

Application Procedures and Arrangements for Shared Use of the Fibre-based Networks to Villages in Remote Areas Under the Subsidy Scheme by Qualified Fixed Network Operators for Projects 1, 3 and 4

1. Background

The Office of the Communications Authority ("OFCA") has implemented a subsidy scheme¹ ("Scheme") to provide fixed network operators (FNOs) with financial incentives in the form of subsidies to encourage the extension of fibre-based networks ("Network")² to villages in remote areas. The Scheme covers 235 villages across nine districts in the New Territories and outlying islands (namely North, Sai Kung, Tai Po, Sha Tin, Yuen Long, Tuen Mun, Tsuen Wan, Kwai Tsing and Islands). These 235 villages are grouped under six projects. After conducting two tender exercises, OFCA awarded Project 1 (North) ("Project 1"), Project 3 (Part of Sha Tin, part of Tai Po, Yuen Long, Tuen Mun, Tsuen Wan and Kwai Tsing) ("Project 3") and Project 4 (Part of Sha Tin and part of Sai Kung) ("Project 4") (collectively the "Relevant Project") to HGC Global Communications Limited ("HGC").

HGC is required to roll out fibre-based lead-in connections ("LIC") to the vicinity of the entrances of the villages concerned (applicable to Projects 1, 3 and 4) ("Village(s)").

2. Sharing of the Network with other FNOs

HGC shall share at least 50% of the capacity of the LIC between the network interconnection point (means one of the two end points of the LIC where interconnection with the fibre-based networks of the Qualified FNOs (as defined in Clause 2(a) below) takes place) ("Network Interconnection Point") and the network termination point (means one of the two end points of the LIC where the LIC terminates in the vicinity of the entrance of the Village concerned) ("Network Termination Point") under the Relevant Project, in relation to Villages which obtained the project milestone completion certificate(s) issued by OFCA, for use by the Qualified FNOs in accordance with the requirements set out below:

(a) Qualified FNO:

- i. A "Qualified FNO" refers to an FNO which holds a carrier licence issued by the Communications Authority pursuant to the Telecommunications Ordinance (Chapter 106 of the Laws of Hong Kong) for the provision of public internal fixed telecommunications services in Hong Kong ("Relevant Carrier Licence") and a block licence issued by the Lands Department to an FNO for laying telecommunications facilities on unleased Government land or public street ("Block Licence"), and is not connected with HGC of the Relevant Project concerned;
- ii. an FNO (FNO A) is regarded as "connected" with another FNO (FNO B) if:
 - (I) FNO A holds a "material interest" in FNO B;

¹ More information about the Scheme is available on OFCA's website – https://www.ofca.gov.hk/en/industry_focus/infrastructures/subsidy_scheme_to_extend_fibre_based_networks/index.html

² "Network" means the lead-in connection between the Network Interconnection Point and the Network Termination Point for each of the Villages (including the fibre-based submarine cable(s) if applicable) rolled out by the Contracting Party in respect of each Relevant Project.



- (II) FNO B holds a "material interest" in FNO A; and
- (III) FNOs A and B are under common ownership of a third party who holds a "material interest" in both FNOs A and B;
- iii. a "material interest" refers to a direct or indirect interest of one of the following:
 - (I) a holding of or a right to acquire or subscribe for 25% or more of the issued share capital of the body corporate;
 - (II) a holding of or a right to acquire voting power in respect of 25% or more of the issued share capital of the body corporate; and
 - (III) control of the body corporate through holding of, a right to acquire or having voting power of 50% or more of the issued share capital of the body corporate, or through other means by which the affairs of the body corporate are conducted according to the wishes of the holding party.
- (b) With respect to the Network (or any part thereof) deployed using underground duct system, so far as the part using underground duct system is concerned, HGC shall make available on aggregate at least 50% of the number of underground ducts laid to at least four (4) Qualified FNOs which are not connected with each other, with each Qualified FNO sharing at most one-fourth of the capacity made available for sharing. HGC has no obligation to install any fibre cables in the underground ducts to be shared with the Qualified FNOs.
- (c) For the avoidance of doubt, the sharing of Network means sharing of the entire LIC from the Network Interconnection Point to the Network Termination Point of the Village concerned. HGC has no obligation to offer sharing of the LIC to any Qualified FNO on a partial basis.
- (d) HGC shall provide facilities and services reasonably necessary for the prompt and efficient shared use of the Network. Examples of such facilities and services may include but not be limited to:
 - i. carriage services for the delivery of codes, messages or signals or other communication across and between the interconnected networks;
 - ii. those facilities necessary to establish, operate and maintain interconnection between the Network and the networks of the Qualified FNOs which have entered into Network Capacity Agreements (as defined in Clause 3(d) below) with HGC in relation to the shared use of the Network ("Parties Sharing Use"); and
 - iii. other ancillary facilities and services required to support the shared use of the Network.
- (e) HGC shall make available the Network for Qualified FNOs to use on a non-discriminatory basis.
- (f) HGC shall not levy any charges for access to and / or usage of Network on the Parties Sharing Use, but may recover reasonable expenses incurred by HGC as set out in Clause 3(d) below.



3. Application procedures and arrangements for shared use of the Network by the Qualified FNOs

(a) HGC herewith publish and announce that the Villages as set out in <u>Annex A</u> have obtained the relevant project milestone completion certificate(s) issued by OFCA for shared use of the Network by the Qualified FNOs. The maximum capacity to be shared by each Qualified FNO of different means of LIC will be:

Means of LIC	Capacity available for sharing	Maximum capacity to be shared by each Qualified FNO
Underground Duct System	One Duct with internal diameter of 107mm	One-fourth
Direct Cable Laying	100 fibre cores	One-third

- (b) Any Qualified FNOs may submit written application to our contact point as set out in Annex B to request for sharing of the Network. For more network information such as lead-in connections of the Villages concerned and other enquiries, please contact HGC during business hours. Business hours mean 9am to 6pm Monday to Friday excluding public holidays. Relevant contact information is provided at Annex B.
- (c) The Qualified FNOs should submit the following documents and information to HGC in support of its application:
 - i. The licence number of its existing and valid Relevant Carrier Licence;
 - ii. Evidence as a Block Licence holder (such as copy of correspondence issued by the Lands Department relating to the grant of its existing and valid Block Licence);
 - iii. Copy of Certificate of Incorporation;
 - iv. Name of Village(s) requested for sharing of the Network;
 - v. Requested target timeframe for sharing of Network for each Village;
 - vi. As the means of LIC of the Network for the Village concerned is underground duct system, please provide the technical specifications of the optical fiber cable including number of fiber cores, diameter of the optical fiber cable for laying (which should be less than 23mm);
 - vii. As the means of LIC of the Network for the Village concerned is a duct with cable system, please provide the number of fiber cores (which should be multiple of 4) requested and technical specifications including the diameter of the optical fiber cable for interconnection;
 - viii. As the means of LIC of the Network for the Village concerned is direct cable laying, please provide the number of fiber cores (which should be multiple of 4) requested and technical specifications including the diameter of the optical fiber cable for interconnection; and
 - ix. Other relevant information or document necessary for processing the application



- (d) Once application is received, HGC will study, clarify and provide feedback to the Qualified FNO within ten (10) working days. HGC will negotiate with the Qualified FNO and use reasonable endeavours to reach commercial agreement ("Network Capacity Agreement") for shared use of the Network. For the avoidance of doubt, HGC shall not levy any charges for access to and / or usage of the Network on the Parties Sharing Use, but may recover reasonable expenses from the Parties Sharing Use incurred by HGC in the following circumstances:
 - i. repair of damaged Network;
 - ii. re-routing or re-configuration of the Network arising from road diversion as directed or occasioned by the relevant Government bureaux/departments;
 - iii. additional protection and enhancement made to the Network as required or directed by OFCA and / or other relevant Government bureaux/departments;
 - iv. any charges levied by the Government in respect of the Network; and
 - v. other circumstances or situations agreed between HGC and the Parties Sharing Use under the Network Capacity Agreement.

Unless otherwise agreed by HGC and the Parties Sharing Use, HGC shall not levy any ongoing network monitoring or maintenance cost under normal circumstances on the Parties Sharing Use. For the avoidance of doubt, HGC shall not recover any capital expenditure or cost of depreciation in respect of the Network from the Parties Sharing Use.

- (e) If HGC receives excessive applications from Qualified FNO exceeding the maximum capacity in shared use of the Network as stated in Clause 2 (b),(c),(d),(e) and (f) above, HGC will entertain these applications in priority of those Qualified FNOs which have first signed Network Capacity Agreement with HGC.
- (f) For the avoidance of doubt and without prejudice to Clause 2 above, HGC has no obligation to share the Network which exceeded the maximum capacity of the Network required for sharing, and/or make provision of the Network (including but not limited to reservation of spare capacity) to those Qualified FNO which have failed or not yet signed the Network Capacity Agreement with HGC.



Annex A

Villages for shared use of the Network by the Qualified FNOs

Project 1 Milestone 1

Project	Village ID	Village Name	Means of LIC	Global Positioning System ("GPS") coordinates of Network Interconnection Point	GPS coordinates of Network Termination Point
1	1-7	李屋村	Underground Duct System	22.533384, 114.152042	22.535153, 114.149182
1	1-10	坪洋村	Underground Duct System	22.528393, 114.158520	22.536123, 114.162911
1	1-23	雞谷樹下村及 南坑尾	Underground Duct System	22.524807, 114.218146	22.525241, 114.219270
1	1-27	鹽灶下村及膊 頭下村	Underground Duct System	22.532869, 114.206018	22.532478, 114.206904
1	1-28	烏石角村	Underground Duct System	22.536151, 114.210291	22.534784, 114.211333
1	1-31	新村	Underground Duct System	22.543574, 114.217362	22.543918, 114.215437
1	1-40	塘坊村	Underground Duct System	22.536265, 114.150764	22.536746, 114.151401
1	1-41	簡頭圍村	Underground Duct System	22.539665, 114.149046	22.539362, 114.149467
1	1-43	竹園村	Underground Duct System	22.540428, 114.148481	22.545171, 114.154968
1	1-44	香園圍村	Underground Duct System	22.540428, 114.148481	22.553591, 114.162907
1	1-45	松園下村	Underground Duct System	22.540428, 114.148481	22.552325, 114.156476
1	1-47	横山脚新村	Underground Duct System	22.519683, 114.176127	22.520179, 114.171990
1	1-48	沙頭角墟(西上)	Underground Duct System	22.545459, 114.220863	22.545577, 114.221807
1	1-49	沙頭角墟(西下)	Underground Duct System	22.545459, 114.220863	22.545577, 114.221807



Project	Village ID	Village Name	Means of LIC	Global Positioning System ("GPS") coordinates of Network Interconnection Point	GPS coordinates of Network Termination Point
1	1-50	麻雀嶺 (包括麻雀嶺 上村及麻雀嶺 新屋下村)	Underground Duct System	22.530884, 114.201157	22.531641, 114.201898 / 22.532716, 114.200321
1	1-54	大塘湖村	Underground Duct System	22.519838, 114.176247	22.520694, 114.175660
1	1-57	畫眉山村	Underground Duct System	22.481973, 114.140703	22.481749, 114.140797
1	1-59	馬尾下村	Underground Duct System	22.518889, 114.175676	22.518287, 114.176231

Project 1 Milestone 2

Project	Village ID	Village Name	Means of LIC	Global Positioning System ("GPS") coordinates of Network Interconnection Point	GPS coordinates of Network Termination Point
1	1-1	長瀝村	Underground Duct System	22.482378, 114.112573	22.484847, 114.101069
1	1-2	料壆村	Underground Duct System	22.510881, 114.077836	22.527531, 114.104365
1	1-3	馬草壠信義新村	Underground Duct System	22.510881, 114.077836	22.522821, 114.098567
1	1-4	得月樓村	Underground Duct System	22.510881, 114.077836	22.527795, 114.109718
1	1-5	羅湖村	Underground Duct System	22.525844, 114.114680	22.529296, 114.114053
1	1-8	週田村	Underground Duct System	22.540470, 114.143938	22.536539, 114.145043
1	1-11	瓦窰下村	Underground Duct System	22.528393, 114.158520	22.540626, 114.160504



Project	Village ID	Village Name	Means of LIC	Global Positioning System ("GPS") coordinates of Network Interconnection Point	GPS coordinates of Network Termination Point
1	1-12	獅頭嶺村	Underground Duct System	22.518012, 114.174268	22.509796, 114.178148
1	1-13	丹竹坑村 (包括丹竹坑老 園)	Underground Duct System	22.518012, 114.174268	22.513989, 114.175709
1	1-14	嶺皮村	Underground Duct System	22.518012, 114.174268	22.515365, 114.176510
1	1-15	嶺咀 (包括馬 尾下嶺咀村)	Underground Duct System	22.518012, 114.174268	22.515365, 114.176510
1	1-16	新屋仔村	Underground Duct System	22.518012, 114.174268	22.509796, 114.178148
1	1-17	簡頭村	Underground Duct System	22.516395, 114.171562	22.517013, 114.172664
1	1-18	新塘莆村	Underground Duct System	22.510845, 114.163796	22.510256, 114.166317
1	1-21	高莆 (包括高 莆村及大窩 村)	Underground Duct System	22.510845, 114.163796	22.510047, 114.167175
1	1-22	崇謙堂 (包括 崇謙堂(東)村 及崇謙堂(西) 村)	Underground Duct system + Direct Cable	22.496866, 114.146474	22.496877, 114.147636
1	1-29	石涌凹村 (包括立和村)	Underground Duct System	22.536323, 114.210172	22.533953, 114.205748; 22.536979, 114.209986
1	1-30	塘肚 (包括塘 肚坪村)	Underground Duct System	22.538827, 114.213359	22.541210, 114.211945
1	1-32	山咀村	Underground Duct System	22.545564, 114.220238	22.548686, 114.220334
1	1-34	烏蛟騰 (包括 新屋村、新屋 下村、三家 村、河背村、	Underground Duct System	22.509955, 114.234627	22.506976, 114.242104;



Project	Village ID	Village Name	Means of LIC	Global Positioning System ("GPS") coordinates of Network Interconnection Point	GPS coordinates of Network Termination Point
		嶺背村、老圍村及田心村)			
1	1-42	瓦窰 (包括木 湖瓦窰村及瓦 窰村)	Underground Duct System	22.541063 114.137900	22.541144, 114.137748;
1	1-42	瓦窰 (包括木 湖瓦窰村及瓦 窰村)	Underground Duct system + Direct Cable	22.536826 114.134327	22.539273, 114.132647;
1	1-46	蓮麻坑村	Underground Duct System	22.540428, 114.148481	22.552317, 114.181539;
1	1-58	孔嶺	Underground Duct System	22.513676, 114.167140	22.514128, 114.167550;
1	1-60	軍地北村	Underground Duct System	22.507391, 114.154793	22.512587, 114.158511;



Project 3 Milestone 1

Project	Village ID	Village Name	Means of LIC	Global Positioning System ("GPS") coordinates of Network Interconnection Point	GPS coordinates of Network Termination Point
3	3-5	排頭村 (包括 田寮村)	Underground Duct System	22.384836, 114.187734	22.383667, 114.187644
3	3-6	營盤下村及竹 坑村	Underground Duct System	22.455269, 114.159621; 22.455436, 114.165461	22.455933, 114.160125 22.457442, 114.162547
3	3-9	布心排村	Underground Duct System	22.468389, 114.209057	22.469887, 114.209963
3	3-13	元墩下村	Underground Duct System	22.437266, 114.164324	22.429019, 114.160968
3	3-14	犂壁山新村	Underground Duct System	22.468389, 114.209057	22.474556, 114.212202
3	3-15	打鐵印村	Underground Duct System	22.437266, 114.164324	22.424670, 114.162052
3	3-17	 	Underground Duct System	22.463104, 114.206929	22.468130, 114.208631
3	3-21	馮家圍	Underground Duct System	22.461998, 114.008736	22.457302, 114.011762
3	3-27	落馬洲村	Underground Duct System	22.510881, 114.077836	22.512944, 114.079658
3	3-30	大橋村	Underground Duct System	22.446192, 114.027288	22.447265, 114.027352
3	3-40	河田村	Underground Duct System	22.401070, 113.966045	22.398997, 113.965014
3	3-42	青山村	Underground Duct System	22.392396, 113.967308	22.390450, 113.966208
3	3-43	井頭村(下)	Underground Duct System	22.408726, 113.982110	22.405112, 113.985859
3	3-44	九華徑村	Underground Duct System	22.344111, 114.137218	22.345136, 114.137137

Project 3 Milestone 2

Project	Village ID	Village Name	Means of LIC	Global Positioning System ("GPS") coordinates of Network Interconnection Point	GPS coordinates of Network Termination Point
3	3-3	黃竹洋村	Underground Duct System + Direct cable	22.398640, 114.189228	22.397588, 114.177364
3	3-4	桂地新村	Underground Duct System	22.398640, 114.189228	22.400013, 114.187997
3	3-7	蓮澳鄭屋村及 蓮澳李屋村	Underground Duct System	22.448989, 114.160374	22.446431, 114.153533
3	3-8	梅樹坑村	Underground Duct System + Direct cable	22.448989, 114.160374	22.451821, 114.152858
3	3-10	沙螺洞張屋村	Underground Duct System + Direct cable	22.459555, 114.179963	22.479347, 114.182217
3	3-16	半山洲村	Underground Duct System + Direct cable	22.438583 <i>,</i> 114.165964	22.433129 <i>,</i> 114.168465
3	3-18	田寮下(包括上田寮下村及下田寮下村)	Underground Duct System	22.451795, 114.139776	22.445384, 114.140146 22.446774, 114.141415
3	3-20	雷公田村	Underground Duct System	22.431600, 114.103222	22.426882, 114.104959
3	3-25	天水圍(一)	Underground Duct System	22.462233, 114.008691	22.466367, 114.013404
3	3-26	下灣村	Underground Duct System	22.510881, 114.077836	22.514312, 114.073793
3	3-29	攸潭美(一)	Underground Duct System	22.476258, 114.057656	22.473102, 114.063688



3	3-32	 下花山村	Direct cable	22.384552,	22.384600,
3	3-32	ГАСЩТЭ	Direct cable	114.108429	114.097961
3	3-35		Underground	22.364764,	22.365365,
5	3-33	排棉角村 	Duct System	114.054946	114.054866
3	2.26	ごま んか + 床 立 ご ナ ナ	Divo et coblo	22.368059,	22.370642,
3	3-36	清快塘新村 	Direct cable	114.060119	114.062193
3				22.417404,	22.415631,
3	3-38	虎地村(包括	Underground	113.987129	113.988729
3	3-38	虎地上村及虎 ************************************	Duct System	22.408726,	22.406854,
3		地下村) 		113.982110	113.985568
3	3-39	海ウサイト	Underground	22.417404,	22.418482,
3	3-39	福亨村(上)	Duct System	113.987129	113.993841
3	3-41	龍鼓灘村	Underground	22.384624,	22.389409,
3	3-41	月后以又/美比个3	Duct System	113.920988	113.920096



Project 4 Milestone 1

Project	Village ID	Village Name	Means of LIC	Global Positioning System ("GPS") coordinates of Network Interconnection Point	GPS coordinates of Network Termination Point
4	4-13	海傍街	Underground Duct System	22.381202, 114.270269	22.379297, 114.271285
4	4-14	正街(東)	Underground Duct System	22.381202, 114.270269	22.379568, 114.270484
4	4-15	正街(西)	Underground Duct System	22.381202, 114.270269	22.379568, 114.270484
4	4-17	普通道(東)	Underground Duct System	22.381202, 114.270269	22.380925, 114.270994
4	4-18	普通道(西)	Underground Duct System	22.381202, 114.270269	22.381038, 114.269863
4	4-19	西貢道(北)	Underground Duct System	22.381202, 114.270269	22.379568, 114.270484
4	4-20	西貢道(南)	Underground Duct System	22.381202, 114.270269	22.379568, 114.270484
4	4-23	大街(東)	Underground Duct System	22.381202, 114.270269	22.379297, 114.271285
4	4-24	大街(西)	Underground Duct System	22.381202, 114.270269	22.379297, 114.271285
4	4-25	德隆後街	Underground Duct System	22.381202, 114.270269	22.380925, 114.270994
4	4-26	 德隆前街 	Underground Duct System	22.381202, 114.270269	22.380925, 114.270994



Project 4 Milestone 2

Project	Village ID	Village Name	Means of LIC	Global Positioning System ("GPS") coordinates of Network Interconnection Point	GPS coordinates of Network Termination Point
4	4-6	梅子林村	Underground	22.404614,	22.393097,
-T		רואויר פור	Duct System	114.220759	114.233204
4	4-7	 渡頭灣村	Underground	22.432998,	22.433737,
4	4-7	II文项[号1]	Duct System	114.240454	114.239814
4	4-9	蠻窩村	Underground Duct System + Direct cable	22.354928, 114.250692	22.352234, 114.237018
4	4-10	大藍湖村	Underground Duct System + Direct cable	22.354928, 114.250692	22.349903, 114.234132
4	4-12	禾寮村	Underground Duct System + Direct cable	22.396203, 114.284128	22.399646, 114.279822
4	4-16	萬宜灣新村	Underground Duct System	22.381202, 114.270269	22.381199 <i>,</i> 114.271717
4	4-21	市場街	Underground Duct System	22.381202, 114.270269	22.379629, 114.271935
4	4-22	沙咀新村	Underground Duct System	22.381202, 114.270269	22.380677, 114.272971
4	4-28	澳朗村	Underground Duct System	22.377920, 114.264786	22.379379, 114.263746
4	4-29	沙角尾村	Underground Duct System	22.385670, 114.271386	22.387215, 114.268654
4	4-30	蕉坑村	Underground Duct System + Direct cable	22.373560, 114.261065	22.370818, 114.268270
4	4-33	布袋澳村(包括大王公村)	Underground Duct System	22.277720, 114.290906	22.277700, 114.293403



				22.272816,	22.275355,
				114.291361	114.295780
4 4-34	4.24	4.24 十四百廿	Underground	22.299176,	22.295361,
	大環頭村	Duct System	114.288209	114.292072	



HGC contact point for application of shared use of the Network

Contact Person: Charles Leung / Jimmy Leung Contact Telephone: 21283947 / 21285728

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Business Hours: 9am to 6pm, Monday to Friday only excluding Public Holidays