## Legislative Council

LC Paper No. CB(4)252/17-18

Ref: CB4/SS/2/17

#### Paper for the House Committee meeting on 24 November 2017

Report of the Subcommittee on Telecommunications (Designation of Frequency Bands subject to Payment of Spectrum Utilization Fee) (Amendment) Order 2017 and Telecommunications (Level of Spectrum **Utilization Fee) (Fixed and Other Links) Regulation** 

#### **Purpose**

This paper reports on the deliberations of the Subcommittee on Telecommunications (Designation of Frequency Bands subject to Payment of Spectrum Utilization Fee) (Amendment) Order 2017 ("the Amendment Order") and Telecommunications (Level of Spectrum Utilization Fee) (Fixed and Other Links) Regulation ("the Regulation").

#### **Background**

In accordance with the Radio Spectrum Policy Framework promulgated by the Government in 2007, spectrum utilization fee ("SUF") is in principle applicable to all non-government uses of spectrum.

At present, SUF is

imposed on spectrum assigned to public mobile services through auction, while no SUF is applicable to spectrum assigned administratively <sup>1</sup>.

3. To encourage spectrum users to use spectrum more efficiently and return excess spectrum to the Communications Authority ("CA") for reassignment to other users which are in need of such spectrum to support their operation, the Government proposed the implementation of an SUF charging scheme for spectrum assigned administratively ("charging scheme"). Under the charging scheme, SUF will be imposed on frequency bands that are congested (i.e. 75% or more occupied) and are anticipated to be more congested in future. Accordingly, six frequency bands will be subject to payment of SUF, and their levels are based on the estimates of the opportunity cost of the

Spectrum where the CA considers that there are not likely to be competing demands when it is made available for assignment will be assigned to licensees administratively upon application.

concerned frequency bands using the least cost alternative approach. A summary of such frequency bands and the corresponding SUF levels is in **Appendix I**.

- 4. There will be a transitional period of five years <sup>2</sup> before the charging scheme is fully in force. A one-off grant capped at 10% of the annual SUF applicable to the spectrum will be offered to spectrum users who return their excess spectrum within the first two years of the transitional period.
- 5. The Secretary for Commerce and Economic Development ("SCED") and the former Telecommunications Authority launched a public consultation from November 2010 to February 2011 to solicit views on the implementation of the charging scheme, and issued a joint statement <sup>3</sup> in September 2011 to announce their respective decisions after due consideration of the views received. Spectrum users were informed of the implementation of the charging scheme in April 2017.

#### The subsidiary legislation

- 6. To effect the charging scheme, the Amendment Order and the Regulation respectively made by the CA and the SCED under section 32I(1) and 32I(2) of the Telecommunications Ordinance (Cap. 106) were gazetted on 13 October 2017 and tabled at the Council meeting of 18 October 2017.
- 7. The Amendment Order adds a new Part 7 to the Schedule to the Telecommunications (Designation of Frequency Bands subject to Payment of Spectrum Utilization Fee) Order (Cap. 106Y) to designate six additional frequency bands in which the use of spectrum is subject to the payment of SUF.
- 8. The Regulation, among others, prescribes the levels of SUF for using any of the six designated frequency bands (set out in the new Part 7 of the Schedule to Cap. 106Y, as added by the Amendment Order) assigned under a licence relating to an electronic news gathering or outside broadcast link, a fixed link or a satellite uplink. The relevant prescribed fees are set out in the Schedule to the Regulation. Further, the Regulation provides for the following transitional arrangements relating to the payment of SUF between 2018 and 2021:

\_

Out of these five years, no SUF will be levied in the first two years. Thereafter, SUF will be introduced by a three-year phase-in approach, with 30% of the SUF imposed at the beginning of the third year, 70% at the beginning of the fourth year, and the full payable amount for the fifth year and beyond.

The Joint Statement is available at http://www.cedb.gov.hk/ccib/eng/paper/pdf/SUF\_Statement.pdf.

- (a) no SUF is payable for the 24 months beginning on 1 January 2018;
- (b) for the 12 months beginning on 1 January 2020, SUF payable is reduced by 70%; and
- (c) for the 12 months beginning on 1 January 2021, SUF payable is reduced by 30%.
- 9. The Amendment Order and the Regulation will come into operation on 1 January 2018.

#### The Subcommittee

- 10. At the House Committee meeting on 20 October 2017, Members agreed to form a Subcommittee to examine the two items of the subsidiary legislation. Under the chairmanship of Dr Hon Elizabeth QUAT, the Subcommittee held a meeting on 6 November 2017 with the Administration. The membership list of the Subcommittee is in **Appendix II**.
- 11. A resolution to extend the scrutiny period of the subsidiary legislation to the Council meeting of 6 December 2017 was scheduled for the Council meeting of 15 November 2017. However, as the resolution was not dealt with at the Council meeting of 15 November 2017, the scrutiny period for the subsidiary legislation expired at that meeting.

#### **Deliberations of the Subcommittee**

12. While raising no objection to the implementation of the charging scheme, members have expressed concerns about spectrum availability and assignment, periodic review of the charging scheme, effectiveness of the charging scheme, and other measures to promote spectrum efficiency.

#### Spectrum availability and assignment

13. Members note that the six designated frequency bands are congested with occupation of at least 75% and are anticipated to become more congested over time. Members have enquired whether the congestion has formed a barrier to new entrants, whether there is sufficient spectrum for current and future needs, and whether the Administration will implement measures to ensure sufficient spectrum supply in case these frequency bands are fully occupied.

14. The Administration has advised that although current spectrum resources are sufficient for spectrum assignments, a number of measures have been taken to ensure the efficient use of spectrum. First, the CA has been assessing spectrum assignment applications in a stringent manner and assigning less congested bands to cater for the needs of spectrum users whenever possible. Second, the charging scheme is introduced to encourage spectrum users to return excess spectrum to the CA for reassignments. In fact, several spectrum users have returned part of their spectrum assignments to the CA after being informed of the implementation of the charging scheme in April 2017. spectrum returned accounts for about one-fifth of the spectrum assignments in the six congested frequency bands as at April 2017. Third, the Administration will continue to monitor the congestion situation and take necessary actions, such as spectrum re-allocation, to cope timely with demand that may arise in future.

#### Periodic review of the charging scheme

- 15. Noting that the Administration will review the charging scheme every five years, members have considered the review cycle of five years too long and enquired whether a mid-term review will be conducted so as to keep pace with the rapidly changing trends of spectrum utilization and technological landscape. The Administration has advised that it is more desirable to conduct the review upon the completion of the five-year transitional period for implementing the charging scheme.
- 16. Members have enquired whether the congestion threshold of 75% occupancy will be reviewed and adjusted. The Administration has advised that adjustment to the threshold will be duly considered when the review is conducted.

#### Effectiveness of the charging scheme

- 17. Members have enquired about the performance indicators for the charging scheme. According to the Administration, the charging scheme should be regarded as effective if spectrum users of the congested frequency bands would critically review their spectrum need and return excess spectrum to the CA per the objective of the charging scheme.
- 18. Members have queried whether the charging scheme will achieve the objective as envisaged by the Administration. They are of the view that if the amount of SUF payable is small compared with users' operating cost, users may not be incentivized to return excess spectrum to the CA. The Administration has advised that it is premature to judge the effectiveness of the charging scheme at this stage. However, as several spectrum users have already returned all or part of the frequency assignments to the CA since April 2017, the

charging scheme has proved to be effective to some extent. The Administration will monitor the situation and consider whether and how the charging scheme should be improved in future reviews.

#### Other measures to promote spectrum efficiency

- 19. Members have enquired whether the Administration has drawn reference from overseas economies which adopt other more effective measures to relieve the congestion of frequency bands. The Administration has advised that the application of SUF to congested bands is consistent with the practice of other economies, such as the United Kingdom and Australia.
- 20. Members have further enquired whether the Administration knows the amount of spectrum lying idle by spectrum users and how efficiently spectrum assigned to spectrum users have been put to use. The Administration has advised that in general, it will not look into the use of spectrum by individual spectrum users. However, if the spectrum is suspected to have been left idle or used inefficiently by a spectrum user, the CA will conduct random inspections and take appropriate follow-up actions. Notwithstanding, members have considered it necessary for the CA to put in place a monitoring mechanism to ensure that spectrum users have efficiently utilized the assigned spectrum.
- 21. Members have suggested the Administration to consider an option of requesting spectrum users to provide information on the utilization level of the spectrum assigned to them through reports or questionnaires on a regular basis, with a view to obtaining relevant information for future spectrum planning. The Administration has undertaken to consider members' suggestions and advised that it will consider enquiring with spectrum users on the spectrum utilization in the congested bands upon their payment of annual spectrum management fee.

#### Recommendation

22. The Subcommittee raises no objection to the Amendment Order and the Regulation and will not propose any amendment to them.

#### **Advice sought**

23. Members are invited to note the deliberations of the Subcommittee.

Council Business Division 4
<u>Legislative Council Secretariat</u>
23 November 2017

### List of designated frequency bands and corresponding levels of spectrum utilization fee

Designated Frequency	Use	SUF (in HK\$/MHz/annum)	
Bands (MHz)		Exclusive Use	Non-Exclusive Use
2055 – 2095	ENG/OB links <sup>1,2</sup>	21,600	10,800
5875 – 6425	Fixed links <sup>3</sup> / Satellite uplinks <sup>4</sup>	No exclusive use	432
6425 – 7100	Fixed links / Satellite uplinks	21,600 (for frequencies assigned under	3,600 (for frequencies assigned under
7421 – 7900 8275 – 8500 10700 – 11700	Fixed links Fixed links	carrier and SPETS <sup>5</sup> licences) or	carrier and SPETS licences) or
		36,000 (for frequencies assigned under WBLRS <sup>6</sup> licences)	6,000 (for frequencies assigned under WBLRS licences)

Major users of fixed links are public utilities, television broadcasters, mobile network operators and fixed network operators, while major users of ENG/OB links and satellite uplinks are television broadcasters and external fixed network operators respectively.

<sup>&</sup>lt;sup>1</sup> ENG/OB stands for Electronic News Gathering/Outside Broadcast.

An ENG/OB link means a radio transmission path that is established through the use of terrestrial portable or transportable radio equipment for electronic news gathering or outside broadcast services.

<sup>&</sup>lt;sup>3</sup> A fixed link means a radio transmission path that is established between fixed locations for radiocommunications purposes.

<sup>&</sup>lt;sup>4</sup> A satellite uplink means a raido transmission path that is established in the direction from an earth station to a space station of a satellite system.

<sup>&</sup>lt;sup>5</sup> SPETS licence stands for Self-Provided External Telecommunications System licence.

<sup>&</sup>lt;sup>6</sup> WBLRS licence stands for Wide Band Link and Relay Station licence.

# Subcommittee on Telecommunications (Designation of Frequency Bands subject to Payment of Spectrum Utilization Fee) (Amendment) Order 2017 and Telecommunications (Level of Spectrum Utilization Fee) (Fixed and Other Links) Regulation

#### Membership list

**Chairman** Dr Hon Elizabeth QUAT, BBS, JP

Members Hon Abraham SHEK Lai-him, GBS, JP

Hon WONG Ting-kwong, GBS, JP

Hon CHAN Kin-por, GBS, JP

Hon WU Chi-wai, MH

Hon MA Fung-kwok, SBS, JP Hon Charles Peter MOK, JP

Hon CHAN Chi-chuen

Hon Christopher CHEUNG Wah-fung, SBS, JP

Hon CHUNG Kwok-pan

Hon Alvin YEUNG Hon HO Kai-ming

(Total: 12 members)

Clerk Ms Angel WONG

**Legal Adviser** Mr Alvin CHUI

**Date** 6 November 2017