

ODISHA POWER TRANSMISSION CORPORATION LIMITED

ODISHA Province
Note

Reference to P.W.D. Code

DIVISION: -O/o CGM Telecom, OPTCL, BBSR

Chapter VII, Part 7

STATION :- O/o CGM Telecom, OPTCL, BBSR

SANCTIONED

Rs. 27,21,85,913/-
(Rupees Twenty Seven Crore
Twenty One Lakh Eighty Five
Thousand Nine Hundred
Thirteen Only)

As per authority
19/12/25
Senior General Manager
O/o CGM, Telecom, OPTCL
Bhubaneswar

NAME OF WORK:- Procurement & Stringing of 48F
OPGW for upgradation of OPTCL OPGW network.

FUND :- Govt. Fund

DEPARTMENTAL HEAD :- CGM Telecom

SERVICE HEAD :- Capital Work

MAIN HEAD OF CLASSIFICATION :-

SUB HEAD OF CLASSIFICATION :-

ARM OF THE SERVICE :- Telecommunication

ESTIMATE NO - 14 of 2025-26

AMOUNT- Rs. 27,21,85,913/-

(Rupees Twenty Seven Crore Twenty One Lakh Eighty Five Thousand Nine Hundred
Thirteen) only incl. GST.

Estimate of original works (showing Ref Specification Detail and Abstract)

O.S.E.B-144A
(First Sheet)

Estimate framed by Prabodha Kumar Biswal, Asst. Manager (TC), O/o
CGM, Telecom. for the proposed expenses of Procurement of 48F OPGW for
upgradation of OPTCL OPGW network for the year 2025-26.

15-12-25
DGM Finance
O/o. CGM Telecom OPTCL
Bhubaneswar

REFERENCES

Stringing of more than 6500 km of 24F/48F OPGW has already been completed in OPTCL transmission network across Odisha. OPTCL is presently utilizing the OPGW network for its own operational requirements and is also leasing spare fibres to PAN-India telecom service providers such as BSNL, PGCIL, RailTel, Tata Communications, Airtel, Lightstorm, Vodafone, etc., thereby generating a revenue of approximately ₹20 Crore per annum.

Over the years, due to continuous leasing and increased internal requirements, non-availability of spare/dark fibres has been observed in several vital and strategically important links of the OPTCL OPGW network. In many of these links, all available fibres are already leased out, leaving no provision for future internal requirements.

Recently, the Government of Odisha is implementing a State-wide IP-MPLS network, for which OPTCL's dark fibre infrastructure has been identified as a critical backbone. However, non-availability of dark fibres in certain key links has posed a serious challenge to the rollout of this project. In this regard, a meeting was held between OPTCL and the Competent Authority of the E&IT Department, Government of Odisha, wherein OPTCL was directed to initiate procurement of additional OPGW to address the fibre shortage and facilitate timely implementation of the IP-MPLS project.

Accordingly, an estimate has been framed considering procurement & stringing of 48F OPGW for upgradation of the existing OPGW network to cater to:

- Immediate requirements of the Government of Odisha IP-MPLS project
- Future internal communication needs of OPTCL.
- Continuity and expansion of fibre leasing activities

The estimate amounts to ₹27,21,85,913/- (Rupees Twenty Seven Crore Twenty One Lakh Eighty Five Thousand Nine Hundred Thirteen only), inclusive of GST, towards procurement and stringing of 48F OPGW. The estimate for procurement has been prepared based on Cost Data for FY 2024-25 Vide ltr no-84(18) dated 16/01/2025 issued by Sr.GM(CPC) and The estimate for Erection has been prepared based on work order Vide ltr no-CGM(Tel)/475(10) dated 20/09/2025 issued by CGM(Telecom).

This estimate may please be sanctioned at the earliest.

Asst. Manager(TC)
O/o, CGM(Telecom)
OPTCL, BBSR.

Asst. Manager (Telecom)
O/o CGM, Telecom, OPTCL
Bhubaneswar

Procurement & Stringing of 48F OPGW for Upgradation of OPTCL OPGW network.

Sl. No.	EHT Line	Voltage Level	Line distance	Joint Box	Approach Cable(Km)	FODP
1	Bhadrak-Balasore	220	80	28	0.5	2
2	Budhipadar-Tarkara(Via-Bamra)	132	117	40	0.5	2
3	Budhipadar-Lapanga	132	20	8	0.5	2
4	Mendhasal-Khurda	132	18	7	0.5	2
5	Khurda-Balugaon	132	81	28	0.5	2
6	Balugaon-Chatrapur	132	64	23	0.5	2
7	Chatrapur-Narendrapur	132	15	6	0.5	2
8	Chandaka-Choudwar (Via Bidanasi)	132	52	19	0.5	2
9	Choudwar-ICCL-Khuntuni	132	28	11	0.5	2
10	Khuntuni-Dhenkanal	132	24	9	0.5	2
11	Chandaka-Ranasinghpur	132	26	10	0.5	2
12	Ransinghpur-Nimapada	132	39	14	0.5	2
13	Nimapada-Puri	132	35	13	0.5	2
14	Khurdha-Puri(Via Samuka)	132	85	30	0.5	2
Total Length			684	246	7	28

Prasanna
19/12/25
Asst. Manager (Telecom)
O/o CGM, Telecom, OPTCL
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O/o. CGM Telecom OPTCL
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Soumyakanta Das
19/12/25
Senior General Manager
O/o CGM, Telecom, OPTCL
Bhubaneswar

ESTIMATE FOR PROCUREMENT OF 48F OPGW FOR UPGRADTION OF OPTCL OPGW NETWORK					
SL NO	NAME OF MATERIALS	UNIT	QNTY	RATE	AMOUNT IN RS
1	48 Fibre(DWSM, G-652D)OPGW fibre Optic Cable	KM	684	215500	147402000.00
2	OPGW hardware set for 48F as per the list below required per km. 1-Link Plate 2 Nos. 2- Tension fitting Set incl. inner and outer armoured rod 2 Nos. 3- Suspension fitting Set incl. inner and outer armoured rod 4-Earth bond 6 Nos. 5-Downlead clamp 40 Nos. 6-Vibration Damper-12 Nos.	KM	684	22598	15457032.00
3	48F joint Box	No	246	6491	1596786.00
4	48 Fibre Optic Approach cable	KM	7	127090	889630.00
5	Hardware set for 48F FOAC(HDPE duct and coupling etc.)	KM	7	93763	656341.00
6	Supply of FODP(Fibre Optic Distribution Panel)48 F: Indoor type,rack mounted with FCPC coupling and pig tails(DWSM Fibre)	No	28	54257	1519196.00
	SUB TOTAL				167520985.00
	GST@18%				30153777.30
	GRAND TOTAL				₹ 19,76,74,763.00
	Rupees Nineteen Crore Seventy Six Lakh Seventy Four Thousand Seven Hundred Sixty Three Only				

ESTIMATE FOR STRINGINGT OF 48F OPGW FOR UPGRADTION OF OPTCL OPGW NETWORK					
SL NO	NAME OF MATERIALS	UNIT	QNTY	RATE	AMOUNT IN RS
1	Stringing/Erection of 48F cable along with hardware and joint box	KM	684	89865	61467660.00
2	Laying of 48F apprch cable alongwith hardware	KM	7	22598	158186.00
3	Erection of FODP	No	28	54257	1519196.00
	SUB TOTAL				63145042.00
	GST@18%				11366107.56
	GRAND TOTAL				₹ 7,45,11,150.00
	Rupees Seven Crore Forty Five Lakh Eleven Thousand One Hundred Fifty Only				

Total (Incl. Procurement and Stringing)

₹ 27,21,85,913.00

Rupees Twenty Seven Crore Twenty One Lakh Eighty Five Thousand Nine Hundred Thirteen only

Note:

1-The estimate for procurement has been prepared based on Cost Data for FY 2024-25 Vide ltr no-84(18) dated 16/01/2025 issued by Sr.GM(CPC).

2-The estimate for Erection has been prepared based on work order vide ltr no-CGM(Tel)/475(10) dated 20/09/2025 issued by CGM(Telecom).

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