

LEGISLATIVE COUNCIL BRIEF

Telecommunications Ordinance
(Chapter 106)

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

**TELECOMMUNICATIONS (METHOD FOR DETERMINING
SPECTRUM UTILIZATION FEES) (THIRD GENERATION
MOBILES SERVICES) REGULATION**

INTRODUCTION

— This brief aims to brief Members on the Telecommunications (Designation Of Frequency Bands Subject To The Payment Of Spectrum Utilization Fee) Order, and the Telecommunications (Method for Determining Spectrum Utilization Fees) (Third Generation Mobile Services) Regulation, attached at Annexes 1 and 2 respectively, made under section 32I of the Telecommunications Ordinance as amended by the Telecommunications (Amendment) Ordinance 2001.

BACKGROUND AND ARGUMENT

General Background

2. Our policy objectives in the third generation mobile services (3G) licensing exercise are to promote the development of the telecommunications industry in Hong Kong, to protect the interests of the consumers and to maximize benefits to the economy as a whole. Under these objectives, the Telecommunications Authority (TA) conducted two rounds of consultations in March and October 2000 respectively. On 13 February 2001, the Government announced that a hybrid method will

be used to allocate four 3G licences. It would involve a two-stage process of pre-qualification, followed by spectrum auctioning. The pre-qualification exercise will weed out unqualified applicants and ensure that 3G networks to be built by eligible applicants will reach an acceptable quality within a certain period of time. Spectrum auctioning is an efficient and fair method of allocating licences to applicants with the best business case.

3. Spectrum auctioning will be conducted based on bidding on royalty percentage with minimum guaranteed payment. There will be a cash auction to resolve connected bidders among the successful bidders in order that the same economic group will not have substantial interests in or otherwise control, more than one 3G licences. In order to allocate the four sets of frequency bands to the successful bidders in a fair and efficient manner, there will also be a cash auction to determine the respective priority of choosing the specific 3G spectrum. These three phases of the auction will each give rise to payment of spectrum utilisation fee by bidders.

4. Under sections 32I(1) and (2) of the Telecommunications Ordinance as amended by the Telecommunications (Amendment) Ordinance 2001, the TA and the Secretary for Information Technology and Broadcasting (SITB) are respectively empowered to designate the frequency bands subject to the payment of spectrum utilization fees, and prescribe the level of, or the method for determining, the spectrum utilization fees. The TA and the SITB therefore make an order (the Order) and a regulation (the Regulation) respectively under section 32I to empower the Government to conduct the spectrum auction for the forthcoming 3G exercise.

THE ORDER AND THE REGULATION

5. The Order sets out the four sets of frequency bands which will be subject to the payment of the spectrum utilization fees in the 3G licensing exercise.

6. The main provisions of the Regulation are set out in the ensuing paragraphs.

7. **Regulation 4** prescribes the main auction that shall be held when there are more than four bidders, determining the annual royalty-based spectrum utilisation fee of the successful bidders. All the successful bidders will be paying a spectrum utilization fee determined by the “highest common royalty percentage” (i.e. the highest royalty percentage bids offered by all the successful bidders) subject to a minimum fee. The components of the fees are set out in the Legislative Council brief on the licensing framework for 3G, extract of which is at Annex 3.

8. **Regulation 5** sets out that if there are four or fewer bidders the auction mentioned in Regulation 4 will not be held. All the bidders will be successful bidders and the spectrum utilization fees will be the “reserve price” set by SITB.

9. **Regulation 6** prescribes that in case there are two or more of the successful bidders which are connected as defined by the auction rules, there shall be a cash auction as required by the auction rules to resolve which of the connected bidders will remain successful. The losing bidder(s) will cease to be (a) successful bidder(s).

10. **Regulation 7** prescribes that there shall be a cash auction to determine the respective priority rights of allocating the frequency bands designated in the Order among the successful bidders.

11. **Regulation 8** empowers SITB to set the minimum spectrum utilization fees by notice published in the Gazette or otherwise. The regulation empowers SITB to set the minimum fees for the main auction under Regulations 4 and 5, covering:-

- (i) the minimum royalty percentage, and the spectrum utilization fees payable over the 15-year licence period based on that minimum royalty percentage – they, as a whole, constitute what is commonly known as the ‘reserve price’; and
- (ii) the series of minimum payments of spectrum utilization fees over the 15-year licence period based on the “highest common royalty percentage”.

12. **Regulation 9** empowers TA to promote, hold, conduct, suspend, cancel or conclude any auction mentioned in the Regulation. TA is also empowered to set the terms and conditions of the auctions, including the terms and conditions relating to the payment of spectrum utilization fees.

13. **Regulation 10** empowers the TA to treat the accounts to bring them into conformity with the licence conditions and accounting practices he specifies, and to assess the network turnover in relation to the 3G licensee on the basis of the accounts so treated, if TA is not satisfied that the accounts have been prepared in accordance with the licence conditions and the accounting practices.

14. Members may wish to note that, to facilitate the passage of the Order and the Regulation, the Administration issued on 23 March a draft Order and a revised draft Regulation on 26 April. The Legislative Council has already formed a subcommittee to examine the draft subsidiary legislation. The draft Order is the same as the Order at Annex 1 except that a commencement section is added to designate 4 July 2001 as the commencement date. The revised Regulation at Annex 2 is broadly the same with the draft Regulation previously circulated, except for necessary revisions set out below:-

- (a) a new section has been added to set the commencement date on 4 July 2001;
- (b) as announced before, the policy intention is that, if there are more than four bidders before the start of the main auction whose applications are in compliance with the terms and conditions of the auction, the auction will be held. If there are four or fewer bidders, there will not be any main auction and the spectrum will be allocated at the reserve price set by SITB. Amendments have therefore been made to Regulations 4 and 5 to make this clear; and
- (c) to determine the spectrum utilisation fee payable by the licences, which involves a royalty based on their respective network turnover from year 6 of the licence period onwards, the licensees need to submit to the TA their accounts, in compliance with the

licence conditions and accounting practices specified by the TA. In order for the licensees to comply with their obligations and for the TA to discharge his role in collecting government revenue, the network turnover as defined in the Regulation should enable the network turnover to be properly calculated and assessed through the licensees' accounts. For the sake of clarity, the definition of 'network turnover' has been revised to expressly relate it to the calculation of the spectrum utilisation fee. Such a revision does not change its scope, but will help tie in with Regulation 10 on treatment of the accounts by the TA. Regulation 10 has also been amended to clarify our intention that the Authority may treat the licensees' accounts and assess the network turnover by bringing them into conformity with the licence conditions and accounting practices for the purposes of determining the spectrum utilisation fee.

LEGISLATIVE TIMETABLE

15. The legislative timetable will be –

Publication in the Gazette	1 June 2001
Tabling in the Legislative Council	6 June 2001
Commencement	4 July 2001

BASIC LAW IMPLICATIONS

16. The Department of Justice advises that the Order and the Regulation do not conflict with those provisions of the Basic Law carrying no human rights implications.

HUMAN RIGHTS IMPLICATIONS

17. The Department of Justice advises that the Order and the Regulation are consistent with the human rights provisions of the Basic Law.

FINANCIAL AND STAFFING IMPLICATIONS

18. The spectrum utilization fees to be generated in the 3G spectrum auction will be set by the market. In view of the changing market sentiment on investment in 3G services, it is difficult to estimate the spectrum utilization fees that may be brought to the General Revenue. The Finance Committee has already approved the creation of a commitment of \$55 million for engaging consultancy services for design and implementation of the forthcoming 3G licensing exercise. The Office of the Telecommunications Authority will undertake this exercise within its existing staffing resources.

ECONOMIC IMPLICATIONS

19. The Order and the Regulation will enable the TA to grant 3G licences by the method as announced on 13 February 2001. The timely issue of 3G licences will allow Hong Kong to enjoy 3G services at the same time as other advanced economies. In particular, the open network requirement will give our innovative and competitive content and application providers great business opportunities over the 3G platform. Consumers and businesses will also stand to benefit from quality and competitive 3G services.

ENVIRONMENTAL IMPLICATIONS

20. The Order and the Regulation do not have any environmental implications.

PUBLIC CONSULTATION

21. The TA has conducted two rounds of consultation in March and October 2000 on the licensing and regulatory framework of 3G.

PUBLICITY

22. As mentioned in paragraph 14, the sub-committee has already been examining the draft Order and Regulation. A spokesman will be made available to answer media enquiries.

ENQUIRIES

23. For any enquiries relating to this Brief, please contact:-

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31 May 2001
Information Technology and Broadcasting Bureau

**Extract of Legislative Council Brief on Licensing Framework for
Third Generation Mobile Services issued on 13 February 2001**

11. we propose to combine their advantages in an arrangement, whereby the **royalty payment will be subject to a guaranteed, minimum payment**. Bidders would be asked to bid for a level of annual royalty by way of a percentage of turnover from their 3G services network operations. Successful bidders who win the 3G licences at a certain royalty percentage bid would do the following :

- (a) for the first five years of the licence: They will pay a guaranteed, minimum royalty payment fixed by the Government as explained in paragraph 14(a) below. They will pay the same fixed amounts for this period regardless of their actual turnover. This is because it will be difficult in these initial years of the 3G licences to distinguish between second generation mobile services (2G) and 3G network revenues, if the 3G licensee is also an existing 2G operator;
- (b) from year six to the end of the licence period: They will pay royalties to the Government according to the royalty percentage determined by the auction. The same royalty percentage will apply to all licensees as explained in paragraph 13 below. The actual royalty payment will differ from licensee to licensee as their 3G revenue turnover will be different. However, the royalty paid by each licensee should not be less than the guaranteed, minimum royalty payment fixed by the Government as explained in paragraph 14(a) below. In other words, the Government collects the royalty based on actual turnover, or the guaranteed, minimum royalty payment, whichever is the higher; and
- (c) throughout the whole licence period: They will need to provide a 5-year rolling guarantee for each of their guaranteed, minimum royalty payment.

12. The proposed method will capture the advantages of deferred cash payment and royalty and best meet our policy objectives. It is “pro-entry” by lowering the financial burden of successful 3G licensees, and allows the Government to share the upside of the future 3G services market. It is also an efficient method of allocating licences to those bidders with the best business case, although the payment will be in the form of royalty and therefore will depend on the actual performance of each licensee. The guaranteed, minimum royalty payment requirement will minimise credit risks for the Government, and reduce the costs that may be passed on to consumers.

13. To further mitigate any distortive effects that royalties may create in the 3G market, we need to ensure that **all successful bidders are subject to the same royalty percentage**, which will, depending on the detailed auction design, be at or near the highest price willing to be paid by the weakest successful licensee. An auction design to achieve this effect as well as to fit in with existing circumstances in the Hong Kong market is being worked out with our 3G consultant.

14. In formulating the details of the auction, we will take into account the following points :

- (a) the auction must be designed to deter stronger bidders from overbidding in the hope that it can pass royalties on to consumers. At the same time, weak players should be deterred to make over-aggressive bids on royalty percentages. To achieve this, we will fix different guaranteed, minimum payments for different royalty percentages. For a given royalty percentage, the guaranteed, minimum royalty payment is flat for the first five years, and is rising from year six onwards. We may set the level of the guaranteed minimum payment at a level which increases at a higher rate than the royalty percentage increase. For example,

<u>royalty percentage</u>	<u>the guaranteed, minimum royalty payment for year 1^{Note}</u>
R ₁ %	\$1x
R ₂ %	\$2x
R ₃ %	\$3x
.	.
.	.
.	.
R ₁₀ %	\$12x
R ₁₁ %	\$16x
R ₁₂ %	\$20x

The result would be that, at low royalty bids, the guaranteed, minimum royalty payment is likely to be significantly less than the royalty that may be collected based on the licensees' turnover. This would enhance entry to the auction. But for higher royalty bids the minimum payment might even exceed royalties that may be collected based on the licensees' turnover. The whole guaranteed, minimum royalty payment, in theory, will act as a sunk cost that should not be passed on to consumers. We are now working out a bidding schedule with our 3G consultant. The bidding schedule will set out the linkage between the royalty and the minimum payment, based on projections of industry revenues from 3G; and

- (b) since the four successful 3G licence applicants may have different preferences (due to technical reasons such as inter-band interference) for the four frequency bands to be allocated, we will design an efficient method to allocate the frequency bands, such as by a final auction stage requiring a lump-sum cash bid. This will not affect the result of the auction of royalty percentages which will have identified the winners. The final round of auction for allocating

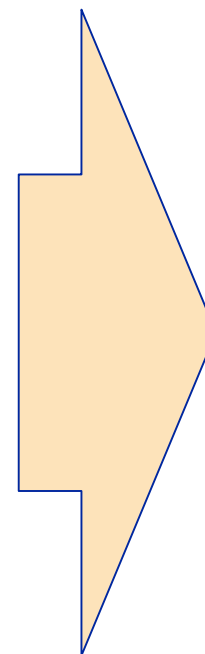
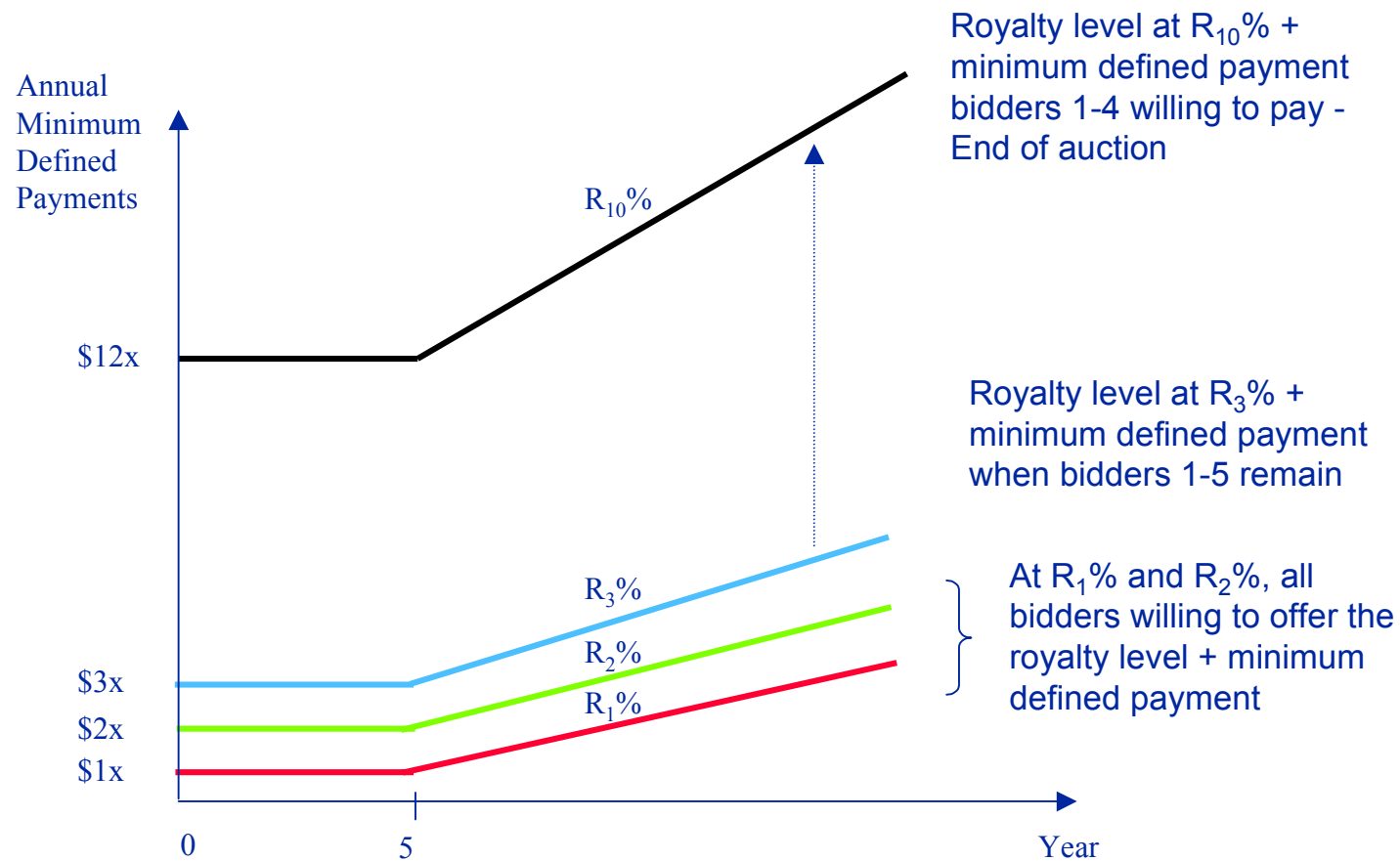
^{Note} The table is for illustration purpose only. There will be defined minimum royalty payments for subsequent years for the licence period.

frequency bands is however not expected to generate material additional proceeds.

15. Two diagrams to illustrate the royalty payment proposal is attached at the Annex.

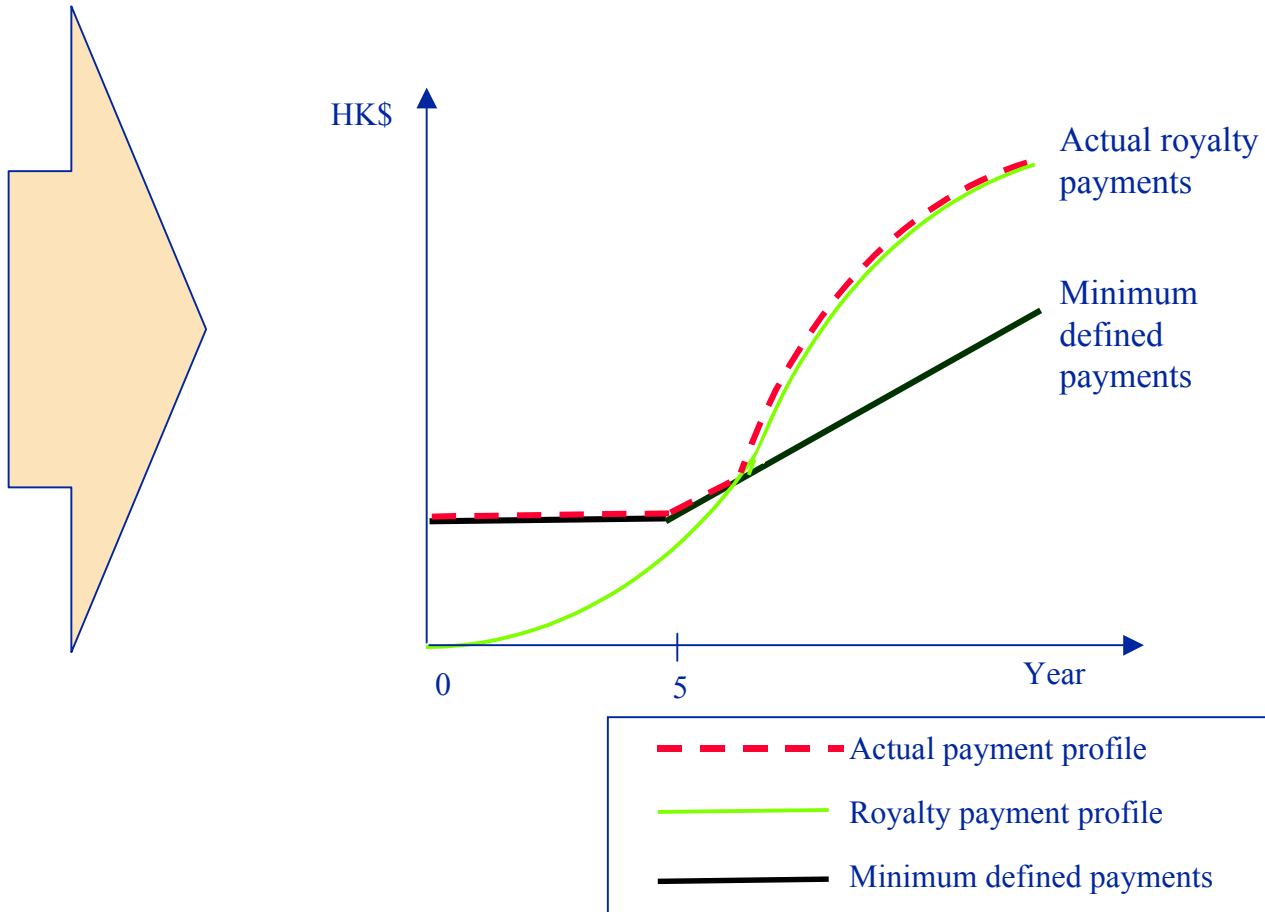
Diagrams to illustrate the royalty payment proposal

Minimum defined payments spread over time



Diagrams to illustrate the royalty payment proposal

Actual payments over time



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

(Made by the Telecommunications Authority under section 32I(1) of the Telecommunications Ordinance (Cap. 106) subject to the consultation required under section 32G(2) of the Ordinance)

1. Commencement

This Order shall come into operation on 4 July 2001.

2. Designation of frequency bands subject to payment of spectrum utilization fee

The following frequency bands are designated as the frequency bands in which the use of spectrum is subject to the payment of spectrum utilization fee by the users of the spectrum -

MHz	MHz	MHz
1920.3 - 1935.1	2110.3 - 2125.1	1914.9 - 1919.9
1935.1 - 1949.9	2125.1 - 2139.9	1904.9 - 1909.9
1950.1 - 1964.9	2140.1 - 2154.9	1909.9 - 1914.9
1964.9 - 1979.7	2154.9 - 2169.7	2019.7 - 2024.7

Telecommunications Authority

29th May 2001

Explanatory Note

This Order is made under section 32I(1) of the Telecommunications Ordinance (Cap. 106) and designates the frequency bands in which the use of spectrum is subject to the payment of spectrum utilization fee by the users of the spectrum.

**TELECOMMUNICATIONS (METHOD FOR DETERMINING
SPECTRUM UTILIZATION FEES)(THIRD GENERATION
MOBILE SERVICES) REGULATION**

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**TELECOMMUNICATIONS (METHOD FOR DETERMINING
SPECTRUM UTILIZATION FEES)(THIRD GENERATION
MOBILE SERVICES) REGULATION**

(Made under section 32I of the Telecommunications
Ordinance (Cap. 106))

1. Commencement

This Regulation shall come into operation on 4 July 2001.

2. Interpretation

(1) In this Regulation, unless the context otherwise requires -

"auction" (拍賣) includes a tender and a combination of auction and tender; "bid" (出價) includes -

- (a) a tender;
- (b) an intention to bid specified in an application in writing given to the Authority;

"bidder" (競投人) includes -

- (a) a tenderer;
- (b) a person who has expressed an intention to bid by application in writing given to the Authority;

"highest common royalty percentage" (最高共同專營權費百分率), in relation to an auction, means the highest royalty percentage bids offered by all the successful bidders at the auction;

"network turnover" (網絡營業額), in relation to calculating a spectrum utilization fee, means the revenue arising from or attributable to the provision of any telecommunications services over any telecommunications network using the frequency bands to which that fee relates;

"relevant minimum fee" (有關最低費用), in relation to a spectrum utilization fee mentioned in a provision of this Regulation, means the minimum fee specified under section 8;

"relevant terms" (有關條款) means the terms and conditions specified in the notice mentioned in section 9(b).

(2) For the avoidance of doubt, it is hereby declared that the fact that an auction mentioned in this Regulation is not held shall not in any way prejudice the operation of a provision of this Regulation (including the definition of "highest common royalty percentage").

3. Application

The method for determining the spectrum utilization fees to be paid by the users of the spectrum which falls within the 4 sets of frequency bands designated in the Telecommunications (Designation of Frequency Bands subject to Payment of Spectrum Utilization Fee) Order (L.N. of 2001) shall be as specified in sections 4, 5, 6 and 7.

4. Auction to determine annual spectrum utilization fee payable

Subject to sections 5, 6, 7 and 8 and compliance with the relevant terms, where there are more than 4 bidders, an auction shall be held in which -

- (a) the bidders whose bids will produce the highest common royalty percentage, as determined in accordance with this Regulation and the relevant terms, shall be the successful bidders;
- (b) the spectrum utilization fee to which the auction relates shall be -
 - (i) an annual fee for each of the first 5 years of the period of validity of the relevant licence mentioned in section 7(12) of the Ordinance

consisting of the relevant minimum fee applicable to the highest common royalty percentage;

- (ii) for each year of the period of validity of the relevant licence remaining after the expiration of the first 5 years, an annual fee consisting of -
 - (A) a royalty determined by reference to the network turnover in relation to the licensee multiplied by the highest common royalty percentage; or
 - (B) the relevant minimum fee based on the highest common royalty percentage,

whichever is the highest for the year concerned.

5. Spectrum utilization fee payable where auction not held due to insufficient bidders

Subject to sections 6, 7 and 8 and compliance with the relevant terms, where there are not more than 4 bidders -

- (a) in relation to the auction mentioned in section 4 and before the start of the auction; and
- (b) immediately upon the expiration of the period, as specified in the relevant terms, after which the Authority will not accept bids,

then -

- (c) the auction shall not be held;
- (d) each of the bidders shall be a successful bidder; and
- (e) the spectrum utilization fee shall be the relevant minimum fee.

6. Auction to remove connected bidders

Subject to section 8 and compliance with the relevant terms, where 2 or more of the successful bidders mentioned in section 4 or 5 are connected as

mentioned in the relevant terms, then an auction shall be held, as required by the relevant terms, for those successful bidders so connected (or, if there is more than one set of those successful bidders so connected, an auction for each set shall be held) in which -

- (a) the bidder whose bid produces the highest spectrum utilization fee mentioned in paragraph (b) shall be the remaining successful bidder whilst the other bidder or bidders shall cease to be a successful bidder or the successful bidders, as the case may be;
- (b) the spectrum utilization fee to which the auction relates shall be a cash amount payable by the successful bidder immediately upon demand by the Authority.

7. Auction to determine respective priority rights of successful bidders in allocation of sets of frequency bands

Subject to section 8 and compliance with the relevant terms, after sections 4, 5 and 6 have been complied with, an auction shall be held -

- (a) to determine the respective priority rights -
 - (i) of the successful bidders remaining after the operation of those sections; and
 - (ii) in relation to the allocation of the sets of frequency bands mentioned in section 3; and
- (b) in which -
 - (i) the priority rights shall be assigned in descending order from the bidder whose bid produces the highest spectrum utilization fee mentioned in subparagraph (ii);
 - (ii) the spectrum utilization fee to which the auction relates shall be a cash amount payable by each of

the successful bidders immediately upon demand by the Authority.

8. Secretary may specify minimum fee of spectrum utilization fee

The Secretary may specify the minimum fee of any spectrum utilization fee mentioned in a provision of this Regulation -

- (a) by notice published in the Gazette or otherwise; 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 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 series of events;
 - (iv) a minimum fee the determination of which varies upon the occurrence of an event or 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, or is calculated by reference to, the period of validity of a licence or any part thereof; or
 - (vii) any 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.

9. Authority may promote, etc. an auction to which method referred to in section 3 relates

The Authority may -

- (a) promote, hold, conduct, suspend, cancel or conclude an auction to which the method referred to in section 3 relates;
- (b) specify the terms and conditions of an auction to which that method relates by notice published in the Gazette (including terms and conditions relating to the payment of the spectrum utilization fees).

10. Action that may be taken by Authority if licensee fails to keep proper accounts for purposes of determining spectrum utilization fees

Where the determination of a spectrum utilization fee (including a relevant minimum fee) relates, whether in whole or in part, to the accounts of a licensee and the accounts have not, in the opinion of the Authority, been kept in accordance with -

- (a) the conditions to which the licence is subject; or
- (b) any accounting practices specified under section 7H of the Ordinance and applicable to the licensee,

then -

- (c) the Authority may -
 - (i) treat the accounts in such manner as he considers necessary to bring them into conformity with those conditions or accounting practices, as the case may be; and
 - (ii) assess the network turnover in relation to the licensee on the basis of the accounts as so treated; and

- (d) the accounts as so treated and the network turnover as so assessed shall be used for the purposes of determining that fee, and the other provisions of this Regulation shall be construed accordingly.

Secretary for Information Technology
and Broadcasting

29th May 2001

Explanatory Note

This Regulation -

- (a) specifies the method for determining the spectrum utilization fees to be paid for the frequency bands designated in the Telecommunications (Designation of Frequency Bands subject to Payment of Spectrum Utilization Fee) Order (L.N.of 2001)(sections 3 to 7);
- (b) empowers the Secretary for Information Technology and Broadcasting to specify the minimum fee to be paid in relation to any spectrum utilization fee specified in a provision of the Regulation (section 8);
- (c) empowers the Telecommunications Authority to, inter alia, hold the auction or tender (see the definition of "auction" in section 2) to which the method relates and specify the terms and conditions of the auction or tender (section 9); and

- (d) empowers the Telecommunications Authority to take remedial action should a licensee fail to keep proper accounts for the purposes of determining spectrum utilization fees (section 10).