

SECTOR:
Subsector: Rural Digital Microwave Links

CODE	DESCRIPTION	QUANTITY	UNIT OF MEASURE
ANNEX SEVEN / Telecommunications			
Sub - Sector : Rural Digital Microwave Links			
07-02-00100	SDH Microwave Radio Equipment	UNIT	50
07-02-00101	STM-1) capacity in the 7 GHZ frequency band and within 28 MHz ITU-R channel plan (1+1) Hot stand by (using same frequency channel) Radio Terminal with : Modems Modules; Protection Switch; Engineering order wire channel; 2Mb/s auxiliary traffic; Peripherals (Lap Top PC , etc.....); Rack with 48V. d/c unit (duplicated); Installation & Maintenance tools & materials; Spare parts & spare units.	UNIT	50
07-02-00102	-(16x2Mb/s) in the (15,18) GHZ frequency band and within 28 MHz ITU-R channel plan (1+1) Hot stand by (using same frequency channel) ; High modulation order is preferable; Radio Terminal with : Modems Modules; Protection Switch; Engineering	UNIT	70
07-02-00103	Documentation.	SET	20
07-02-00104	Microwave Antennas		
07-02-00105	Parabolic Dish (1.8, 2.4, 3)m. diameter with: Antenna Radiation Element; Connector Flanges; Tower Attachment; Installation & Maintenance tools & materials.	SET	120
07-02-00106	Microwave Feeders		
07-02-00107	Elliptical wave guide for (7,15,18)GHZ band	8500	METER
07-02-00108	Medium capacity dehydrator.	120	UNIT
07-02-00109	Pressure Window.	120	UNIT
07-02-00110	Fixture clamps.	120	UNIT
07-02-00111	Earthing Kits.	120	UNIT
07-02-00112	Installation materials & tools.	120	UNIT
07-02-00113	Documentation	20	SET
07-02-00114	DC Power Plant		
07-02-00115	Modular switched rectifier system 48V / 30Ampere module (1+1) configuration.	120	SET
07-02-00116	48V, 120Ah Lead-Acid Sealed-Batteries (2sets); with Cabinet; Installation materials , cables, tools; Documentation.	120	SET
07-02-00117	Air Conditioners		
07-02-00118	Duplicated 24000 BTU Split Unit with; Piping & installation materials & fixtures; Spare parts; Documentation.	120	SET
07-02-00119	Diesel Engine Generator		
07-02-00120	Capacity 15 KVA, Dual Set; with : Daily Fuel Tank; Fan; Piping ; Control cubicle & Alarms; Installation Materials & Tools; Spare parts & PCB's.	120	LOT
07-02-00121	Documentation	20	SET
07-02-00122	SDH Multiplex Equipment		

CODE	DESCRIPTION	QUANTITY	UNIT OF MEASURE
07-02-00123	STM-1 Multiplex Subrack with redundant common units with 3 Tributary Cards (21x2Mb/s); Full Matrix (duplicated) with : Access & Connection Modules Auxiliary /Engineering order wire; Telephone Handset; Installation Materials & Tools & Spare parts; Documentation; Racks with power supply unit (duplicated)and cable head; Digital Distribution Frames; Primary Multiplex (PCM-30CH.) Subrack with common units & channel PCB's of different signaling configurations (2W Subscriber; 2W Exchange (4W+ E&M) Exchange , Data all types) ; Equipment craft terminal for programmed control and display with operation soft ware (PCD) or (LCT)- PC & application soft ware for SDH & PDH	50	SET
07-02-00124	(16 x2Mb/s) Multiplex Subrack with redundant common units with 16x2Mb/s Tributary Cards with Access & Connection Modules with : Auxiliary /Engineering order wire; Telephone Handset; Installation Materials & Tools & Spare parts; Documentation; Racks with power supply unit (duplicated)and cable head; Digital Distribution Frames; Primary Multiplex (PCM-30CH.) Subrack with common units & channel PCB's of different signaling configurations (2W Subscriber; 2W Exchange (4W+ E&M) Exchange , Data all types) ; Equipment craft terminal for programmed control and display with operation soft ware (PCD) or (LCT)- PC & application soft ware for SDH & PDH management.	70	SET
07-02-00125	Network Management Equipment For Radio Terminal		
07-02-00126	Local Network Management Equipment (craft terminals); PC IBM Compatible; Mediation , Interface, and connection cards &modules; Installation Materials & Tools; Documentation..	20	SET
07-02-00127	Test Instruments		
07-02-00128	Frequency Counter .	20	UNIT
07-02-00129	Power Meter .	20	UNIT
07-02-00130	PCM Multiplex Tester .	20	UNIT
07-02-00131	RF Sweep Generator .	20	UNIT
07-02-00132	VSWR Test Set.	20	UNIT
07-02-00133	RF Spectrum Analyzer.	20	UNIT
07-02-00134	SDH Analyzer for STM-1.	20	UNIT
07-02-00135	PDH Analyzer (2Mb/s).	20	UNIT
07-02-00136	Oscilloscope 500 MHZ Dual channel.	20	UNIT
07-02-00137	RF Attenuators Fixed & Variable (0 - 60	20	UNIT
07-02-00138	Cables & Adapters.	20	UNIT
07-02-00139	Waveguide / Coax. Adapters.	20	UNIT
07-02-00140	Documentation.	20	
07-02-00141	Specific Tools		
07-02-00142	Specific Maintenance Tools	20	SET
07-02-00143	Station Tools	20	SET
07-02-00144	Special Tools for waveguide.	20	SET

CODE	DESCRIPTION	QUANTITY	UNIT OF MEASURE
07-02-00145	Installation Tools.	20	SET
07-02-00146	Services		
07-02-00147	Factory Training Abroad.	20	man.month
07-02-00148	Training In Iraq.	20	man.month
07-02-00149	Supervision Services (Supplier Expert).	10	man.month
07-02-00150	complete set of mobile digital microwave link	5	sets