materials & fixtures, Spare parts & Documentation.	Lot	2	
07-01-06111	AC Power Plant Including Diesel Engine Generator Capacity 50 KVA, Dual Set, all complete with, Daily Fuel Tank, Fan, Piping, Control cubicle & Alarms, Installation Materials, Documentation & Tools	Lot	1	
07-01-06112	-Spare parts & PCB's.	Lot	1	
07-01-06113	-SDH Multiplex Equipment Including STM-16 Mutliplexer , STM-4,STM-1Multiplexer Subrack with redundant common units ADM, Terminal configuration , Tributary & Elect. Aggregate Cards (3x34Mb/s, 21x2Mb/s,140/155Mb/s switch, 7x2Mb/s) Access &Connection Modules, Full Matrix (duplicated),Auxiliary /Engineering order wire, Installation Materials & Tools, Racks with power supply unit (duplicated) and cable head, Digital	Lot	1	

07-01-06114	Distribution Frames & Documentation for each .			
07-01-06115	-Primary Multiplex (PCM-30CH.) Subrack with common units & channel PCB's of different configs. Installed in Racks with power supply units, cable head & Digital Distribution Frames.	Lot	1	
07-01-06116	-Spare parts & spare units.			
	-Installation materials & tools.			
07-01-06117	-Network Management Equipment consisting of Local Network Management System platform (Hard ware),System software packages all complete with craft terminals, Mediation , Interface, and connection cards & modules, Installation Materials & Tools, Documentation & Spare Parts for each item.	Lot	1	
07-01-06118	Test Instruments including : Digital Multimeter, Frequency Counter, Power Meter , PCM Multiplex Tester , RF Sweep Generator ,VSWR Test Set, Scalar Network Analyzer , RF Spectrum Analyzer, SDH Analyzer for STM-1,TX / RX MW Link Analyzer, PDH Analyzer (2Mb/s),Oscilloscope 500 MHZ Dual channel, Vedio Test Set, RF Attenuators Fixed & Variable (0 - 60)DB, Cables & Adapters Waveguide / Coax. Adapters & relevant Documentation.	Lot	1	
07-01-06119	-Specific Tools including: Specific Maintenance Tools Station Tools, Special Tools for waveguide & General Installation Tools.	Lot	1	
07-01-06120	-Factory Training Abroad.	Trainee	1	
07-01-06121	-Training In Iraq.	Trainee	2	
07-01-06222	-Supervision Services (Supplier Expert).	Expert	1	

ANNEX SEVEN / Telecommunications

Sub - sector : Interconnection network between local exchanges in Baghdad.

Site - Name DAWOODI

Code	Item Description	Unit	Qty.	Complement ary Items
07-01-07100	SDH Microwave Radio Equipment, STM-1, 13GHZ(2+1) Frequency Diversity Radio Terminal All Complete with Transmitters, Receivers, 128 QAM Modems Modules ,Protection Switch, Engineering order wire channel, 2Mb/s auxiliary traffic, Interface to central Network management, Peripherals (Lap Top PC , ETC.....), Installed in Rack with 48V. d/c unit (duplicated).	Lot	3	
07-01-07101	-Installation materials.	Lot	3	
07-01-07102	-Spare parts & spare units.	Lot	3	
07-01-07103	-Documentation.	Set	1	
07-01-07104	Microwave Parabolic Dish (1.8m., 2.4m.)Antenna with (one/ two)Polarization's all complete with Connector Flanges, Tower Attachment, Installation materials & Documentation.	Lot	3	
07-01-07105	-Microwave Elliptical waveguide Feeder Run, 11/13 GHZ band all complete with Pressure Window, Fixture clamps, Earthing Kits, Installation materials & Documentation.	Lot	3	
07-01-07106	-Medium Capacity Dehydrator.	Unit	1	
07-01-07107	-10% Spares.	Lot	1	
07-01-07108	-DC Power Plant Including Modular Switched Rectifier system 48V/30A. module(3+1)configuration, 48V, 250Ah Lead- Acid Sealed- Batteries (2sets), Cabinets, Installation materials, cables, tools & Documentation.	Lot	1	
07-01-07109	-Spare Parts & Spare Units.	Lot	1	
07-01-07110	-Air Conditioners, Duplicated 18000 / 24000 BTU Unit All Complete With, Piping & installation materials & fixtures, Spare parts & Documentation.	Lot	2	
07-01-07111	AC Power Plant Including Diesel Engine Generator Capacity 50 KVA, Dual Set, all complete with, Daily Fuel Tank, Fan, Piping, Control cubicle & Alarms, Installation Materials, Documentation & Tools	Lot	1	
07-01-07112	-Spare parts & PCB's.	Lot	1	
07-01-07113	-SDH Multiplex Equipment Including STM-16 Mutliplexer , STM-4,STM-1Multiplexer Subrack with redundant common units ADM, Terminal configuration , Tributary & Elect. Aggregate Cards (3x34Mb/s, 21x2Mb/s,140/155Mb/s switch, 7x2Mb/s) Access &Connection Modules, Full Matrix (duplicated),Auxiliary /Engineering order wire, Installation Materials & Tools, Racks with power supply unit (duplicated) and cable head, Digital	Lot	1	

07-01-07114	Distribution Frames & Documentation for each .			
07-01-07115	-Primary Multiplex (PCM-30CH.) Subrack with common units & channel PCB's of different configs. Installed in Racks with power supply units, cable head & Digital Distribution Frames.	Lot	1	
07-01-07116	-Spare parts & spare units.			
	-Installation materials & tools.			
07-01-07117	-Network Management Equipment consisting of Local Network Management System platform (Hard ware),System software packages all complete with craft terminals, Mediation , Interface, and connection cards & modules, Installation Materials & Tools, Documentation & Spare Parts for each item.	Lot	1	
07-01-07118	Test Instruments including : Digital Multimeter, Frequency Counter, Power Meter , PCM Multiplex Tester , RF Sweep Generator ,VSWR Test Set, Scalar Network Analyzer , RF Spectrum Analyzer, SDH Analyzer for STM-1,TX / RX MW Link Analyzer, PDH Analyzer (2Mb/s),Oscilloscope 500 MHZ Dual channel, Vedio Test Set, RF Attenuators Fixed & Variable (0 - 60)DB, Cables & Adapters Waveguide / Coax. Adapters & relevant Documentation.	Lot	1	
07-01-07119	-Specific Tools including: Specific Maintenance Tools Station Tools, Special Tools for waveguide & General Installation Tools.	Lot	1	
07-01-07120	-Factory Training Abroad.	Trainee	1	
07-01-07121	-Training In Iraq.	Trainee	2	
07-01-07222	-Supervision Services (Supplier Expert).	Expert	1	

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Sub - sector : Interconnection network between local exchanges in Baghdad.

Site - Name KADHUMIA

Code	Item Description	Unit	Qty.	Complementary Items
07-01-08100	SDH Microwave Radio Equipment, STM-1, 13GHZ(2+1) Frequency Diversity Radio Terminal All Complete with Transmitters, Receivers, 128 QAM Modems Modules ,Protection Switch, Engineering order wire channel, 2Mb/s auxiliary traffic, Interface to central Network management, Peripherals (Lap Top PC , ETC.....), Installed in Rack with 48V. d/c unit (duplicated).	Lot	3	
07-01-08101	-Installation materials.	Lot	3	
07-01-08102	-Spare parts & spare units.	Lot	3	
07-01-08103	-Documentation.	Set	1	
07-01-08104	Microwave Parabolic Dish (1.8m., 2.4m.)Antenna with (one/ two)Polarization's all complete with Connector Flanges, Tower Attachment, Installation materials & Documentation.	Lot	3	
07-01-08105	-Microwave Elliptical waveguide Feeder Run, 11/13 GHZ band all complete with Pressure Window, Fixture clamps, Earthing Kits, Installation materials & Documentation.	Lot	3	
07-01-08106	-Medium Capacity Dehydrator.	Unit	1	
07-01-08107	-10% Spares.	Lot	1	
07-01-08108	-DC Power Plant Including Modular Switched Rectifier system 48V/30A. module(3+1)configuration, 48V, 250Ah Lead- Acid Sealed- Batteries (2sets), Cabinets, Installation materials, cables, tools & Documentation.	Lot	1	
07-01-08109	-Spare Parts & Spare Units.	Lot	1	
07-01-08110	-Air Conditioners, Duplicated 18000 / 24000 BTU Unit All Complete With, Piping & installation materials & fixtures, Spare parts & Documentation.	Lot	2	
07-01-08111	AC Power Plant Including Diesel Engine Generator Capacity 50 KVA, Dual Set, all complete with, Daily Fuel Tank, Fan, Piping, Control cubicle & Alarms, Installation Materials, Documentation & Tools	Lot	1	
07-01-08112	-Spare parts & PCB's.	Lot	1	
07-01-08113	-SDH Multiplex Equipment Including STM-16 Mutliplexer , STM-4,STM-1Multiplexer Subrack with redundant common units ADM, Terminal configuration , Tributary & Elect. Aggregate Cards (3x34Mb/s, 21x2Mb/s,140/155Mb/s switch, 7x2Mb/s) Access &Connection Modules, Full Matrix (duplicated),Auxiliary /Engineering order wire, Installation Materials & Tools, Racks with power supply unit (duplicated) and cable head, Digital	Lot	1	

07-01-08114	Distribution Frames & Documentation for each .			
07-01-08115	-Primary Multiplex (PCM-30CH.) Subrack with common units & channel PCB's of different configs. Installed in Racks with power supply units, cable head & Digital Distribution Frames.	Lot	1	
07-01-08116	-Spare parts & spare units.			
	-Installation materials & tools.			
07-01-08117	-Network Management Equipment consisting of Local Network Management System platform (Hard ware),System software packages all complete with craft terminals, Mediation , Interface, and connection cards & modules, Installation Materials & Tools, Documentation & Spare Parts for each item.	Lot	1	
07-01-08118	Test Instruments including : Digital Multimeter, Frequency Counter, Power Meter , PCM Multiplex Tester , RF Sweep Generator ,VSWR Test Set, Scalar Network Analyzer , RF Spectrum Analyzer, SDH Analyzer for STM-1,TX / RX MW Link Analyzer, PDH Analyzer (2Mb/s),Oscilloscope 500 MHZ Dual channel, Vedio Test Set, RF Attenuators Fixed & Variable (0 - 60)DB, Cables & Adapters Waveguide / Coax. Adapters & relevant Documentation.	Lot	1	
07-01-08119	-Specific Tools including: Specific Maintenance Tools Station Tools, Special Tools for waveguide & General Installation Tools.	Lot	1	
07-01-08120	-Factory Training Abroad.	Trainee	1	
07-01-08121	-Training In Iraq.	Trainee	2	
07-01-08222	-Supervision Services (Supplier Expert).	Expert	1	

ANNEX SEVEN / Telecommunications

Sub - sector : Interconnection network between local exchanges in Baghdad.

Site - Name 14 JULY

Code	Item Description	Unit	Qty.	Complement ary Items
07-01-09100	SDH Microwave Radio Equipment, STM-1, 13GHZ(2+1) Frequency Diversity Radio Terminal All Complete with Transmitters, Receivers, 128 QAM Modems Modules ,Protection Switch, Engineering order wire channel, 2Mb/s auxiliary traffic, Interface to central Network management, Peripherals (Lap Top PC , ETC.....), Installed in Rack with 48V. d/c unit (duplicated).	Lot	3	
07-01-09101	-Installation materials.	Lot	3	
07-01-09102	-Spare parts & spare units.	Lot	3	
07-01-09103	-Documentation.	Set	1	
07-01-09104	Microwave Parabolic Dish (1.8m., 2.4m.)Antenna with (one/ two)Polarization's all complete with Connector Flanges, Tower Attachment, Installation materials & Documentation.	Lot	3	
07-01-09105	-Microwave Elliptical waveguide Feeder Run, 11/13 GHZ band all complete with Pressure Window, Fixture clamps, Earthing Kits, Installation materials & Documentation.	Lot	3	
07-01-09106	-Medium Capacity Dehydrator.	Unit	1	
07-01-09107	-10% Spares.	Lot	1	
07-01-09108	-DC Power Plant Including Modular Switched Rectifier system 48V/30A. module(3+1)configuration, 48V, 250Ah Lead- Acid Sealed- Batteries (2sets), Cabinets, Installation materials, cables, tools & Documentation.	Lot	1	
07-01-09109	-Spare Parts & Spare Units.	Lot	1	
07-01-09110	-Air Conditioners, Duplicated 18000 / 24000 BTU Unit All Complete With, Piping & installation materials & fixtures, Spare parts & Documentation.	Lot	2	
07-01-09111	AC Power Plant Including Diesel Engine Generator Capacity 50 KVA, Dual Set, all complete with, Daily Fuel Tank, Fan, Piping, Control cubicle & Alarms, Installation Materials, Documentation & Tools	Lot	1	
07-01-09112	-Spare parts & PCB's.	Lot	1	
07-01-09113	-SDH Multiplex Equipment Including STM-16 Mutliplexer , STM-4,STM-1Multiplexer Subrack with redundant common units ADM, Terminal configuration , Tributary & Elect. Aggregate Cards (3x34Mb/s, 21x2Mb/s,140/155Mb/s switch, 7x2Mb/s) Access &Connection Modules, Full Matrix (duplicated),Auxiliary /Engineering order wire, Installation Materials & Tools, Racks with power supply unit (duplicated) and cable head, Digital	Lot	1	

07-01-09114	Distribution Frames & Documentation for each .			
07-01-09115	-Primary Multiplex (PCM-30CH.) Subrack with common units & channel PCB's of different configs. Installed in Racks with power supply units, cable head & Digital Distribution Frames.	Lot	1	
07-01-09116	-Spare parts & spare units.			
	-Installation materials & tools.			
07-01-09117	-Network Management Equipment consisting of Local Network Management System platform (Hard ware),System software packages all complete with craft terminals, Mediation , Interface, and connection cards & modules, Installation Materials & Tools, Documentation & Spare Parts for each item.	Lot	1	
07-01-09118	Test Instruments including : Digital Multimeter, Frequency Counter, Power Meter , PCM Multiplex Tester , RF Sweep Generator ,VSWR Test Set, Scalar Network Analyzer , RF Spectrum Analyzer, SDH Analyzer for STM-1,TX / RX MW Link Analyzer, PDH Analyzer (2Mb/s),Oscilloscope 500 MHZ Dual channel, Vedio Test Set, RF Attenuators Fixed & Variable (0 - 60)DB, Cables & Adapters Waveguide / Coax. Adapters & relevant Documentation.	Lot	1	
07-01-09119	-Specific Tools including: Specific Maintenance Tools Station Tools, Special Tools for waveguide & General Installation Tools.	Lot	1	
07-01-09120	-Factory Training Abroad.	Trainee	1	
07-01-09121	-Training In Iraq.	Trainee	2	
07-01-09222	-Supervision Services (Supplier Expert).	Expert	1	

ANNEX SEVEN / Telecommunications

Sub - sector : Interconnection network between local exchanges in Baghdad.

Site - Name : NEW BAGHDAD

Code	Item Description	Unit	Qty.	Complementary Items
07-01-10100	SDH Microwave Radio Equipment, STM-1, 13GHZ(2+1) Frequency Diversity Radio Terminal All Complete with Transmitters, Receivers, 128 QAM Modems Modules ,Protection Switch, Engineering order wire channel, 2Mb/s auxiliary traffic, Interface to central Network management, Peripherals (Lap Top PC , ETC.....), Installed in Rack with 48V. d/c unit (duplicated).	Lot	3	
07-01-10101	-Installation materials.	Lot	3	
07-01-10102	-Spare parts & spare units.	Lot	3	
07-01-10103	-Documentation.	Set	1	
07-01-10104	Microwave Parabolic Dish (1.8m., 2.4m.)Antenna with (one/ two)Polarization's all complete with Connector Flanges, Tower Attachment, Installation materials & Documentation.	Lot	3	
07-01-10105	-Microwave Elliptical waveguide Feeder Run, 11/13 GHZ band all complete with Pressure Window, Fixture clamps, Earthing Kits, Installation materials & Documentation.	Lot	3	
07-01-10106	-Medium Capacity Dehydrator.	Unit	1	
07-01-10107	-10% Spares.	Lot	1	
07-01-10108	-DC Power Plant Including Modular Switched Rectifier system 48V/30A. module(3+1)configuration, 48V, 250Ah Lead- Acid Sealed- Batteries (2sets), Cabinets, Installation materials, cables, tools & Documentation.	Lot	1	
07-01-10109	-Spare Parts & Spare Units.	Lot	1	
07-01-10110	-Air Conditioners, Duplicated 18000 / 24000 BTU Unit All Complete With, Piping & installation materials & fixtures, Spare parts & Documentation.	Lot	2	
07-01-10111	AC Power Plant Including Diesel Engine Generator Capacity 50 KVA, Dual Set, all complete with, Daily Fuel Tank, Fan, Piping, Control cubicle & Alarms, Installation Materials, Documentation & Tools	Lot	1	
07-01-10112	-Spare parts & PCB's.	Lot	1	
07-01-10113	-SDH Multiplex Equipment Including STM-16 Mutliplexer , STM-4,STM-1Multiplexer Subrack with redundant common units ADM, Terminal configuration , Tributary & Elect. Aggregate Cards (3x34Mb/s, 21x2Mb/s,140/155Mb/s switch, 7x2Mb/s) Access &Connection Modules, Full Matrix (duplicated),Auxiliary /Engineering order wire, Installation Materials & Tools, Racks with power supply unit (duplicated) and cable head, Digital	Lot	1	

07-01-10114	Distribution Frames & Documentation for each .			
07-01-10115	-Primary Multiplex (PCM-30CH.) Subrack with common units & channel PCB's of different configs. Installed in Racks with power supply units, cable head & Digital Distribution Frames.	Lot	1	
07-01-10116	-Spare parts & spare units.			
	-Installation materials & tools.			
07-01-10117	-Network Management Equipment consisting of Local Network Management System platform (Hard ware),System software packages all complete with craft terminals, Mediation , Interface, and connection cards & modules, Installation Materials & Tools, Documentation & Spare Parts for each item.	Lot	1	
07-01-10118	Test Instruments including : Digital Multimeter, Frequency Counter, Power Meter , PCM Multiplex Tester , RF Sweep Generator ,VSWR Test Set, Scalar Network Analyzer , RF Spectrum Analyzer, SDH Analyzer for STM-1,TX / RX MW Link Analyzer, PDH Analyzer (2Mb/s),Oscilloscope 500 MHZ Dual channel, Vedio Test Set, RF Attenuators Fixed & Variable (0 - 60)DB, Cables & Adapters Waveguide / Coax. Adapters & relevant Documentation.	Lot	1	
07-01-10119	-Specific Tools including: Specific Maintenance Tools Station Tools, Special Tools for waveguide & General Installation Tools.	Lot	1	
07-01-10120	-Factory Training Abroad.	Trainee	1	
07-01-10121	-Training In Iraq.	Trainee	2	
07-01-10222	-Supervision Services (Supplier Expert).	Expert	1	

ANNEX SEVEN / Telecommunications

Sub - sector : Interconnection network between local exchanges in Baghdad.

Site - Name : BAB ALMUADAM

Code	Item Description	Unit	Qty.	Complement ary Items
07-01-11100	SDH Microwave Radio Equipment, STM-1, 13GHZ(2+1) Frequency Diversity Radio Terminal All Complete with Transmitters, Receivers, 128 QAM Modems Modules ,Protection Switch, Engineering order wire channel, 2Mb/s auxiliary traffic, Interface to central Network management, Peripherals (Lap Top PC , ETC.....), Installed in Rack with 48V. d/c unit (duplicated).	Lot	2	
07-01-11101	-Installation materials.	Lot	2	
07-01-11102	-Spare parts & spare units.	Lot	2	
07-01-11103	-Documentation.	Set	1	
07-01-11104	Microwave Parabolic Dish (1.8m., 2.4m.)Antenna with (one/ two)Polarization's all complete with Connector Flanges, Tower Attachment, Installation materials & Documentation.	Lot	2	
07-01-11105	-Microwave Elliptical waveguide Feeder Run, 11/13 GHZ band all complete with Pressure Window, Fixture clamps, Earthing Kits, Installation materials & Documentation.	Lot	2	
07-01-11106	-Medium Capacity Dehydrator.	Unit	1	
07-01-11107	-10% Spares.	Lot	1	
07-01-11108	-DC Power Plant Including Modular Switched Rectifier system 48V/30A. module(3+1)configuration, 48V, 250Ah Lead- Acid Sealed- Batteries (2sets), Cabinets, Installation materials, cables, tools & Documentation.	Lot	1	
07-01-11109	-Spare Parts & Spare Units.	Lot	1	
07-01-11110	-Air Conditioners, Duplicated 18000 / 24000 BTU Unit All Complete With, Piping & installation materials & fixtures, Spare parts & Documentation.	Lot	2	
07-01-11111	AC Power Plant Including Diesel Engine Generator Capacity 50 KVA, Dual Set, all complete with, Daily Fuel Tank, Fan, Piping, Control cubicle & Alarms, Installation Materials, Documentation & Tools	Lot	1	
07-01-11112	-Spare parts & PCB's.	Lot	1	
07-01-11113	-SDH Multiplex Equipment Including STM-16 Mutliplexer , STM-4,STM-1Multiplexer Subrack with redundant common units ADM, Terminal configuration , Tributary & Elect. Aggregate Cards (3x34Mb/s, 21x2Mb/s,140/155Mb/s switch, 7x2Mb/s) Access &Connection Modules, Full Matrix (duplicated),Auxiliary /Engineering order wire, Installation Materials & Tools, Racks with power supply unit (duplicated) and cable head, Digital	Lot	1	

07-01-11114	Distribution Frames & Documentation for each . -Primary Multiplex (PCM-30CH.) Subrack with common units & channel PCB's of different configs. Installed in Racks with power supply units, cable head & Digital Distribution Frames.	Lot	1	
07-01-11115	-Spare parts & spare units.			
07-01-11116	-Installation materials & tools.			
07-01-11117	-Network Management Equipment consisting of Local Network Management System platform (Hard ware),System software packages all complete with craft terminals, Mediation , Interface, and connection cards & modules, Installation Materials & Tools, Documentation & Spare Parts for each item.	Lot	1	
07-01-11118	Test Instruments including : Digital Multimeter, Frequency Counter, Power Meter , PCM Multiplex Tester , RF Sweep Generator ,VSWR Test Set, Scalar Network Analyzer , RF Spectrum Analyzer, SDH Analyzer for STM-1,TX / RX MW Link Analyzer, PDH Analyzer (2Mb/s),Oscilloscope 500 MHZ Dual channel, Vedio Test Set, RF Attenuators Fixed & Variable (0 - 60)DB, Cables & Adapters Waveguide / Coax. Adapters & relevant Documentation.	Lot	1	
07-01-11119	-Specific Tools including: Specific Maintenance Tools Station Tools, Special Tools for waveguide & General Installation Tools.	Lot	1	
07-01-11120	-Factory Training Abroad.	Trainee	1	
07-01-11121	-Training In Iraq.	Trainee	2	
07-01-11222	-Supervision Services (Supplier Expert).	Expert	1	

ANNEX SEVEN / Telecommunications

Sub - sector : Interconnection network between local exchanges in Baghdad.

Site - Name : SALHYIA

Code	Item Description	Unit	Qty.	Complement ary Items
07-01-12100	SDH Microwave Radio Equipment, STM-1, 13GHZ(2+1) Frequency Diversity Radio Terminal All Complete with Transmitters, Receivers, 128 QAM Modems Modules ,Protection Switch, Engineering order wire channel, 2Mb/s auxiliary traffic, Interface to central Network management, Peripherals (Lap Top PC , ETC.....), Installed in Rack with 48V. d/c unit (duplicated).	Lot	2	
07-01-12101	-Installation materials.	Lot	2	
07-01-12102	-Spare parts & spare units.	Lot	2	
07-01-12103	-Documentation.	Set	1	
07-01-12104	Microwave Parabolic Dish (1.8m., 2.4m.)Antenna with (one/ two)Polarization's all complete with Connector Flanges, Tower Attachment, Installation materials & Documentation.	Lot	2	
07-01-12105	-Microwave Elliptical waveguide Feeder Run, 11/13 GHZ band all complete with Pressure Window, Fixture clamps, Earthing Kits, Installation materials & Documentation.	Lot	2	
07-01-12106	-Medium Capacity Dehydrator.	Unit	1	
07-01-12107	-10% Spares.	Lot	1	
07-01-12108	-DC Power Plant Including Modular Switched Rectifier system 48V/30A. module(3+1)configuration, 48V, 250Ah Lead- Acid Sealed- Batteries (2sets), Cabinets, Installation materials, cables, tools & Documentation.	Lot	1	
07-01-12109	-Spare Parts & Spare Units.	Lot	1	
07-01-12110	-Air Conditioners, Duplicated 18000 / 24000 BTU Unit All Complete With, Piping & installation materials & fixtures, Spare parts & Documentation.	Lot	2	
07-01-12111	AC Power Plant Including Diesel Engine Generator Capacity 50 KVA, Dual Set, all complete with, Daily Fuel Tank, Fan, Piping, Control cubicle & Alarms, Installation Materials, Documentation & Tools	Lot	1	
07-01-12112	-Spare parts & PCB's.	Lot	1	
07-01-12113	-SDH Multiplex Equipment Including STM-16 Mutliplexer , STM-4,STM-1Multiplexer Subrack with redundant common units ADM, Terminal configuration , Tributary & Elect. Aggregate Cards (3x34Mb/s, 21x2Mb/s,140/155Mb/s switch, 7x2Mb/s) Access &Connection Modules, Full Matrix (duplicated),Auxiliary /Engineering order wire, Installation Materials & Tools, Racks with power supply unit (duplicated) and cable head, Digital	Lot	1	

07-01-12114	Distribution Frames & Documentation for each . -Primary Multiplex (PCM-30CH.) Subrack with common units & channel PCB's of different configs. Installed in Racks with power supply units, cable head & Digital Distribution Frames.	Lot	1	
07-01-12115	-Spare parts & spare units.			
07-01-12116	-Installation materials & tools.			
07-01-12117	-Network Management Equipment consisting of Local Network Management System platform (Hard ware),System software packages all complete with craft terminals, Mediation , Interface, and connection cards & modules, Installation Materials & Tools, Documentation & Spare Parts for each item.	Lot	1	
07-01-12118	Test Instruments including : Digital Multimeter, Frequency Counter, Power Meter , PCM Multiplex Tester , RF Sweep Generator ,VSWR Test Set, Scalar Network Analyzer , RF Spectrum Analyzer, SDH Analyzer for STM-1,TX / RX MW Link Analyzer, PDH Analyzer (2Mb/s),Oscilloscope 500 MHZ Dual channel, Vedio Test Set, RF Attenuators Fixed & Variable (0 - 60)DB, Cables & Adapters Waveguide / Coax. Adapters & relevant Documentation.	Lot	1	
07-01-12119	-Specific Tools including: Specific Maintenance Tools Station Tools, Special Tools for waveguide & General Installation Tools.	Lot	1	
07-01-12120	-Factory Training Abroad.	Trainee	1	
07-01-12121	-Training In Iraq.	Trainee	2	
07-01-12122	-Supervision Services (Supplier Expert).	Expert	1	

ANNEX SEVEN / Telecommunications

Sub - sector : Interconnection network between local exchanges in Baghdad.

Site - Name : AL DUBAT

Code	Item Description	Unit	Qty.	Complement ary Items
07-01-13100	SDH Microwave Radio Equipment, STM-1, 13GHZ(2+1) Frequency Diversity Radio Terminal All Complete with Transmitters, Receivers, 128 QAM Modems Modules ,Protection Switch, Engineering order wire channel, 2Mb/s auxiliary traffic, Interface to central Network management, Peripherals (Lap Top PC , ETC.....), Installed in Rack with 48V. d/c unit (duplicated).	Lot	2	
07-01-13101	-Installation materials.	Lot	2	
07-01-13102	-Spare parts & spare units.	Lot	2	
07-01-13103	-Documentation.	Set	1	
07-01-13104	Microwave Parabolic Dish (1.8m., 2.4m.)Antenna with (one/ two)Polarization's all complete with Connector Flanges, Tower Attachment, Installation materials & Documentation.	Lot	2	
07-01-13105	-Microwave Elliptical waveguide Feeder Run, 11/13 GHZ band all complete with Pressure Window, Fixture clamps, Earthing Kits, Installation materials & Documentation.	Lot	2	
07-01-13106	-Medium Capacity Dehydrator.	Unit	1	
07-01-13107	-10% Spares.	Lot	1	
07-01-13108	-DC Power Plant Including Modular Switched Rectifier system 48V/30A. module(3+1)configuration, 48V, 250Ah Lead- Acid Sealed- Batteries (2sets), Cabinets, Installation materials, cables, tools & Documentation.	Lot	1	
07-01-13109	-Spare Parts & Spare Units.	Lot	1	
07-01-13110	-Air Conditioners, Duplicated 18000 / 24000 BTU Unit All Complete With, Piping & installation materials & fixtures, Spare parts & Documentation.	Lot	2	
07-01-13111	AC Power Plant Including Diesel Engine Generator Capacity 50 KVA, Dual Set, all complete with, Daily Fuel Tank, Fan, Piping, Control cubicle & Alarms, Installation Materials, Documentation & Tools	Lot	1	
07-01-13112	-Spare parts & PCB's.	Lot	1	
07-01-13113	-SDH Multiplex Equipment Including STM-16 Mutliplexer , STM-4,STM-1Multiplexer Subrack with redundant common units ADM, Terminal configuration , Tributary & Elect. Aggregate Cards (3x34Mb/s, 21x2Mb/s,140/155Mb/s switch, 7x2Mb/s) Access &Connection Modules, Full Matrix (duplicated),Auxiliary /Engineering order wire, Installation Materials & Tools, Racks with power supply unit (duplicated) and cable head, Digital	Lot	1	

07-01-13114	Distribution Frames & Documentation for each .			
07-01-13115	-Primary Multiplex (PCM-30CH.) Subrack with common units & channel PCB's of different configs. Installed in Racks with power supply units, cable head & Digital Distribution Frames.	Lot	1	
07-01-13116	-Spare parts & spare units.			
	-Installation materials & tools.			
07-01-13117	-Network Management Equipment consisting of Local Network Management System platform (Hard ware),System software packages all complete with craft terminals, Mediation , Interface, and connection cards & modules, Installation Materials & Tools, Documentation & Spare Parts for each item.	Lot	1	
07-01-13118	Test Instruments including : Digital Multimeter, Frequency Counter, Power Meter , PCM Multiplex Tester , RF Sweep Generator ,VSWR Test Set, Scalar Network Analyzer , RF Spectrum Analyzer, SDH Analyzer for STM-1,TX / RX MW Link Analyzer, PDH Analyzer (2Mb/s),Oscilloscope 500 MHZ Dual channel, Vedio Test Set, RF Attenuators Fixed & Variable (0 - 60)DB, Cables & Adapters Waveguide / Coax. Adapters & relevant Documentation.	Lot	1	
07-01-13119	-Specific Tools including: Specific Maintenance Tools Station Tools, Special Tools for waveguide & General Installation Tools.	Lot	1	
07-01-13120	-Factory Training Abroad.	Trainee	1	
07-01-13121	-Training In Iraq.	Trainee	2	
07-01-13122	-Supervision Services (Supplier Expert).	Expert	1	

ANNEX SEVEN / Telecommunications

Sub - sector : Interconnection network between local exchanges in Baghdad.

Site - Name : BAYAA

Code	Item Description	Unit	Qty.	Complement ary Items
07-01-14100	SDH Microwave Radio Equipment, STM-1, 13GHZ(2+1) Frequency Diversity Radio Terminal All Complete with Transmitters, Receivers, 128 QAM Modems Modules ,Protection Switch, Engineering order wire channel, 2Mb/s auxiliary traffic, Interface to central Network management, Peripherals (Lap Top PC , ETC.....), Installed in Rack with 48V. d/c unit (duplicated).	Lot	2	
07-01-14101	-Installation materials.	Lot	2	
07-01-14102	-Spare parts & spare units.	Lot	2	
07-01-14103	-Documentation.	Set	1	
07-01-14104	Microwave Parabolic Dish (1.8m., 2.4m.)Antenna with (one/ two)Polarization's all complete with Connector Flanges, Tower Attachment, Installation materials & Documentation.	Lot	2	
07-01-14105	-Microwave Elliptical waveguide Feeder Run, 11/13 GHZ band all complete with Pressure Window, Fixture clamps, Earthing Kits, Installation materials & Documentation.	Lot	2	
07-01-14106	-Medium Capacity Dehydrator.	Unit	1	
07-01-14107	-10% Spares.	Lot	1	
07-01-14108	-DC Power Plant Including Modular Switched Rectifier system 48V/30A. module(3+1)configuration, 48V, 250Ah Lead- Acid Sealed- Batteries (2sets), Cabinets, Installation materials, cables, tools & Documentation.	Lot	1	
07-01-14109	-Spare Parts & Spare Units.	Lot	1	
07-01-14110	-Air Conditioners, Duplicated 18000 / 24000 BTU Unit All Complete With, Piping & installation materials & fixtures, Spare parts & Documentation.	Lot	2	
07-01-14111	AC Power Plant Including Diesel Engine Generator Capacity 50 KVA, Dual Set, all complete with, Daily Fuel Tank, Fan, Piping, Control cubicle & Alarms, Installation Materials, Documentation & Tools	Lot	1	
07-01-14112	-Spare parts & PCB's.	Lot	1	
07-01-14113	-SDH Multiplex Equipment Including STM-16 Mutlplexer , STM-4,STM-1Multiplexer Subrack with redundant common units ADM, Terminal configuration , Tributary & Elect. Aggregate Cards (3x34Mb/s, 21x2Mb/s,140/155Mb/s switch, 7x2Mb/s) Access &Connection Modules, Full Matrix (duplicated),Auxiliary /Engineering order wire, Installation Materials & Tools, Racks with power supply unit (duplicated) and cable head, Digital Distribution Frames & Documentation for each .	Lot	1	

07-01-14114	-Primary Multiplex (PCM-30CH.) Subrack with common units & channel PCB's of different configs. Installed in Racks with power supply units, cable head & Digital Distribution Frames.	Lot	1	
07-01-14115	-Spare parts & spare units.			
07-01-14116	-Installation materials & tools.			
07-01-14117	-Network Management Equipment consisting of Local Network Management System platform (Hard ware),System software packages all complete with craft terminals, Mediation , Interface, and connection cards & modules, Installation Materials & Tools, Documentation & Spare Parts for each item.	Lot	1	
07-01-14118	Test Instruments including : Digital Multimeter, Frequency Counter, Power Meter , PCM Multiplex Tester , RF Sweep Generator ,VSWR Test Set, Scalar Network Analyzer , RF Spectrum Analyzer, SDH Analyzer for STM-1,TX / RX MW Link Analyzer, PDH Analyzer (2Mb/s),Oscilloscope 500 MHZ Dual channel, Vedio Test Set, RF Attenuators Fixed & Variable (0 - 60)DB, Cables & Adapters Waveguide / Coax. Adapters & relevant Documentation.	Lot	1	
07-01-14119	-Specific Tools including: Specific Maintenance Tools Station Tools, Special Tools for waveguide & General Installation Tools.	Lot	1	
07-01-14120	-Factory Training Abroad.	Trainee	1	
07-01-14121	-Training In Iraq.	Trainee	2	
07-01-14122	-Supervision Services (Supplier Expert).	Expert	1	

ANNEX SEVEN / Telecommunications

Sub - sector : Interconnection network between local exchanges in Baghdad.

Site - Name : DORA

Code	Item Description	Unit	Qty.	Complement ary Items
07-01-15100	SDH Microwave Radio Equipment, STM-1, 13GHZ(2+1) Frequency Diversity Radio Terminal All Complete with Transmitters, Receivers, 128 QAM Modems Modules ,Protection Switch, Engineering order wire channel, 2Mb/s auxiliary traffic, Interface to central Network management, Peripherals (Lap Top PC , ETC.....), Installed in Rack with 48V. d/c unit (duplicated).	Lot	2	
07-01-15101	-Installation materials.	Lot	2	
07-01-15102	-Spare parts & spare units.	Lot	2	
07-01-15103	-Documentation.	Set	1	
07-01-15104	Microwave Parabolic Dish (1.8m., 2.4m.)Antenna with (one/ two)Polarization's all complete with Connector Flanges, Tower Attachment, Installation materials & Documentation.	Lot	2	
07-01-15105	-Microwave Elliptical waveguide Feeder Run, 11/13 GHZ band all complete with Pressure Window, Fixture clamps, Earthing Kits, Installation materials & Documentation.	Lot	2	
07-01-15106	-Medium Capacity Dehydrator.	Unit	1	
07-01-15107	-10% Spares.	Lot	1	
07-01-15108	-DC Power Plant Including Modular Switched Rectifier system 48V/30A. module(3+1)configuration, 48V, 250Ah Lead- Acid Sealed- Batteries (2sets), Cabinets, Installation materials, cables, tools & Documentation.	Lot	1	
07-01-15109	-Spare Parts & Spare Units.	Lot	1	
07-01-15110	-Air Conditioners, Duplicated 18000 / 24000 BTU Unit All Complete With, Piping & installation materials & fixtures, Spare parts & Documentation.	Lot	2	
07-01-15111	AC Power Plant Including Diesel Engine Generator Capacity 50 KVA, Dual Set, all complete with, Daily Fuel Tank, Fan, Piping, Control cubicle & Alarms, Installation Materials, Documentation & Tools	Lot	1	
07-01-15112	-Spare parts & PCB's.	Lot	1	
07-01-15113	-SDH Multiplex Equipment Including STM-16 Mutliplexer , STM-4,STM-1Multiplexer Subrack with redundant common units ADM, Terminal configuration , Tributary & Elect. Aggregate Cards (3x34Mb/s, 21x2Mb/s,140/155Mb/s switch, 7x2Mb/s) Access &Connection Modules, Full Matrix (duplicated),Auxiliary /Engineering order wire, Installation Materials & Tools, Racks with power supply unit (duplicated) and cable head, Digital	Lot	1	

07-01-15114	Distribution Frames & Documentation for each .			
07-01-15115	-Primary Multiplex (PCM-30CH.) Subrack with common units & channel PCB's of different configs. Installed in Racks with power supply units, cable head & Digital Distribution Frames.	Lot	1	
07-01-15116	-Spare parts & spare units.			
	-Installation materials & tools.			
07-01-15117	-Network Management Equipment consisting of Local Network Management System platform (Hard ware),System software packages all complete with craft terminals, Mediation , Interface, and connection cards & modules, Installation Materials & Tools, Documentation & Spare Parts for each item.	Lot	1	
07-01-15118	Test Instruments including : Digital Multimeter, Frequency Counter, Power Meter , PCM Multiplex Tester , RF Sweep Generator ,VSWR Test Set, Scalar Network Analyzer , RF Spectrum Analyzer, SDH Analyzer for STM-1,TX / RX MW Link Analyzer, PDH Analyzer (2Mb/s),Oscilloscope 500 MHZ Dual channel, Vedio Test Set, RF Attenuators Fixed & Variable (0 - 60)DB, Cables & Adapters Waveguide / Coax. Adapters & relevant Documentation.	Lot	1	
07-01-15119	-Specific Tools including: Specific Maintenance Tools Station Tools, Special Tools for waveguide & General Installation Tools.	Lot	1	
07-01-15120	-Factory Training Abroad.	Trainee	1	
07-01-15121	-Training In Iraq.	Trainee	2	
07-01-15122	-Supervision Services (Supplier Expert).	Expert	1	

ANNEX SEVEN / Telecommunications

Sub - sector : Interconnection network between local exchanges in Baghdad.

Site - Name : FIDAA

Code	Item Description	Unit	Qty.	Complement ary Items
07-01-16100	SDH Microwave Radio Equipment, STM-1, 13GHZ(2+1) Frequency Diversity Radio Terminal All Complete with Transmitters, Receivers, 128 QAM Modems Modules ,Protection Switch, Engineering order wire channel, 2Mb/s auxiliary traffic, Interface to central Network management, Peripherals (Lap Top PC , ETC.....), Installed in Rack with 48V. d/c unit (duplicated).	Lot	2	
07-01-16101	-Installation materials.	Lot	2	
07-01-16102	-Spare parts & spare units.	Lot	2	
07-01-16103	-Documentation.	Set	1	
07-01-16104	Microwave Parabolic Dish (1.8m., 2.4m.)Antenna with (one/ two)Polarization's all complete with Connector Flanges, Tower Attachment, Installation materials & Documentation.	Lot	2	
07-01-16105	-Microwave Elliptical waveguide Feeder Run, 11/13 GHZ band all complete with Pressure Window, Fixture clamps, Earthing Kits, Installation materials & Documentation.	Lot	2	
07-01-16106	-Medium Capacity Dehydrator.	Unit	1	
07-01-16107	-10% Spares.	Lot	1	
07-01-16108	-DC Power Plant Including Modular Switched Rectifier system 48V/30A. module(3+1)configuration, 48V, 250Ah Lead- Acid Sealed- Batteries (2sets), Cabinets, Installation materials, cables, tools & Documentation.	Lot	1	
07-01-16109	-Spare Parts & Spare Units.	Lot	1	
07-01-16110	-Air Conditioners, Duplicated 18000 / 24000 BTU Unit All Complete With, Piping & installation materials & fixtures, Spare parts & Documentation.	Lot	2	
07-01-16111	AC Power Plant Including Diesel Engine Generator Capacity 50 KVA, Dual Set, all complete with, Daily Fuel Tank, Fan, Piping, Control cubicle & Alarms, Installation Materials, Documentation & Tools	Lot	1	
07-01-16112	-Spare parts & PCB's.	Lot	1	
07-01-16113	-SDH Multiplex Equipment Including STM-16 Mutliplexer , STM-4,STM-1Multiplexer Subrack with redundant common units ADM, Terminal configuration , Tributary & Elect. Aggregate Cards (3x34Mb/s, 21x2Mb/s,140/155Mb/s switch, 7x2Mb/s) Access &Connection Modules, Full Matrix (duplicated),Auxiliary /Engineering order wire, Installation Materials & Tools, Racks with power supply unit (duplicated) and cable head, Digital	Lot	1	

07-01-16114	Distribution Frames & Documentation for each .			
07-01-16115	-Primary Multiplex (PCM-30CH.) Subrack with common units & channel PCB's of different configs. Installed in Racks with power supply units, cable head & Digital Distribution Frames.	Lot	1	
07-01-16116	-Spare parts & spare units.			
	-Installation materials & tools.			
07-01-16117	-Network Management Equipment consisting of Local Network Management System platform (Hard ware),System software packages all complete with craft terminals, Mediation , Interface, and connection cards & modules, Installation Materials & Tools, Documentation & Spare Parts for each item.	Lot	1	
07-01-16118	Test Instruments including : Digital Multimeter, Frequency Counter, Power Meter , PCM Multiplex Tester , RF Sweep Generator ,VSWR Test Set, Scalar Network Analyzer , RF Spectrum Analyzer, SDH Analyzer for STM-1,TX / RX MW Link Analyzer, PDH Analyzer (2Mb/s),Oscilloscope 500 MHZ Dual channel, Vedio Test Set, RF Attenuators Fixed & Variable (0 - 60)DB, Cables & Adapters Waveguide / Coax. Adapters & relevant Documentation.	Lot	1	
07-01-16119	-Specific Tools including: Specific Maintenance Tools Station Tools, Special Tools for waveguide & General Installation Tools.	Lot	1	
07-01-16120	-Factory Training Abroad.	Trainee	1	
07-01-16121	-Training In Iraq.	Trainee	2	
07-01-16122	-Supervision Services (Supplier Expert).	Expert	1	

ANNEX SEVEN / Telecommunications

Sub - sector : Interconnection network between local exchanges in Baghdad.

Site - Name : ABU GRAIB

Code	Item Description	Unit	Qty.	Complement ary Items
07-01-17100	SDH Microwave Radio Equipment, STM-1, 13GHZ(2+1) Frequency Diversity Radio Terminal All Complete with Transmitters, Receivers, 128 QAM Modems Modules ,Protection Switch, Engineering order wire channel, 2Mb/s auxiliary traffic, Interface to central Network management, Peripherals (Lap Top PC , ETC.....), Installed in Rack with 48V. d/c unit (duplicated).	Lot	2	
07-01-17101	-Installation materials.	Lot	2	
07-01-17102	-Spare parts & spare units.	Lot	2	
07-01-17103	-Documentation.	Set	1	
07-01-17104	Microwave Parabolic Dish (1.8m., 2.4m.)Antenna with (one/ two)Polarization's all complete with Connector Flanges, Tower Attachment, Installation materials & Documentation.	Lot	2	
07-01-17105	-Microwave Elliptical waveguide Feeder Run, 11/13 GHZ band all complete with Pressure Window, Fixture clamps, Earthing Kits, Installation materials & Documentation.	Lot	2	
07-01-17106	-Medium Capacity Dehydrator.	Unit	1	
07-01-17107	-10% Spares.	Lot	1	
07-01-17108	-DC Power Plant Including Modular Switched Rectifier system 48V/30A. module(3+1)configuration, 48V, 250Ah Lead- Acid Sealed- Batteries (2sets), Cabinets, Installation materials, cables, tools & Documentation.	Lot	1	
07-01-17109	-Spare Parts & Spare Units.	Lot	1	
07-01-17110	-Air Conditioners, Duplicated 18000 / 24000 BTU Unit All Complete With, Piping & installation materials & fixtures, Spare parts & Documentation.	Lot	2	
07-01-17111	AC Power Plant Including Diesel Engine Generator Capacity 50 KVA, Dual Set, all complete with, Daily Fuel Tank, Fan, Piping, Control cubicle & Alarms, Installation Materials, Documentation & Tools	Lot	1	
07-01-17112	-Spare parts & PCB's.	Lot	1	
07-01-17113	-SDH Multiplex Equipment Including STM-16 Mutliplexer , STM-4,STM-1Multiplexer Subrack with redundant common units ADM, Terminal configuration , Tributary & Elect. Aggregate Cards (3x34Mb/s, 21x2Mb/s,140/155Mb/s switch, 7x2Mb/s) Access &Connection Modules, Full Matrix (duplicated),Auxiliary /Engineering order wire, Installation Materials & Tools, Racks with power supply unit (duplicated) and cable head, Digital	Lot	1	

07-01-17114	Distribution Frames & Documentation for each .			
07-01-17115	-Primary Multiplex (PCM-30CH.) Subrack with common units & channel PCB's of different configs. Installed in Racks with power supply units, cable head & Digital Distribution Frames.	Lot	1	
07-01-17116	-Spare parts & spare units.			
	-Installation materials & tools.			
07-01-17117	-Network Management Equipment consisting of Local Network Management System platform (Hard ware),System software packages all complete with craft terminals, Mediation , Interface, and connection cards & modules, Installation Materials & Tools, Documentation & Spare Parts for each item.	Lot	1	
07-01-17118	Test Instruments including : Digital Multimeter, Frequency Counter, Power Meter , PCM Multiplex Tester , RF Sweep Generator ,VSWR Test Set, Scalar Network Analyzer , RF Spectrum Analyzer, SDH Analyzer for STM-1,TX / RX MW Link Analyzer, PDH Analyzer (2Mb/s),Oscilloscope 500 MHZ Dual channel, Vedio Test Set, RF Attenuators Fixed & Variable (0 - 60)DB, Cables & Adapters Waveguide / Coax. Adapters & relevant Documentation.	Lot	1	
07-01-17119	-Specific Tools including: Specific Maintenance Tools Station Tools, Special Tools for waveguide & General Installation Tools.	Lot	1	
07-01-17120	-Factory Training Abroad.	Trainee	1	
07-01-17121	-Training In Iraq.	Trainee	2	
07-01-17122	-Supervision Services (Supplier Expert).	Expert	1	

ANNEX SEVEN / Telecommunications

Sub - sector : Interconnection network between local exchanges in Baghdad.

Site - Name : GHAZ

Code	Item Description	Unit	Qty.	Complement ary Items
07-01-18100	SDH Microwave Radio Equipment, STM-1, 13GHZ(2+1) Frequency Diversity Radio Terminal All Complete with Transmitters, Receivers, 128 QAM Modems Modules ,Protection Switch, Engineering order wire channel, 2Mb/s auxiliary traffic, Interface to central Network management, Peripherals (Lap Top PC , ETC.....), Installed in Rack with 48V. d/c unit (duplicated).	Lot	1	
07-01-18101	-Installation materials.	Lot	1	
07-01-18102	-Spare parts & spare units.	Lot	1	
07-01-18103	-Documentation.	Set	1	
07-01-18104	Microwave Parabolic Dish (1.8m., 2.4m.)Antenna with (one/ two)Polarization's all complete with Connector Flanges, Tower Attachment, Installation materials & Documentation.	Lot	1	
07-01-18105	-Microwave Elliptical waveguide Feeder Run, 11/13 GHZ band all complete with Pressure Window, Fixture clamps, Earthing Kits, Installation materials & Documentation.	Lot	1	
07-01-18106	-Medium Capacity Dehydrator.	Unit	1	
07-01-18107	-10% Spares.	Lot	1	
07-01-18108	-DC Power Plant Including Modular Switched Rectifier system 48V/30A. module(3+1)configuration, 48V, 250Ah Lead- Acid Sealed- Batteries (2sets), Cabinets, Installation materials, cables, tools & Documentation.	Lot	1	
07-01-18109	-Spare Parts & Spare Units.	Lot	1	
07-01-18110	-Air Conditioners, Duplicated 18000 / 24000 BTU Unit All Complete With, Piping & installation materials & fixtures, Spare parts & Documentation.	Lot	2	
07-01-18111	AC Power Plant Including Diesel Engine Generator Capacity 50 KVA, Dual Set, all complete with, Daily Fuel Tank, Fan, Piping, Control cubicle & Alarms, Installation Materials, Documentation & Tools	Lot	1	
07-01-18112	-Spare parts & PCB's.	Lot	1	
07-01-18113	-SDH Multiplex Equipment Including STM-16 Mutliplexer , STM-4,STM-1Multiplexer Subrack with redundant common units ADM, Terminal configuration , Tributary & Elect. Aggregate Cards (3x34Mb/s, 21x2Mb/s,140/155Mb/s switch, 7x2Mb/s) Access &Connection Modules, Full Matrix (duplicated),Auxiliary /Engineering order wire, Installation Materials & Tools, Racks with power supply unit (duplicated) and cable head, Digital	Lot	1	

07-01-18114	Distribution Frames & Documentation for each .			
07-01-18115	-Primary Multiplex (PCM-30CH.) Subrack with common units & channel PCB's of different configs. Installed in Racks with power supply units, cable head & Digital Distribution Frames.	Lot	1	
07-01-18116	-Spare parts & spare units.			
	-Installation materials & tools.			
07-01-18117	-Network Management Equipment consisting of Local Network Management System platform (Hard ware),System software packages all complete with craft terminals, Mediation , Interface, and connection cards & modules, Installation Materials & Tools, Documentation & Spare Parts for each item.	Lot	1	
07-01-18118	Test Instruments including : Digital Multimeter, Frequency Counter, Power Meter , PCM Multiplex Tester , RF Sweep Generator ,VSWR Test Set, Scalar Network Analyzer , RF Spectrum Analyzer, SDH Analyzer for STM-1,TX / RX MW Link Analyzer, PDH Analyzer (2Mb/s),Oscilloscope 500 MHZ Dual channel, Vedio Test Set, RF Attenuators Fixed & Variable (0 - 60)DB, Cables & Adapters Waveguide / Coax. Adapters & relevant Documentation.	Lot	1	
07-01-18119	-Specific Tools including: Specific Maintenance Tools Station Tools, Special Tools for waveguide & General Installation Tools.	Lot	1	
07-01-18120	-Factory Training Abroad.	Trainee	1	
07-01-18121	-Training In Iraq.	Trainee	2	
07-01-18122	-Supervision Services (Supplier Expert).	Expert	1	

ANNEX SEVEN / Telecommunications

Sub - sector : Interconnection network between local exchanges in Baghdad.

Site - Name : KAMALIYA

Code	Item Description	Unit	Qty.	Complement ary Items
07-01-19100	SDH Microwave Radio Equipment, STM-1, 13GHZ(1+1) Frequency Diversity Radio Terminal All Complete with Transmitters, Receivers, 128 QAM Modems Modules ,Protection Switch, Engineering order wire channel, 2Mb/s auxiliary traffic, Interface to central Network management, Peripherals (Lap Top PC , ETC.....), Installed in Rack with 48V. d/c unit (duplicated).	Lot	1	
07-01-19101	-Installation materials.	Lot	1	
07-01-19102	-Spare parts & spare units.	Lot	1	
07-01-19103	-Documentation.	Set	1	
07-01-19104	Microwave Parabolic Dish (1.8m., 2.4m.)Antenna with (one/ two)Polarization's all complete with Connector Flanges, Tower Attachment, Installation materials & Documentation.	Lot	1	
07-01-19105	-Microwave Elliptical waveguide Feeder Run, 11/13 GHZ band all complete with Pressure Window, Fixture clamps, Earthing Kits, Installation materials & Documentation.	Lot	1	
07-01-19106	-Medium Capacity Dehydrator.	Unit	1	
07-01-19107	-10% Spares.	Lot	1	
07-01-19108	-DC Power Plant Including Modular Switched Rectifier system 48V/30A. module(3+1)configuration, 48V, 250Ah Lead- Acid Sealed- Batteries (2sets), Cabinets, Installation materials, cables, tools & Documentation.	Lot	1	
07-01-19109	-Spare Parts & Spare Units.	Lot	1	
07-01-19110	-Air Conditioners, Duplicated 18000 / 24000 BTU Unit All Complete With, Piping & installation materials & fixtures, Spare parts & Documentation.	Lot	2	
07-01-19111	AC Power Plant Including Diesel Engine Generator Capacity 50 KVA, Dual Set, all complete with, Daily Fuel Tank, Fan, Piping, Control cubicle & Alarms, Installation Materials, Documentation & Tools	Lot	1	
07-01-19112	-Spare parts & PCB's.	Lot	1	
07-01-19113	-SDH Multiplex Equipment Including STM-16 Mutliplexer , STM-4,STM-1Multiplexer Subrack with redundant common units ADM, Terminal configuration , Tributary & Elect. Aggregate Cards (3x34Mb/s, 21x2Mb/s,140/155Mb/s switch, 7x2Mb/s) Access &Connection Modules, Full Matrix (duplicated),Auxiliary /Engineering order wire, Installation Materials & Tools, Racks with power supply unit (duplicated) and cable head, Digital	Lot	1	

07-01-19114	Distribution Frames & Documentation for each .			
07-01-19115	-Primary Multiplex (PCM-30CH.) Subrack with common units & channel PCB's of different configs. Installed in Racks with power supply units, cable head & Digital Distribution Frames.	Lot	1	
07-01-19116	-Spare parts & spare units.			
	-Installation materials & tools.			
07-01-19117	-Network Management Equipment consisting of Local Network Management System platform (Hard ware),System software packages all complete with craft terminals, Mediation , Interface, and connection cards & modules, Installation Materials & Tools, Documentation & Spare Parts for each item.	Lot	1	
07-01-19118	Test Instruments including : Digital Multimeter, Frequency Counter, Power Meter , PCM Multiplex Tester , RF Sweep Generator ,VSWR Test Set, Scalar Network Analyzer , RF Spectrum Analyzer, SDH Analyzer for STM-1,TX / RX MW Link Analyzer, PDH Analyzer (2Mb/s),Oscilloscope 500 MHZ Dual channel, Vedio Test Set, RF Attenuators Fixed & Variable (0 - 60)DB, Cables & Adapters Waveguide / Coax. Adapters & relevant Documentation.	Lot	1	
07-01-19119	-Specific Tools including: Specific Maintenance Tools Station Tools, Special Tools for waveguide & General Installation Tools.	Lot	1	
07-01-19120	-Factory Training Abroad.	Trainee	1	
07-01-19121	-Training In Iraq.	Trainee	2	
07-01-19122	-Supervision Services (Supplier Expert).	Expert	1	

ANNEX SEVEN / Telecommunications

Sub - sector : Interconnection network between local exchanges in Baghdad.

Site - Name : BAGHDAD TRAINING CENTER

Code	Item Description	Unit	Qty.	Complement ary Items
07-01-20100	SDH Microwave Radio Equipment, STM-1, 13GHZ(2+1) Frequency Diversity Radio Terminal All Complete with Transmitters, Receivers, 128 QAM Modems Modules ,Protection Switch, Engineering order wire channel, 2Mb/s auxiliary traffic, Interface to central Network management, Peripherals (Lap Top PC , ETC.....), Installed in Rack with 48V. d/c unit (duplicated).	Lot	2	
07-01-20101	-Installation materials.	Lot	2	
07-01-20102	-Spare parts & spare units.	Lot	2	
07-01-20103	-Documentation.	Set	1	
07-01-20104	Microwave Parabolic Dish (1.8m., 2.4m.)Antenna with (one/ two)Polarization's all complete with Connector Flanges, Tower Attachment, Installation materials & Documentation.	Lot	0	
07-01-20105	-Microwave Elliptical waveguide Feeder Run, 11/13 GHZ band all complete with Pressure Window, Fixture clamps, Earthing Kits, Installation materials & Documentation.	Lot	1	
07-01-20106	-Medium Capacity Dehydrator.	Unit	1	
07-01-20107	-10% Spares.	Lot	1	
07-01-20108	-DC Power Plant Including Modular Switched Rectifier system 48V/30A. module(3+1)configuration, 48V, 250Ah Lead- Acid Sealed- Batteries (2sets), Cabinets, Installation materials, cables, tools & Documentation.	Lot	1	
07-01-20109	-Spare Parts & Spare Units.	Lot	1	
07-01-20110	-Air Conditioners, Duplicated 18000 / 24000 BTU Unit All Complete With, Piping & installation materials & fixtures, Spare parts & Documentation.	Lot	2	
07-01-20111	AC Power Plant Including Diesel Engine Generator Capacity 50 KVA, Dual Set, all complete with, Daily Fuel Tank, Fan, Piping, Control cubicle & Alarms, Installation Materials, Documentation & Tools	Lot	1	
07-01-20112	-Spare parts & PCB's.	Lot	1	
07-01-20113	-SDH Multiplex Equipment Including STM-16 Mutliplexer , STM-4,STM-1Multiplexer Subrack with redundant common units ADM, Terminal configuration , Tributary & Elect. Aggregate Cards (3x34Mb/s, 21x2Mb/s,140/155Mb/s switch, 7x2Mb/s) Access &Connection Modules, Full Matrix (duplicated),Auxiliary /Engineering order wire, Installation Materials & Tools, Racks with power supply unit (duplicated) and cable head, Digital	Lot	1	

07-01-20114	Distribution Frames & Documentation for each .			
07-01-20115	-Primary Multiplex (PCM-30CH.) Subrack with common units & channel PCB's of different configs. Installed in Racks with power supply units, cable head & Digital Distribution Frames.	Lot	1	
07-01-20116	-Spare parts & spare units.			
	-Installation materials & tools.			
07-01-20117	-Network Management Equipment consisting of Local Network Management System platform (Hard ware),System software packages all complete with craft terminals, Mediation , Interface, and connection cards & modules, Installation Materials & Tools, Documentation & Spare Parts for each item.	Lot	1	
07-01-20118	Test Instruments including : Digital Multimeter, Frequency Counter, Power Meter , PCM Multiplex Tester , RF Sweep Generator ,VSWR Test Set, Scalar Network Analyzer , RF Spectrum Analyzer, SDH Analyzer for STM-1,TX / RX MW Link Analyzer, PDH Analyzer (2Mb/s),Oscilloscope 500 MHZ Dual channel, Vedio Test Set, RF Attenuators Fixed & Variable (0 - 60)DB, Cables & Adapters Waveguide / Coax. Adapters & relevant Documentation.	Lot	1	
07-01-20119	-Specific Tools including: Specific Maintenance Tools Station Tools, Special Tools for waveguide & General Installation Tools.	Lot	1	
07-01-20120	-Factory Training Abroad.	Trainee	1	
07-01-20121	-Training In Iraq.	Trainee	2	
07-01-20122	-Supervision Services (Supplier Expert).	Expert	1	

ANNEX SEVEN / Telecommunications

Sub - sector : Interconnection network between local exchanges in Baghdad.

Site - Name : BAGHDAD MAINTENANCE CENTER

Code	Item Description	Unit	Qty.	Complementary Items
07-01-21100	SDH Microwave Radio Equipment, STM-1, 13GHZ(2+1) Frequency Diversity Radio Terminal All Complete with Transmitters, Receivers, 128 QAM Modems Modules ,Protection Switch, Engineering order wire channel, 2Mb/s auxiliary traffic, Interface to central Network management, Peripherals (Lap Top PC , ETC.....), Installed in Rack with 48V. d/c unit (duplicated).	Lot	2	
07-01-21101	-Installation materials.	Lot	2	
07-01-21102	-Spare parts & spare units.	Lot	2	
07-01-21103	-Documentation.	Set	1	
07-01-21104	Microwave Parabolic Dish (1.8m., 2.4m.)Antenna with (one/ two)Polarization's all complete with Connector Flanges, Tower Attachment, Installation materials & Documentation.	Lot	0	
07-01-21105	-Microwave Elliptical waveguide Feeder Run, 11/13 GHZ band all complete with Pressure Window, Fixture clamps, Earthing Kits, Installation materials & Documentation.	Lot	1	
07-01-21106	-Medium Capacity Dehydrator.	Unit	1	
07-01-21107	-10% Spares.	Lot	1	
07-01-21108	-DC Power Plant Including Modular Switched Rectifier system 48V/30A. module(3+1)configuration, 48V, 250Ah Lead- Acid Sealed- Batteries (2sets), Cabinets, Installation materials, cables, tools & Documentation.	Lot	1	
07-01-21109	-Spare Parts & Spare Units.	Lot	1	
07-01-21110	-Air Conditioners, Duplicated 18000 / 24000 BTU Unit All Complete With, Piping & installation materials & fixtures, Spare parts & Documentation.	Lot	2	
07-01-21111	AC Power Plant Including Diesel Engine Generator Capacity 50 KVA, Dual Set, all complete with, Daily Fuel Tank, Fan, Piping, Control cubicle & Alarms, Installation Materials, Documentation & Tools	Lot	1	
07-01-21112	-Spare parts & PCB's.	Lot	1	
07-01-21113	-SDH Multiplex Equipment Including STM-16 Mutliplexer , STM-4,STM-1Multiplexer Subrack with redundant common units ADM, Terminal configuration , Tributary & Elect. Aggregate Cards (3x34Mb/s, 21x2Mb/s,140/155Mb/s switch, 7x2Mb/s) Access &Connection Modules, Full Matrix (duplicated),Auxiliary /Engineering order wire, Installation Materials & Tools, Racks with power supply unit (duplicated) and cable head, Digital	Lot	1	

07-01-21114	Distribution Frames & Documentation for each .			
07-01-21115	-Primary Multiplex (PCM-30CH.) Subrack with common units & channel PCB's of different configs. Installed in Racks with power supply units, cable head & Digital Distribution Frames.	Lot	1	
07-01-21116	-Spare parts & spare units.			
	-Installation materials & tools.			
07-01-21117	-Network Management Equipment consisting of Local Network Management System platform (Hard ware),System software packages all complete with craft terminals, Mediation , Interface, and connection cards & modules, Installation Materials & Tools, Documentation & Spare Parts for each item.	Lot	1	
07-01-21118	Test Instruments including : Digital Multimeter, Frequency Counter, Power Meter , PCM Multiplex Tester , RF Sweep Generator ,VSWR Test Set, Scalar Network Analyzer , RF Spectrum Analyzer, SDH Analyzer for STM-1,TX / RX MW Link Analyzer, PDH Analyzer (2Mb/s),Oscilloscope 500 MHZ Dual channel, Vedio Test Set, RF Attenuators Fixed & Variable (0 - 60)DB, Cables & Adapters Waveguide / Coax. Adapters & relevant Documentation.	Lot	1	
07-01-21119	-Specific Tools including: Specific Maintenance Tools Station Tools, Special Tools for waveguide & General Installation Tools.	Lot	1	
07-01-21120	-Factory Training Abroad.	Trainee	2	
07-01-21121	-Training In Iraq.	Trainee	4	
07-01-21122	-Supervision Services (Supplier Expert).	Expert	1	