المواصفات الفنية الخاصة بالمناقصة العامة رقم المناقصة : (٢٠١١/٣)

الخاصة بشراء وتوريد (١,٠٠٠) موفة ألياف ضوئية

مختلفة السعات

المؤسسة العامة للاتصالات السلكية واللاسلكية الإدارة العامة للمشتريات والمخازن إدارة المشتريات – قسم العقود والمناقصات

Fibre Optic Splice Closures (Distribution Joint, 24/40 Fibres)

- 1- The closures is required for joining the two main cables (24 fibres, armoured, loose tubes (each cable has 6 loose tubes and each tube has 4 fibres)) and to splice them with the secondary fibre access cables (40 fibres).
- 2- The closure should include all the jointing materials for splicing (40 fibres) in addition to the fibre protection sleeves and moisture absorption compound Minimum of four cable entries, three cable entries materials should be supplied with the closure kit and the remaining entries with removable plugs and cable entries materials for future use.
- 3- Minimum four cable entries with diameters range from =22mm. and the cable entries should be divided in the two side of the closure.
- 4- The closure should be directly buried and in cable ducts with manholes.
- 5- The closure should be a mechanical type and be able to re-enterable many times for easy splicing any new branch cable. With out adding any new materials.
- 6- Equipped with fibre organizer trays of (24 fusion splices per each tray) with total capacity of 24/40 fibre splices and to hold the fibres splice parts and access length of fibre after splicing.
- 7- The splice trays or units should be movable ones to easy splicing any fibre to new branches without affecting the working ones –
- 8- The protection sleeve in the splice trays should be in on layer for easy maintenance.
- 9- The splice trays should be suitable for fusion and mechanical splice.
- 10- The capacity of the closure should be not less than 40 fibre splices.
- 11- It should have fixed parts to hold the central strength member of the cable so to prevent the cable from pulling out and prevent fibre bending in the organizer when the cable is twisted when handling the closure.
- 12- The closure should be with an appropriate dimension to prevent fibres and buffers from too tight bending radii.
- 13- It should be corrosion resistant and watertight.
- 14- It should be able to withstand maximum tensile load and the pressure when used for buried application.

- 15- It should be offered with materials of mounting on the manholes wall.
- 16- It should be considered that the manholes where the closures will be mounted might be filled with water fluid in the rain sessions.
- 17- The tenderer should offer one sample of the offered closure.
- 18- The closures should be opened and reclosed as of ten as required with out using power, consumable material or special tools.
- 19- The closures should include the pressure gas valve.
- 20- The closures shall be designed for a life expectancy of at least 30 years.
- 21- We will refuse the closures with the cylindrical shape.
- 22- The tender should offer catalogues for each type, which clear the mechanical construction details, dimension, drawing of the product offered and the installation construction. And should be in English language.
- 23- Information to be supplied: Manufacturers name country of origin make /model/code No-Closure content materials used operating environments.

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Technical data sheet of optical fibre closure 24/40 fibre

Characteristics		Offered by the Tender	
1- Cl	Capacity Cable entries Cable entire diameter Cable fixing Dimension Corrosion resistant Water tight Max tensile load Max pressure Opened and reclosed as often as required with out using power, consumable material or special tools. Including pressure gas value Life expectancy		
5 4 2	Tray no Tray capacity Protection sleeve arrangement in the tray Suitable for fusion and mechanical splice Tray dimension Splice tray movability		
3- M	Jointing materials for splicing the full capacity Cable entries materials materials of mounting on the manholes wall		





Distribution Joint,24/40 fibres

Number of entries Cable enter diameter Cable fixing Dimension Of Closure (L * W * H)mm Min 4 Max 7 Corrosion resistant Water tight Max tensile load Max pressure Opened and reclosed as often as required without using power consumable material or special tools including pressure gas value Life expectancy 2- Organizer trays Number of tray Tray capacity Protection sleeve arrangement in the tray	plastic to 40 fibers Expandable to 72 fiber by adding cassettes Minimum 6 tin . 29 max . te of Galvanized steel 50 * 200 * 150 700 * 380 * 300 s(necessary) found s(necessary) s(necessary) s(necessary) found 30 year
Capacity of closure Number of entries Cable enter diameter Cable fixing Dimension Of Closure (L * W * H)mm Min 4: Max 7 Corrosion resistant Water tight Max tensile load Max pressure Opened and reclosed as often as required without using power consumable material or special tools Including pressure gas value Life expectancy 2- Organizer trays Number of tray Tray capacity Protection sleeve arrangement in the tray	Expandable to 72 fiber by adding cassettes Alinimum 6 Alin . 29 max . Be of Galvanized steel 50 * 200 * 150 700 * 380 * 300 Senecessary) found senecessary) senecessary) found 30 year
Capacity of closure Number of entries Cable enter diameter Cable fixing Dimension Of Closure (L * W * H)mm Min 4: Max 7 Corrosion resistant Water tight Max tensile load Max pressure Opened and reclosed as often as required without using power consumable material or special tools Including pressure gas value Life expectancy 2- Organizer trays Number of tray Tray capacity Protection sleeve arrangement in the tray	cassettes fininmum 6 iin . 29 max . se of Galvanized steel 50 * 200 * 150 700 * 380 * 300 s(necessary) found s(necessary) s(necessary) found 30 year
Cable enter diameter Cable fixing Fixed by bas Dimension Of Closure (L * W * H)mm Min 4 Max 7 Corrosion resistant Water tight Max tensile load Max pressure Opened and reclosed as often as required without using power consumable material or special tools Including pressure gas value Life expectancy 2- Organizer trays Number of tray Tray capacity Protection sleeve arrangement in the tray	in . 29 max . se of Galvanized steel .50 * 200 * 150 .00 * 380 * 300 s(necessary) found s(necessary) s(necessary) s(necessary) found 30 year
Cable fixing Dimension Of Closure (L * W * H)mm Min 4: Max 7 Corrosion resistant Water tight Max tensile load Max pressure Opened and reclosed as often as required without using power consumable material or special tools Including pressure gas value Life expectancy 2- Organizer trays Number of tray Tray capacity Protection sleeve arrangement in the tray	se of Galvanized steel 150 * 200 * 150 100 * 380 * 300 15(necessary) 15 found 15 found 15 found 15 found 16 found 17 found 18 found 19 fou
Dimension Of Closure (L * W * H)mm Corrosion resistant Water tight Max tensile load Max pressure Opened and reclosed as often as required without using power consumable material or special tools Including pressure gas value Life expectancy 2- Organizer trays Number of tray Tray capacity Protection sleeve arrangement in the tray	50 * 200 * 150 700 * 380 * 300 s(necessary) found s(necessary) s(necessary) s(necessary) found 30 year
Corrosion resistant yes Water tight Max tensile load yes Max pressure yes Opened and reclosed as often as required without using power consumable material or special tools Including pressure gas value Life expectancy 2- Organizer trays Number of tray Tray capacity Protection sleeve arrangement in the tray	found s(necessary) s(necessary) s(necessary) s(necessary) s(necessary) s(necessary) s2 to 4
Water tight Max tensile load Max pressure Opened and reclosed as often as required without using power consumable material or special tools Including pressure gas value Life expectancy 2- Organizer trays Number of tray Tray capacity Protection sleeve arrangement in the tray	found s(necessary) s(necessary) found 30 year 2 to 4
Max tensile load yes Max pressure yes Opened and reclosed as often as required without using power consumable material or special tools Including pressure gas value Life expectancy 2- Organizer trays Number of tray Tray capacity Protection sleeve arrangement in the tray	s(necessary) s(necessary) found 30 year
Max tensile load yes Max pressure yes Opened and reclosed as often as required without using power consumable material or special tools Including pressure gas value Life expectancy 2- Organizer trays Number of tray Tray capacity Protection sleeve arrangement in the tray	found 30 year 2 to 4
Opened and reclosed as often as required without using power consumable material or special tools Including pressure gas value Life expectancy 2- Organizer trays Number of tray Tray capacity Protection sleeve arrangement in the tray	found 30 year 2 to 4
required without using power consumable material or special tools Including pressure gas value Life expectancy 2- Organizer trays Number of tray Tray capacity Protection sleeve arrangement in the tray	found 30 year 2 to 4
Life expectancy 2- Organizer trays Number of tray Tray capacity Protection sleeve arrangement in the tray	2 to 4
2- Organizer trays Number of tray Tray capacity Protection sleeve arrangement in the tray Arran	2 to 4
Number of tray Tray capacity Protection sleeve arrangement in the tray	7.12.1
Tray capacity Protection sleeve arrangement in the tray	7.12.1
Tray capacity Protection sleeve arrangement in the tray	
tray	12 to 24
	ngement shape
splice	s(necessary)
Tray dimension	suitable
Splice tray movability	easy
3- Materials	
Jointing materials for splicing the full capacity	found
Cable entries materials	found
Materials of mounting on the manholes wall	found

Note:-

**The closure should have area under the splice trays or in side of closure in order to keep of spear of loose tubes.

Fibre Optic Splice Closures (Distribution Joint, 36/48 Fibres)

- 1- The closures is required for joining the two main cables (36 fibres, armoured, loose tubes (each cable has 6 loose tubes and each tube has 6 fibres)) and to splice them with the secondary fibre access cables (48 fibres).
- 2- The closure should include all the jointing materials for splicing (48 fibres) in addition to the fibre protection sleeves and moisture absorption compound Minimum of four cable entries, three cable entries materials should be supplied with the closure kit and the remaining entries with removable plugs and cable entries materials for future use.
- 3- Minimum four cable entries with diameters range from =22mm, and the cable entries should be divided in the two side of the closure.
- 4- The closure should be directly buried and in cable ducts with manholes.
- 5- The closure should be a mechanical type and be able to re-enterable many times for easy splicing any new branch cable. With out adding any new materials.
- 6- Equipped with fibre organizer trays of (24 fusion splices per each tray) with total capacity of 36/48 fibre splices and to hold the fibres splice parts and access length of fibre after splicing.
- 7- The splice trays or units should be movable ones to easy splicing any fibre to new branches without affecting the working ones –
- 8- The protection sleeve in the splice trays should be in on layer for easy maintenance.
- 9- The splice trays should be suitable for fusion and mechanical splice.
- 10- The capacity of the closure should be not less than 48 fibre splices.
- 11- It should have fixed parts to hold the central strength member of the cable so to prevent the cable from pulling out and prevent fibre bending in the organizer when the cable is twisted when handling the closure.
- 12- The closure should be with an appropriate dimension to prevent fibres and buffers from too tight bending radii.
- 13- It should be corrosion resistant and watertight.
- 14- It should be able to withstand maximum tensile load and the pressure when used for buried application.



- 15- It should be offered with materials of mounting on the manholes wall.
- 16- It should be considered that the manholes where the closures will be mounted might be filled with water fluid in the rain sessions.
- 17- The tenderer should offer one sample of the offered closure.
- 18- The closures should be opened and reclosed as of ten as required with out using power, consumable material or special tools.
- 19- The closures should include the pressure gas valve.
- 20- The closures shall be designed for a life expectancy of at least 30 years.
- 21- We will refuse the closures with the cylindrical shape.
- 22- The tender should offer catalogues for each type, which clear the mechanical construction details, dimension, drawing of the product offered and the installation construction. And should be in English language.
- 23- Information to be supplied: Manufacturers name country of origin make /model/code No-Closure content materials used operating environments.

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Technical data sheet of optical fibre closure 36/48 fibre

Characteristics	Offered by the Tender
1- Closure - Capacity - Cable entries - Cable entire diameter - Cable fixing - Dimension - Corrosion resistant - Water tight - Max tensile load - Max pressure - Opened and reclosed as often as required with out using power, consumable material or special tools Including pressure gas value - Life expectancy	
2- Organizer trays - Tray no - Tray capacity - Protection sleeve arrangement in the tray - Suitable for fusion and mechanical splice - Tray dimension - Splice tray movability	
3- Materials - Jointing materials for splicing the full capacity - Cable entries materials - materials of mounting on the manholes wall	





Distribution Joint,36/48 fibres

1- Closure	specification	
Naterial of closure		
	plastic	
apacity of closure	36 to 48 fibers	Expandable to72 fiber by adding cassettes
lumber of entries	Minimum 6	
able enter diameter	6 min . 29 max .	
able fixing	Fixed by base of Galvanized steel	
imension Of Closure (L * W * H)mm	Min 450 * 200 * 150 Max 700 * 380 * 300	
orrosion resistant	yes(necessary)	
Vater tight	found	
/lax tensile load	yes(necessary)	
Aax pressure	yes(necessary)	
Opened and reclosed as often as equired without using power onsumable material or special tools	yes(necessary)	
ncluding pressure gas value	found	
ife expectancy	30 year	
2- Organizer trays		
Number of tray	2 to 4	
ray capacity	12 to 24	
Protection sleeve arrangement in the ray	Arrangement shape	
Suitable for fusion and mechanical	yes(necessary)	
Tray dimension	suitable	
Splice tray movability	easy	
3- Materials		
lointing materials for splicing the full	found	
capacity	found	

Note:-

^{**}The closure should have area under the splice trays or in side of closure in order to keep of spear of loose tubes.

Schedule of tender no. 03/2011 for the Supply of Optical Fiber Cable Accessories (Distribution Joint)

Item No	Item Description	Qty	Unit price	Total Price
1	Distribution Joint 24/36 fibers	500		
2	Option 20% organizer tray + 20% protection sleeve (for joint 24/36 fibers)			
3	Distribution Joint 36/48 fibers	500		
4	Option 20% organizer tray + 20% protection sleeve (for joint 36/48 fibers)			

^{1.} Specification of above items are required