

# 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 2, 5 and 6

## 1. Background

The Office of the Communications Authority (“OFCA”) has implemented a subsidy scheme<sup>1</sup> (“Scheme”) to provide fixed network operators (FNOs) with financial incentives in the form of subsidies to encourage the extension of fibre-based networks (“Network”)<sup>2</sup> 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 2 (part of Tai Po District and part of Sai Kung District) (“Project 2”), Project 5 (Lamma Island) (“Project 5”) and Project 6 (Lantau Island, Cheung Chau and Peng Chau) (“Project 6”) (collectively the “Relevant Project”) to Hong Kong Telecommunications (HKT) Limited (“HKT”).

HKT is required to roll out fibre-based lead-in connections (“LIC”) to the vicinity of the entrances of the villages concerned (applicable to Projects 2, 5 and 6) (“Village(s)”), and roll out three submarine fibre-based cables connecting Lamma Island from Hong Kong Island (applicable to Project 5), as well as connecting Cheung Chau from Lantau Island and Peng Chau from Lantau Island (applicable to Project 6) respectively.

## 2. Sharing of the Network with other FNOs

HKT 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 HKT of the Relevant Project concerned;
- ii. an FNO (FNO A) is regarded as “connected” with another FNO (FNO B) if:

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<sup>1</sup> 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](https://www.ofca.gov.hk/en/industry_focus/infrastructures/subsidy_scheme_to_extend_fibre_based_networks/index.html)

<sup>2</sup> “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.

- (I) FNO A holds a “material interest” in FNO B;
  - (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) If the Network (or any part thereof) is deployed using underground duct system, so far as the part using underground duct system is concerned, HKT 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. HKT has no obligation to install any fibre cables in the underground ducts to be shared with the Qualified FNOs.
- (c) If the Network (or any part thereof) is deployed using a duct with cable system, so far as the part using the duct with cable system is concerned, HKT shall make available on aggregate at least 50% of the number of fibre cores laid inside the duct to at least five (5) Qualified FNOs which are not connected with each other, with each Qualified FNO sharing at most one-fifth of the capacity made available for sharing.
- (d) If the Network (or any part thereof) is deployed using aerial cable system or direct cable laying, so far as the part using aerial cable system or direct cable laying is concerned, HKT shall make available on aggregate at least 50% of the number of fibre cores installed on poles or laid on land to at least three (3) Qualified FNOs which are not connected with each other, with each Qualified FNO sharing at most one-third of the capacity made available for sharing.
- (e) If the Network (or any part thereof) is deployed using a wireless system, so far as the part using the wireless system is concerned, HKT shall make available on aggregate at least 50% of the space in the tower concerned to at least two (2) Qualified FNOs which are not connected with each other, for establishing their respective wireless systems. HKT has no obligation to share its own wireless system with the Qualified FNOs.
- (f) If the Network (or any part thereof) is deployed using a submarine cable system, so far as the part using the submarine cable system is concerned, HKT shall make available on aggregate at least 50% of the number of fibre cores within the submarine cable system to at least five (5) Qualified FNOs which are not connected with each other, with each Qualified FNO sharing at most one-fifth of the capacity made available for sharing.
- (g) 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. HKT has no obligation to offer sharing of the LIC to any Qualified FNO on a partial basis.
- (h) HKT 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 HKT in relation to the share use of the Network (“Parties Sharing Use”); and
  - iii. other ancillary facilities and services required to support the shared use of the Network.
- (i) HKT shall make available the Network for Qualified FNOs to use on a non-discriminatory basis.
- (j) HKT 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 HKT as set out in Clause 3(d) below.

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

- (a) HKT herewith publish and announce that the Villages as set out in Annex A 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:

<b>Means of LIC</b>	<b>Capacity available for sharing</b>	<b>Maximum capacity to be shared by each Qualified FNO</b>
Underground Duct System	One Duct with internal diameter of 107mm	One-fourth
Direct Cable Laying	100 fibre cores	One-third
Aerial Cable	96 fibre cores	One-third
Mix of Direct Cable Laying and Aerial Cable	96 fibre cores	One-third
Duct with Cable System	500 fibre cores	One-fifth
Submarine Cable	500 fibre cores	One-fifth

- (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 us 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 HKT 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. If 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. If 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 the technical specifications including diameter of the optical fiber cable for interconnection;
  - viii. If the means of LIC of the Network for the Village concerned is direct cable laying, please provide number of fiber cores (which should be multiple of 4) requested and technical specifications including the diameter of the optical fiber cable for interconnection;
  - ix. If the means of LIC of the Network for the Village concerned is a wireless system, please provide the space (dimension in mm) requested for the installation of equipment in the tower and the technical specifications of the equipment to be installed;
  - x. If the Network is deployed using a submarine cable system, please provide the number of fiber cores (which should be multiple of 4) requested and the technical specifications including diameter of the optical fiber cable for interconnection; and
  - xi. Other relevant information or document necessary for processing the application
- (d) Once application is received, HKT will study, clarify and provide feedback to the Qualified FNO within ten [10] working days. HKT will negotiate with the Qualified FNO and use all reasonable endeavours to reach commercial agreement ("Network Capacity Agreement") for shared use of the Network. For the avoidance of doubt, HKT 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 HKT 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;
- v. insurance cost for the fibre-based submarine cable(s) subsidized under Project 5 and Project 6 respectively; and
- vi. other circumstances or situations agreed between HKT and the Parties Sharing Use under the Network Capacity Agreement.

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

- (e) If HKT receives excessive applications from Qualified FNO exceeding the maximum capacity in share use of the Network as stated in Clause 2 (b), (c), (d), (e) and (f) above, HKT will entertain these applications in priority for those Qualified FNOs which have first signed Network Capacity Agreement with HKT.
- (f) For the avoidance of doubt and without prejudice to Clause 2 above, HKT 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 HKT.

## Villages and submarine cables for shared use of the Network by the Qualified FNOs

## Project 2 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
2	2-1	高塘下洋村	Underground Duct System	22.433302, 114.328343	22.435574, 114.330582
	2-5	高塘村	Underground Duct System	22.431479, 114.327368	22.431399, 114.327313
	2-8	北潭凹村	Underground Duct System	22.420554, 114.332010	22.420113, 114.332327
	2-11	屋頭村	Underground Duct System	22.428449, 114.328468	22.428410, 114.328318
	2-13	赤徑村	Direct Cable Laying	22.420554, 114.332010	22.420554, 114.332010
	2-14	西灣村	Direct Cable Laying	22.420554, 114.332010	22.397466, 114.370979
	2-15	大浪 (包括大浪圍及咸田圍)	Direct Cable Laying	22.420554, 114.332010	22.417199, 114.372016 22.411394, 114.375793
	2-16	北丫村	Direct Cable Laying	22.400069, 114.323657	22.355011, 114.351602
	2-17	白腊村	Direct Cable Laying	22.400069, 114.323657	22.353561, 114.360677

## Project 2 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
2	2-7	深涌村	Direct Cable laying + Aerial Cable System	22.405391, 114.278710	22.441774, 114.286049
	2-9	大灘村	Underground Duct System	22.433302, 114.328343	22.439377, 114.332621
	2-10	蛋家灣村	Direct Cable laying + Aerial Cable System	22.433302, 114.328343	22.451250, 114.361069
	2-12	高流灣村	Direct Cable Laying	22.433302, 114.328343	22.460058, 114.361975
	2-18	東丫 (包括沙橋頭村)	Direct Cable Laying	22.400069, 114.323657	22.348294, 114.355911
	2-20	北潭涌	Underground Duct System	22.393366, 114.313816	22.398294, 114.321029
	2-24	大埗仔村	Underground Duct System	22.391946, 114.296891	22.395033, 114.297491
	2-25	氹笏村	Underground Duct System	22.391946, 114.296891	22.401394, 114.300252
	2-27	鯽魚湖村	Underground Duct System	22.393366, 114.313816	22.401172, 114.323324
	2-28	黃麋地村	Underground Duct System	22.393366, 114.313816	22.394149, 114.317449
	2-29	黃宜洲村	Underground Duct System	22.393366, 114.313816	22.388913, 114.319202
	2-30	鹽田仔村	Underground Duct System	22.393366, 114.313816	22.377341, 114.302044

**Project 5 Milestone 1**

<b>Project</b>	<b>Village ID</b>	<b>Village Name</b>	<b>Means of LIC</b>	<b>Global Positioning System ("GPS") coordinates of Network Interconnection Point</b>	<b>GPS coordinates of Network Termination Point</b>
5	5-2	北角舊村	Underground Duct System + Submarine Cable	22.255912, 114.132314	22.235433, 114.113077
	5-3	北角新村	Underground Duct System + Submarine Cable	22.255912, 114.132314	22.236510, 114.113777
	5-4	大坪村	Underground Duct System + Submarine Cable	22.255912, 114.132314	22.229027, 114.116575
	5-5	大灣舊村	Underground Duct System + Submarine Cable	22.255912, 114.132314	22.223393, 114.116452
	5-6	大灣新村	Underground Duct System + Submarine Cable	22.255912, 114.132314	22.223393, 114.116452



**Project 5 Milestone 2**

<b>Project</b>	<b>Village ID</b>	<b>Village Name</b>	<b>Means of LIC</b>	<b>Global Positioning System ("GPS") coordinates of Network Interconnection Point</b>	<b>GPS coordinates of Network Termination Point</b>
5	5-7	蘆鬚城村	Underground Duct System + Submarine Cable	22.255912, 114.132314	22.205269, 114.125357
	5-9	模達(包括模達舊村及模達新村)	Underground Duct System + Submarine Cable	22.255912, 114.132314	22.206291, 114.145863
	5-10	模達灣	Underground Duct System + Submarine Cable	22.255912, 114.132314	22.206291, 114.145863
	5-11	索罟灣	Underground Duct System + Submarine Cable	22.255912, 114.132314	22.201936, 114.130307
	5-12	東澳村	Underground Duct System + Submarine Cable	22.255912, 114.132314	22.195285, 114.138466

**Project 5 Milestone 3 & 4**

<b>Project</b>	<b>Village ID</b>	<b>Village Name</b>	<b>Means of LIC</b>	<b>Global Positioning System ("GPS") coordinates of Network Interconnection Point</b>	<b>GPS coordinates of Network Termination Point</b>
5	5-1	蘆荻灣村	Underground Duct System + Submarine Cable	22.255912, 114.132314	22.223757, 114.125366
	5-8	鹿洲村	Underground Duct System + Submarine Cable + Direct Cable laying	22.255912, 114.132314	22.217599, 114.130749
	5-13	榕樹下村	Underground Duct System + Submarine Cable	22.255912, 114.132314	22.200005, 114.141566

**Project 6 Milestone 1**

<b>Project</b>	<b>Village ID</b>	<b>Village Name</b>	<b>Means of LIC</b>	<b>Global Positioning System ("GPS") coordinates of Network Interconnection Point</b>	<b>GPS coordinates of Network Termination Point</b>
6	6-8	美經援村	Duct with Cable + Submarine Cable	22.243358, 113.976693	22.200502, 114.019913
	6-9	信義村	Duct with Cable + Submarine Cable + Direct Cable	22.243358, 113.976693	22.202438, 114.025993
	6-14	好景台	Duct with Cable + Submarine Cable	22.266002, 113.995991	22.286333, 114.038085
	6-25	梁屋村	Direct Cable	22.252619, 113.863186	22.247983, 113.863550
	6-36	石仔埗 (東)	Direct Cable	22.252857, 113.862532	22.253694, 113.862433
	6-37	石仔埗 (西)	Direct Cable	22.252857, 113.862532	22.253694, 113.862433
	6-38	吉慶後街	Direct Cable	22.252857, 113.862532	22.253694, 113.862433
	6-39	吉慶街	Direct Cable	22.252857, 113.862532	22.253694, 113.862433
	6-41	大澳街市街	Direct Cable	22.252857, 113.862532	22.253694, 113.862433
	6-42	大澳太平街 (一)	Direct Cable	22.252857, 113.862532	22.253694, 113.862433
	6-43	大澳太平街 (二)	Direct Cable	22.252857, 113.862532	22.253694, 113.862433
	6-44	大澳永安街 (一)	Direct Cable	22.252857, 113.862532	22.253694, 113.862433
	6-45	大澳永安街 (二)	Direct Cable	22.252857, 113.862532	22.253694, 113.862433
	6-46	赤鱸角新村	Direct Cable	22.279085, 113.940430	22.277257, 113.941669
	6-47	低埔新村	Direct Cable	22.279085, 113.940430	22.277257, 113.941669
	6-48	黃泥屋村	Direct Cable + Aerial Cable	22.283310, 113.937241	22.283227, 113.938110
	6-49	馬灣涌村	Direct Cable	22.283310, 113.937241	22.283669, 113.935633

**Project 5 Submarine Cable**

	<b>NIP Location</b>	<b>NIP GPS</b>	<b>Common Manhole Location</b>	<b>Common Manhole GPS</b>
<b>Lamma Island Submarine Cable System</b>	<b>Cyberport</b>	<b>22.255912, 114.132314</b>	<b>Lamma Island</b>	<b>22.239235, 114.117671</b>

**Project 6 Submarine Cables**

	<b>NIP Location</b>	<b>NIP GPS</b>	<b>IP Location</b>	<b>IP GPS</b>
<b>Cheung Chau Submarine Cable System</b>	<b>Pui O</b>	<b>22.243358, 113.976693</b>	<b>Cheung Chau</b>	<b>22.198446, 114.021254</b>
<b>Peng Chau Submarine Cable System</b>	<b>Mui Wo</b>	<b>22.266002, 113.995991</b>	<b>Peng Chau</b>	<b>22.289249, 114.035485</b>

## Annex B

HKT contact point of shared use of the Network application.

Contact Person: Mr Thomas Chan

Contact Telephone: 2888 4498

Email: [Thomas.ty.chan@pccw.com](mailto:Thomas.ty.chan@pccw.com)

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