

ITEM FOR FINANCE COMMITTEE

**HEAD 55 – GOVERNMENT SECRETARIAT:
COMMERCE AND ECONOMIC DEVELOPMENT
BUREAU (COMMUNICATIONS AND CREATIVE
INDUSTRIES BRANCH)**

Subhead 700 “General non-recurrent”

New item “Subsidy Scheme to Extend Fibre-based Networks to Villages in Remote Areas”

Members are invited to approve a new commitment of \$774.4 million under Head 55 – Government Secretariat: Commerce and Economic Development Bureau (Communications and Creative Industries) for implementing a subsidy scheme to extend fibre-based networks to villages in remote areas.

PROBLEM

We need to implement a subsidy scheme to extend fibre-based networks to villages in remote areas (Subsidy Scheme) to enhance the coverage of optical fibre networks in villages in remote areas.

PROPOSAL

2. The Secretary for Commerce and Economic Development proposes creating a commitment of \$774.4 million for the implementation of the Subsidy Scheme to enhance the coverage of optical fibre networks in villages in remote areas.

/JUSTIFICATION

JUSTIFICATION

3. Currently, the household broadband penetration rate in Hong Kong is over 90%. Most Hong Kong people can 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 high costs of network roll-out and the small number of subscribers. With a view to incentivising telecommunications operators to roll-out optical fibre infrastructure, 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 some 170,000 villagers. 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.

Proposed arrangement for the Subsidy Scheme

Scope of Coverage

4. 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 delivered over copper-based networks at a speed of 10 megabits per second (Mbps) or below. According to currently available information¹, 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 Enclosure. The final list of villages to be covered and the 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.

Encl.

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¹ The preliminary estimation of the numbers of villages and villagers that will benefit under the Subsidy Scheme is worked out based on the 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.

5. For those villages which are not covered under the Subsidy Scheme, according to information available to us, fibre-based networks have already reached the vicinity of the village entrances in most cases, while the villagers can now enjoy broadband speed of 25 Mbps or above. Only by carrying out optical fibre wiring works within the villages or leasing the facilities of other FNOs, FNOs can connect the optical fibres to individual village houses for provision of higher speed broadband services.

Basic Principles

6. The Government will invite eligible FNOs² to participate in the Subsidy Scheme by way of tender. The Subsidy Scheme will subsidise the selected FNOs of individual projects (see paragraphs 10-17 below) to roll out fibre-based lead-in connections to the vicinity of the entrances of the villages concerned. 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, and 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 private land areas of 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).

7. For projects involving outlying islands, the Subsidy Scheme will subsidise the selected FNOs to roll out three submarine fibre-based cables connecting Lamma Island from Hong Kong Island, Cheung Chau from Lantau Island, and Peng Chau from Lantau Island respectively.

8. To introduce competition, selected FNOs 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 allow other FNOs 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.

/Method

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

Method for Selection of FNOs

9. The Office of the Communications Authority (OFCA) will select FNOs by way of tender for participation in the Subsidy Scheme. 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. Eligible FNOs are required to submit proposals for the projects. For each project, one FNO will be selected to complete the relevant works of network roll-out and will receive the relevant financial subsidies.

Assessment Procedures

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

Part 1: Essential Requirements

11. 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; 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 considered in the next phase of technical assessment.

12. 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.

/Part

Part 2: Technical Assessment

13. 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.

Part 3: Amount of Subsidies Requested

14. 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.

15. When setting the cap on the amount of subsidies for each project, we will take into account the amount of capital expenditure required for the relevant construction works, the engineering challenges, geographical and/or technical constraints of each project in order to encourage eligible FNOs to submit proposals. For example, a higher cap will be set for projects involving very remote village areas without leading roads or having to pass through country parks, or projects requiring the rolling out of fibre-based submarine cables which will involve more complicated statutory requirements, larger amount of investment and longer implementation time.

Weighting of the Scores

16. 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 FNO

17. As stated above, six projects will be tendered under the Subsidy Scheme, and one FNO will be selected for each project to complete the relevant works of network roll-out. Since the Subsidy Scheme involves Government funding and taking into account 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 FNO so that more eligible FNOs would be given the opportunity to participate in the Subsidy Scheme. The cap and the relevant arrangements will be stipulated in the tender document.

/EXPECTED

EXPECTED BENEFITS

18. Broadband networks are key infrastructure for the development of smart city. Therefore, enhancement of the coverage of fixed and mobile broadband networks is crucial to the development of smart city. The Subsidy Scheme will cover about 300 remote villages located far away from the existing fibre-based backbone networks of FNOs and will benefit about 170 000 villagers who at present can only choose broadband services delivered over copper-based networks at a speed of 10 Mbps or below³. Implementation of the Subsidy Scheme can instantly increase fixed broadband speed to at least 25 Mbps for the villages concerned, and also improve stability of service. If the villagers reach an agreement with an FNO to allow the latter to roll out fibre-based networks within the village, the fixed broadband speed can further increase substantially to a level which is comparable to that in the urban areas. The Subsidy Scheme can also introduce market competition to the villages concerned such that the villagers will have choices, and eventually more choices, of broadband services instead of just broadband services delivered over copper-based networks. With competition, service quality and charges are expected to be able to peg at levels comparable to those in the urban areas.

19. The Subsidy Scheme will also enhance the coverage of fibre-based networks in rural and remote areas, and provide the infrastructure necessary for the deployment of other types of telecommunications services (including mobile and Wi-Fi services). In respect of mobile services, through leasing the fibre-based networks newly built under the Subsidy Scheme in the future, mobile network operators will be able to provide mobile services with better network coverage and higher speed to remote villages and the neighbourhood areas. This will benefit villagers and visitors to the countryside.

MONITORING MECHANISM

20. Upon completion of the tender process, the Government will sign agreements with the selected FNOs. Taking into account the difficulties and complications of individual projects, the deadline for completion of various milestones of the projects, will be specified in the agreements. In order to ensure that the subsidies are used properly for the achievement of the policy objectives set under the Subsidy Scheme, subsidies will only be released upon completion of the relevant milestones by the selected FNO.

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³ 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 DCs, RCs as well as the villagers concerned.

21. In addition, the commitments made by the selected FNO in its proposal will be incorporated as terms and conditions of the agreement for the Subsidy Scheme to be entered into with the Government. OFCA will closely monitor the implementation progress. If any selected FNO fails to complete the relevant works and provide services according to the tender specifications and the commitments made in its proposal, OFCA may defer payment of subsidies, deduct the amount of subsidies, or call on the performance bond in accordance with the terms and conditions of the agreement. The relevant arrangements will be stipulated in details in the tender.

FINANCIAL IMPLICATIONS

22. We estimate that a total non-recurrent funding of \$774.4 million will be required for implementing the above proposal. For budgetary purpose, the indicative cash flow requirements by financial years are as follows –

	2019-20	2020-21	2021-22	2022-23 and beyond	Total
	(\$ Million)	(\$ Million)	(\$ Million)	(\$ Million)	(\$ Million)
Amount of subsidies required for network roll-out	193.6	193.6	193.6	193.6	774.4

23. The above requirements are estimated based on the latest information relating to the capital expenditure required by FNOs to roll out fibre-based lead-in connections from their fibre-based backbone termination points to the vicinity of the entrances of the villages concerned and the three fibre-based submarine cables. The amount of subsidies does not cover the costs of network roll-out within villages. Selected FNOs are also required to bear the non-capital expenditure (such as the expenditures for project planning, monitoring and management, etc.) involved in the whole project and the recurrent expenditure to be incurred in future for operation and maintenance of the fibre-based network.

24. As stated in paragraph 9 above, the villages to be covered under the Subsidy Scheme will be grouped into six projects for tender based on their geographical distribution. We will set a cap on the amount of subsidies for each project as stated in paragraph 15 above. The actual amount of Government subsidies involved will be subject to the tender result, but the total amount will not exceed \$774.4 million.

25. The Communications and Creative Industries Branch of Commerce and Economic Development Bureau (CEDB) has earmarked a total of \$69.8 million in the coming five years for OFCA to coordinate the implementation of the Subsidy Scheme.

IMPLEMENTATION PLAN

26. Subject to Members' approval of the funding proposal, OFCA will proceed with the tender exercise. Selected FNOs are required to apply to departments concerned for relevant permits 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 can be extended to the villages concerned in phases from 2021 onwards.

27. The tentative implementation plan is as follows –

Activities	Time
(a) • Prepare tender document	July to December 2018
(b) • Commence the tender exercise • Assess the tender bids • Award tender and sign agreements with selected FNOs	January to June 2019
(c) • Selected FNOs start applying to the departments concerned for the relevant permits and commence construction works	July 2019 onwards
(d) • Depending on the progress of permits approval, views of the villagers concerned and the progress of works, fixed broadband networks will be extended to the villages concerned in phases • Continue to monitor the project progress	2021 onwards

/PUBLIC

PUBLIC CONSULTATION

28. CEDB and OFCA consulted the nine relevant DCs and 27 RCs between March and June 2018 on the initial thinking of the arrangements for the Subsidy Scheme and the list of villages proposed to be covered, and received general support from the DCs and RCs. At the same time, OFCA has also exchanged views with the eligible FNOs in respect of the technical requirements and other relevant arrangements under the Subsidy Scheme. We have taken into account the views of the stakeholders as appropriate when devising the details of the Subsidy Scheme.

29. We consulted the Panel on Information Technology and Broadcasting of the Legislative Council on the proposal on 14 May 2018. Members were supportive of the proposal.

BACKGROUND

30. 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. The Subsidy Scheme also provides the telecommunications infrastructure necessary for the conservation and revitalisation of rural and remote areas in future.

Commerce and Economic Development Bureau
Office of the Communications Authority
June 2018

Number of villages proposed to be covered and estimated number of villagers benefited under the Subsidy Scheme to extend fibre-based networks to villages in remote areas

District	Number of villages proposed to be covered	Estimated number of villagers benefited
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
Total	About 300	About 170 000
