

NATIONAL BROADBAND NETWORK PROGRAMME (NBN)
BILL OF QUANTITIES
REQUEST FOR PROPOSAL FOR REPAIRING CIVIL WORKS
& FIBER CABLES & ROUTES TRANSFERING
FOR
SOUTH REGION NETWORK
(AL- KARAK, AL-GOUR, AND AL-TAFILAH)
VOLUME 5- BILL OF QUANTITIES

TABLE OF CONTENTS

GENERAL PREAMBLES _____	3
BILL NO.1-A: Fiber Cable Repair _____	5
BILL NO.1-B: CIVIL WORK _____	9
SUMMARY TABLE FOR BILL NO.1 (A AND B) _____	24
BILL NO. 2: TRANSFERRING ADSS CABLES AND REMOVED CABLES _____	25
BILL NO. 3: MOBILIZATION FEES _____	26
PRICING SUMMARY _____	27

GENERAL PREAMBLES

1. QUANTITIES

- 1.01 Quantities set out in the Bills of Quantities are the estimated quantities and they shall not be taken as the actual and correct quantities for ordering or purchasing of materials.
- 1.02 Works shall be measured net as fixed in position in accordance with the rules contained in this Method of Measurement or except where otherwise stated in a measurement rule applicable to the work.
- 1.03 Dimensions used in calculating quantities are taken to the nearest 10 mm (i.e. 5 mm and over is regarded as 10 mm and less than 5 mm is disregarded).

2. SYMBOLS, ABBREVIATIONS AND DEFINITIONS

The following symbols and abbreviations are using in these Preambles and in the Bills of Quantities:

LM	:	Linear Meter
No.	:	Number
Strand	:	Fiber Strand
Month	:	Month

copy not for sale

BILLS OF QUANTITIES

BILL NO.1-A Fiber Cable Works

- Existing ADSS cables: 393.429 km.
- Existing Duct cables: 845.175 km.

Item No.	Description	Unit	Est. Qty		* Unit Rate J.D.		Amount J.D.
			Number	Words	Number	Words	
1	Duct Fiber Repair Inside UPVC Ducts, Delivery and Installation with all related fittings and accessories (Specifications are in Accordance with Volume IV) approved by the Engineer.						
1.1	Supply 144-Fiber cable.	LM	4000	Four Thousands			
1.2	Install 144-Fiber cable in UPVC ducts.	LM	4000	Four Thousands			
1.3	Supply 96-Fiber cable.	LM	50000	Fifty Thousands			
1.4	Install 96-Fiber cable in UPVC ducts.	LM	50000	Fifty Thousands			
1.5	Supply 72-Fiber cable.	LM	4000	Four Thousands			
1.6	Install 72-Fiber cable in UPVC ducts.	LM	4000	Four Thousands			
1.7	Supply 48-Fiber cable.	LM	4000	Four Thousands			
1.8	Install 48-Fiber cable in UPVC ducts.	LM	4000	Four Thousands			
1.9	Supply 24-Fiber cable.	LM	4000	Four Thousands			
1.10	Install 24-Fiber cable in UPVC ducts.	LM	4000	Four Thousands			
2	ADSS Fiber (Repair Or Transferring), Aerial Optical Fiber Cable (ADSS) Delivery and Installation with all related fittings and accessories approved by the Engineer (Specifications are in Accordance with Volume IV) :						
2.1	Supply 144-Fiber aerial cable (ADSS type).	LM	1000	One Thousand			
2.2	Install 144-Fiber aerial cable (ADSS type) with all needed accessories.	LM	1000	One Thousand			
2.3	Supply 96-Fiber aerial cable (ADSS type).	LM	8000	Eight Thousands			
2.4	Install 96-Fiber aerial cable (ADSS type) with all needed accessories.	LM	8000	Eight Thousands			
2.5	Supply 72-Fiber aerial cable (ADSS type).	LM	6000	Six Thousands			
2.6	Install 72-Fiber aerial cable (ADSS type) with all needed accessories.	LM	6000	Six Thousands			

2.7	Supply 48-Fiber aerial cable (ADSS type).	LM	14000	Fourteen Thousands			
2.8	Install 48-Fiber aerial cable (ADSS type) with all needed accessories.	LM	14000	Fourteen Thousands			
2.9	Supply 24-Fiber aerial cable (ADSS type).	LM	16000	Sixteen Thousands			
2.10	Install 24-Fiber aerial cable (ADSS type) with all needed accessories.	LM	16000	Sixteen Thousands			
3	Splicing Enclosure for Duct Installed Cables Delivery and Installation with all related accessories and fittings approved by the Engineer (Specifications are in Accordance with Volume IV) :						
3.1	Supply splicing enclosure for 144-fiber Duct cable.	No.	10	Ten			
3.2	Splicing and installing 144 F.O splice Enclosure with all related accessories.	No.	20	Twenty			
3.3	Supply splicing enclosure for 96-fiber Duct cable.	No.	30	Thirty			
3.4	Splicing and installing 96 F.O splice Enclosure with all related accessories.	No.	30	Thirty			
3.5	Supply splicing enclosure for 72-fiber Duct cable.	No.	10	Ten			
3.6	Splicing and installing 72 F.O splice Enclosure with all related accessories.	No.	20	Twenty			
3.7	Supply splicing enclosure for 48-fiber Duct cable.	No.	10	Ten			
3.8	Splicing and installing 48 F.O splice Enclosure with all related accessories.	No.	10	Ten			
3.9	Supply splicing enclosure for 24-fiber Duct cable.	No.	15	Fifteen			
3.10	Splicing and installing 24 F.O splice Enclosure with all related accessories.	No.	20	Twenty			
	Sub Total to be Carried to Summary Table for Bill # 1						

Cont'd Bill No. 1-A: Fiber Cable Works:

Item No.	Description	Unit	Est. Qty		* Unit Rate J.D.		Amount J.D.
			Number	Words	Number	Words	
4	Splicing Enclosure for ADSS Installed Cables Delivery and Installation with all related accessories and fittings approved by the Engineer (Specification are in Accordance with Volume IV).						
4.1	Supply ADSS splicing enclosure for 144-fiber cable.	No.	2	Two			
4.2	Splicing and installing 144 F.O ADSS splice Enclosure with all related accessories.	No.	6	Six			
4.3	Supply ADSS splicing enclosure for 96-fiber cable.	No.	10	Ten			
4.4	Splicing and installing 96 F.O ADSS splice Enclosure with all related accessories.	No.	20	Twenty			
4.5	Supply ADSS splicing enclosure for 72-fiber cable.	No.	10	Ten			
4.6	Splicing and installing 72 F.O ADSS splice Enclosure with all related accessories.	No.	20	Twenty			
4.7	Supply ADSS splicing enclosure for 48-fiber cable.	No.	10	Ten			
4.8	Splicing and installing 48 F.O ADSS splice Enclosure with all related accessories.	No.	20	Twenty			
4.9	Supply ADSS splicing enclosure for 24-fiber cable.	No.	10	Ten			
4.10	Splicing and installing 24 F.O ADSS splice Enclosure with all related accessories.	No.	20	Twenty			
5	Splicing Single Strands for Duct and ADSS hanged Cables						
5.1	Re-splice single strand of fiber inside existing Splicing Enclosures or inside existing ODF to remedy high attenuation or breaks on single strands. According to Engineer instructions.	No.	200	Two Hundreds			
	Sub Total to be Carried to Summary Table for Bill # 1						

Cont'd Bill No. 1-A : Fiber Cable Works:

Item No.	Description	Unit	Est. Qty		* Unit Rate J.D.		Amount J.D.
			Number	Words	Number	Words	
6	Supply, Install and Splice Optical Patch Panel to be Mounted inside 19" rack for optical termination. Prices should include all related components, pigtails, connectors. As per Specifications in ANNEX F-3 in Volume IV, and approved by the Engineer).						
6.1	Supply Optical patch panel for 144-fiber cable with all accessories and Patch Cords.	No.	1	One			
6.2	Install and Splice Optical patch panel for 144-fiber cable with all accessories and Patch Cords.	No.	1	One			
6.3	Supply Optical patch panel for 96-fiber cable with all accessories and Patch Cords.	No.	1	One			
6.4	Supply Optical patch panel for 96-fiber cable with all accessories and Patch Cords.	No.	1	One			
6.5	Supply Mini ODF optical shelves with patch panel for 24-fiber cable.	No.	10	Ten			
6.6	Install and Splice Mini Optical patch panel for 24-fiber cable with all accessories and Patch Cords.	No.	10	Ten			
7	Supply and Install Optical Patch Cords 5 m, SM LC-SC duplex.	No.	10	Ten			
8	Supply and Install Optical Patch Cords 3m ,SM LC-SC duplex	No.	10	Ten			
9	Pigtail SC for using inside existing ODFs	No.	50	Fifty			
	Sub Total to be Carried to Summary Table For Bill # 1						

**BILL NO.1-B
CIVIL WORKS**

Item No.	Description	Unit	Est. Qty		* Unit Rate J.D.		Amount J.D.
			Number	Words	Number	Words	
1	<p>Repairing the damaged duct routes as follows:</p> <p>The excavation of the existing trench of fiber optics cables route to repair or replace the damaged ducts and reinstate the terrain to its original status regardless of the type of the soil: rocky, sand, concrete, base course, asphalt, pavement slabs of various types and colours, etc. As per the below specifications and as those mentioned in the RFP :</p> <ul style="list-style-type: none"> ➤ The trench is a 50 cm wide and 100 cm deep. ➤ Repair or Supply and install Two (2) UPVC sub-ducts (1.25 inches in diameter and 1.8 mm thickness) inside one (1) UPVC (4 inches diameter & 3.2 mm thickness) ➤ The Unit Price will be per one Fiber Cut for a distance not exceeding (10m). <p>Prices for this item shall include the following:</p> <ul style="list-style-type: none"> ▪ Excavation, layer backfilling in layers of not more than 20cm each, intensive compacting. Support excavation sides and to transfer the excess outside the site to the allowed locations according to the authorized sites. ▪ Backfilling with Sweileh red sand to protect the pipes, approximately 30 cm high from the excavation base according to the drawings. ▪ Procurement and installation of the warning tape, electronic identifiers, according to the specifications, drawings, the requirements of the responsible authorities, and the supervising Engineer. 	No.	50	Fifty			

	<ul style="list-style-type: none"> ▪ The backfilling using single size material or base course or cement treated base course or concrete in any thickness according to the specifications and requirements of the responsible authorities and the Engineer instructions. ▪ Re-instate the terrain to its original status before excavation regardless of the type of the surface ▪ Repair or Supply and install Two (2) UPVC sub-ducts (1.25 inches in diameter and 1.8 mm thickness) inside one (1) UPVC (4 inches diameter & 3.2 mm thickness) with all related accessories flanges fittings, the adhesives inside the trench. In addition, the galvanised steel pipes 4” in diameter and 2.5 mm thickness to be used in railway and bridge crossing, according to the specifications, drawings, the requirements of the responsible authorities and the agreement of the supervising Engineer. ▪ The price shall include the Flanges, the adhesives, different colours of plastic ropes 6 mm in diameter, quantity: a rope inside each sub-duct, to be used to drag cables in the future. (No knots are allowed). 					
2	<p>As in the previous item No.1 but for distance more than 10 m.</p> <ul style="list-style-type: none"> ➤ Fiber Cuts that exceed (10m) shall be measured and paid for every one meter starting from the first meter. 	LM	1000	One Thousand		
Sub Total to be Carried to Summary Table For Bill # 1						

Cont'd Bill No. 1-B: Civil Works:

Item No.	Description	Unit	Est. Qty		* Unit Rate J.D.		Amount
			Number	Words	Number	Words	J.D.
3	<p>Repairing the damaged duct routes as follows:</p> <p>The excavation of the existing trench of fiber optics cables route to repair or replace the damaged ducts and reinstate the terrain to its original status regardless of the type of the soil: rocky, sand, concrete, base course, asphalt, pavement slabs of various types and colours, etc. As per the below specifications and as those mentioned in the RFP :</p> <ul style="list-style-type: none"> ▪ The trench is a 50 cm wide and 100 cm deep. ▪ Repair or Supply and install Four (4) UPVC sub-ducts (1.25 inches in diameter and 1.8 mm thickness) inside one (1) UPVC (4 inches diameter & 3.2 mm thickness) ▪ The Unit Price will be per one Fiber Cut for a distance not exceeding (10m). ▪ <p>Prices for this item shall include the following:</p> <ul style="list-style-type: none"> ▪ Excavation, layer backfilling in layers of not more than 20cm each, intensive compacting. Support excavation sides and to transfer the excess outside the site to the allowed locations according to the authorized sites. ▪ Backfilling with Sweileh red sand to protect the pipes, approximately 30 cm high from the excavation base according to the drawings. ▪ Procurement and installation of the warning tape, electronic identifiers, according to the specifications, drawings, the requirements of the responsible authorities, and the supervising Engineer. ▪ The backfilling using single size material or base course or cement treated base course or concrete in any thickness according to the specifications and requirements of the responsible authorities and the Engineer instructions. 	No.	70	Seventy			

	<ul style="list-style-type: none"> ▪ Re-instate the terrain to its original status before excavation regardless of the type of the surface. ▪ Repair or Supply and install Four (4) UPVC sub-ducts (1.25 inches in diameter and 1.8 mm thickness) inside one (1) UPVC (4 inches diameter & 3.2 mm thickness) with all related accessories flanges fittings, the adhesives inside the trench. Moreover, the galvanised steel pipes 4” in diameter and 2.5 mm thickness to be used in railway and bridge crossing, according to the specifications, drawings, the requirements of the responsible authorities and the agreement of the supervising Engineer. <p>The price shall include the Flanges, the adhesives, different colours of plastic ropes 6 mm in diameter, quantity: 1, inside each sub-duct, to be used to drag cables in the future. (No knots are allowed).</p>					
4	<p>As in the previous item no.3 but for distance more than 10 m.</p> <ul style="list-style-type: none"> ➤ Fiber Cuts that exceed (10m) shall be measured and paid for every one meter starting from the first meter 	LM	1000	One Thousand		
5	<p>The execution of trench excavation for fiber optics cables 50 cm wide and 100 cm deep regardless of the type of the soil for routes In Non-Urban Areas defined by the Engineer.</p> <p>Prices shall include the following:</p> <ul style="list-style-type: none"> ▪ Excavation, backfilling one layer (using the excavated materials with maximum size of aggregate not more than 10 cm), intensive compacting (as per the specifications of MOHPW and Municipalities in the kingdom). Support excavation sides and to transfer the excess outside the site to the allowed locations according to the authorized sites. ▪ Backfilling with Sweileh red sand to protect the pipes, approximately 30 cm high from the excavation base according to the drawings. ▪ Procurement and installation of the warning tape, electronic identifiers for this mentioned distance herein according to the specifications, drawings, and the requirements of the responsible authorities, and the Engineer's instructions. 		500	Five Hundreds		

Cont'd Bill No. 1-B: CIVIL WORKS:

Item No.	Description	Unit	Est. Qty		* Unit Rate J.D.	
			Number	Words	Number	Words
6	<p>Execute a micro-trench 15 cm X 80 cm for new routes or to repair or replace the damaged ducts and reinstate the terrain to its original status regardless of the type of the soil: rocky, sand, concrete, base course, asphalt, pavement slabs of various types and colours, etc. As per the below specifications and as those mentioned in the RFP :</p> <ul style="list-style-type: none"> ➤ The micro trench is a 15 cm wide and 80 cm deep. ➤ Repair or Supply and install two (2) UPVC sub-ducts (1.25 inches in diameter and 1.8 mm thickness) inside one (1) UPVC (4 inches diameter & 3.2 mm thickness) <p>Prices for this item shall include the following:</p> <ul style="list-style-type: none"> ▪ Excavation, layer backfilling with Flow able concrete placement according to the specifications of the MPWH and the responsible authorities (Flow able concrete with measurement 73*15And 7 cm Asphalt or concrete class A then transfer the excess excavation materials outside the site to the allowed locations according to the authorized sites. ▪ Procurement and installation of the warning tape, electronic identifiers, according to the specifications, drawings, the requirements of the responsible authorities, and the supervising Engineer. ▪ Re-instate the terrain to its original status before excavation regardless of the type of the surface. ▪ The Flanges, the adhesives, different colours of plastic ropes 6 mm in diameter, quantity: a rope inside each sub-duct, to be used to drag cables in the future. (No knots are allowed) ▪ Repair or Supply and install two (2) UPVC sub-ducts (1.25 inches in diameter and 1.8 mm thickness) inside one (1) UPVC (4 inches diameter & 3.2 mm thickness) with all related accessories flanges fittings, the adhesives inside the trench. In addition, the galvanised steel pipes 4" in diameter and 2.5 mm thickness to be used in railway and bridge crossing, according to the specifications, drawings, the requirements of the MPWH and the responsible authorities and the agreement of the supervising Engineer. 	LM	1000	One Thousand		

7	<p>Execute a micro-trench 15 cm X 80 cm for new routes or to repair or replace the damaged ducts and reinstate the terrain to its original status regardless of the type of the soil: rocky, sand, concrete, base course, asphalt, pavement slabs of various types and colours, etc. As per the below specifications and as those mentioned in the RFP :</p> <ul style="list-style-type: none"> ➤ The micro trench is a 15 cm wide and 80 cm deep. ➤ Repair or Supply and install four (4) UPVC sub-ducts (1.25 inches in diameter and 1.8 mm thickness) inside one (1) UPVC (4 inches diameter & 3.2 mm thickness) <p>Prices for this item shall include the following:</p> <ul style="list-style-type: none"> ▪ Excavation, layer backfilling with Flow able concrete placement according to the specifications of the MPWH and the responsible authorities (Flow able concrete with measurement 73*15And 7 cm Asphalt or concrete class A then transfer the excess excavation materials outside the site to the allowed locations according to the authorized sites. ▪ Procurement and installation of the warning tape, electronic identifiers, according to the specifications, drawings, the requirements of the responsible authorities, and the supervising Engineer. ▪ Re-instate the terrain to its original status before excavation regardless of the type of the surface. ▪ The Flanges, the adhesives, different colours of plastic ropes 6 mm in diameter, quantity: a rope inside each sub-duct, to be used to drag cables in the future. (No knots are allowed) ▪ Repair or Supply and install four (4) UPVC sub-ducts (1.25 inches in diameter and 1.8 mm thickness) inside one (1) UPVC (4 inches diameter & 3.2 mm thickness) with all related accessories flanges fittings, the adhesives inside the trench. Moreover, the galvanised steel pipes 4” in diameter and 2.5 mm thickness to be used in railway and bridge crossing, according to the specifications, drawings, the requirements of the MPWH and the responsible authorities and the agreement of the supervising Engineer. 	LM	1000	One Thousand			
---	--	----	------	--------------	--	--	--

8	<p>Execute a Micro-Trench a 15 cm wide and 55 depth for new routes or to repair or replace the damaged ducts and reinstate the terrain to its original status regardless of the type of the soil: rocky, sand, concrete, base course, asphalt, pavement slabs of various types and colours, etc. As per the below specifications and as those mentioned in the RFP :</p> <ul style="list-style-type: none"> ➤ The micro trench is a 15 cm wide and 50 cm deep. ➤ Repair or Supply and install two (2) UPVC sub-ducts (1.25 inches in diameter and 1.8 mm thickness) inside one (1) UPVC (4 inches diameter & 3.2 mm thickness) <p>Prices for this item shall include the following: Excavation, layer backfilling with Flowable concrete according to the specifications MPWH and the responsible authorities (Flow able concrete) with measurement 43*15.and 7 cm Asphalt or concrete class A. Moreover, transfer the excess excavation materials outside the site to the allowed locations according to the authorized sites.</p> <ul style="list-style-type: none"> ▪ Procurement and installation of the warning tape, electronic identifiers, according to the specifications, drawings, the requirements of the responsible authorities, and the supervising Engineer. ▪ Re-instate the terrain to its original status before excavation regardless of the type of the surface. ▪ The Flanges, the adhesives, different colours of plastic ropes 6 mm in diameter, quantity: a rope inside each sub-duct, to be used to drag cables in the future. (No knots are allowed) ▪ Repair or Supply and install two (2) UPVC sub-ducts (1.25 inches in diameter and 1.8 mm thickness) inside one (1) UPVC (4 inches diameter & 3.2 mm thickness) with all related accessories flanges fittings, the adhesives inside the trench. In addition, the galvanised steel pipes 4” in diameter and 2.5 mm thickness to be used in railway and bridge crossing, according to the specifications, drawings, the requirements of the MPWH and the responsible authorities and the agreement of the supervising Engineer. 	LM	1000	One Thousand			
---	--	----	------	--------------	--	--	--

9	<p>Execute a Micro-Trench a 15 cm wide and 55 depth for new routes or to repair or replace the damaged ducts and reinstate the terrain to its original status regardless of the type of the soil: rocky, sand, concrete, base course, asphalt, pavement slabs of various types and colours, etc. As per the below specifications and as those mentioned in the RFP :</p> <ul style="list-style-type: none"> ➤ The micro trench is a 15 cm wide and 50 cm deep. ➤ Repair or Supply and install four (4) UPVC sub-ducts (1.25 inches in diameter and 1.8 mm thickness) inside one (1) UPVC (4 inches diameter & 3.2 mm thickness) <p>Prices for this item shall include the following: Excavation, layer backfilling with Flow able concrete according to the specifications MPWH and the responsible authorities (Flow able concrete) with measurement 43*15.and 7 cm Asphalt or concrete class A In addition, transfer the excess excavation materials outside the site to the allowed locations according to the authorized sites.</p> <ul style="list-style-type: none"> ▪ Procurement and installation of the warning tape, electronic identifiers, according to the specifications, drawings, the requirements of the responsible authorities, and the supervising Engineer. ▪ Re-instate the terrain to its original status before excavation regardless of the type of the surface. ▪ The Flanges, the adhesives, different colours of plastic ropes 6 mm in diameter, quantity: a rope inside each sub-duct, to be used to drag cables in the future. (No knots are allowed) ▪ Repair or Supply and install four (4) UPVC sub-ducts (1.25 inches in diameter and 1.8 mm thickness) inside one (1) UPVC (4 inches diameter & 3.2 mm thickness) with all related accessories flanges fittings, the adhesives inside the trench. In addition, the galvanised steel pipes 4” in diameter and 2.5 mm thickness to be used in railway and bridge crossing, according to the specifications, drawings, the requirements of the MPWH and the responsible authorities and the agreement of the supervising Engineer. 	LM	1000	One Thousand			
---	---	----	------	--------------	--	--	--

10	<p>The execution of Trenchless sections by drilling track in the road sections and the supply and installation of UPVC pipes with a diameter of 1.25 inches and thickness of 1.8 mm inside a 5-inch HDPE pipe in the road sections as required according to specifications, drawings , tender and supervising Engineer.</p> <ul style="list-style-type: none"> ▪ The pipe shall enter the manhole in depth not less than 80 cm from the surrounding surface ▪ The price shall include drilling, supply and installation of pipes and fittings, extension of various plastic ropes with diameter of 6 mm inside pipes, with a rope for each sub-pipe to be used in cable towing later (nodes is not allowed) ▪ Re-instate the terrain to its original status before excavation regardless of the type of the surface. <p>The price shall include the trench at the two sides of roads that is required for the drilling machine to work. Transfer the excess outside the site to the allowed locations according to the authorized sites</p>	LM	10	Ten		
11	<p>Supply and cast in place reinforced concrete (50cm*50cm) with minimum cube crushing strength of 200 Kg/cm² after 28 days, to be used to protect the ducts where the trench's route crosses flood's routes or valleys, and where required according to the Engineer's instructions.</p> <p>Price includes all shuttering works</p>	LM	400	Four Hundreds		
12	<p>Establish excavation checkpoints for the tracks to determine the location of the fiber cut, and restore their original position according to the instructions of the supervising ministry engineer.</p>	No.	50	fifty		
13	<p>Supply and install UPVC sub-ducts (1.25 inches in diameter and 1.8 mm thickness) inside UPVC main duct according to the supervising Engineer</p>	LM	2000	Two Thousands		
14	<p>Supply and install UPVC Main ducts (4 inches in diameter and 3.2 mm thickness) according to the supervising Engineer.</p>	LM	1000	One Thousand		
15	<p>The supply and installation of the galvanized steel pipes 6 inches in diameter Class B, to be used in railway crossings and bridge crossings, if required in accordance to the specifications, drawings, the requirements of the responsible authorities and the Engineer's instructions.</p> <ul style="list-style-type: none"> ▪ The price shall include all fittings and accessories for fixation. 	LM	50	Fifty		
16	<p>Supply and install galvanized steel pipe Ø 2" Class A to be fixed to the poles and where required including all related accessories in accordance with the Engineer's guidance and instructions.</p>	LM	50	Fifty		
17	<p>Supply and install galvanized steel pipe Ø 1" , Class A, to be fixed to the poles and where required including all related accessories in accordance with the Engineer's guidance and instructions.</p>	LM	50	Fifty		

18	<p>Delivery and execution of pre-cast manholes (120*68*82 cm) as internal dimensions with base and walls of 15 cm thickness, with a refined surface made from reinforced concrete with a minimum cube crushing strength of 260 kg/cm², as per Annex B in specifications sheets.</p> <ul style="list-style-type: none"> ▪ Prices shall include excavation, material procurement, shuttering, pouring, reinforcement steel, manhole mesh, accessories and fixing the required plastic pipes and the metallic manhole cover of the heavy type 40-ton load and backfilling around the manhole, according to the specifications & drawings, and instructions of the supervising engineer. 	No.	5	Five		
19	<p>Supply ,Delivery ,installation and execution of pre-cast manholes (100*100*100 cm) as internal dimensions with base and walls of 20 cm thickness, with a fair-face surface made from reinforced concrete with a minimum cube crushing strength of 250 kg/cm² after 28 days</p> <ul style="list-style-type: none"> ▪ Prices shall include excavation, material procurement shuttering, pouring, reinforcement iron, accessories (the same accessories mentioned in item no. 12), fixing the required plastic pipes, and the reinforced concrete manhole cover with 80cm diameter and 10 cm thickness, the cast iron heavy cover frame, and backfilling around the manhole, according to the specifications, drawings, and Engineer's instructions. 	No.	5	Five		
20	<p>Delivery and execution of pre-cast handholes (91.5*46*82 cm) as minimum internal dimensions with a base of 15 cm thickness, with a refined surface made from reinforced concrete with fracture strength of 250 kg/cm². As per Annex B in specifications sheets.</p> <ul style="list-style-type: none"> ▪ Prices shall include excavation, material procurement, shuttering, pouring, reinforcement steel, manhole mesh, accessories and fixing the required plastic pipes and the metallic manhole cover of the heavy type 40-ton load and backfilling around the manhole, according to the specifications & drawings, and instructions of the supervising engineer. 	No.	5	Five		

21	<p>Delivery and execution of pre-cast ring Manhole (with diameter 90cm & depth 90cm) as minimum internal dimensions with a base and Wall of 10 cm thickness, with a refined surface made from reinforced concrete with a minimum cube crushing strength of 260 kg/cm², as per Annex B in specifications sheets.</p> <ul style="list-style-type: none"> Prices shall include excavation, material procurement, shuttering, pouring, accessories and fixing the required plastic pipes and the metallic manhole cover of the heavy type 40-ton load and backfilling around the manhole, according to the specifications & drawings, and instructions of the supervising engineer. 	No.	5	Five			
22	<p>Delivery and execution of pre-cast ring Handhole (with diameter 60cm & depth 90cm) as minimum internal dimensions with a base and Wall of 10 cm thickness, with a refined surface made from reinforced concrete with a minimum cube crushing strength of 260 kg/cm², as per Annex B in specifications sheets.</p> <ul style="list-style-type: none"> Prices shall include excavation, material procurement, shuttering, pouring, accessories and fixing the required plastic pipes and the metallic manhole cover of the heavy type 40-ton load and backfilling around the manhole, according to the specifications & drawings, and instructions of the supervising engineer. 	No.	5	Five			
23	<p>Delivery and execution of pull boxes (50*26*48.5 cm) as internal dimensions with a base of 5 cm thickness with a fair-face surface finish made from reinforced concrete with a minimum cube crushing strength of 200 kg/cm², the cover shall be metallic cover of the heavy type, according to the specifications, drawings and agreement of the supervising engineer.</p>	No.	10	Ten			
24	<p>Supply and install galvanized U-guard cable protector including all related accessories, according to the specifications, drawings, and instructions of the Engineer.</p>	LM	10	Ten			
25	<p>Supply and install galvanized cable ladder (15 cm) including all related accessories. According to the specifications & drawings, and instructions of the Engineer.</p>	No.	10	Ten			
Sub Total to be Carried to Summary Table For Bill # 1							

Cont'd Bill No. 1-B: CIVIL WORKS

Item No.	Description	Unit	Est. Qty		* Unit Rate J.D.		* Unit Rate J.D.
			Number	Words	Number	Number	
26	Supply and install flexible white colour HDPE pipes (25mm in diameter and 2.8mm thickness) with all related accessories and fittings to be installed between the pole & the hand-hole and between the pull box & the entity and where required in accordance with the Engineer's guidance and instructions.	LM	100	One Hundred			
27	Supply and install white colour UPVC pipes (25mm in diameter and 1.5mm thickness) with all related accessories and fittings (joints, fittings, connectors...etc..) to be installed inside the entities and where required in accordance with the Engineer's guidance and instructions.	LM	50	Fifty			
28	Supply and install Wall mountain bracket for splice box. (Should be fit to the splice Box Dimensions).	No.	50	Fifty			
29	Supply and install Steel Manhole cover with frame and Mesh (for manhole 120*68cm, the two covers shall be heavy type with a label stating "MODEE -NBN". The covers shall be lockable and bears 40 ton). According to the specifications & drawings, and instructions of the Engineer	No.	20	Twenty			
30	Supply and install Steel Manhole cover without frame and Mesh (for manhole 120*68cm, the two covers shall be heavy type with a label stating "MODEE -NBN". The covers shall be lockable and bears 40 ton). According to the specifications & drawings, and instructions of the Engineer	No.	20	Twenty			
31	Supply and install the iron Manhale frame(for manhole 120*68cm) According to the specifications & drawings, and instructions of the Engineer	No.	20	Twenty			
32	Supply and install Steel Mesh (for manhole 120*68cm) According to the specifications & drawings, and instructions of the Engineer	No.	20	Twenty			
33	Supply and install Reinforced concrete manhole cover with 80cm diameter and 10 cm thickness with the cast iron heavy cover frame, According to the specifications & drawings, and instructions of the Engineer	No.	20	Twenty			
34	Supply and install Steel Handhole cover with frame and Mesh (for handnhole 91.5*46, the cover shall be heavy type with a label stating "MoDEE NBN". The covers shall be lockable and bears 40 ton), According to the specifications & drawings, and instructions of the Engineer.	No.	50	Fifty			

35	Supply and install Steel Handhole cover without frame and Mesh (for handnhole 91.5*46, the cover shall be heavy type with a label stating "MoDEE -NBN". The covers shall be lockable and bears 40ton), According to the specifications & drawings, and instructions of the Engineer.	No.	50	Fifty			
36	Supply and install Steel Mesh (for Handhole 91.5*46cm), According to the specifications & drawings, and instructions of the Engineer.	No.	20	Twenty			
37	Supply and install the iron Handhole frame (for Handhole 91.5*46cm), According to the specifications & drawings, and instructions of the Engineer.	No.	20	Twenty			
Sub Total to be Carried to Summary Table For Bill # 1							

COPY NOT FOR SALE

Cont'd Bill No. 1-B: CIVIL WORKS :

Item No.	Description	Unit	Est. Qty		* Unit Rate J.D.		* Unit Rate J.D.
			Number	Words	Number	Number	
38	Supply and install Steel heavy-duty cover with frame (for Pull Boxes 50*26*48.5 cm), According to the specifications & drawings, and instructions of the Engineer.	No.	20	Twenty			
39	Supply and install Steel Ring Manhole cover. The cover shall be heavy type with a label stating "MODEE-NBN". The covers shall be According to the specifications & drawings, and instructions of the Engineer.	No.	2	Two			
40	Supply and install Steel Ring Handhole cover. The cover shall be heavy type with a label stating "MODEE-NBN". The covers shall be According to the specifications & drawings, and instructions of the Engineer.	No.	2	Two			
41	Supply and install Manhole brackets (According to the samples currently used in the project According to the specifications & drawings, and instructions of the Engineer.	No.	5	Five			
42	Supply and install Manhole or handhole Aluminum plate (According to the samples currently used in the project and According to the specifications & drawings, and instructions of the Engineer).	No.	5	Five			
43	Supply and install Pole water-proof Sticker for labelling (According to the samples currently used in the project and, and instructions of the Engineer).	No.	100	One Hundred			
44	Cleaning existing Manhole or Handhole of waste or water in accordance to the instructions of supervising engineer.	No.	100	One Hundred			
45	Supply and install plastic rope 6mm in diameter inside the existing Sub duct in accordance to the instructions of supervising engineer.	No.	1000	One Thousand			
46	Cleaning existing sub ducts in accordance to the instructions of supervising engineer.	LM	600	Six Hundreds			
47	Cover Manhole and Handhole with sand and plastic cover According to the samples currently used in the project and in accordance to the instructions of supervising engineer	No.	50	Fifty			
48	Rising the level of Manhole and Handhole to equal the surrounding surface with accordance to the instructions of supervising engineer	No.	20	Twenty			
49	Supply and install plastic electrical boxes (30 * 30) cm to be used in extending the internal cable, according to the instructions of the supervising ministry engineer.	No.	2	Two			

50	Supply and install ironic electrical boxes (30 * 30) cm to be used in extending the internal cable, according to the instructions of the supervising ministry engineer.	No.	2	Two			
51	Supply Wall mounting Cabinet 60*60*60 cm, according to the instructions of the supervising ministry engineer.	No	6	Six			
52	Install Wall mounting Cabinet 60*60*60 cm, according to the instructions of the supervising ministry engineer.	No	6	Six			
Sub Total to be Carried to Summary Table For Bill # 1							

copy not for sale

Summary Table for Bill No.1 (A and B)

Item	Amount
Subtotal for Bill # 1-A carried From Page No. 6	
Subtotal for Bill # 1-A carried From Page No. 7	
Subtotal for Bill # 1- A carried From Page No. 8	
Subtotal for Bill # 1-B carried From Page No. 10	
Subtotal for Bill # 1-B carried From Page No. 19	
Subtotal for Bill # 1-B carried From Page No. 21	
Subtotal for Bill # 1-B carried From Page No. 23	
Sub Total For Bills No. 1(A and B) (Will be Carried to price's Summary)	

Summary Table for Bill No.1

Bill NO. 2 Transferring ADSS Cables

Item No.	Description	Unit	Est. Qty		* Unit Rate J.D.		Amount J.D.
			Number	Words	Number	Words	
1	Transferring the same existing cable to the new poles (without supply new cables, without supply all fittings, nor cable mountaineering accessories.). According to the instructions of the supervising ministry engineer.	L.M	8000	Eight Thousands			
2	Fitting, Accessories, and cable mounting needed to hang cable to the new poles according to the instructions of the supervising ministry engineer.	No.	50	Fifty			
3	<p>disassemble the fiber optic cable for all sizes and accessories from the poles on which the cable is located, and keep the accessories and cables that can be reused and transfer the materials to the contractor's store in Jordan area and keep them usable approved by the Engineer:</p> <ul style="list-style-type: none"> - The cables shall be reeled on a wooden drum - The diameter of the drum barrel shall be large enough to prevent damage to the cable during reeling or unreeling - The drum shall be durable and constructed such as to prevent damage to the cables during Transportation and handlings. - All above works should be accomplished according to the instructions of the supervising ministry engineer. 	LM	1000	One Thousand			
	Subtotal to be Carried to price's Summary						

BILL NO.3 : MOBILIZATION FEES

Item	Description	Unit	Est. Qty	* Unit Rate J.D.		Amount
No.			Number	Number	Words	JD.
1	<p>Monthly mobilization cost:</p> <p>This cost shall be paid to the Contractor at the end of each month of the Time for Completion (Contract Duration) whether any Fiber Cut Repair and/or Routes Transferring and/or connecting new entities shall be carried out by the Contractor or not and in case no Fiber Cut Repair and/nor Routes Transferring and/nor connecting new entities is required on the existing south Region Network(<u>AL- KARAK AND AL-GOUR AND AL-TAFILAH</u>) or a small number of either occurs during any month; the Contractor shall not in any case ask for any additional costs for any reason except for the monthly mobilization cost stipulated in the Contract, Where the mobilization cost shall cover the following items and conditions :</p> <ol style="list-style-type: none"> 1. All the Contractor's salaries for his manpower and staff, or to provide machines, equipment, materials, or any other needed works, expenses, fees and taxes, overheads, profits and any other cost incurred by the Contractor. 2. Contractor must provide and maintain One double cabin pickup, (2500 cc at least) to be delivered and used by MoDEE team. Complete with all requirements, One new diesel (2020), Automatic transmission, four-wheel drive, the price should include all expenses Comprehensive insurance, overheads, maintenance, profits and fuel (500) litters per month, knowing that the car must be returned to the contractor at the end of the project. 3. The Employer MODEE shall not pay any monthly Mobilization cost to the Contractor to cover for this item due to unjustified delays caused by the contractor as defined in the SLR. 	Month	24	Twenty Four		
Subtotal to be Carried to Summary Table price's Summary						

* All unit rates submitted by bidders for all items in Bills Nos. 1 and 2 should be inclusive of all costs incurred by bidders to supply, and install, all required works in accordance with tender specifications and instructions including the cost of materials, workmanship, accessories, equipment, erection, testing, insurance, transport, maintenance and support, over heads, profits, taxes, fees and any other cost of any kind

Pricing Summary			
S/No.	Item Description	Amount	
		Dinar	Fils
	ITEM No. 1: Bill # 1 (A and B) Civil & Fiber Works (Carried from page #24)		
	ITEM No. 2: Bill #2 Transferring ADSS and removed cables (Carried from page #25)		
	ITEM No. 3: Bill #3 Mobilization (Carried from page # 26)		
Total			
Percentage of Increase to total () % OR			
Percentage of Decrease from Total () %			
Final Total (in words		J.D.)	
* Price including all applicable taxes, fees and duties.			
Name of Bidder			
Name of Authorized signatory		His Position	
Tel. & fax of Bidder			
Address of Bidder			
Date			
Signature of Bidder (Authorized signatory) & his seal			