

**LEGISLATIVE COUNCIL BRIEF**

Telecommunications Ordinance  
(Chapter 106)

**TELECOMMUNICATIONS (DESIGNATION OF FREQUENCY BANDS SUBJECT TO PAYMENT OF SPECTRUM UTILIZATION FEE) (AMENDMENT) ORDER 2019**

**TELECOMMUNICATIONS (METHOD FOR DETERMINING SPECTRUM UTILIZATION FEES) (SPECTRUM FOR AUCTION) REGULATION**

**INTRODUCTION**

This paper briefs Members on the following subsidiary legislation which will be published in the Gazette on 17 May 2019 –

- (a) the Telecommunications (Designation of Frequency Bands Subject to Payment of Spectrum Utilization Fee) (Amendment) Order 2019 (“106Y Amendment Order”, copy at **Annex A**); and
- (b) the Telecommunications (Method for Determining Spectrum Utilization Fees) (Spectrum for Auction) Regulation (“New Regulation”, copy at **Annex B**).

**JUSTIFICATIONS**

2. To prepare for the launch of fifth generation (5G) mobile services in Hong Kong, the Communications Authority (CA) promulgated in March 2017 its work plan for making available additional spectrum to facilitate further development of public mobile communications. The spectrum release plan issued by the CA in July 2018 stated that a total of about 4 500 MHz of spectrum in various bands would be released for the deployment of public mobile services, including 5G services.

3. On 13 December 2018, SCED and the CA issued Joint Statements<sup>1</sup> promulgating their decisions<sup>2</sup> to assign 380 MHz of spectrum in the 3.5 GHz band, and the 3.3 GHz and 4.9 GHz bands by way of auction, and that the related spectrum utilisations fees (SUF) will be determined through auction. We need to make legislative amendments to effect the decisions.

4. Sections 32H(2) and 32I(1) of the Telecommunications Ordinance (TO) empower the CA to assign radio spectrum and to designate which of them shall be subject to the payment of SUF, while sections 32I(2) and 32I(4) of the TO empower the Secretary for Commerce and Economic Development (SCED) to prescribe the method for determining the SUF and to specify the minimum fee of the SUF.

## LEGISLATIVE AMENDMENTS

### A. The 106Y Amendment Order (at Annex A)

5. The 106Y Amendment Order amends the Telecommunications (Designation of Frequency Bands subject to Payment of Spectrum Utilization Fee) Order (Cap. 106Y) to designate 3 300 – 3 400 MHz (i.e. the 3.3 GHz band), 3 400 – 3 600 MHz (i.e. 3.5 GHz band) and 4 840 – 4 920 MHz (i.e. the 4.9 GHz band) as the frequency bands the use of which should be subject to payment of SUF.

### B. The New Regulation (at Annex B)

6. The New Regulation<sup>3</sup> specifies the method for determining the SUF by auction for spectrum set out in the Schedule to the Regulation. It also empowers the SCED to specify the minimum fee of the SUF (i.e.

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<sup>1</sup> The Joint Statements in relation to the 3.5 GHz band and the 3.3 GHz and 4.9 GHz bands are respectively available at:

[https://www.cedb.gov.hk/ccib/eng/paper/pdf/joint\\_statement\\_3.4\\_3.6GHz\\_2018en.pdf](https://www.cedb.gov.hk/ccib/eng/paper/pdf/joint_statement_3.4_3.6GHz_2018en.pdf)  
[https://www.cedb.gov.hk/ccib/eng/paper/pdf/joint\\_statement\\_3.3\\_4.9GHz\\_2018en.pdf](https://www.cedb.gov.hk/ccib/eng/paper/pdf/joint_statement_3.3_4.9GHz_2018en.pdf)

<sup>2</sup> Separately, the CA decided that the 26/28 GHz bands (involving 4 100 MHz of spectrum) would be administratively assigned. No legislative amendment is required for effecting such decision.

<sup>3</sup> Another subsidiary legislation under the Telecommunications Ordinance (Cap. 106), the Telecommunications (Determining Spectrum Utilization Fees by Auction) Regulation (Cap. 106AC) also specifies the method for determining the SUF by auction. Nevertheless, as the format of the auctions set out under Cap. 106AC (i.e. the Simultaneous Multiple Round Auction Method) is different from the auctions formats proposed for the auctions of the 3.3 GHz and 3.5 GHz bands (i.e. the Clock Auction Method), a new subsidiary legislation is made instead of amending Cap. 106AC.

auction reserve prices) for the relevant spectrum by notice published in the Gazette or otherwise, and empowers the CA to, amongst other things, hold auctions to determine the SUF for the use of the relevant spectrum.

## **LEGISLATIVE TIMETABLE**

7. The legislative timetable will be –

Publication in the Gazette	17 May 2019
Tabling at the Legislative Council	22 May 2019
Commencement of the subsidiary legislation	12 July 2019

## **IMPLICATIONS OF THE SUBSIDIARY LEGISLATION**

8. On financial implication, the subsidiary legislation stipulates that the relevant spectrum in the 3.3 GHz, 3.5 GHz and 4.9 GHz bands is subject to the payment of SUF, and sets out the method for determining the SUF of the relevant spectrum. The SUF paid by the spectrum assignees will be paid into the general revenue. As to economic implications, while the legislative amendments themselves have minimal economic implication, the assignment of the relevant spectrum by way of auction would promote competition for the spectrum and encourage operators to enhance spectral efficiency and provide innovative 5G services. This is conducive to the long-term development of the telecommunications sector.

9. The subsidiary legislation is in conformity with the Basic Law, including the provisions concerning human rights. It does not affect the current binding effect of the Telecommunications Ordinance (Cap. 106). It has no civil service, productivity, family, gender or environmental implications.

## **PUBLIC CONSULTATION**

10. SCED and the CA jointly conducted public consultations in relation to the assignment and related SUF of the 3.5 GHz band<sup>4</sup>, as well

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<sup>4</sup> The consultation paper in relation to the 3.5 GHz band is available at:  
[https://www.cedb.gov.hk/ccib/eng/paper/pdf/3.5GHz\\_Spectrum\\_consultation.pdf](https://www.cedb.gov.hk/ccib/eng/paper/pdf/3.5GHz_Spectrum_consultation.pdf)

as the 3.3 GHz and 4.9 GHz bands<sup>5</sup> respectively from 2 May to 13 June 2018 and from 28 August to 26 September 2018. The comments received and responses of SCED and the CA have been set out in the Joint Statements issued on 13 December 2018.

11. We briefed the Information Technology and Broadcasting Panel of the Legislative Council on 10 May 2019<sup>6</sup>. The Panel has raised no objection to this proposal.

## **PUBLICITY**

12. Subject to the enactment of the two pieces of subsidiary legislation, the CA aims to hold auctions for the spectrum concerned in the second half of 2019.

13. Before the auction takes place, the SCED and the CA will, respectively, specify by notices published in the Gazette the minimum fees of the respective spectrum (i.e. the auction reserve prices), and the terms and conditions of the auctions, including the application periods for the auctions, the criteria for qualifying a bidder to participate or disqualifying a bidder from participating in the auctions, etc. Information memoranda which provide key information of the auction and press releases will also be published by the CA to invite interested parties to participate in the auctions.

## **ENQUIRIES**

14. For enquiries, please contact Mr Keith Giang, Principal Assistant Secretary for Commerce and Economic Development (Communications & Creative Industries) at 2810 2708.

**Commerce and Economic Development Bureau  
(Communications and Creative Industries Branch)  
15 May 2019**

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<sup>5</sup> The consultation paper in relation to the 3.3 GHz and 4.9 GHz bands is available at:  
[https://www.cedb.gov.hk/ccib/eng/paper/pdf/cp20180828\\_e.pdf](https://www.cedb.gov.hk/ccib/eng/paper/pdf/cp20180828_e.pdf)

<sup>6</sup> The Panel paper is available at:  
<https://www.legco.gov.hk/yr18-19/english/panels/itb/papers/itb20190510cb1-1020-5-e.pdf>

**Telecommunications (Designation of Frequency Bands subject to Payment of Spectrum Utilization Fee) (Amendment) Order 2019**



Communications Authority

(Made by the Communications Authority under section 32I(1) of the Telecommunications Ordinance (Cap. 106) after carrying out the consultation required under section 32G(2) of the Ordinance)

14 May 2019

**1. Commencement**

This Order comes into operation on 12 July 2019.

**2. Telecommunications (Designation of Frequency Bands subject to Payment of Spectrum Utilization Fee) Order amended**

The Telecommunications (Designation of Frequency Bands subject to Payment of Spectrum Utilization Fee) Order (Cap. 106 sub. leg. Y) is amended as set out in section 3.

**3. Schedule amended**

The Schedule, after Part 7—

**Add**

**“Part 8**

MHz

3300–3400

3400–3600

4840–4920”.

**Explanatory Note**

This Order designates additional frequency bands in which the use of spectrum is subject to the payment of spectrum utilization fee.

**Telecommunications (Method for Determining Spectrum Utilization Fee) (Spectrum for Auction) Regulation**

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## Telecommunications (Method for Determining Spectrum Utilization Fee) (Spectrum for Auction) Regulation

(Made by the Secretary for Commerce and Economic Development under section 321 of the Telecommunications Ordinance (Cap. 106))

### 1. Commencement

This Regulation comes into operation on 12 July 2019.

### 2. Interpretation

In this Regulation—

*application period* (申請限期) means a period after which the Authority may not, in accordance with the specified terms, accept written applications for participating in an auction;

*auction* (拍賣) means an auction or a series of auctions referred to in section 3;

*bidder* (競投人) includes a person who has, by written application to the Authority, expressed an intention to participate in an auction;

*eligible bidder* (合資格競投人) means a bidder that—

- (a) has been determined by the Authority in accordance with the specified terms to be qualified to participate in an auction; and
- (b) has not been determined by the Authority in accordance with the specified terms to be disqualified from participating in the auction;

*frequency band* (頻帶) includes a division of a frequency band referred to in section 4;

*specified terms* (指明條款) means the terms and conditions of an auction specified under section 11(b);

*spectrum* (頻譜) means the spectrum referred to in section 3.

### 3. Determining spectrum utilization fee by auction

(1) The spectrum utilization fee for using the spectrum that falls within a frequency band set out in the Schedule is to be determined by an auction or a series of auctions held in accordance with this Regulation and the specified terms.

(2) This section is subject to sections 4, 5, 6, 7, 8 and 9.

### 4. Division of frequency band

(1) For determining the spectrum utilization fee, the Authority may further divide a frequency band set out in the Schedule for an auction.

(2) A division of a frequency band under subsection (1) is to be specified in the specified terms.

### 5. Spectrum utilization fee payable if there is more than one eligible bidder

(1) If, on the expiry of the application period for participating in an auction, there is more than one eligible bidder, the auction is to be held for determining the spectrum utilization fee for using the spectrum concerned.

(2) The amount of the spectrum utilization fee is the amount payable by the successful bidder as determined by the outcome of the auction.

(3) However, the amount payable must not be less than the minimum amount of the spectrum utilization fee specified under section 10 for the spectrum concerned.



**6. Spectrum utilization fee payable if there is only 1 eligible bidder**

- (1) If—
  - (a) on the expiry of the application period for participating in an auction; or
  - (b) immediately before the start of the auction,there is only 1 eligible bidder, the auction is not to be held for determining the spectrum utilization fee for using the spectrum concerned.
- (2) The amount of the spectrum utilization fee is the minimum amount of the spectrum utilization fee specified under section 10 for the spectrum concerned.

**7. Spectrum utilization fee payable if connected bidders are involved**

- (1) This section applies if—
  - (a) 2 or more successful bidders in an auction are connected bidders;
  - (b) the total amount of the spectrum successfully bidden by those bidders exceeds the spectrum cap; and
  - (c) the Authority conducts another auction for those bidders in accordance with the specified terms.
- (2) The amount of a bid made by the successful bidder in the other auction is to be added to, and form part of, the spectrum utilization fee payable by that bidder for using the spectrum concerned.
- (3) The amount of a bid in the other auction must not be less than the minimum amount of the spectrum utilization fee specified under section 10 for the spectrum concerned.

- (4) In this section—

*connected bidder* (有關連的競投人) has the same meaning as in the specified terms;

*spectrum cap* (頻譜上限) means the maximum amount of the spectrum specified by the Authority in the specified terms that may be assigned to a group of persons who are connected bidders.

**8. Spectrum utilization fee not payable for use of spectrum relating to space object**

- (1) If a user of the spectrum that falls within the frequency band 3400–3600 MHz is authorized by the Authority to use the spectrum for the sole purpose of telemetry, tracking, control, monitoring and testing functions related to the use, maintenance, operation and control of space objects, the user is not liable to pay any spectrum utilization fee for using the spectrum solely for that purpose.

- (2) In this section—

*space object* (空間物體) has the meaning given by section 2(1) of the Outer Space Ordinance (Cap. 523).

**9. Payment of spectrum utilization fee**

- (1) The spectrum utilization fee determined under this Regulation must be paid—
  - (a) in a lump sum; or
  - (b) annually in 15 instalments in accordance with subsection (2).
- (2) For subsection (1)(b), the spectrum utilization fee for each instalment is as follows—

- (a) for the first instalment—an amount equal to the lump sum referred to in subsection (1)(a) divided by 15;
  - (b) for each subsequent instalment—an amount equal to the spectrum utilization fee payable in the immediately preceding instalment increased by 2.5%.
- (3) The spectrum utilization fee is payable at the time and in the way required by the Authority.

**10. Secretary may specify minimum amount of spectrum utilization fee**

The Secretary may specify the minimum amount of the spectrum utilization fee for the purposes of sections 5(3), 6(2) and 7(3)—

- (a) by notice published in the Gazette or in any other manner; and
- (b) by means of—
  - (i) a minimum fixed fee;
  - (ii) a minimum fee determined by reference to a formula or percentage or the occurrence of an event or a series of events;
  - (iii) a series of 2 or more minimum fees in relation to the same spectrum utilization fee where the relevant minimum fee is determined by reference to the occurrence of an event or a series of events;
  - (iv) a minimum fee the determination of which varies on the occurrence of an event or a series of events;
  - (v) a minimum fee determined by reference to another minimum fee, or by reference to the means of determining another minimum fee, whether or not the other minimum fee is or will become payable;

- (vi) a minimum fee the determination of which varies with, or is calculated by reference to, the period of validity of a licence or a part of the period; or
- (vii) a combination of 2 or more of any of the means specified in subparagraph (i), (ii), (iii), (iv), (v) or (vi), whether in whole or in part.

**11. Authority may hold auction etc. and specify terms and conditions of auction**

The Authority may—

- (a) promote, hold, conduct, suspend, cancel or conclude an auction; and
  - (b) by notice published in the Gazette, specify the terms and conditions of an auction (including the terms and conditions relating to the payment of the spectrum utilization fee).
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## Schedule

[ss. 3 & 4]

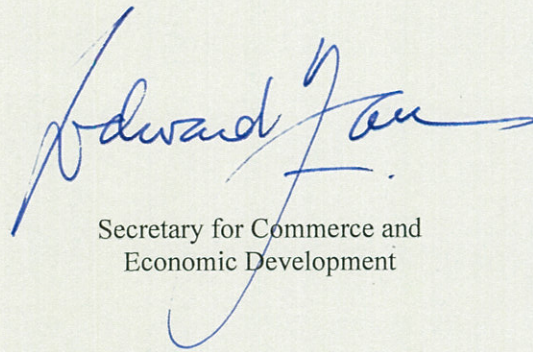
### Frequency Bands

MHz

3300–3400

3400–3600

4840–4920



Secretary for Commerce and  
Economic Development

14 May 2019

## Explanatory Note

This Regulation—

- (a) provides for the determination by auction, and the payment, of spectrum utilization fees for using the spectrum that falls within the frequency bands set out in the Schedule to the Regulation;
- (b) exempts from payment of the spectrum utilization fee for using the spectrum that falls within a particular frequency band for the sole purpose of certain functions related to the use, maintenance, operation and control of space objects;
- (c) empowers the Secretary for Commerce and Economic Development to specify the minimum amount of the spectrum utilization fee to be determined under the Regulation; and
- (d) empowers the Communications Authority to arrange for an auction and specify the terms and conditions of an auction.