

15 -ാം കേരള നിയമസഭ

10 -ാം സമ്മേളനം

നക്ഷത്ര ചിഹ്നം ഇല്ലാത്ത ചോദ്യം നം. 71

29-01-2024 - ൽ മറുപടിയ്ക്ക്

കെ-ഫോൺ പദ്ധതിയുടെ കരാർ കാലാവധി

ചോദ്യം		ഉത്തരം	
ശ്രീ. എൽദോസ് പി. കുനപ്പിള്ളിൽ		ശ്രീ. പിണറായി വിജയൻ (മുഖ്യമന്ത്രി)	
(എ)	കെ-ഫോൺ പദ്ധതിയിൽ എസ്.ആർ.ഐ.ടി. അടങ്ങുന്ന ബെൽ കൺസോർഷ്യത്തിന് എത്ര തവണ കരാർ കാലാവധി നീട്ടി നൽകിയിട്ടുണ്ടെന്ന് വ്യക്തമാക്കാമോ;	(എ)	അഞ്ച് തവണ കാലാവധി നീട്ടി നൽകിയിട്ടുണ്ട്. കൊറോണ മഹാമാരി മൂലമുണ്ടായ ലോക്ക് ഡൗൺ, ദേശീയപാതാ വികസനവുമായി ബന്ധപ്പെട്ട റോഡ് വീതികൂട്ടലും റോഡ് നിർമ്മാണവും, റെയിൽവേ അതോറിറ്റിയിൽ നിന്നും റൈറ്റ് ഓഫ് വേ അനുമതി ലഭിക്കാനുണ്ടായ കാലതാമസം, വൈദ്യുതി വിതരണം നിർത്തിവയ്ക്കുന്ന സമയക്രമത്തിനനുസരിച്ച് ജോലി പുനഃക്രമീകരിക്കേണ്ടി വരുന്നത് മുതലായ കാരണങ്ങളാൽ പദ്ധതി പൂർത്തിയാക്കുന്നതിന് കാലതാമസം നേരിട്ടതിനാലാണ് കാലാവധി നീട്ടി നൽകിയത്.
(ബി)	ഇപ്രകാരം കരാർ കാലാവധി നീട്ടി നൽകാനുണ്ടായ കാരണം വിശദമാക്കാമോ;	(ബി)	അഞ്ച് തവണ കാലാവധി നീട്ടി നൽകിയിട്ടുണ്ട്. കൊറോണ മഹാമാരി മൂലമുണ്ടായ ലോക്ക് ഡൗൺ, ദേശീയപാതാ വികസനവുമായി ബന്ധപ്പെട്ട റോഡ് വീതികൂട്ടലും റോഡ് നിർമ്മാണവും, റെയിൽവേ അതോറിറ്റിയിൽ നിന്നും റൈറ്റ് ഓഫ് വേ അനുമതി ലഭിക്കാനുണ്ടായ കാലതാമസം, വൈദ്യുതി വിതരണം നിർത്തിവയ്ക്കുന്ന സമയക്രമത്തിനനുസരിച്ച് ജോലി പുനഃക്രമീകരിക്കേണ്ടി വരുന്നത് മുതലായ കാരണങ്ങളാൽ പദ്ധതി പൂർത്തിയാക്കുന്നതിന് കാലതാമസം നേരിട്ടതിനാലാണ് കാലാവധി നീട്ടി നൽകിയത്.
(സി)	കരാർ കാലാവധി നീട്ടി നൽകിയത് സംബന്ധിച്ച രേഖകളുടെ പകർപ്പ് ലഭ്യമാക്കാമോ?	(സി)	കരാർ കാലാവധി നീട്ടി നൽകിയ രേഖകളുടെ പകർപ്പ് അനുബന്ധമായി ഉള്ളടക്കം ചെയ്യുന്നു.

സെക്ഷൻ ഓഫീസർ



കേരളം കേരल KERALA

K 539529

Now therefore this agreement witnesseth as follows:

FIRST SUPPLIMENTARY AGREEMENT DATED..28/12/2021..TO THE MASTER SERVICE AGREEMENT NO. AGREEMENT/KFON/2018-19/001 DATED 09.03.2019 FOR KERALA FIBRE OPTIC NETWORK AND RELIABLE COMMUNICATION AND DATA ACQUISITION NETWORK

First Supplementary Agreement is made and entered into this 28th day of December, 2021 by and between Kerala State Information Technology Infrastructure Limited (KSITIL) on behalf of Kerala Fibre Optic Network Limited., a company registered under the Companies Act, 2013, having its registered office at First floor, SAANKETHIKA, PF Road, Pattom Palace PO, Thiruvananthapuram- 695004 hereinafter referred to as "Authority" (which expression unless repugnant to the context therein shall include its administrator and permitted assignees) of the FIRST PART;

AND

Bharat Electronics Limited, a company registered under the Companies Act, 1956, having its registered office at Nagavara, Outer Ring Road, Bengaluru 560045, hereinafter referred to as "System Integrator" or "SI", (which expression unless



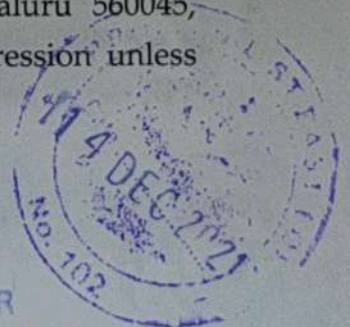
28-12-2021

MANAGING DIRECTOR
KERALA STATE IT INFRASTRUCTURE LIMITED
Kerala State

IT Infrastructure Ltd
R-600h

Laila S.S.

LAILA S.S.
PATTOM VENDOR



repugnant to the context therein, shall include its successors, administrators, executors and permitted assignees), of the **SECOND PART**.

WHEREAS, vide Contract No Agreement/KFON/2018-19/001 dated 09.03.2019 Authority entered into an agreement with **SI** for implementation of Kerala Fibre Optic Network and Reliable Communication and Data Acquisition Network (hereinafter referred to as the "**Agreement**"); and

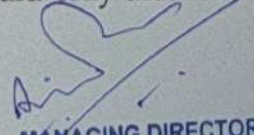
WHEREAS, both the parties agreed to amend the Agreement by incorporating following terms to the agreement. All other terms and conditions of the master agreement vide no. Agreement/KFON/2018-19/001 dated 09.03.2019 remains unaltered.

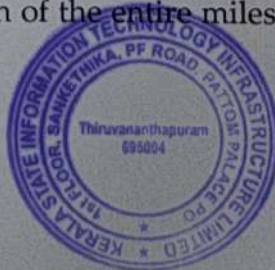
Now therefore this agreement witnesseth as follows:

1. Considering the Covid-19 pandemic and other practical issues with regard to the execution of the project, the implementation time of the project is extended to 30/06/2022 without imposing liquidated damages (LD).

2. Variation of Quantity: Revised capex cost of the Package A shall be Rs. 10,118,855,572/- (Rupees one Thousand and Eleven Crore Eighty-Eight Lakhs fifty-five thousand five hundred and seventy-two only) and that of Package B is Rs. 771,495,169.8/- (Rupees Seventy-Seven Crore fourteen lakhs ninety-five thousand one hundred and Sixty nine point eight paise). The Revised Opex price is Rs. 3,101,648,966.02/- (Rupees Three Hundred and Ten Crore sixteen lakhs forty eight thousand nine hundred and sixty six point two paise). The Revised Price Schedule is enclosed as **Annexure-A (to be signed by both parties)**.

3. The payment terms as per the approval from GoK vide Order no G.O.(Ms)No.36/2021/ITD Dated, 06/11/2021, in such a way that payment will be effected PoP wise up to 70% of the total billed amount and the remaining 30% has to be paid only after the completion of the entire milestones in the district, as per RFP.


MANAGING DIRECTOR
KERALA STATE IT INFRASTRUCTURE LIMITED



The revised payment milestone approved by the government is enclosed as **Annexure-B (to be signed by both parties)**

The revised Contract Value and revised PBG , ABG value will change as follows:

Description	Existing Value in INR (Excluding GST)	Revised Value in INR (Excluding GST)
CAPEX Value	1247,92,72,543	1089,03,50,742
OPEX Value	363,42,60,005	310,16,48,966
Performance security value (10% of CAPEX Value)	124,79,27,254	108,90,35,074
In form of Performance BG	32,09,76,056	26,76,35,032
In form of Indemnity Bond	92,69,51,198	82,14,00,042
Advance BG	92,69,51,198	82,14,00,042

It is understood and acknowledged by the parties that the terms and conditions of the Agreement, and the respective rights and performance of obligations under the same, not otherwise modified by, or made inconsistent with the provisions of this supplementary agreement, will remain in full force and effect and be made binding on the parties hereto, and that this supplementary agreement shall be made and form a part of the Master Agreement vide no. Agreement/KFON/2018-2019/001 dated 09th March 2019.

For and behalf of
Kerala State IT Infrastructure Ltd.,

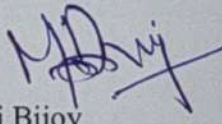
Signature:
Name: Dr. Santhosh Babu IAS (Retd.)
Designation: Managing Director, KSITIL

Date:
Witness:

1.

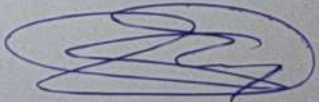
2.

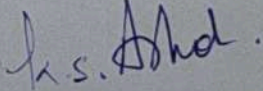
For and behalf of
Bharat Electronics Limited

Signature: 
Name: Mini Bijoy
Designation: Sr.DGM/Mktg-HLS&SC SBU



Date:
Witness:


1. Sr.DGM/Finance/HLS&SC
Bharat Electronics Ltd.
Jalahalli Post, Bangalore-560013

2. 
AGM-HLSMKT
BEL
Jalahalli Post, Bangalore-560013

ANNEXURE A

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SL No	Category	BOQ ID	Item Description	UOM	Rate	As Per Tender Tender Quantity	Tender Amount	Total Qty	Revised Quantity	Total Amount	Remarks
1	Supply	A1	A. OPGW Cable & Accessories								
2	Supply	A2	48F DWSM OPGW fiber optic cable	Kms	1,55,326	516	8,01,48,154	100		1,55,32,588	
3	Service	A3	Installation hardware set for the above 48F OPGW fiber optic cable including all cable fittings, accessories	Kms	27,737	516	1,43,12,168	100		27,73,676	
4	Supply	A4	Joint Box	Set	9,172	259	23,75,450	100		9,17,162	
5		A5	B. Installation, Commissioning & Testing for OPGW Installation								
6	Service	A6	Survey of route, design and submission of drawing for approval and detailed list of materials required for the work and providing as built drawing after the execution of work.	Kms	1,699	516	8,76,741	516		8,76,741	
7	Service	A7	Installation of 48 Fiber (DWDM) OPGW optic fiber cable on transmission tower, fixing of hardware set, cable fittings and accessories and its terminations etc.	Kms	69,446	516	3,58,34,177	100		69,44,608	
8	Service	A8	Splicing and installation of Joint Boxes	Set	12,500	259	32,37,575	50		6,25,015	
9	Service	A9	End to End testing of OPGW and approach cable and accessories	Kms	19,098	516	98,54,398	100		19,09,767	
10		A10	C. OF Cable & Accessories								
11	Supply	A11	48F ADSS fiber optic cable with 100 Kmph	Kms	1,04,661	14886	1,55,79,83,497	13500		1,41,29,23,365	
12	Supply	A12	48F ADSS fiber optic cable with 150 Kmph	Kms	1,14,015	10097	1,15,12,08,041	2000		22,80,29,720	
13	Supply	A13	24F ADSS fiber optic cable	Kms	86,513	10250	88,67,60,198	5500		47,58,22,545	
14	Supply	A14	12F ADSS fiber optic cable	Kms	71,006	7409	52,60,84,343	16000		1,13,60,97,920	
15	Supply	A15	Anchoring / tensioning clamp assembly for the poles	Nos	493	639630	31,54,01,553	535000		26,38,08,500	
16	Supply	A16	Suspension clamp assembly	Nos	185	426420	7,88,49,322	370000		6,84,16,700	
17	Supply	A17	Adjustable Cable Storage Bracket	Nos	740	170568	12,61,60,621	129000		9,54,14,850	
18	Supply	A18	Down Lead Clamps Assembly	Nos	99	170568	1,68,21,416	129000		1,27,21,980	
19	Supply	A19	48F UG fiber optic cable	Kms	99,852	600	5,99,11,410	600		5,99,11,410	
20	Supply	A20	PLB HDPE pipe	Kms	73,965	600	4,43,78,826	600		4,43,78,826	
21	Supply	A21	RCC route indicators	Nos	923	3000	27,69,990	3000		27,69,990	
22	Supply	A22	Man holes	Nos	11,093	300	33,28,041	300		33,28,041	
23	Supply	A23	4F fiber optic drop cable	Kms	23,965	6088	14,58,96,241	4100		9,82,54,696	
24	Supply	A24	Anchoring / tensioning clamp assembly for the poles	Nos	101	91320	92,31,539	325000		3,28,54,250	
25	Supply	A25	Suspension clamp assembly	Nos	57	60880	34,52,505	195000		1,10,58,450	
26	Supply	A26	Adjustable Cable Storage Bracket	Nos	863	24352	2,10,13,828	0		-	
27	Supply	A27	Down Lead Clamps Assembly	Nos	72	24352	17,41,168	0		-	
28	Supply	A28	Anchoring bolt	Nos	47	30438	14,25,716	35000		16,39,400	
29	Supply	A29	Cross arm	Nos	148	1000000	14,79,30,000	780000		11,53,85,400	
30	Supply	A30	Street Box Type I - (Branch Joint Closure)	Nos	1,504	10000	1,50,39,500	26500		3,98,54,675	
31	Supply	A31	Street Box Type II - (FTB Type II)	Nos	1,220	15000	1,83,06,300	17500		2,13,57,350	
32	Supply	A32	FTB Type I at end office	Nos	136	30438	41,27,393	30438		41,27,393	
33	Supply	A33	1:2 optical splitter	Nos	863	500	4,31,460	18378		1,58,58,744	
34	Supply	A34	1:4 optical splitter	Nos	1,603	13049	2,09,11,936	5000		80,12,850	
35	Supply	A35	1:8 optical splitter	Nos	2,465	2039	50,27,134	1839		45,34,036	
36	Supply	A36	SC APC adapters	Nos	65	2000	1,30,680	2000		1,30,680	
37	Supply	A37	Adapter Digitalis	Nos	173	2000	3,45,160	0		-	

MANAGING DIRECTOR
KERALA STATE IT INFRASTRUCTURE LIMITED

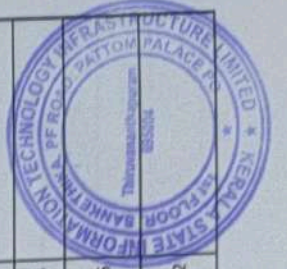


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Sl No	Category	BOQ ID	Item Description	UOM	As Per Tender			Revised Quantity		Remarks
					Rate	Tender Quantity	Tender Amount	Total Qty	Total Amount	
38	Supply	A38	Poles and accessories	Nos	11,834	5000	5,91,71,750	5000	5,91,71,750	
39		A39	D. Pole Strengthening							
40	Supply	A40	LT pole stay	Nos	1,350	5000	67,49,300	5000	67,49,300	
41	Supply	A41	HT pole stay	Nos	1,949	5000	97,44,850	5000	97,44,850	
42	Supply	A42	8m support pole insertion	Nos	4,745	5000	2,37,24,200	5000	2,37,24,200	
43	Supply	A43	8m to 9m pole conversion	Nos	6,779	5000	3,38,94,350	0	-	
44	Supply	A44	9m to A pole conversion	Nos	16,642	5000	8,32,10,300	0	-	
45		A45	E. Installation, Commissioning & Testing for OFC & accessories							
46	Service	A46	Survey of route, design and submission of drawing for approval and detailed list of materials required for the work and providing as built drawing after the execution of work	Kms	682	49330	3,36,31,221	49330	3,36,31,221	
47	Service	A47	Installation of 48FADSS optic fiber cable, fixing of hardware set, cable fittings, accessories, joint closures, FTB, splicing and terminations etc.	Kms	56,045	24983	1,40,01,66,989	15500	86,86,94,245	
48	Service	A48	Installation of 24FADSS optic fiber cable, fixing of hardware set, cable fittings, accessories, joint closures, FTB, splicing and terminations etc.	Kms	47,894	10250	49,09,10,733	5500	26,34,15,515	
49	Service	A49	Installation of 12FADSS optic fiber cable, fixing of hardware set, cable fittings, accessories, joint closures, FTB, splicing and terminations etc.	Kms	36,451	7409	27,00,66,719	16000	58,32,18,720	
50	Service	A50	Excavation of trench for PLB laying, PLB laying, back filling, reinstatement and compaction, laying of 48 F UG optical fiber cable, its splicing and terminations etc. and all other allied activities	Kms	6,68,393	600	40,10,36,046	600	40,10,36,046	
51	Service	A51	Installation of 4FADSS optic fiber cable, fixing of hardware set, cable fittings, accessories, joint closures, FTB, splicing and terminations etc.	Kms	23,690	6088	14,42,25,268	4100	9,71,29,369	
52	Service	A52	End to End testing of total OFC and accessories	Kms	223	49330	1,09,90,724	41700	92,90,760	
53	Service	A53	Installation of Poles and accessories	Nos	2,228	5000	1,11,39,900	5000	1,11,39,900	
54		A54	IT & NON - IT							
55		A55	A. NOC-Non IT							
56	Service	A56	Civil works including site preparation and partitioning works, false flooring, false ceiling, floor strengthening, etc.	Site	8,01,284	1	8,01,284	1	8,01,284	
57	Service	A57	Electrical works including light fixtures, cabling, panels + Earthing etc.	Site	20,34,029	1	20,34,029	1	20,34,029	
58	Supply	A58	250 KVA DG set with AMF Panel and required foundation and civil structure	Nos	81,92,910	2	1,63,85,820	2	1,63,85,820	
59	Supply	A59	Precision AC for server room	Lot	28,90,787	1	28,90,787	1	28,90,787	
60	Supply	A60	Comfort AC for NOC, UPS, BMS, Meeting, electrical rooms, etc.	Lot	8,01,284	1	8,01,284	1	8,01,284	
61	Supply	A61	80 KVA online UPS (with SNMP) with 30 minutes battery back up, isolation transformer and battery enclosure for server farm area	Nos	9,75,742	2	19,51,485	2	19,51,485	
62	Supply	A62	30 KVA online UPS (with SNMP) with 30 minutes battery back up, isolation transformer and battery enclosure for help desk and other areas	Nos	4,78,331	2	9,56,662	2	9,56,662	



MANAGING DIRECTOR

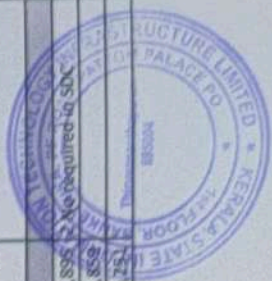


SL No	Category	BOQ ID	Item Description	UOM	As Per Tender			Revised Quantity		Remarks
					Rate	Tender Quantity	Tender Amount	Total Qty	Total Amount	
63	Supply	A63	Access Control System (RFID + Biometric, smart cards) to manage NOC and all the PoP locations	Set	17,68,618	1	17,68,618	1	17,68,618	
64	Supply	A64	High Sensitivity Smoke Detection System	Set	5,73,483	1	5,73,483	1	5,73,483	
65	Supply	A65	Fire Detection System	Set	5,98,037	1	5,98,037	1	5,98,037	
66	Supply	A66	Fire Suppression System	Set	26,70,637	1	26,70,637	1	26,70,637	
67	Supply	A67	Indoor Dome Camera	Lot	29,46,459	1	29,46,459	1	29,46,459	
68	Supply	A68	Rodent Repellent System	Set	2,36,224	1	2,36,224	1	2,36,224	
69	Supply	A69	Water Leak Detection System	Set	86,402	1	86,402	1	86,402	
70	Supply	A70	Integrated Building Management Solution	Set	44,12,782	1	44,12,782	1	44,12,782	
71	Supply	A71	42U Network Racks installed with redundant PDUs, Industrial sockets and accessories	Nos	1,65,188	4	1,65,188	8	3,30,376	
72	Supply	A72	42U Server Racks installed with redundant PDUs, Industrial sockets and accessories	Nos	41,297	16	6,60,751	18	7,43,345	
73	Supply	A73	LCD Projector	Nos	1,06,632	1	1,06,632	1	1,06,632	
74	Supply	A74	70" LED TV	Nos	1,41,766	3	4,25,297	3	4,25,297	
75	Supply	A75	Network Colour Laser Printer	Nos	55,474	1	55,474	1	55,474	
76	Supply	A76	Network MFP	Nos	3,51,332	1	3,51,332	1	3,51,332	
77	Supply	A77	Passive Items	Lot	8,007	1	8,007	1	8,007	
78	Supply	A78	Workstation Furniture and Fixtures including chairs	Set	33,900	20	6,78,010	20	6,78,010	
79	Supply	A79	Conference Table (for 10 personnel) & Chairs	Set	4,26,037	1	4,26,037	1	4,26,037	
80	Supply	A80	Public Addressable System	Set	4,47,198	1	4,47,198	1	4,47,198	
81	Supply	A81	B. NOC – IT components							
82	Supply	A82	IP MPLS Router	Nos	75,51,722	2	1,51,03,443	2	1,51,03,443	
83	Supply	A83	Internet router	Nos	39,97,971	2	79,95,941	2	79,95,941	
84	Supply	A84	URL Filtering Firewall	Nos	2,66,53,134	2	5,33,06,268	2	5,33,06,268	
85	Supply	A85	DC Firewall	Nos	2,60,60,843	2	5,21,21,686	2	5,21,21,686	
86	Supply	A86	DC Core Switch	Nos	35,53,751	2	71,07,502	2	71,07,502	
87	Supply	A87	Access Switch	Nos	69,594	4	2,78,377	4	2,78,377	
88	Supply	A88	Aggregation Switch	Nos	7,40,365	2	14,80,730	6	44,42,189	
89	Supply	A89	SAN storage (80 TB) for application & DB	Set	51,45,535	1	51,45,535	1	51,45,535	
90	Supply	A90	Video storage (200 TB)	Set	28,72,616	1	28,72,616	1	28,72,616	
91	Supply	A91	SAN Switch	Nos	7,62,576	2	15,25,151	2	15,25,151	
92	Supply	A92	Secondary Storage	Set	53,30,627	1	53,30,627	1	53,30,627	
93	Supply	A93	Blade Chassis	Set	44,42,189	1	44,42,189	1	44,42,189	
94	Supply	A94	Servers	Lot	1,99,89,851	1	1,99,89,851	1	1,99,89,851	
95	Supply	A95	OS licences	Lot	32,77,164	1	32,77,164	1	32,77,164	
96	Supply	A96	DB licenses	Lot	2,45,78,729	1	2,45,78,729	1	2,45,78,729	
97	Supply	A97	Virtualization software license	Lot	4,91,57,458	1	4,91,57,458	1	4,91,57,458	
98	Supply	A98	Workstation computers	Nos	6,93,727	5	6,93,727	5	6,93,727	
99	Supply	A99	Desktop Computers	Nos	1,38,745	15	16,15,204	15	16,15,204	
100	Supply	A100	IP phones	Nos	1,07,680	15	16,15,204	15	16,15,204	
101	Supply	A101	IP PBX	Nos	4,327	20	86,539	20	86,539	
102	Supply	A102	Voice Router	Nos	13,80,043	2	27,60,087	2	27,60,087	
103	Supply	A103	Video Management System base license	Nos	2,32,989	2	4,65,978	4	9,31,955	
104	Supply	A104	Video Management System camera license	Lot	13,94,543	1	13,94,543	1	13,94,543	
105	Supply	A105	Video wall display, Controller, Video wall Management Software & Accessories	Set	94,76,457	1	94,76,457	1	94,76,457	



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Sl No	Category	BOQ ID	Item Description	UOM	As Per Tender			Revised Quantity		Remarks
					Rate	Tender Quantity	Tender Amount	Total Qty	Total Amount	
106	Supply	A106	Link load balancer	Nos	85,14,196	2	1,70,28,392	2	1,70,28,392	
107	Supply	A107	KVM switch (If Required)	Nos	29,61,460	2	59,22,919	0	-	
108	Supply	A108	Backup and archival solution	Lot	3,84,98,972	1	3,84,98,972	1	3,84,98,972	
109	Supply	A109	EMS solution for Network(for MPLS & DWDM) with NMS	Lot	58,74,277	1	58,74,277	1	58,74,277	
110	Supply	A110	EMS solution for GPON with NMS	Lot	58,74,277	1	58,74,277	1	58,74,277	
111	Supply	A111	BSS software including CRM, Enterprise & Partner billing module, and self-care portal	Lot	58,74,277	1	58,74,277	1	58,74,277	
112	Supply	A112	Anti-virus software	Lot	1,726	1	1,726	1	1,726	
113	Supply	A113	GIS software license	Lot	3,57,49,608	1	3,57,49,608	1	3,57,49,608	
114	Supply	A114	Fibre Monitoring System	Lot	44,37,882	1	44,37,882	1	44,37,882	
115	Supply	A115	Centralized Access Control system software	Lot	-	1	-	1	-	
116	Supply	A116	Project Management Software	Lot	1,96,62,884	1	1,96,62,884	1	1,96,62,884	
117		A117	C. DR Site							
118	Supply	A118	Servers, Virtualization software, OS, DB licenses required for EMS Solution at DR	Lot	1,83,24,030	1	1,83,24,030	1	1,83,24,030	
119	Supply	A119	Servers, Virtualization software, OS, DB licenses required for BSS Solution at DR	Lot	1,83,24,030	1	1,83,24,030	1	1,83,24,030	
120	Supply	A120	IP PBX	Nos	13,80,043	1	13,80,043	2	27,60,087	
121		A121	D. Core PoP (14 Nos)							
122	Supply	A122	Modular MPLS Router	Nos	85,88,233	28	24,04,70,512	28	24,04,70,512	
123	Supply	A123	24 port Access Switch	Nos	69,594	14	9,74,319	14	9,74,319	
124	Supply	A124	Desktop Computers	Nos	97,307	14	13,62,297	14	13,62,297	
125	Supply	A125	IP phones	Nos	3,910	14	54,741	14	54,741	
126	Supply	A126	High Density Fiber Distribution Frame(FDMS Type I)	Nos	98,031	14	13,72,434	28	27,44,869	
127	Supply	A127	15 KVA UPS (with SNMP) with 30 minutes battery back up, isolation transformer and battery enclosure	Nos	2,66,759	28	74,69,256	28	74,69,256	
128	Supply	A128	42U server racks installed with redundant PDUs, Industrial sockets and accessories	Nos	30,278	28	8,47,790	42	12,71,685	
129	Supply	A129	Split Air Conditioners 3 TR with timer	Nos	60,922	42	25,58,717	42	25,58,717	
130	Supply	A130	Pre-fabricated Shelter	Set	4,85,142	14	67,91,991	14	67,91,991	
131	Supply	A131	Indoor CCTV Dome Camera	Nos	12,532	14	1,75,453	14	1,75,453	
132	Supply	A132	Indoor CAT 6 patch cord 10 mtr	Nos	362	28	10,137	28	10,137	
133	Supply	A133	Access Control system with Biometric + Smart card Reader & Smart Card, Push button, Magnetic lock and accessories	Set	36,205	14	5,06,865	14	5,06,865	
134	Supply	A134	Fibre monitoring unit with minimum of 4 ports and scalable to 8 ports	Nos	16,00,206	14	2,24,02,887	88	14,08,18,148	
135	Supply	A135	Spare Cable Box	Nos	6,907	14	96,694	14	96,694	
136	Supply	A136	Passive Cabling & Accessories	Lot	7,063	14	98,878	14	98,878	
137	Service	A137	Site Preparation(partition for UPS, exhaust fan, painting, light & fans) and Electrical works including earthing	Site	55,699	14	7,79,792	14	7,79,792	
138		A138	E. Aggregation PoP(87 Nos)							
139	Supply	A139	Modular MPLS Router	Nos	44,79,207	87	38,96,91,030	96	43,00,03,895	No required to SOC
140	Supply	A140	24 port Access Switch	Nos	69,594	87	60,54,699	94	65,41,859	
141	Supply	A141	High Density Fiber Distribution Frame (FDMS Type I)	Nos	98,031	87	85,28,700	137	1,34,30,251	



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(CAPEX)

Sl No	Category	BOQ ID	Item Description	UOM	As Per Tender			Revised Quantity		Remarks
					Rate	Tender Quantity	Tender Ammount	Total Qty	Total Amount	
142	Supply	A142	5 kVA UPS (with SNMP) with 30 minutes battery back up, isolation transformer and battery enclosure	Nos	92,384	174	1,60,74,854	188	1,73,68,233	
143	Supply	A143	42U server Racks installed with redundant PDUs, Industrial sockets and accessories	Nos	30,278	87	26,34,205	94	28,46,153	
144	Supply	A144	Split Air Conditioners – 2 TR with timer	Nos	41,339	174	71,92,989	188	77,71,736	
145	Supply	A145	Pre-fabricated Shelter	Set	6,12,694	87	5,33,04,375	94	5,75,93,232	
146	Supply	A146	Indoor CCTV Dome Camera	Nos	12,532	87	10,90,317	94	11,78,044	
147	Supply	A147	Indoor CAT 6 patch cord 10 mtr	Nos	362	174	62,997	188	68,065	
148	Supply	A148	Access Control system with Biometric + Smart card Reader & Smart Card, Push button, Magnetic lock and accessories	Set	36,205	87	31,49,804	94	34,03,236	
149	Supply	A149	Spare Cable Box	Nos	6,907	87	6,00,886	94	6,49,233	
150	Supply	A150	Passive Cabling & Accessories	Lot	7,063	87	6,14,454	94	6,63,893	
151	Service	A151	Site Preparation(partition for UPS, exhaust fan, painting, light & fans) and Electrical works including earthing	site	55,699	87	48,45,852	94	52,35,748	
152		A152	F. Pre-Aggregation PoP(194 Nos)							
153	Supply	A153	IP MPLS Router	Nos	25,17,241	194	48,83,44,729	186	46,82,06,802	
154	Supply	A154	24 port Access Switch	Nos	69,594	194	1,35,01,283	186	1,29,44,529	
155	Supply	A155	High Density Fiber Distribution Frame (FDMS Type I)	Nos	98,031	194	1,90,18,020	216	2,11,74,702	
156	Supply	A156	5 kVA UPS (with SNMP) with 30 minutes battery back up, isolation transformer and battery enclosure	Nos	3,18,357	388	12,35,22,473	372	11,84,28,763	
157	Supply	A157	42U server Racks installed with redundant PDUs, Industrial sockets and accessories	Nos	71,816	194	1,39,32,213	186	1,33,57,689	
158	Supply	A158	Split Air Conditioners – 2 TR with timer	Nos	41,339	388	1,60,39,540	372	1,53,78,115	
159	Supply	A159	Pre-fabricated Shelter	Set	4,85,142	194	9,41,17,591	186	9,02,36,453	
160	Supply	A160	Indoor CCTV Dome Camera	Nos	12,532	194	24,31,282	186	23,31,073	
161	Supply	A161	Indoor CAT 6 patch cord 10 mtr	Nos	362	388	1,40,475	372	1,34,683	
162	Supply	A162	Access Control system with Biometric + Smart card Reader & Smart Card, Push button, Magnetic lock and accessories	Set	36,205	194	70,23,700	186	67,34,063	
163	Supply	A163	Spare Cable Box	Nos	6,907	194	13,39,906	186	12,84,652	
164	Supply	A164	Passive Cabling & Accessories	Lot	7,063	194	13,70,162	186	13,13,660	
165	Service	A165	Site Preparation(partition for UPS, exhaust fan, painting, light & fans) and Electrical works including earthing	site	50,130	194	97,25,125	186	93,24,089	
166		A166	G. Spur PoP(83 Nos)							
167	Supply	A167	IP MPLS Router	Nos	24,06,186	83	19,97,13,454	81	19,49,01,081	
168	Supply	A168	24 port Access Switch	Nos	69,594	83	57,76,322	81	56,37,133	
169	Supply	A169	High Density Fiber Distribution Frame (FDMS Type I)	Nos	98,031	83	81,36,575	83	81,36,575	
170	Supply	A170	5 kVA UPS (with SNMP) with 30 minutes battery back up, isolation transformer and battery enclosure	Nos	1,53,996	166	2,55,63,271	162	2,49,47,289	
171	Supply	A171	42U server Racks installed with redundant PDUs, Industrial sockets and accessories	Nos	71,816	83	59,60,689	81	58,17,058	
172	Supply	A172	Split Air Conditioners – 2 TR with timer	Nos	41,339	166	68,62,277	162	66,96,921	
173	Supply	A173	Pre-fabricated Shelter	Set	4,85,142	83	4,02,66,804	81	3,92,96,520	
174	Supply	A174	Indoor CCTV Dome Camera	Nos	12,532	83	10,40,186	81	10,15,121	
175	Supply	A175	Indoor CAT 6 patch cord 10 mtr	Nos	362	166	60,100	162	58,652	

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KERALA STATE IT INFRASTRUCTURE LIMITED



Sl No	Category	BOQ ID	Item Description	UOM	As Per Tender			Revised Quantity		Remarks
					Rate	Tender Quantity	Tender Ammount	Total Qty	Total Amount	
176	Supply	A176	Access Control system with Biometric + Smart card Reader & Smart Card, Push button, Magnetic lock and accessories	Set	36,205	83	3,004,985	81	2,932,576	
177	Supply	A177	Spare Cable Box	Nos	6,907	83	573,259	81	559,445	
178	Supply	A178	Passive Cabling & Accessories	Lot	7,063	83	586,203	81	572,078	
179	Service	A179	Site Preparation(partition for UPS, exhaust fan, painting, light & fans) and Electrical works including earthing	site	50,130	83	4,160,749	81	4,060,490	
180		A180	H. OLT		-		-	0		
181	Supply	A181	4 port GPON OLT (at PoP location)	Nos	327,422	94	30,777,679	30	9,822,664	
182	Supply	A182	8 port GPON OLT (at PoP location)	Nos	351,238	284	99,751,720	449	157,706,064	
183		A183	I. DWDM Solution							
184	Supply	A184	DWDM Solution at all Core PoP locations	Nos	28,133,864	14	393,874,094	14	393,874,094	
185		A185	J. End Office							
186	Supply	A186	600 VA UPS with 15 min Battery backup to be supplied along with the enclosure	Nos	1,337	30438	40,689,214	30438	40,689,214	
187	Supply	A187	2x5 way 5 amp PDU	Nos	301	30438	9,155,142	30438	9,155,142	
188	Supply	A188	9U Network Rack 19" with provision to mount the ONT	Nos	2,785	30438	84,768,917	30438	84,768,917	
189	Supply	A189	GPON ONT (at end office)	Nos	7,343	30438	223,506,538	30438	223,506,538	
190		A190	K. Installation, Commissioning & Testing		-		-	0		
191	Service	A191	Installation, Commissioning & Testing of all IT/Non IT Components at NOC	Set	29,476,764	1	29,476,764	1	29,476,764	
192	Service	A192	Installation, Commissioning & Testing of all IT/Non IT Components at Core PoPs incl. OLT	Set	889,743	14	12,456,402	14	12,456,402	
193	Service	A193	Installation, Commissioning & Testing of all IT/Non IT Components at Aggregation PoPs incl. OLT	Set	420,587	87	36,591,030	94	39,535,136	
194	Service	A194	Installation, Commissioning & Testing of all IT/Non IT Components at Pre-Aggregation PoPs incl. OLT	Set	263,629	194	51,143,995	186	49,034,964	
195	Service	A195	Installation, Commissioning & Testing of all IT/Non IT Components at Spur PoPs incl. OLT	Set	135,457	83	11,242,899	81	10,971,985	
196	Service	A196	Installation, Commissioning & Testing of DWDM equipment at all Core PoPs	Set	4,442,189	1	4,442,189	1	4,442,189	
197	Service	A197	Installation, Commissioning & Testing of all IT/Non IT Components at end offices	Set	-	30438	-	30438	-	
198		A198	L. Training & Others							
199	Service	A199	Training and other miscellaneous costs	Lot	3,050,814	1	3,050,814	1	3,050,814	
					Package- A total value		11,682,522,568		10,118,855,572	
Sl.No	Category	BOQ ID	Item Description	UOM	As Per Tender			Revised Quantity		Remarks
					Rate	Tender Quantity	Tender Ammount	Total Qty	Total Amount	
1	Supply	B1	Supply of 48 Fibre (DWDM) OPCW optic fibre cable with 5Kms Spare and testing equipment as per Technical specification, at three System Operation Circles at Kannur, Kalamassery & Thiruvananthapuram.	Kms	155,326	2900	450521161.7	2751	427,301,495.88	



Sl No	Category	BOQ ID	Item Description	UOM	As Per Tender			Revised Quantity		Remarks
					Rate	Tender Quantity	Tender Ammount	Total Qty	Total Amount	
2	Supply	B2	Supply of Hardware sets for 48 Fibre (DWSM)OPGW OFC including cable fittings and accessories and for the 5Kms OPGW Spare cable at three System Operation Circles at Kannur, Kalamassery & Thiruvananthapuram.	Kms	31,435	2900	91176903.15	2751	86,477,685.00	
3	Supply	B3	Joint box four way for 48 fibre OPGW cable	Nos	1,356	800	1084816	1050	1,423,821.00	
4	Supply	B4	FODP (96 fibre) Indoor type with FC-PC coupling and pig tails (5 mtr each)	Nos	28,161	100	2816083	100	2,816,083.00	
5	Supply	B5	FODP (48 fibre) Indoor type with FC-PC coupling and pig tails (5 mtr each)	Nos	32,244	160	5158988.8	400	12,897,472.00	
6	Supply	B6	Non-Metallic armored underground Optic Fibre approach cable, 48 Fibre, DWSM.	Nos	100,715	75	7553645.25	75	7,553,645.25	
7	Supply	B7	PLB HDPE pipe O.D 40 mm including all accessories	Kms	73,965	75	5547353.25	75	5,547,353.25	
8	Service	B8	Survey of route, design and submission of drawing for approval and detailed list of materials required for the work and providing as built drawing after the execution of work.	Kms	535	2900	1550979.018	2900	1,550,717.00	
9	Service	B9	Installation of 48 Fibre (DWSM) OPGW optic fibre cable on 220kV & 110kV towers, fixing of hardware set, cable fittings and accessories and installation of joint boxes and its terminations etc. Pre-installation test (Drum test), Post installation test, splicing and Link test (End to End).	Kms	75,233	2900	218213289.3	2751	206,966,670.75	
10	Service	B10	Installation of non-metallic armored underground optical fibre approach cable (UG OFC 48 fibre DWSM) at 220kV & 110kV Substations through existing cable trench by removing concrete slab, installation of HDPE pipe etc. Pre-installation test (Drum test), Post installation test, splicing and Link test (End to end) and placing back concrete slabs as good as in original condition.	Kms	49,770	75	3732726.75	75	3,732,726.75	
11	Service	B11	Installation, testing and commissioning of FODP 96 fibre and termination of OPGW & OF approach cable.	Nos	24,885	100	2488484	100	2,488,484.00	
12	Service	B12	Installation, testing and commissioning of FODP 48 fibre and termination of OPGW & OF approach cable.	Nos	24,306	160	3888980.8	400	9,722,452.00	
13	Supply	B13	OTDR (Optical Time Domain reflectometer) for 1310/1550 nm with laser source and all necessary accessories	Nos	156,254	11	1718790.37	11	1,718,790.37	
14	Supply	B14	Callbrated Fibre 1km Spool	Nos	4,919	11	54110.1	11	54,110.10	
15	Supply	B15	Optical Power meter (1310/1550)	Nos	4,051	11	44561.22	11	44,561.22	
16	Supply	B16	Laser Light source (1310/1550)	Nos	6,366	11	70024.79	11	70,024.79	
17	Supply	B17	Optical Fiber Fusion Splicer incl. Fibre Cleaver with splice kit	Nos	251,163	3	753489.93	3	753,489.93	
18	Supply	B18	Optical Fibre Talk set	Nos	34,144	11	375587.52	11	375,587.52	
Package- B total value							796749974.9		771495169.8	



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Revised OPEX Quantity proposed

ANNEXURE A -REVISED OPEX PRICE

SL No	Item Description	No of Qtr	UOM	Rate/Qtr	As Per Tender		Revised Quantity		Remarks
					Tender Quantity	Tender Ammount	Total Qty	Total Amount	
1	OPEX for core PoPS	28	No	33259.43	14	13037696.56	14	13037696.56	
2	OPEX for Agg PoPS	28	No	12419.51	87	30253926.36	94	32688150.32	
3	OPEX for Pre-Agg PoPS	28	No	10920.96	194	59322654.72	186	56876359.68	
4	OPEX for Spur PoPS	28	No	11634.56	83	27038717.44	81	26387182.08	
5	OPEX for OPGW cable	24	No	2499.83	516	30957894.72	100	5999592.00	
6	OPEX for OPGW cable	4	No	2478.28	516	5115169.92	100	991312.00	
7	OPEX for 48F ADSS (100Kmph)	28	No	2300.57	14886	958895980.6	13500	869615460.00	
8	OPEX for 48F ADSS (150 Kmph)	28	No	2300.57	10097	650407948.1	2000	128831920.00	
9	OPEX for 24F ADSS	28	No	2283.51	10250	655367370	5500	351660540.00	
10	OPEX for 12F ADSS	28	No	2283.51	7409	473718716.5	16000	1023012480.00	
11	OPEX for 4F ADSS	28	No	2283.51	6088	389256248.6	4100	262146948.00	
12	OPEX for 48F UG cable	28	No	253.72	675	4795308	675	4795308.00	
13	OPEX for end institutions	28	No	88.06	30438	75050367.84	30438	75050367.84	
14	OPEX for NOC	28	No	1880093.86	1	52642628.08	1	52642628.08	
15	AMC for Active equipments under Package A(yearly)	2	Lot	2796626.21	1	5593252.42	1	5593252.42	
Total OPEX value- Package A						3431453879.90		2909329196.98	

For items Under Package -B									
SL No	Item Description	No of Qtr	UOM	Rate/Qtr	As Per Tender		Revised Quantity		Remarks
					Tender Quantity	Tender Ammount	Total Qty	Total Amount	
1	OPEX for OPGW cable	24	No	2499.83	2901	174048163.9	2751	165048775.92	First 6 Year
2	OPEX for OPGW cable	4	No	2478.28	2901	28757961.12	2751	27270993.12	7th Year
Total OPEX value- Package B						202806125		192319769.04	



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ANNEXURE B

Sl No.	Milestone	Material on Advance	Implementation Period				Integration with NOC of all equipment and Ge-Live of services at the end of State (100% CAPEX of the respective milestones)	Complete Project Ge-Live in the State (100% CAPEX of the respective milestones)	OPEX for 7 years
			Fiber & Accessories (for routers and Packet A)	Network IT/Non-IT	IT/Non-IT	Integration with NOC of all equipment and Ge-Live of services at the end of State (100% CAPEX of the respective milestones)			
1	Core Rings + associated institutions	10% of the total supply value of materials (Fiber & accessories + Network IT/Non-IT) against submission of BIC of equivalent amount valid till 60 days beyond implementation period	40% of material delivery cost	70% of installation cost + 20% of material delivery cost	40% of material delivery cost	70% of installation cost + 20% of material delivery cost	20% of installation cost + 20% of material delivery cost		
2	NOCC		NA	NA	40% of material delivery cost	70% of installation cost + 20% of material delivery cost			
3	Aggregation Rings + associated institutions for each district	Aggregation Rings + associated institutions for each district	40% of material delivery cost	70% of installation cost + 20% of material delivery cost	40% of material delivery cost	70% of installation cost + 20% of material delivery cost	20% of installation cost + 20% of material delivery cost	10% of remaining CAPEX of subject to SLA charges	
4	Aggregation Rings + associated institutions for each district	Aggregation Rings + associated institutions for each district	40% of material delivery cost	70% of installation cost + 20% of material delivery cost	40% of material delivery cost	70% of installation cost + 20% of material delivery cost	20% of installation cost + 20% of material delivery cost		
5	Connectivity (A) + associated institutions for each district	Aggregation Rings + associated institutions for each district	40% of material delivery cost	70% of installation cost + 20% of material delivery cost	40% of material delivery cost	70% of installation cost + 20% of material delivery cost	20% of installation cost + 20% of material delivery cost		

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SECOND SUPPLEMENTARY AGREEMENT DATED 07/11/2022 TO THE MASTER SERVICE AGREEMENT NO. AGREEMENT/KFON/2018-19/001 DATED 09.03.2019 FOR KERALA FIBRE OPTIC NETWORK AND RELIABLE COMMUNICATION AND DATA ACQUISITION NETWORK

Second Supplementary Agreement is made and entered into on this 07th day of November, 2022 by and between Kerala State Information Technology Infrastructure Limited (KSITIL) on behalf of Kerala Fibre Optic Network Limited., a company registered under the Companies Act, 1956, having its registered office at First floor, SAANKETHIKA, PF Road, Pattom Palace PO, Thiruvananthapuram- 695004 hereinafter referred to as "**Authority**" (which expression unless repugnant to the context therein shall include its administrator and permitted assignees) of the **FIRST PART;**

AND

Bharat Electronics Limited, a company registered under the Companies Act, 1956, having its registered office at Nagavara, Outer Ring Road, Bengaluru 560045, hereinafter referred to as "**System Integrator**" or "**SI**", (which expression unless repugnant to the context therein, shall include its successors, administrators, executors and permitted assignees), of the **SECOND PART.**

to.....13649
value.....
issued.....

MANAGING DIRECTOR
Kerala State Information Technology Infrastructure Limited
2022



S. USHAKUMARY
STAMP, VENDOR
PUTHEN CHANTHAI
THIRUVANANTHAPURAM






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DD 316360

WHEREAS, vide Contract No Agreement/KFON/2018-19/001 dated 09.03.2019 and First Supplementary dated 28/12/2021 Authority had entered into an agreement with SI for implementation of Kerala Fibre Optic Network and Reliable Communication and Data Acquisition Network (hereinafter referred to as the "Agreement"); and


MANAGING DIRECTOR
Kerala State IT Infrastructure Limited




S. USHAKUMARY
STAMP, VENDOR
PUTHEN CHANNAI
THIRUVANANTHAPURAM



No. 13657 Date 27-12-2021
Value 100/-
Issued



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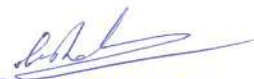
DD 316361

WHEREAS, both the parties agreed to amend the Agreement by incorporating following terms to the agreement. All other terms and conditions of the master agreement vide no. Agreement/KFON/2018-19/001 dated 09.03.2019 and first supplementary agreement dated 28/12/2021 remains unaltered.

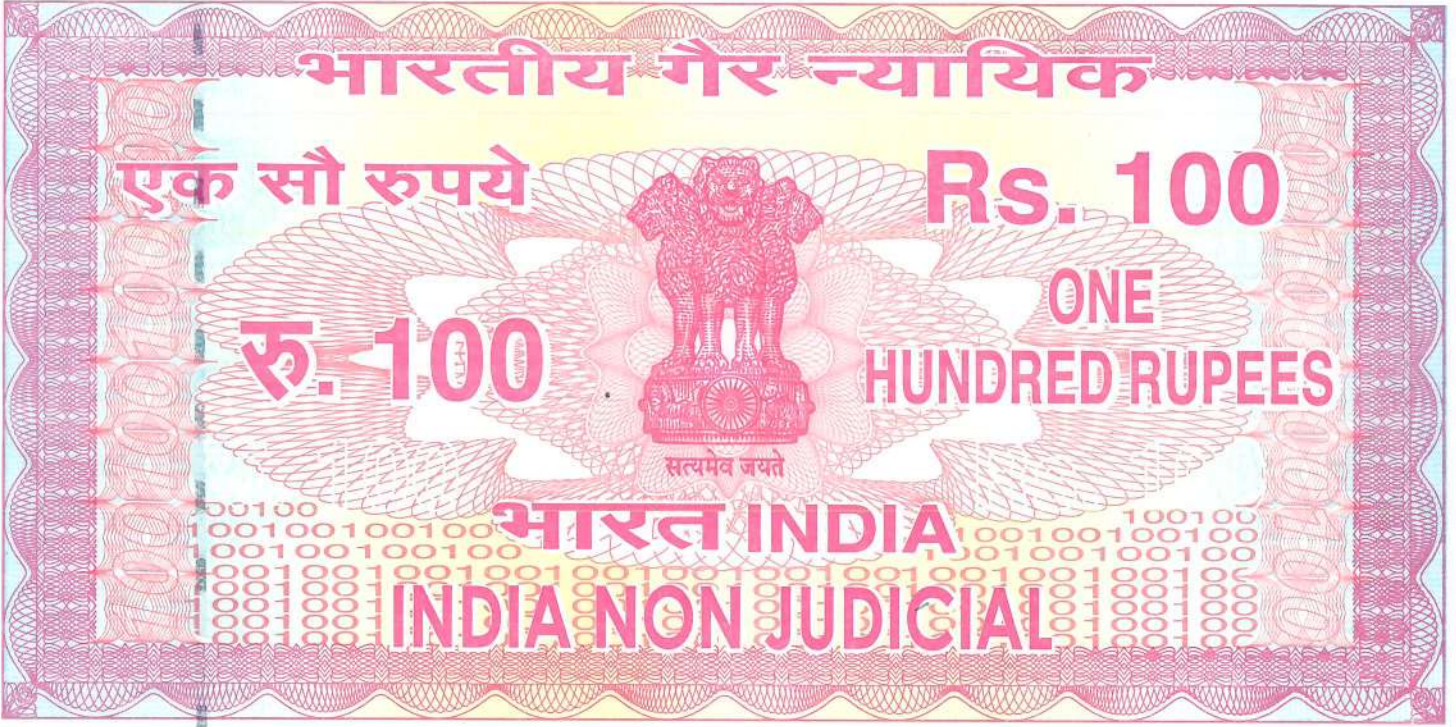

MANAGING DIRECTOR
Kerala State IT Infrastructure Limited

No. 13652 Date 27-12-2021
Value 100/-
Issued




S. USHAKUMARY
STAMP, VENDOR
PUTHEN CHANTHAI
THIRUVANANTHAPURAM





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DD 316362

NOW THEREFORE THIS AGREEMENT WITNESSES AS FOLLOWS:

1. By considering the reasons submitted by the System Integrator vide letter no. MS/KFON/PD/01/2022-23 dated 29/08/2022, the implementation term of the project is hereby extended till 31st December 2022. After evaluating the reasons submitted by System Integrator, the Authority hereby decided to waive-off Liquidated Damages till 30th September 2022.


DIRECTOR
IT Infrastructure




S. USHAKUMARY
STAMP, VENDOR
PUTHEN CHANTHAI
THIRUVANANTHAPURAM



No. 13653 Date 27-12-2021
Value
Issued



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DD 316363

It is understood and acknowledged by the parties that the terms and conditions of the Agreement, and the respective rights and performance of obligations under the same, not otherwise modified by, or made inconsistent with the provisions of this supplementary agreement, will remain in full force and effect and be made binding on the parties hereto, and that this supplementary agreement shall be made and form a part of the Master Agreement vide no. Agreement/KFON/2018-2019/001 dated 09th March 2019.

For and behalf of
Kerala State IT Infrastructure Ltd.

[Signature]
MANAGING DIRECTOR
Kerala State IT Infrastructure Limited

Signature:
Name: Dr Santhosh Babu IAS (retd.)

Designation: Managing Director
Date: 07.11.2022

For and behalf of
Bharat Electronics Limited

Signature:
Name:

Designation:
Date:

Witness:
1. *[Signature]*
S. Moses Raju Kumar
Proj. Head KFON

2.

13654 Date 27-12-2021
value
issued.....



[Signature]
S. USHAKUMARY
STAMP, VENDOR
PUTHEN CH.ATHAI
THIRUVANANTHAPURAM





കേരളം കേരल KERALA

H 846899

THIRD SUPPLEMENTARY AGREEMENT DATED 15/02/2023 TO THE MASTER SERVICE AGREEMENT NO. AGREEMENT/KFON/2018-19/001 DATED 09.03.2019 FOR KERALA FIBRE OPTIC NETWORK AND RELIABLE COMMUNICATION AND DATA ACQUISITION NETWORK

Third Supplementary Agreement is made and entered into on this 15th day of February, 2023 by and between M/s Kerala State Information Technology Infrastructure Limited (KSITIL) on behalf of M/s Kerala Fibre Optic Network Limited., a company registered under the Companies Act, 1956, having its registered office at First floor, SAANKETHIKA, PF Road, Pattom Palace PO, Thiruvananthapuram- 695004 hereinafter referred to as "Authority" (which expression unless repugnant to the context therein shall include its administrator and permitted assignees) of the **FIRST PART**;

AND

Bharat Electronics Limited, a company registered under the Companies Act, 1956, having its registered office at Nagavara, Outer Ring Road, Bengaluru 560045, hereinafter referred to as "System Integrator" or "SI", (which expression unless repugnant to the context therein, shall include its successors, administrators, executors and permitted assignees), of the **SECOND PART**.


MANAGING DIRECTOR
KERALA STATE IT INFRASTRUCTURE LIMITED



No: 1398 Co. 500
28-11-22
Kerala state IT infrastructure Ltd
(KSITIL) pattom palace P.O.

ഇമ്പ്രോവ്മെന്റ് വെണ്ടർ
എസ്. രാധാകൃഷ്ണൻ നായർ

WHEREAS, as per Contract No Agreement/KFON/2018-19/001 dated 09.03.2019, First Supplementary agreement dated 28/12/2021 and Second Supplementary agreement dated 07/11/2022, the Authority had entered into an agreement with SI for implementation of Kerala Fibre Optic Network and Reliable Communication and Data Acquisition Network (hereinafter referred to as the "**Agreement**"); and

WHEREAS, both the parties agreed to amend the Agreement by incorporating following terms to the agreement. All other terms and conditions of the master agreement vide no. Agreement/KFON/2018-19/001 dated 09.03.2019, first supplementary agreement dated 28/12/2021 and Second Supplementary agreement dated 07/11/2022 remains unaltered.

NOW THEREFORE THIS AGREEMENT WITNESSES AS FOLLOWS:

After evaluating the reasons submitted by the System Integrator M/s Bharat Electronics Limited, the implementation term of the project- Kerala Fibre Optic Network and Reliable Communication and Data Acquisition Network is hereby extended till 31st March 2023 without imposing LD/penalty.

It is understood and acknowledged by the parties that the terms and conditions of the Agreement, and the respective rights and performance of obligations under the same, not otherwise modified by, or made inconsistent with the provisions of this supplementary agreement, will remain in full force and effect and be made binding on the parties hereto, and that this supplementary agreement shall be made and form a part of the Master Agreement vide no. Agreement/KFON/2018-2019/001 dated 09th March 2019.

**For and behalf of
Kerala State IT Infrastructure Ltd.**

Signature: 
Name: Dr Santhosh Babu IAS (retd.)
Designation: Managing Director

Date:

Witness:

1.

**For and behalf of
Bharat Electronics Limited**

Signature:
Name:
Designation:

Date:

2.





കേരളം KERALA

M 482214

FOURTH SUPPLEMENTARY AGREEMENT DATED 19/04/2023 TO THE MASTER SERVICE AGREEMENT NO. AGREEMENT/KFON/2018-19/001 DATED 09.03.2019 FOR KERALA FIBRE OPTIC NETWORK AND RELIABLE COMMUNICATION AND DATA ACQUISITION NETWORK

Fourth Supplementary Agreement is made and entered into on this 19th day of April, 2023 by and between M/s Kerala State Information Technology Infrastructure Limited (KSITIL) on behalf of M/s Kerala Fibre Optic Network Limited., a company registered under the Companies Act, 1956, having its registered office at First floor, SAANKETHIKA, PF Road, Pattom Palace PO, Thiruvananthapuram- 695004 hereinafter referred to as "Authority" (which expression unless repugnant to the context therein shall include its administrator and permitted assignees) of the **FIRST PART**;

AND

Bharat Electronics Limited, a company registered under the Companies Act, 1956, having its registered office at Nagavara, Outer Ring Road, Bengaluru 560045, hereinafter referred to as "System Integrator" or "SI", (which expression unless repugnant to the context therein, shall include its successors, administrators, executors and permitted assignees), of the **SECOND PART**.

L.S. Mohan
Bharat Electronics Limited
Bengaluru 560045

[Signature]
19/04/23
MANAGING DIRECTOR
Kerala Fibre Optic Network Limited

No. 48472
15.02.23 Ltd
Pattom, Truro

[Signature]
L. Jayalekshmy
Vendor, Vanchiyoor
Thiruvananthapuram

13 FEB 2023

WHEREAS, as per Contract No Agreement/KFON/2018-19/001 dated 09.03.2019, First Supplementary agreement dated 28/12/2021, Second Supplementary agreement dated 07/11/2022 and Third Supplementary agreement dated 15/02/2023, the Authority had entered into an agreement with SI for implementation of Kerala Fibre Optic Network and Reliable Communication and Data Acquisition Network (hereinafter referred to as the "Agreement"); and

WHEREAS, both the parties agreed to amend the Agreement by incorporating following terms to the agreement. All other terms and conditions of the master agreement vide no. Agreement/KFON/2018-19/001 dated 09.03.2019, first supplementary agreement dated 28/12/2021, Second Supplementary agreement dated 07/11/2022 and Third Supplementary agreement dated 15/02/2023 remains unaltered.

NOW THEREFORE THIS AGREEMENT WITNESSES AS FOLLOWS:

Project timeline: After evaluating the reasons submitted by the System Integrator M/s Bharat Electronics Limited, the implementation term of the project- Kerala Fibre Optic Network and Reliable Communication and Data Acquisition Network is hereby extended till 30th September 2023 without imposing Liquidated Damages (LD)/Penalty. However, the exemption of LD/Penalty is applicable only for the case where the non-execution is because of the reasons beyond the control of SI. And the LD/Penalty shall be imposed if work was not executed within the agreed timeline, despite the availability of resources and manpower.

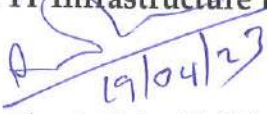
Variation of Quantity: The System Integrator raised a request for the revision of the Bill of Quantities (BoQ) to include the additional materials that are required for the completion of SI's scope of activities. After detailed review, both the parties hereby agreed to revise the BoQ accordingly. Hence the revised capex cost of the Package A shall be Rs. 919,95,07,692.00/- (Rupees Nine Hundred and Nineteen Crore Ninety Five Lakhs Seven Thousand Six Hundred and Ninety Two Only) and that of Package B is Rs. 75,62,26,721.00/- (Rupees Seventy Five Crore Sixty Two Lakhs Twenty Six Thousand Seven Hundred and Twenty One Only). The Revised BOQ signed by both parties is enclosed as **Annexure-A**.





It is understood and acknowledged by the parties that the terms and conditions of the Agreement, and the respective rights and performance of obligations under the same, not otherwise modified by, or made inconsistent with the provisions of this supplementary agreement, will remain in full force and effect and be made binding on the parties hereto, and that this supplementary agreement shall be made and form a part of the Master Agreement vide no. Agreement/KFON/2018-2019/001 dated 09th March 2019.

**For and behalf of
Kerala State IT Infrastructure Ltd.**

Signature: 
Name: Dr Santhosh Babu IAS (retd.)
Designation: Managing Director


Date:



Witness:

1.


**For and behalf of
Bharat Electronics Limited**

Signature: 
Name: K.S. Ashok
Designation: Addl. General Manager

Date:



2.


M V BIJOY
SR. DGM / MKTG
HLS & SC SBU

Revised Quantity proposed for Item under Package -A

Sl. No	Category	BOQ ID	Item Description	UOM	As Per Tender			As per Suuplementry Agreement		Revised Estimated Qty- 14-12-2022		Remarks
					Rate	Tender Quantity	Tender Ammount	Total Qty	Total Amount	Total Qty	Total Amount	
1		A1	A. OPGW Cable & Accessories									
2	Supply	A2	48F DWDM OPGW fiber optic cable	Kms	1,55,326	516	8,01,48,154	100	1,55,32,588	100	1,55,32,588	
3	Service	A3	Installation hardware set for the above 48F OPGW fiber optic cable including all cable fittings, accessories	Kms	27,737	516	1,43,12,168	100	27,73,676	100	27,73,676	
4	Supply	A4	Joint Box	Set	9,172	259	23,75,450	100	9,17,162	100	9,17,162	
5		A5	B. Installation, Commissioning & Testing for OPGW Installation									
6	Service	A6	Survey of route, design and submission of drawing for approval and detailed list of materials required for the work and providing as built drawing after the execution of work.	Kms	1,699	516	8,76,741	516	8,76,741	516	8,76,741	
7	Service	A7	Installation of 48 Fiber (DWDM) OPGW optic fiber cable on transmission tower, fixing of hardware set, cable fittings and accessories and its terminations etc.	Kms	69,446	516	3,58,34,177	100	69,44,608	100	69,44,608	
8	Service	A8	Splicing and installation of Joint Boxes	Set	12,500	259	32,37,575	50	6,25,015	50	6,25,015	
9	Service	A9	End to End testing of OPGW and approach cable and accessories	Kms	19,098	516	98,54,398	100	19,09,767	100	19,09,767	
10		A10	C. OF Cable & Accessories									
11	Supply	A11	48F ADSS fiber optic cable with 100 Kmph	Kms	1,04,661	14886	1,55,79,83,497	13500	1,41,29,23,365	11855.00	1,24,07,56,036	
12	Supply	A12	48F ADSS fiber optic cable with 150 Kmph	Kms	1,14,015	10097	1,15,12,08,041	2000	22,80,29,720	1000.00	11,40,14,860	
13	Supply	A13	24F ADSS fiber optic cable	Kms	86,513	10250	88,67,60,198	5500	47,58,22,545	5000.00	43,25,65,950	
14	Supply	A14	12F ADSS fiber optic cable	Kms	71,006	7409	52,60,84,343	16000	1,13,60,97,920	14035.00	99,65,70,894	
15	Supply	A15	Anchoring / tensioning clamp assembly for the poles	Nos	493	639630	31,54,01,553	535000	26,38,08,500	735000.00	36,24,28,500	
16	Supply	A16	Suspension clamp assembly	Nos	185	426420	7,88,49,322	370000	6,84,16,700	379841.00	7,02,36,399	
17	Supply	A17	Adjustable Cable Storage Bracket	Nos	740	170568	12,61,60,621	129000	9,54,14,850	135125.00	9,99,45,206	
18	Supply	A18	Down Lead Clamps Assembly	Nos	99	170568	1,68,21,416	129000	1,27,21,980	135125.00	1,33,26,028	
19	Supply	A19	48F UG fiber optic cable	Kms	99,852	600	5,99,11,410	600	5,99,11,410	300.00	2,99,55,705	
20	Supply	A20	PLB HDPE pipe	Kms	73,965	600	4,43,78,826	600	4,43,78,826	900.00	6,65,68,239	
21	Supply	A21	RCC route indicators	Nos	923	3000	27,69,990	3000	27,69,990	1500.00	13,84,995	
22	Supply	A22	Man holes	Nos	11,093	300	33,28,041	300	33,28,041	1000.00	1,10,93,470	
23	Supply	A23	4F fiber optic drop cable	Kms	23,965	6088	14,58,96,241	4100	9,82,54,696	4000.00	9,58,58,240	
24	Supply	A24	Anchoring / tensioning clamp assembly for the poles	Nos	101	91320	92,31,539	325000	3,28,54,250	120750.00	1,22,06,618	
25	Supply	A25	Suspension clamp assembly	Nos	57	60880	34,52,505	195000	1,10,58,450	60880.00	34,52,505	
26	Supply	A26	Adjustable Cable Storage Bracket	Nos	863	24352	2,10,13,828	0	-	0.00	-	
27	Supply	A27	Down Lead Clamps Assembly	Nos	72	24352	17,41,168	0	-	0.00	-	
28	Supply	A28	Anchoring bolt	Nos	47	30438	14,25,716	35000	16,39,400	35000.00	16,39,400	
29	Supply	A29	Cross arm	Nos	148	1000000	14,79,30,000	780000	11,53,85,400	808728.00	11,96,35,133	
30	Supply	A30	Street Box Type I - (Branch Joint Closure)	Nos	1,504	10000	1,50,39,500	26500	3,98,54,675	25477.00	3,83,16,134	
31	Supply	A31	Street Box Type II - (FTB Type II)	Nos	1,220	15000	1,83,06,300	17500	2,13,57,350	22000.00	2,68,49,240	
32	Supply	A32	FTB Type I at end office	Nos	136	30438	41,27,393	30438	41,27,393	33042.00	44,80,495	
33	Supply	A33	1:2 optical splitter	Nos	863	500	4,31,460	18378	1,58,58,744	16827.00	1,45,20,355	
34	Supply	A34	1:4 optical splitter	Nos	1,603	13049	2,09,11,936	5000	80,12,850	4800.00	76,92,336	
35	Supply	A35	1:8 optical splitter	Nos	2,465	2039	50,27,134	1839	45,34,036	3700.00	91,22,313	
36	Supply	A36	SC APC adapter	Nos	65	2000	1,30,680	2000	1,30,680	0.00	-	
37	Supply	A37	Adapter pigtails	Nos	173	2000	3,45,160	0	-	0.00	-	
38	Supply	A38	Poles and accessories	Nos	11,834	5000	5,91,71,750	5000	5,91,71,750	10000.00	11,83,43,500	
39		A39	D. Pole Strengthening									
40	Supply	A40	LT pole stay	Nos	1,350	5000	67,49,300	5000	67,49,300	2000.00	26,99,720	
41	Supply	A41	HT pole stay	Nos	1,949	5000	97,44,850	5000	97,44,850	500.00	9,74,485	
42	Supply	A42	8m support pole insertion	Nos	4,745	5000	2,37,24,200	5000	2,37,24,200	0.00	-	
43	Supply	A43	8m to 9m pole conversion	Nos	6,779	5000	3,38,94,350	0	-	0.00	-	
44	Supply	A44	9m to A pole conversion	Nos	16,642	5000	8,32,10,300	0	-	0.00	-	



Moses Rajakumar S
 Moses Rajakumar S
 Project Head - KFON
 KSITIL

K.S. Shaha



[Signature]
 19/12/23
 MANAGING DIRECTOR
 Kerala State IT Infrastructure Limited

Revised Quantity proposed for Item under Package -A

Sl. No	Category	BOQ ID	Item Description	UOM	As Per Tender			As per Suuplementry Agreement		Revised Estimated Qty- 14-12-2022		Remarks
					Rate	Tender Quantity	Tender Ammount	Total Qty	Total Amount	Total Qty	Total Amount	
45		A45	E. Installation, Commissioning & Testing for OFC & accessories									
46	Service	A46	Survey of route, design and submission of drawing for approval and detailed list of materials required for the work and providing as built drawing after the execution of work	Kms	682	49330	3,36,31,221	49330	3,36,31,221	55000.00	3,74,96,800	
47	Service	A47	Installation of 48FADSS optic fiber cable, fixing of hardware set, cable fittings, accessories, joint closures, FTB, splicing and terminations etc.	Kms	56,045	24983	1,40,01,66,989	15500	86,86,94,245	11370.00	63,72,29,262	
48	Service	A48	Installation of 24FADSS optic fiber cable, fixing of hardware set, cable fittings, accessories, joint closures, FTB, splicing and terminations etc.	Kms	47,894	10250	49,09,10,733	5500	26,34,15,515	4571.00	21,89,22,240	
49	Service	A49	Installation of 12FADSS optic fiber cable, fixing of hardware set, cable fittings, accessories, joint closures, FTB, splicing and terminations etc.	Kms	36,451	7409	27,00,66,719	16000	58,32,18,720	13554.00	49,40,59,158	
50	Service	A50	Excavation of trench for PLB laying, PLB laying, back filling, reinstatement and compaction, laying of 48 F UG optical fiber cable, its splicing and terminations etc. and all other allied activities	Kms	6,68,393	600	40,10,36,046	600	40,10,36,046	300.00	20,05,18,023	
51	Service	A51	Installation of 4FADSS optic fiber cable, fixing of hardware set, cable fittings, accessories, joint closures, FTB, splicing and terminations etc.	Kms	23,690	6088	14,42,25,268	4100	9,71,29,369	3863.00	9,15,14,818	
52	Service	A52	End to End testing of total OFC and accessories	Kms	223	49330	1,09,90,724	41700	92,90,760	35890.00	79,96,292	
53	Service	A53	Installation of Poles and accessories	Nos	2,228	5000	1,11,39,900	5000	1,11,39,900	10000.00	2,22,79,800	
54		A54	IT & NON - IT									
55		A55	A. NOC-Non IT									
56	Service	A56	Civil works including site preparation and partitioning works, false flooring, false ceiling, floor strengthening, etc.	Site	8,01,284	1	8,01,284	1	8,01,284	1.00	8,01,284	
57	Service	A57	Electrical works including light fixtures, cabling, panels + Earthing etc.	Site	20,34,029	1	20,34,029	1	20,34,029	1.00	20,34,029	
58	Supply	A58	250 KVA DG set with AMF Panel and required foundation and civil structure	Nos	81,92,910	2	1,63,85,820	2	1,63,85,820	2.00	1,63,85,820	
59	Supply	A59	Precision AC for server room	Lot	28,90,787	1	28,90,787	1	28,90,787	1.00	28,90,787	
60	Supply	A60	Comfort AC for NOC, UPS, BMS, Meeting, electrical rooms,etc.	Lot	8,01,284	1	8,01,284	1	8,01,284	1.00	8,01,284	
61	Supply	A61	80 kVA online UPS (with SNMP) with 30 minutes battery back up, isolation transformer and battery enclosure for server farm area	Nos	9,75,742	2	19,51,485	2	19,51,485	2.00	19,51,485	
62	Supply	A62	30 kVA online UPS (with SNMP) with 30 minutes battery back up, isolation transformer and battery enclosure for help desk and other areas	Nos	4,78,331	2	9,56,662	2	9,56,662	2.00	9,56,662	
63	Supply	A63	Access Control System (RFID + Biometric, smart cards) to manage NOC and all the PoP locations	Set	17,68,618	1	17,68,618	1	17,68,618	1.00	17,68,618	
64	Supply	A64	High Sensitivity Smoke Detection System	Set	5,73,483	1	5,73,483	1	5,73,483	1.00	5,73,483	
65	Supply	A65	Fire Detection System	Set	5,98,037	1	5,98,037	1	5,98,037	1.00	5,98,037	
66	Supply	A66	Fire Suppression System	Set	26,70,637	1	26,70,637	1	26,70,637	1.00	26,70,637	
67	Supply	A67	Indoor Dome Camera	Lot	29,46,459	1	29,46,459	1	29,46,459	1.00	29,46,459	
68	Supply	A68	Rodent Repellent System	Set	2,36,224	1	2,36,224	1	2,36,224	1.00	2,36,224	
69	Supply	A69	Water Leak Detection System	Set	86,402	1	86,402	1	86,402	1.00	86,402	
70	Supply	A70	Integrated Building Management Solution	Set	44,12,782	1	44,12,782	1	44,12,782	1.00	44,12,782	
71	Supply	A71	42U Network Racks installed with redundant PDUs, Industrial sockets and accessories	Nos	41,297	4	1,65,188	8	3,30,376	8.00	3,30,376	
72	Supply	A72	42U Server Racks installed with redundant PDUs, Industrial sockets and accessories	Nos	41,297	16	6,60,751	18	7,43,345	18.00	7,43,345	
73	Supply	A73	LCD Projector	Nos	1,06,632	1	1,06,632	1	1,06,632	1.00	1,06,632	
74	Supply	A74	70" LED TV	Nos	1,41,766	3	4,25,297	3	4,25,297	3.00	4,25,297	
75	Supply	A75	Network Colour Laser Printer	Nos	55,474	1	55,474	1	55,474	1.00	55,474	
76	Supply	A76	Network MFP	Nos	3,51,332	1	3,51,332	1	3,51,332	1.00	3,51,332	
77	Supply	A77	Passive Items	Lot	8,007	1	8,007	1	8,007	1.00	8,007	
78	Supply	A78	Workstation Furniture and Fixtures including chairs	Set	33,900	20	6,78,010	20	6,78,010	20.00	6,78,010	
79	Supply	A79	Conference Table (for 10 personnel) & Chairs	Set	4,26,037	1	4,26,037	1	4,26,037	1.00	4,26,037	
80	Supply	A80	Public Addressable System	Set	4,47,198	1	4,47,198	1	4,47,198	1.00	4,47,198	



Moses Rajakumar S
 Moses Rajakumar S
 Project Head - KFON
 KSITIL



19/04/23
 MANAGING DIRECTOR
 Kerala State IT Infrastructure Limited

Revised Quantity proposed for Item under Package -A

SL No	Category	BOQ ID	Item Description	UOM	As Per Tender			As per Suuplementry Agreement		Revised Estimated Qty- 14-12-2022		Remarks
					Rate	Tender Quantity	Tender Ammount	Total Qty	Total Amount	Total Qty	Total Amount	
81		A81	B. NOC – IT components									
82	Supply	A82	IP MPLS Router	Nos	75,51,722	2	1,51,03,443	2	1,51,03,443	2.00	1,51,03,443	
83	Supply	A83	Internet router	Nos	39,97,971	2	79,95,941	2	79,95,941	2.00	79,95,941	
84	Supply	A84	URL Filtering Firewall	Nos	2,66,53,134	2	5,33,06,268	2	5,33,06,268	2.00	5,33,06,268	
85	Supply	A85	DC Firewall	Nos	2,60,60,843	2	5,21,21,686	2	5,21,21,686	2.00	5,21,21,686	
86	Supply	A86	DC Core Switch	Nos	35,53,751	2	71,07,502	2	71,07,502	2.00	71,07,502	
87	Supply	A87	Access Switch	Nos	69,594	4	2,78,377	4	2,78,377	4.00	2,78,377	
88	Supply	A88	Aggregation Switch	Nos	7,40,365	2	14,80,730	6	44,42,189	6.00	44,42,189	
89	Supply	A89	SAN storage (80 TB) for application & DB	Set	51,45,535	1	51,45,535	1	51,45,535	1.00	51,45,535	
90	Supply	A90	Video storage (200 TB)	Set	28,72,616	1	28,72,616	1	28,72,616	1.00	28,72,616	
91	Supply	A91	SAN Switch	Nos	7,62,576	2	15,25,151	2	15,25,151	2.00	15,25,151	
92	Supply	A92	Secondary Storage	Set	53,30,627	1	53,30,627	1	53,30,627	1.00	53,30,627	
93	Supply	A93	Blade Chassis	Set	44,42,189	1	44,42,189	1	44,42,189	1.00	44,42,189	
94	Supply	A94	Servers	Lot	1,99,89,851	1	1,99,89,851	1	1,99,89,851	1.00	1,99,89,851	
95	Supply	A95	OS licences	Lot	32,77,164	1	32,77,164	1	32,77,164	1.00	32,77,164	
96	Supply	A96	DB licenses	Lot	2,45,78,729	1	2,45,78,729	1	2,45,78,729	1.00	2,45,78,729	
97	Supply	A97	Virtualization software license	Lot	4,91,57,458	1	4,91,57,458	1	4,91,57,458	1.00	4,91,57,458	
98	Supply	A98	Workstation computers	Nos	1,38,745	5	6,93,727	5	6,93,727	5.00	6,93,727	
99	Supply	A99	Desktop Computers	Nos	1,07,680	15	16,15,204	15	16,15,204	15.00	16,15,204	
100	Supply	A100	IP phones	Nos	4,327	20	86,539	20	86,539	20.00	86,539	
101	Supply	A101	IP PBX	Nos	13,80,043	2	27,60,087	2	27,60,087	2.00	27,60,087	
102	Supply	A102	Voice Router	Nos	2,32,989	2	4,65,978	4	9,31,955	4.00	9,31,955	
103	Supply	A103	Video Management System base license	Lot	13,94,543	1	13,94,543	1	13,94,543	1.00	13,94,543	
104	Supply	A104	Video Management System camera license	Nos	-	400	-	400	-	400.00	-	
105	Supply	A105	Video wall display, Controller, Video wall Management Software & Accessories	Set	94,76,457	1	94,76,457	1	94,76,457	1.00	94,76,457	
106	Supply	A106	Link load balancer	Nos	85,14,196	2	1,70,28,392	2	1,70,28,392	2.00	1,70,28,392	
107	Supply	A107	KVM switch (If Required)	Nos	29,61,460	2	59,22,919	0	-	0.00	-	
108	Supply	A108	Backup and archival solution	Lot	3,84,98,972	1	3,84,98,972	1	3,84,98,972	1.00	3,84,98,972	
109	Supply	A109	EMS solution for Network(for MPLS & DWDM) with NMS	Lot	58,74,277	1	58,74,277	1	58,74,277	1.00	58,74,277	
110	Supply	A110	EMS solution for GPON with NMS	Lot	58,74,277	1	58,74,277	1	58,74,277	1.00	58,74,277	
111	Supply	A111	BSS software including CRM, Enterprise & Partner billing module, and self-care portal	Lot	58,74,277	1	58,74,277	1	58,74,277	1.00	58,74,277	
112	Supply	A112	Anti-virus software	Lot	1,726	1	1,726	1	1,726	1.00	1,726	
113	Supply	A113	GIS software license	Lot	3,57,49,608	1	3,57,49,608	1	3,57,49,608	1.00	3,57,49,608	
114	Supply	A114	Fibre Monitoring System	Lot	44,37,882	1	44,37,882	1	44,37,882	1.00	44,37,882	
115	Supply	A115	Centralized Access Control system software	Lot	-	1	-	1	-	1.00	-	
116	Supply	A116	Project Management Software	Lot	1,96,62,884	1	1,96,62,884	1	1,96,62,884	1.00	1,96,62,884	
117		A117	C. DR Site									
118	Supply	A118	Servers, Virtualization software, OS, DB licenses required for EMS Solution at DR	Lot	1,83,24,030	1	1,83,24,030	1	1,83,24,030	1.00	1,83,24,030	
119	Supply	A119	Servers, Virtualization software, OS, DB licenses required for BSS Solution at DR	Lot	1,83,24,030	1	1,83,24,030	1	1,83,24,030	1.00	1,83,24,030	
120	Supply	A120	IP PBX	Nos	13,80,043	1	13,80,043	2	27,60,087	2.00	27,60,087	
121		A121	D. Core PoP(14 Nos)									
122	Supply	A122	Modular MPLS Router	Nos	85,88,233	28	24,04,70,512	28	24,04,70,512	28.00	24,04,70,512	
123	Supply	A123	24 port Access Switch	Nos	69,594	14	9,74,319	14	9,74,319	14.00	9,74,319	
124	Supply	A124	Desktop Computers	Nos	97,307	14	13,62,297	14	13,62,297	14.00	13,62,297	
125	Supply	A125	IP phones	Nos	3,910	14	54,741	14	54,741	14.00	54,741	
126	Supply	A126	High Density Fiber Distribution Frame(FDMS Type I)	Nos	98,031	14	13,72,434	28	27,44,869	30.00	29,40,931	2 No FDMS in NOC
127	Supply	A127	15 kVA UPS (with SNMP) with 30 minutes battery back up, isolation transformer and battery enclosure	Nos	2,66,759	28	74,69,256	28	74,69,256	28.00	74,69,256	
128	Supply	A128	42U server racks installed with redundant PDUs, Industrial sockets and accessories	Nos	30,278	28	8,47,790	42	12,71,685	42.00	12,71,685	
129	Supply	A129	Split Air Conditioners 3 TR with timer	Nos	60,922	42	25,58,717	42	25,58,717	42.00	25,58,717	
130	Supply	A130	Pre-fabricated Shelter	Set	4,85,142	14	67,91,991	14	67,91,991	14.00	67,91,991	
131	Supply	A131	Indoor CCTV Dome Camera	Nos	12,532	14	1,75,453	14	1,75,453	14.00	1,75,453	
132	Supply	A132	Indoor CAT 6 patch cord 10 mtr	Nos	362	28	10,137	28	10,137	28.00	10,137	
133	Supply	A133	Access Control system with Biometric + Smart card Reader & Smart Card, Push button, Magnetic lock and accessories	Set	36,205	14	5,06,865	14	5,06,865	14.00	5,06,865	
134	Supply	A134	Fibre monitoring unit with minimum of 4 ports and scalable to 8 ports	Nos	16,00,206	14	2,24,02,887	88	14,08,18,148	88.00	14,08,18,148	
135	Supply	A135	Spare Cable Box	Nos	6,907	14	96,694	14	96,694	14.00	96,694	
136	Supply	A136	Passive Cabling & Accessories	Lot	7,063	14	98,878	14	98,878	14.00	98,878	
137	Service	A137	Site Preparation (partition for UPS, exhaust fan, painting, light & fans) and Electrical works including earthing	Site	55,699	14	7,79,792	14	7,79,792	14.00	7,79,792	



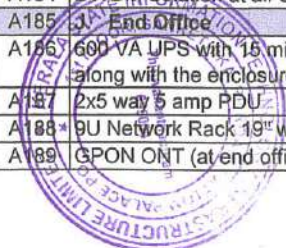
Moses Rajakumar S
Project Head - KFON
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MANAGING DIRECTOR
Kerala State IT Infrastructure Limited

Revised Quantity proposed for Item under Package -A

SL No	Category	BOQ ID	Item Description	UOM	As Per Tender			As per Suuplementry Agreement		Revised Estimated Qty- 14-12-2022		Remarks
					Rate	Tender Quantity	Tender Ammount	Total Qty	Total Amount	Total Qty	Total Amount	
138		A138	E. Aggregation PoP(87 Nos)					0				
139	Supply	A139	Modular MPLS Router	Nos	44,79,207	87	38,96,91,030	96	43,00,03,895	96.00	43,00,03,895	2 No required in SDC
140	Supply	A140	24 port Access Switch	Nos	69,594	87	60,54,699	94	65,41,859	94.00	65,41,859	
141	Supply	A141	High Density Fiber Distribution Frame (FDMS Type I)	Nos	98,031	87	85,28,700	137	1,34,30,251	137.00	1,34,30,251	
142	Supply	A142	5 kVA UPS (with SNMP) with 30 minutes battery back up, isolation transformer and battery enclosure	Nos	92,384	174	1,60,74,854	188	1,73,68,233	188.00	1,73,68,233	
143	Supply	A143	42U server Racks installed with redundant PDUs, Industrial sockets and accessories	Nos	30,278	87	26,34,205	94	28,46,153	94.00	28,46,153	
144	Supply	A144	Split Air Conditioners – 2 TR with timer	Nos	41,339	174	71,92,989	188	77,71,736	188.00	77,71,736	
145	Supply	A145	Pre-fabricated Shelter	Set	6,12,694	87	5,33,04,375	94	5,75,93,232	94.00	5,75,93,232	
146	Supply	A146	Indoor CCTV Dome Camera	Nos	12,532	87	10,90,317	94	11,78,044	94.00	11,78,044	
147	Supply	A147	Indoor CAT 6 patch cord 10 mtr	Nos	362	174	62,997	188	68,065	188.00	68,065	
148	Supply	A148	Access Control system with Biometric + Smart card Reader & Smart Card, Push button, Magnetic lock and accessories	Set	36,205	87	31,49,804	94	34,03,236	94.00	34,03,236	
149	Supply	A149	Spare Cable Box	Nos	6,907	87	6,00,886	94	6,49,233	94.00	6,49,233	
150	Supply	A150	Passive Cabling & Accessories	Lot	7,063	87	6,14,454	94	6,63,893	94.00	6,63,893	
151	Service	A151	Site Preparation(partition for UPS, exhaust fan, painting, light & fans) and Electrical works including earthing	site	55,699	87	48,45,852	94	52,35,748	94.00	52,35,748	
152		A152	F. Pre- Aggregation PoP(194 Nos)									
153	Supply	A153	IP MPLS Router	Nos	25,17,241	194	48,83,44,729	186	46,82,06,802	186.00	46,82,06,802	
154	Supply	A154	24 port Access Switch	Nos	69,594	194	1,35,01,283	186	1,29,44,529	186.00	1,29,44,529	
155	Supply	A155	High Density Fiber Distribution Frame (FDMS Type I)	Nos	98,031	194	1,90,18,020	216	2,11,74,702	216.00	2,11,74,702	
156	Supply	A156	5 kVA UPS (with SNMP) with 30 minutes battery back up, isolation transformer and battery enclosure	Nos	3,18,357	388	12,35,22,473	372	11,84,28,763	372.00	11,84,28,763	
157	Supply	A157	42U server Racks installed with redundant PDUs, Industrial sockets and accessories	Nos	71,816	194	1,39,32,213	186	1,33,57,689	186.00	1,33,57,689	
158	Supply	A158	Split Air Conditioners – 2 TR with timer	Nos	41,339	388	1,60,39,540	372	1,53,78,115	372.00	1,53,78,115	
159	Supply	A159	Pre-fabricated Shelter	Set	4,85,142	194	9,41,17,591	186	9,02,36,453	186.00	9,02,36,453	
160	Supply	A160	Indoor CCTV Dome Camera	Nos	12,532	194	24,31,282	186	23,31,023	186.00	23,31,023	
161	Supply	A161	Indoor CAT 6 patch cord 10 mtr	Nos	362	388	1,40,475	372	1,34,683	372.00	1,34,683	
162	Supply	A162	Access Control system with Biometric + Smart card Reader & Smart Card, Push button, Magnetic lock and accessories	Set	36,205	194	70,23,700	186	67,34,063	186.00	67,34,063	
163	Supply	A163	Spare Cable Box	Nos	6,907	194	13,39,906	186	12,84,652	186.00	12,84,652	
164	Supply	A164	Passive Cabling & Accessories	Lot	7,063	194	13,70,162	186	13,13,660	186.00	13,13,660	
165	Service	A165	Site Preparation(partition for UPS, exhaust fan, painting, light & fans) and Electrical works including earthing	site	50,130	194	97,25,125	186	93,24,089	186.00	93,24,089	
166		A166	G. Spur PoP(83 Nos)									
167	Supply	A167	IP MPLS Router	Nos	24,06,186	83	19,97,13,454	81	19,49,01,081	81.00	19,49,01,081	
168	Supply	A168	24 port Access Switch	Nos	69,594	83	57,76,322	81	56,37,133	81.00	56,37,133	
169	Supply	A169	High Density Fiber Distribution Frame (FDMS Type I)	Nos	98,031	83	81,36,575	83	81,36,575	83.00	81,36,575	
170	Supply	A170	5 kVA UPS (with SNMP) with 30 minutes battery back up, isolation transformer and battery enclosure	Nos	1,53,996	166	2,55,63,271	162	2,49,47,289	162.00	2,49,47,289	
171	Supply	A171	42U server Racks installed with redundant PDUs, Industrial sockets and accessories	Nos	71,816	83	59,60,689	81	58,17,058	81.00	58,17,058	
172	Supply	A172	Split Air Conditioners – 2 TR with timer	Nos	41,339	166	68,62,277	162	66,96,921	162.00	66,96,921	
173	Supply	A173	Pre-fabricated Shelter	Set	4,85,142	83	4,02,66,804	81	3,92,96,520	81.00	3,92,96,520	
174	Supply	A174	Indoor CCTV Dome Camera	Nos	12,532	83	10,40,186	81	10,15,121	81.00	10,15,121	
175	Supply	A175	Indoor CAT 6 patch cord 10 mtr	Nos	362	166	60,100	162	58,652	162.00	58,652	
176	Supply	A176	Access Control system with Biometric + Smart card Reader & Smart Card, Push button, Magnetic lock and accessories	Set	36,205	83	30,04,985	81	29,32,576	81.00	29,32,576	
177	Supply	A177	Spare Cable Box	Nos	6,907	83	5,73,259	81	5,59,445	0.00	-	
178	Supply	A178	Passive Cabling & Accessories	Lot	7,063	83	5,86,203	81	5,72,078	81.00	5,72,078	
179	Service	A179	Site Preparation(partition for UPS, exhaust fan, painting, light & fans) and Electrical works including earthing	site	50,130	83	41,60,749	81	40,60,490	81.00	40,60,490	
180		A180	H. OLT					0				
181	Supply	A181	4 port GPON OLT (at PoP location)	Nos	3,27,422	94	3,07,77,679	30	98,22,664	30.00	98,22,664	
182	Supply	A182	8 port GPON OLT (at PoP location)	Nos	3,51,238	284	9,97,51,720	449	15,77,06,064	449.00	15,77,06,064	
183		A183	I. DWDM Solution									
184	Supply	A184	DWDM Solution at all Core PoP locations	Nos	2,81,33,864	14	39,38,74,094	14	39,38,74,094	14.00	39,38,74,094	
185		A185	J. End Office									
186	Supply	A186	600 VA UPS with 15 min Battery backup to be supplied along with the enclosure	Nos	1,337	30438	4,06,89,214	30438	4,06,89,214	30438.00	4,06,89,214	
187	Supply	A187	2x5 way 5 amp PDU	Nos	301	30438	91,55,142	30438	91,55,142	30438.00	91,55,142	
188	Supply	A188	9U Network Rack 19" with provision to mount the ONT	Nos	2,785	30438	8,47,68,917	30438	8,47,68,917	30438.00	8,47,68,917	
189	Supply	A189	GPON ONT (at end office)	Nos	7,343	30438	22,35,06,538	30438	22,35,06,538	30438.00	22,35,06,538	



Moses Rajakumar S
Project Head - KPN

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Revised Quantity proposed for Item under Package -A

SL No	Category	BOQ ID	Item Description	UOM	As Per Tender		As per Suuplementry Aggreement		Revised Estimated Qty- 14-12-2022		
					Rate	Tender Quantity	Tender Ammount	Total Qty	Total Amount	Total Qty	Total Amount
190		A190	K. Installation, Commissioning & Testing		-		-	0			
191	Service	A191	Installation, Commissioning & Testing of all IT/Non IT Components at NOC	Set	2,94,76,764	1	2,94,76,764	1	2,94,76,764	1.00	2,94,76,764
192	Service	A192	Installation, Commissioning & Testing of all IT/Non IT Components at Core PoPs incl. OLT	Set	8,89,743	14	1,24,56,402	14	1,24,56,402	14.00	1,24,56,402
193	Service	A193	Installation, Commissioning & Testing of all IT/Non IT Components at Aggregation PoPs incl. OLT	Set	4,20,587	87	3,65,91,030	94	3,95,35,136	94.00	3,95,35,136
194	Service	A194	Installation, Commissioning & Testing of all IT/Non IT Components at Pre-Aggregation PoPs incl. OLT	Set	2,63,629	194	5,11,43,995	186	4,90,34,964	186.00	4,90,34,964
195	Service	A195	Installation, Commissioning & Testing of all IT/Non IT Components at Spur PoPs incl. OLT	Set	1,35,457	83	1,12,42,899	81	1,09,71,985	81.00	1,09,71,985
196	Service	A196	Installation, Commissioning & Testing of DWDM equipment at all Core PoPs	Set	44,42,189	1	44,42,189	1	44,42,189	1.00	44,42,189
197	Service	A197	Installation, Commissioning & Testing of all IT/Non IT Components at end offices	Set	-	30438	-	30438	-	30438.00	-
198		A198	L. Training & Others								
199	Service	A199	Training and other miscellaneous costs	Lot	30,50,814	1	30,50,814	1	30,50,814	1.00	30,50,814
					Package- A total value		11,68,25,22,568		10,11,88,55,572		9,19,95,07,692



Moses Rajakumar S
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 KSITIL



[Signature]
 19/04/23
 MANAGING DIRECTOR
 Kerala State IT Infrastructure Limited

Revised Quantity proposed for Item under Package -B

Sl No	Category	BOQ ID	Item Description	UOM	As Per Tender			As per Suuplementry Agreement		Revised Estimated Qty- 14-12-2022		
					Rate	Tender Quantity	Tender Ammount	Total Qty	Total Amount	Total Qty	Total Amount	Remarks
					As Per Tender			Revised Quantity		Revised Estimated Qty- 14-12-2022		
Sl No	Category	BOQ ID	Item Description	UOM	Rate	Tender Quantity	Tender Ammount	Total Qty	Total Amount	Total Qty	Total Amount	Remarks
1	Supply	B1	Supply of 48 Fibre (DWSM) OPGW optic fibre cable with 5Kms Spare and testing equipment as per Technical specification, at three System Operation Circles at Kannur, Kalamassery & Thiruvananthapuram.	Kms	1,55,326	2900	450521161.7	2751	42,73,01,495.88	2751.00	42,73,01,496	
2	Supply	B2	Supply of Hardware sets for 48 Fibre (DWSM)OPGW OFC including cable fittings and accessories and for the 5Kms OPGW Spare cable at three System Operation Circles at Kannur, Kalamassery & Thiruvananthapuram.	Kms	31,435	2900	91176903.15	2751	8,64,77,685.00	2751.00	8,64,77,685	
3	Supply	B3	Joint box four way for 48 fibre OPGW cable	Nos	1,356	800	1084816	1050	14,23,821.00	1050.00	14,23,821	
4	Supply	B4	FODP (96 fibre) indoor type with FC-PC coupling and pig tails (5 mtr each)	Nos	28,161	100	2816083	100	28,16,083.00	100.00	28,16,083	
5	Supply	B5	FODP (48 fibre) indoor type with FC-PC coupling and pig tails (5 mtr each)	Nos	32,244	160	5158988.8	400	1,28,97,472.00	130.00	41,91,678	
6	Supply	B6	Non-Metallic armored underground Optic Fibre approach cable, 48 Fibre, DWSM.	Nos	1,00,715	75	7553645.25	75	75,53,645.25	75.00	75,53,645	
7	Supply	B7	PLB HDPE pipe O.D 40 mm including all accessories	Kms	73,965	75	5547353.25	75	55,47,353.25	75.00	55,47,353	
8	Service	B8	Survey of route, design and submission of drawing for approval and detailed list of materials required for the work and providing as built drawing after the execution of work.	Kms	535	2900	1550979.018	2900	15,50,717.00	2900.00	15,50,717	
9	Service	B9	Installation of 48 Fibre (DWSM) OPGW optic fibre cable on 220kV & 110kV towers, fixing of hardware set, cable fittings and accessories and installation of joint boxes and its terminations etc. Pre-installation test (Drum test), Post installation test, splicing and Link test (End to End).	Kms	75,233	2900	218213289.3	2751	20,69,66,670.75	2751.00	20,69,66,671	
10	Service	B10	Installation of non-metallic armored underground optical fibre approach cable (UG OFC 48 fibre DWSM) at 220kV & 110kV Substations through existing cable trench by removing concrete slab, installation of HDPE pipe etc. Pre-installation test (Drum test), Post Installation test, splicing and Link test (End to end) and placing back concrete slabs as good as in original condition.	Kms	49,770	75	3732726.75	75	37,32,726.75	75.00	37,32,727	
11	Service	B11	Installation, testing and commissioning of FODP 96 fibre and termination of OPGW & OF approach cable.	Nos	24,885	100	2488484	100	24,88,484.00	100.00	24,88,484	
12	Service	B12	Installation, testing and commissioning of FODP 48 fibre and termination of OPGW & OF approach cable.	Nos	24,306	160	3888980.8	400	97,22,452.00	130.00	31,59,797	
13	Supply	B13	OTDR (Optical Time Domain reflectmeter) for 1310/1550 nm with laser source and all necessary accessories	Nos	1,56,254	11	1718790.37	11	17,18,790.37	11.00	17,18,790	
14	Supply	B14	Callbrated Fibre 1km Spool	Nos	4,919	11	54110.1	11	54,110.10	11.00	54,110	
15	Supply	B15	Optical Power meter (1310/1550)	Nos	4,051	11	44561.22	11	44,561.22	11.00	44,561	
16	Supply	B16	Laser Light source (1310/1550)	Nos	6,366	11	70024.79	11	70,024.79	11.00	70,025	
17	Supply	B17	Opriical Fiber Fusion Splicer incl. Fibre Cleaver with splice kit	Nos	2,51,163	3	753489.93	3	7,53,489.93	3.00	7,53,490	
18	Supply	B18	Optical Fibre Talk set	Nos	34,144	11	375587.52	11	3,75,587.52	11.00	3,75,588	
							Package- B total value	796749974.9	771495169.8		756226721.1	



Moses Rajakumar S
 Moses Rajakumar S
 Project Head - KFON
 KSITIL



29/09/22
 MANAGING DIRECTOR
 Kerala State IT Infrastructure Limited

RESOLVED FURTHER THAT the Board be and is hereby authorised Managing Director to do all such acts and deeds necessary for making the above resolution effective.

M 64 A12 ENGINEERING PROJECT STATUS

Board took note of the detailed status of the engineering projects placed before the Board.

M 64 A13 COURT CASE STATUS

Board took note of the status of Court cases placed before the Board.

M 64 A14 CONSTRUCTION OF PROPOSED ROAD TO NON SEZ AREAS OF CYBERPARK LAND NEAR TEMPLE - PROPOSAL FOR FORMING SERVICE ROAD TO THE NEW ROAD

Board instructed to take up the matter with Government.

M 64 A15 EXTENSION OF CONTRACT WITH SYSTEM INTEGRATOR OF KFON PROJECT M/S BHARAT ELECTRONICS LIMITED

Board discussed the matter in detail and passed the following resolutions:

RESOLVED THAT the Board be and is hereby accorded sanction to extend the term of contract of M/s Bharat Electronics Limited till 31/03/2024 with liquidated damages limited to the execution of feasible scope of work.

RESOLVED THAT the Board be and is hereby authorised Managing Director to assess the project execution for ascertaining the net Liquidated Damage amount to be levied.

RESOLVED FURTHER THAT the Board be and is hereby authorised Managing Director to do all such acts and deeds necessary for making the above resolution effective.

M 64 A16 KFON PROJECT STATUS

Board took note of the physical and financial status of KFON Project placed before the Board.



M 64 A17 SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF OPGW ADDITIONAL LINKS

Board discussed the matter in detail and passed the following resolution:

RESOLVED THAT the Board be and is hereby accorded sanction to invite tender for the supply, installation, testing and commissioning of additional OPGW links of 1000 Kms.

RESOLVED FURTHER THAT the Board be and is hereby authorised Managing Director to do all such acts and deeds necessary for making the above resolution effective.