

**For discussion  
on 14 May 2018**

**Legislative Council Panel on  
Information Technology and Broadcasting**

**Subsidy Scheme to Extend Fibre-based Networks  
to Villages in Remote Areas**

**PURPOSE**

The Chief Executive proposed in the 2017 Policy Address that the Government should take the lead to provide telecommunications companies with financial incentives in the form of subsidies to encourage the extension of fibre-based networks to remote villages. This paper seeks Members' views on the proposed arrangements of the subsidy scheme to extend fibre-based networks (Subsidy Scheme).

**BACKGROUND**

2. Currently, the household broadband penetration rate in Hong Kong is over 90%, which is among the highest in the world. Most Hong Kong people can now enjoy high-speed quality broadband services. However, for remote villages located in the New Territories and outlying islands, the progress of extending network coverage by telecommunications companies has been slow and unsatisfactory due to the higher costs of network roll-out and the small number of subscribers. In view of this, the Chief Executive proposed in the 2017 Policy Address to launch the Subsidy Scheme to extend fibre-based networks to remote villages so as to benefit hundreds of thousands of villagers.

3. The Subsidy Scheme not only demonstrates the people-oriented philosophy of the current-term Government, but also provides the telecommunications infrastructure necessary for the conservation and revitalisation of rural and remote areas in future.

4. Details of the proposed arrangements for the Subsidy Scheme are set out below:

## **PROPOSED ARRANGEMENTS FOR THE SUBSIDY SCHEME**

### **A. Scope of Coverage**

5. The Subsidy Scheme covers nine districts in the New Territories and outlying islands (North, Sai Kung, Tai Po, Sha Tin, Yuen Long, Tuen Mun, Tsuen Wan, Kwai Tsing and Islands), targeting remote villages currently located far away from the existing fibre-based backbone networks of fixed network operators (FNOs), where villagers can only choose broadband services which are delivered over copper-based networks at a speed of 10 megabits per second (Mbps) or below. According to currently available information<sup>1</sup>, there are about 300 villages of this kind. Having regard to the circumstances of these 300 villages, we estimate that the Subsidy Scheme can benefit about 170 000 villagers living in various districts as listed at **Annex**. The final list of villages to be covered and number of beneficiaries under the Subsidy Scheme may be adjusted after the Government has taken into account the views of the relevant District Councils (DCs), Rural Committees (RCs) as well as the villagers concerned.

6. For those villages which are not covered under the Subsidy Scheme, according to our understanding, fibre-based networks have already reached the vicinity of the village entrances in most cases, while the villagers are currently able to enjoy broadband speed of 25 Mbps or above. FNOs only need to carry out optical fibre wiring works within the villages or lease the facilities of other FNOs, such that optical fibres can be connected to individual village houses for the provision of higher speed broadband services.

### **B. Basic Principles**

7. The Government will invite eligible FNOs<sup>2</sup> to participate in the Subsidy Scheme by way of tender. Successful bidders will receive subsidies for rolling out fibre-based lead-in connections to the vicinity of

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<sup>1</sup> The preliminary estimation of the numbers of villages and villagers that will benefit under the Subsidy Scheme are based on the number of villages specified in the Rural Representative Election Ordinance, the List of Recognized Villages under the New Territories Small House Policy promulgated by the Lands Department, and the information submitted by FNOs to the Office of the Communications Authority. In addition, according to the delineation of villages under the Rural Representative Election Ordinance, one village may in effect include a number of physical villages.

<sup>2</sup> This refers to those FNOs which have obtained approval from the Lands Department to lay telecommunications facilities on Government land.

the entrances of the villages concerned; and three submarine fibre-based cables connecting Lamma Island from Hong Kong Island, and connecting Cheung Chau and Peng Chau from Lantau Island respectively.

8. Upon the extension of fibre-based networks to the village entrances, FNOs can provide broadband services to villagers by connecting the fibre-based networks to the existing copper-based networks within the villages. Broadband speed can then instantly increase from the current 10 Mbps or below to at least 25 Mbps. Stability of service can also improve. If the villagers reach an agreement with an FNO to allow the latter to roll out fibre-based networks within the village, the broadband speed can further increase substantially to a level which is comparable to that in the urban areas (e.g. 500 Mbps or 1 000 Mbps).

9. To introduce competition, the successful bidders will be required to open up at least half of the capacity of the fibre-based networks and submarine fibre-based cables subsidised under the Subsidy Scheme for use by other FNOs for free. Such a requirement can ensure that other FNOs can follow right after the successful bidders to also provide broadband services to the villages concerned by sharing the use of the subsidised facilities, thereby offering more choices to the villagers. Service charges are expected to be able to peg at a competitive level under the market mechanism.

## **CURRENT WORK PROGRESS**

10. After the promulgation of the 2017 Policy Address, the Commerce and Economic Development Bureau and the Office of the Communications Authority (OFCA) immediately commenced the preparatory work, including the collection of village information of the districts concerned and preparing the preliminary proposal. We have also consulted the nine DCs concerned in March and April on the initial thinking on the arrangements for the Subsidy Scheme and the list of villages proposed to be covered.

11. Overall, the Subsidy Scheme has received general support from the DCs, which have also provided useful views and suggestions on the village list and the relevant details. We will take into account the views of DC members as appropriate when devising the details of the Subsidy Scheme. OFCA is currently consulting the 27 RCs further on

the list of villages proposed to be covered. At the same time, in respect of the technical requirements and the relevant arrangements under the Subsidy Scheme, OFCA has invited eligible FNOs for comments and exchange of views.

## **METHOD FOR SELECTION OF FNOS**

12. We will select FNOs by way of tender. Our current thinking is to group the villages to be covered under the Subsidy Scheme into six projects for tender based on their geographical distribution. For each project, one successful bidder will be selected to complete the relevant works of network roll-out and the successful bidder will receive the relevant financial subsidies under the Subsidy Scheme. In submitting bids for the tender, eligible FNOs are required to submit proposals for the projects.

13. The procedures of assessing the proposals will be divided into three parts.

### **Part 1: Essential Requirements**

14. We will stipulate in the tender all the essential requirements which must be met by the tenderers. For example, the FNO must roll out the lead-in connections to all the villages specified in the projects, open up at least half of the capacity of the subsidised network facilities for use by other FNOs for free, and comply with the basic technical requirements specified by OFCA, etc. The proposal submitted by a FNO must meet all the essential requirements stipulated in the tender in order to be eligible for the next phase of technical assessment.

15. A tenderer may, based on its commercial considerations, commit in the proposal to building new fibre-based networks, upgrading existing networks, or leasing facilities from third parties for meeting the essential requirements stipulated in the tender. If the tenderer decides to lease facilities from a third party, such facilities must meet the basic technical requirements specified by OFCA. The tenderer must also submit the commercial agreement entered into with the owner of the relevant facilities together with its proposal to prove that the relevant facilities will be made available for use by the tenderer within the timeframe specified in the tender, and that the owner of the relevant

facilities agrees to open up the facilities for use by other FNOs for free in accordance with the requirements set out in the tender.

## **Part 2: Technical Assessment**

16. Technical assessment will include evaluation of whether the tenderer will commit to providing broadband services at higher speeds to villagers, providing broadband services to villagers at the prevailing market prices, and/or installing Wi-Fi hotspots at the public areas (such as village office or ancestral hall) of the villages concerned for the provision of free Wi-Fi services, etc.

17. The commitments made by a successful bidder in its proposal will be incorporated as terms and conditions of the agreement to be entered into with the Government for the Subsidy Scheme. If the successful bidder fails to complete the relevant works and provide services according to the commitments made, OFCA may defer payment of subsidies or deduct amounts from the subsidies in accordance with the terms and conditions of the agreement. The relevant arrangements and sanctions will be stipulated in details in the tender.

## **Part 3: Amount of Subsidies**

18. We will consider the amount of subsidies requested by a tenderer for individual projects. We will set a cap on the amount of Government subsidies for each project. The lower the amount of subsidies requested by a tenderer, the higher the score the tenderer will get for this part of the assessment.

## **Weighting of the Scores**

19. To ensure that the Subsidy Scheme can bring more substantive benefits to the remote villages concerned, the score of technical assessment will account for at least half of the total score.

## **Cap on the Number of Projects to be Awarded to a Successful Bidder**

20. As stated above, six projects will be tendered under the Subsidy Scheme, and one successful bidder will be selected for each project to complete the relevant works of network roll-out. Considering that the Subsidy Scheme involves Government funding and the Government policy of supporting the promotion of competition in the

telecommunications market, we will set a cap on the number of projects to be awarded to a successful bidder so that more eligible FNOs would be given the opportunity to participate in the Subsidy Scheme.

## **WAY FORWARD**

21. If Members support the Subsidy Scheme, we will seek the approval of the Legislative Council for the necessary funding according to the established mechanism on a timely basis. Once funding approval is obtained, OFCA will immediately commence the tender process and award the projects so that the successful bidders can apply to departments concerned for relevant permits as soon as possible for excavation works and the roll-out of fibre-based networks and submarine fibre-based cables. Depending on the progress of works and the views of the villagers, we expect that the subsidised lead-in connections will be extended to the villages concerned in phases from 2021 onwards.

## **FINANCIAL IMPLICATIONS**

22. The capital expenditure for the Subsidy Scheme is estimated to be about \$774.4 million. The actual amount of subsidies involved will be subject to the tender result.

23. When setting the cap on the amount of subsidies for each project, we will take into account the capital expenditure required for rolling out the relevant networks and other relevant factors, including the difficulties in rolling out networks to certain remote areas and the number of villagers in individual villages, etc., and adjust the cap on the amount of subsidies for individual projects with a view to providing sufficient financial incentives to encourage FNOs to participate in the tender exercise.

24. In addition, we estimate that OFCA would require a total of about \$69.8 million in the coming five years from 2018-19 to coordinate the implementation of the Subsidy Scheme. The Communications and Creative Industries Branch will reserve the necessary funding to cover the expenses.

## **ADVICE SOUGHT**

25. Members' views are sought on the proposed arrangements for the Subsidy Scheme. We hope Members will support the Subsidy Scheme.

**Communications and Creative Industries Branch  
Commerce and Economic Development Bureau  
and  
Office of the Communications Authority  
May 2018**

**Annex**

**Number of villages proposed to be covered and estimated number of villagers benefited under the Subsidy Scheme**

<b>District</b>	<b>Number of villages proposed to be covered</b>	<b>Estimated number of villagers benefited</b>
North	About 70	About 35 000
Islands	About 70	About 56 000
Sai Kung	About 50	About 15 000
Tai Po	About 40	About 13 000
Sha Tin	About 30	About 10 000
Yuen Long	About 20	About 29 000
Tuen Mun	About 10	About 7 000
Tsuen Wan	About 10	About 4 000
Kwai Tsing	Less than 10	Less than 1000
<b>Total</b>	<b>About 300</b>	<b>About 170 000</b>