

CLARIFICATION OF QUERIES RELATING TO THE AUCTION OF WIRELESS BROADBAND SPECTRUM RIGHTS RELEASED ON 25 FEBRUARY 2005

IMPORTANT NOTICE

Terms and expressions used in this document ("Clarification") are as defined in the Auction Rules relating to the Auction of Wireless Broadband Spectrum Rights released by IDA on 25 February 2005.

This Clarification sets out IDA's response to the queries submitted by the industry relating to the Auction. This Clarification is for informational purposes only and does not form any part of the Auction Rules or the Information Memorandum. Nothing in this Clarification shall be construed as imposing any binding legal obligation on IDA.

This Clarification is not intended to form any part of the basis of any investment decision or other evaluation of any decision to participate in the Auction and should not be considered as a recommendation by IDA or IDA's advisers to participate in the Auction. Each interested person must make its own independent assessment of the potential value of a WBA Spectrum Right after making such investigation as it may deem necessary.

While the information contained in this Clarification is believed to be accurate as at the time of posting on IDA's website, it has not been independently verified by IDA or its advisers. Neither IDA nor any of IDA's advisers nor any of their respective directors, partners, officers or employees make any representation or warranty (express or implied) nor has nor will have any responsibility or liability in relation to the accuracy or completeness of the information contained in this Clarification or any other written or oral information made available to any interested person or its advisers. Any responsibility or liability in respect of any such information or any inaccuracy in this Clarification or omission from this Clarification is expressly disclaimed.

Each recipient of this Clarification should consult its own professional advisers as to financial, legal, tax and other matters concerning any potential participation in the Auction or any grant of a WBA Spectrum Right.

Q1: We are concerned that the 7 April application deadline is too short a time frame for us to obtain the necessary internal approvals.

IDA's Response: IDA understands that potential Bidders may require more time to prepare and submit the necessary documents to participate in the Auction. Hence, IDA will extend the Application Date to 21 April 2005. Please refer to the updated Information Memorandum (Section B) and Auction Rules (Part VII on "Application Date") released on 22 March 2005 for the revised timetable. The Appendix 3 Bank Guarantee (Definitions) has also been updated to reflect the revised Application Date.

Q2: In the roll-out requirement (e.g. 18 months for the 2.5 GHz band), is there any requirement for all the awarded WBA Spectrum Lots to be rolled out within this time frame? E.g., if you are awarded 6 WBA Spectrum Lots, would the roll-out requirement of 1 WBA Spectrum Lot and 1 site be considered to be in compliance with the roll-out requirement?

IDA's Response: IDA's roll-out requirement is that the successful Bidder must provide publicly available WBA telecommunication services to end-users, using the assigned WBA Spectrum Lots within the specified timeframe. However, IDA's roll-out requirement does not extend to dictating the number of WBA Spectrum Lots or sites that must be deployed by the successful Bidder within the specified timeframe. This will be left to the commercial decision of the successful Bidder.

IDA reiterates that its policy objective of awarding WBA Spectrum Lots is to enhance competition in the broadband market. Therefore, it is a condition of the grant of the WBA Spectrum Right that the WBA Spectrum Lots must be used only for the purposes of operating WBA telecommunication systems for the provision of WBA telecommunication services to end-users, and not be used for any other purpose. Hence, IDA will allow the successful Bidder to use the WBA Spectrum Lots to operate any part of its network comprising the WBA telecommunication systems so long as it is used for providing WBA telecommunication services to end-users. IDA has defined WBA, in the Auction Rules issued on 25 February 2005 and revised on 22 March 2005, as "...wireless broadband access technologies whereby the location of the end-user termination and network access points to be connected are fixed, nomadic or mobile. WBA networks are designed to deliver *high-speed communication services [emphasis ours]*,...". To clarify this roll-out requirement, IDA has amended Conditions 1.1, 1.3, 3.1, 5.1, 11.1, 11.4, and 11.5 of the WBA Spectrum Right template, and Sections A1.1 and A17.1 of the Information Memorandum. In addition, this roll-out requirement will also be incorporated into each successful Bidder's FBO licence.

Q3: Is there any constraint on the number of sites per WBA Spectrum Lots? E.g., if you are awarded 1 WBA Spectrum Lot, can this be installed on a few sites?

IDA's Response: IDA has not specified any constraint on the number of sites per WBA Spectrum Lot. This is left to the commercial decision of the successful Bidder.

Q4: Under the FBO licence, there is a performance bond of 5% capital investment. Does this apply to this service?

IDA's Response: Please see IDA's response to Q2 above on the roll-out obligations that will be imposed on the successful Bidder (under both the WBA Spectrum Right and FBO licence).

However, IDA will not be requiring any performance bond under the FBO licence to secure such roll-out obligations. IDA is confident that it will be in the commercial interest of the successful Bidders, having paid the market value for the WBA Spectrum Lots, to launch WBA telecommunication services efficiently.

Q5: We would like to seek IDA's confirmation that the cap of 4 WBA Spectrum Lots imposed on the members of SingTel Group and StarHub Group during the Auction would still apply even though trading of spectrum is permitted. We are of the view that the objective of imposing a cap on the number of WBA Spectrum Lots that members of the SingTel Group or StarHub Group may bid or be granted in the Auction would be compromised if they are able to acquire additional spectrum beyond 4 lots subsequent to the Auction through the spectrum trading mechanism.

IDA's Response: IDA has placed a cap of 6 WBA Spectrum Lots, assessed to be sufficient for nationwide deployment, so as to prevent unnecessary spectrum hoarding. Separately, in support of IDA's objective of injecting further competition into the broadband market, IDA has also placed a cap of 4 WBA Spectrum Lots on the SingTel Group and StarHub Group, which is sufficient for them to complement their existing networks with extensive geographical reach.

In furtherance of these objectives, IDA has decided not to permit any spectrum trading in the WBA Spectrum Lots for a period of one year from the Effective Date of the WBA Spectrum Right. Therefore, a successful Bidder will not be able to either trade in any of its assigned WBA Spectrum Lots or acquire additional WBA Spectrum Lots from other successful Bidders during this one-year period. Thereafter, IDA will only permit spectrum trading subject to IDA's approval and the applicable licensing and regulatory requirements. IDA has therefore amended Section A15 of the Information Memorandum and Condition 13 of the WBA Spectrum Right template to reflect this.

Q6: We would like to request IDA to consider allowing more time for Bidders to submit the Additional Bank Guarantee. Bidders may not be able to meet the existing requirement to submit the Additional Bank Guarantee on the second Business Day (or one further Business Day upon request in writing) after the day on which its obligation to submit such an Additional Bank Guarantee arose due to the logistical and administrative lead time needed to secure such a document (i.e. those logistical and administrative tasks which could not be pre-completed).

IDA's Response: In view that Bidders may require more time to secure the Additional Bank Guarantee, IDA will grant two more Business Days for the submission of the Additional Bank Guarantee. Bidders must submit the Additional Bank Guarantee prior to 9.00 am on the fourth Business Day after the day on which its obligation to submit such Additional Bank Guarantee arose. IDA advises Bidders to take the necessary steps to ensure that there is no delay in the submission of the Additional Bank Guarantee, including securing the Additional Bank Guarantee beforehand, or keeping track of the value of all the Bidders' Valid Bids. In a case where additional time is required owing to unexpected circumstances, IDA will extend the deadline by 1 further Business Day. IDA has amended Section 2.5.5 of the Auction Rules to reflect the above.

Q7: Under Section 2.6.2(b) of the Auction Rules, a Bidder's rejection of the WBA Spectrum Lots that IDA has allocated to the Bidder must be supported by valid reasons.

IDA's Response: No, a Bidder need not assign any reason for its rejection of the WBA Spectrum Lots under Section 2.6.2(b) of the Auction Rules.

Q8: What are the respective likely circumstances under which IDA would determine that the bid increment shall be \$1,000 or up to twenty-five percent of the Going Price in the immediately preceding Round? Such information would help Bidders better anticipate whether the next bid increment is likely to be \$1,000 or twenty-five percent of the Going Price in the immediately preceding Round and hence facilitate better and more rational decision making during the Auction.

IDA's Response: IDA's consideration is to ensure that the Bid Increment for each WBA Spectrum Lot in each Round is set at an appropriate level to facilitate an efficient auction process. Accordingly, the relevant Bid Increment is determined only after considering all relevant factors, including but not limited to the number of Bidders, Withdrawals and Waivers remaining, etc.

Q9: Under Clause 13 of the Appendix 3 Bank Guarantee, IDA is entitled to draw on the account and yet not use the money to discharge Liabilities. This seems to defeat the purpose of the Bank Guarantee.

IDA's Response: IDA would clarify that the purpose of the Bank Guarantee is to provide IDA with security in the event a Bidder fails to discharge any Liabilities owing to IDA. However, the Bank Guarantee is not intended to be a mode of payment by which the parties are to pay IDA for any amount owing to IDA under the Auction Rules.

In this connection, Clause 13 of the Bank Guarantee provides for a situation where IDA has drawn on the Bank Guarantee but IDA chooses not to discharge the Liabilities owing to special circumstances. For example, a Bidder may seek IDA's clarification on the amount of Withdrawal Penalty determined by IDA. In such a case, IDA may draw on the Bank Guarantee after the seventh Business Day as a matter of security, but decide not to apply any sum towards the discharge of the Bidder's Liabilities pending clarification of the amount of Withdrawal Penalty payable. In this way, should the Withdrawal Penalty be determined to be a lower amount, IDA will return the excess to the Bidder.

Q10: Under Clause 16.1 of the Appendix 3 Bank Guarantee, who are the third parties whom IDA may assign the Bank Guarantee to?

IDA's Response: IDA may assign the Bank Guarantee to any third party as IDA considers appropriate.

Q11: In Section 10 of IDA's Explanatory Memorandum Regarding Wireless Broadband Spectrum Allocation Framework released by IDA on 25 February 2005 (hereinafter referred to as "Explanatory Memorandum"), IDA recognised that WiMAX Forum had identified 3.5 GHz band as the priority spectrum and has started standardisation work for this band. Since the 3.5 GHz band in Singapore is currently allocated to Fixed Satellite service on a primary basis, IDA will be studying the possibility of co-existence between WBA and Fixed Satellite services. When does IDA expect to complete the study and decide on the possibility of issuing 3.5 GHz for WiMAX deployment?

IDA's Response: IDA is still studying this matter and is unable to comment on the completion date.

Q12: Under Section A17 of the Information Memorandum, is there any specific performance criteria (e.g. minimum signal strength, data rate etc) that the operator must fulfil at launch?

IDA's Response: Please refer to Section 18(p) of the Explanatory Memorandum. Given that WBA technologies are still evolving, IDA has decided not to impose any mandatory QoS standards on the successful Bidders at this time. Nonetheless, IDA maintains the right to impose QoS standards in the future. (Please also see IDA's response to Q2 above on the successful Bidder's roll-out obligations.)

Q13: What is the penalty for failure to meet roll-out obligations?

IDA's Response: Any failure to meet the roll-out obligations will constitute a breach of Condition 11.5 of the WBA Spectrum Right. In this respect, Regulation 16 of the Telecommunications (Radio-Communication) Regulations provides that, IDA may suspend or cancel the WBA Spectrum Right for contravention of any condition for the grant of the WBA Spectrum Right. In addition, IDA will also incorporate the roll-out obligations into each successful Bidder's FBO licence. In this respect, Section 8(1) of the Telecommunications Act (Cap 323) provides that IDA may impose a financial penalty not exceeding S\$1 million, in the event of any contravention of any condition of the FBO licence. For avoidance of doubt, IDA's imposition of a financial penalty on a defaulting operator does not preclude IDA from specifying a new roll-out deadline for that operator to satisfy.

Q14: If the lot allocated to Operator 1 is used for FDD receive and the adjacent lot allocated to Operator 2 is used for TDD or FDD transmit, how does IDA address the potential interference issue between the 2 adjacent lots?

Q15: We note IDA's preference to abstain from imposing service rules or technical specifications on WBA systems, given the lack of clarity on the general technical attributes that would eventually be adopted for WBA technologies, or whether there is going to be an industry standard for such technologies. However, a basic requirement in any radio network design is the ability to complete a link budget computation to predict and analyse network and service performance. Key to this activity is an assessment of the emission power that could be used, antenna gain etc. This activity is in turn critically linked to the business case for the services that can be supported by the radio network.

For example, the assessment on emission power would help to determine the number of base stations that would be required to deliver an acceptable service to users of the network, and therefore the costing aspects of the business case (i.e. capital expenditure). The technical guidelines listed in Schedule 2 of the Information Memorandum are very general and non-binding, and are insufficient to provide the level of specificity required for the above purpose.

Please clarify what is the maximum Base Station Effective Isotope Radiated Power (“EIRP”) that a WBA operator can transmit as this would have an impact on the required site count.

IDA’s Response to Q14 and Q15: As most of the WBA technologies currently available on the market are proprietary systems, it is not feasible for IDA to impose, for conformity, one specific set of service rules or technical specifications to govern different WBA technologies. Hence IDA leaves it to the operators to coordinate their adjacent channel operations and to employ the necessary interference mitigation techniques to minimize any potential interference, subject to the condition that they do not cause interference to any other telecommunication systems and networks in their own bands or other bands.

There are various proprietary WBA technologies available on the market today. Hence, with respect to EIRP, IDA is allowing operators the flexibility to determine the appropriate emission power for their network deployments, subject to the condition that they do not cause interference to other telecommunication systems and networks in their own bands or other bands, including the border areas. IDA believes that this will help the operators to better plan and design their networks based on their coverage area and traffic capacity. IDA notes that the link budget computations will be mainly influenced by the customer terminal equipment which currently operate at a typical maximum emission power of 2 Watt EIRP. Nevertheless, IDA will look into the need of setting technical parameters such as the emission power limit when there is a common WBA standard.

Q16: In Section 18(a) of IDA’s Explanatory Memorandum, IDA indicated that it would provide technical guidelines on ways to mitigate inter-operator interference. Can these guidelines be issued prior to the WBA Auction to provide clarity on how inter-operator interference can be mitigated?

IDA’s Response: The guidelines are found in Schedule 2 of the Information Memorandum.

Q17: For greater transparency and business/investment certainty, please clarify IDA’s criteria for the allocation of WBA Spectrum Lots on a “closest fit” basis under Section 2.6.2(a) of the Auction Rules.

IDA’s response: The “closest-fit” is determined only after considering all relevant factors, including Bidders’ Initial Offers, proposed systems and technology to be deployed, as well as overall spectrum efficiency and optimisation. While IDA has the discretion to allocate the WBA Spectrum Lots in any manner it considers appropriate, each Bidder also retains corresponding discretion whether or not to accept IDA’s allocation under Section 2.6.2(a) of the Auction Rules. Where any Bidder rejects IDA’s allocation, the Auction will proceed.

Q18: Under Section 7.2 of the Auction Rules, a Bidder must submit a Valid Bid at the going price, a Valid Bid at an Exit Price, a Waiver and/or a Withdrawal for each bidding right.

- What happens if the Bidder does none of the above, i.e., specifies nothing for one of his Bidding Rights, while still submitting on the rest?
- Will the Bidder be 'penalised' for 'doing nothing' in respect of one of his bidding rights?
- Will what the Bidder bid for in the previous Round be deemed as valid and binding in this Round since he 'did nothing' in this Round?

IDA's Response: A Bidder, in respect of each Bidding Right, must submit any of the actions stated in Section 7.2 of the Auction Rules. Failure to do so will be a breach of the Auction Rules, for which IDA may: (a) exclude the Bidder from the Auction under Section 8.1 of the Auction Rules; and/or (b) serve a Forfeiture Notice under Section 8.2.1 of the Auction Rules.

However, IDA has discretion under Section 7.3.3 of the Auction Rules to permit the Bidder to make a correction to the Bid Form, in which case the Bidder will be deemed to have complied with the Auction Rules. Where a Bidder is permitted to continue participating in the Auction (for example, because IDA permits the Bidder to make a correction to the Bid Form), that Bidder's Valid Bid in the previous Round will remain legally binding under Section 7.3.5 of the Auction Rules.

Q19: Are there any restrictions on when a Bidder can decline to exercise his Bidding Rights? i.e.:

- Can it be done during any stage of the auction process? If so, what must he do when submitting the Valid Bid Form to indicate this intent?
- What are the implications when a Bidder declines some of his Bidding Rights?
- Will the Bidder still be allocated Uncontested WBA Spectrum Lots for the declined Bidding Rights after the Auction?

IDA's Response: Please refer to Sections 7.2, 7.4.1 and 7.4.2 of the Auction Rules. Briefly, in the first Round, each Bidder must exercise all his Bidding Rights by submitting Valid Bids on the same number of WBA Spectrum Lots equal to that Bidder's number of Bidding Rights. In any subsequent Round, when a Bidder exercises a Withdrawal in relation to a WBA Spectrum Lot for which that Bidder had submitted a Valid Bid, that Bidder may at the same time decline to exercise his Bidding Right retained as a consequence of the Withdrawal. The Bidder will have to indicate in his Valid Bid Form that he is exercising a Withdrawal and declining to exercise his Bidding Right.

If a Bidder declines to exercise any Bidding Right, the Bidder's number of Bidding Rights in each subsequent Round will be reduced by the number of Bidding Rights he has declined to exercise in this Round.

The Bidder will not be allocated any Uncontested WBA Spectrum Lots in respect of any Bidding Right for which the Bidder has declined to exercise. (Please refer to Sections 2.6.2(c) and 11.1(d) of the Auction Rules on the circumstances in which IDA may allocate Uncontested WBA Spectrum Lots at the close of the Auction.)

Q20: Under Section 7.3.5(a) of the Auction Rules, please clarify if this applies to within the applicable Round or until the provisional award of that WBA Spectrum Lot.

IDA's Response: A Valid Bid on a WBA Spectrum Lot will remain legally binding until the Bidder exercises a Withdrawal in respect of that Valid Bid in any subsequent Round.

Q21: Can Bidders choose to bid for different WBA Spectrum Lots from that which they submitted Valid Bids in the first Round? If so, how would the Bidder change the WBA Spectrum Lots for subsequent Rounds?

- Can the Bidder simply submit a Valid Bid for another WBA Spectrum Lot in the subsequent Round? In this case, will his bid for the original WBA Spectrum Lot be binding if there are no higher bids received in subsequent Rounds? Or
- Must he submit a Withdrawal of Valid Bid in the first WBA Spectrum Lot and make a valid bid for another WBA Spectrum Lot in the subsequent Round?

IDA's Response: Yes, Bidders can choose to submit Valid Bids for different WBA Spectrum Lots from that which they submitted Valid Bids for in the first Round, subject to any Withdrawal Penalties. This must be done by exercising a Withdrawal in respect of the WBA Spectrum Lot previously bid for, and specifying the WBA Spectrum Lot for which the Bidder now wishes to submit a Valid Bid (please see Section 7.2(d)(i) of the Auction Rules). The Valid Bid on a WBA Spectrum Lot will cease to be legally binding once the Bidder exercises a Withdrawal in respect of that WBA Spectrum Lot.

Q22: Is there a limit imposed on the number of bid Withdrawals?

IDA's Response: No, there are no limits imposed on the number of Withdrawals that a Bidder may exercise in the Auction. However, a Bidder will be liable for Withdrawal Penalties for each Withdrawal he exercises, in accordance with Section 7.11.3 of the Auction Rules.

Q23: Besides the Withdrawal Penalty, are there other safeguards to prevent “non-serious” Bidders from bidding up prices by moving bids around different WBA Spectrum Lots and then withdrawing/dropping out later?

IDA’s Response: IDA considers the Withdrawal Penalty to be an adequate safeguard to prevent any such abuse, while at the same time not imposing any undue restriction on the exercise of *bona-fide* commercial decisions by the Bidders in the course of the Auction.

Q24: Will unsuccessful Bidders be eligible for allocation of any remaining Uncontested WBA Spectrum Lots?

IDA’s Response: At the close of the Auction, IDA will only allocate the remaining WBA Spectrum Lots to any Bidder that elected not to bid for the Uncontested WBA Spectrum Lots prior to the start of the Auction (please see Sections 2.6.2(c) and 11.1(d) of the Auction Rules).

Q25: How would IDA allocate remaining Uncontested WBA Spectrum Lots to Bidders who elected not to bid for Uncontested WBA Spectrum Lots?

- What happens if the remaining Uncontested WBA Spectrum Lots are less than the Bidders who elected not to bid for these lots? How would IDA allocate these WBA Spectrum Lots?

IDA’s Response: One of the prerequisites for IDA allocating remaining WBA Spectrum Lots in lieu of Uncontested WBA Spectrum Lots is that the total number of Initial Offers received by IDA does not exceed twenty-five (i.e. the number of WBA Spectrum Lots on Auction). Accordingly, it is not possible to have a situation where there are insufficient remaining WBA Spectrum Lots to allocate in lieu of Uncontested WBA Spectrum Lots that the Bidders elect not to bid for.

Q26: Section 14.1 of the Auction Rules states the prohibition on restricting a vendor from supplying to ‘any other Bidder’. As the WBA Spectrum Lot is transferable and a Bidder may assign it to another entity (refer to Section 12.8 of the Auction Rules). Please clarify if the prohibition should be limited to only ‘any other Bidder’ or it should be a general prohibition.

IDA’s Response: As stipulated in Section 14.1 of the Auction Rules, the prohibition is limited to any other Bidders.

Q27: Under Note 1.5(j) of the Application Form, the definition of a person 'concerned' with the Applicant's participation seems quite broad and could cover external advisors and vendors for the purpose of describing ownership structure. Please clarify if this is the case.

IDA's Response: Yes, any external advisor or vendor that is in possession of Confidential Information relating to the Application or has entered into any agreement or understanding with the Applicant to finance the Applicant or assist the Applicant in any other way in connection with bidding for a WBA Spectrum Right in this Auction is covered under the definition.

Q28: IDA indicated in the Information Memorandum that it would make available the following frequencies for allocation in the Auction:

- i. 2300 MHz to 2350 MHz;
- ii. 2516 MHz to 2528 MHz;
- iii. 2540 MHz to 2552 MHz;
- iv. 2564 MHz to 2600 MHz;
- v. 2636 MHz to 2648 MHz; and
- vi. 2660 MHz to 2678 MHz.

According to the Singapore Spectrum Allocation Chart, the WBA Spectrum has been earmarked for a variety of applications, ranging from fixed services (e.g. Multipoint Microwave Distribution System, or MMDS), to satellite broadcasting services (e.g. Digital Audio Broadcast, or DAB), to mobile services. We would appreciate it if IDA could confirm that there are no other uses in the WBA Spectrum. We would also request that IDA advise on the applications that have been earmarked for these frequencies in the neighbouring countries (i.e. Malaysia and Indonesia), and whether there are any existing uses in the WBA Spectrum in these countries. This information is needed to analyse potential interference conflicts.

IDA's Response: The 2.3 GHz and 2.5 GHz spectrum bands are allocated for WBA on a primary basis. IDA notes the comment on the Singapore Spectrum Allocation Chart and will be updating the Chart accordingly.

Once successful Bidders are granted the WBA Spectrum Rights which would be now effective as of 1 July 2005 due to the extension in the Application Date (or such other date as IDA may determine), the Bidders will have full use of the WBA Spectrum Lots awarded to them. As explained in Section A18 of the Information Memorandum and IDA's response to Q14 and Q15 above, IDA will leave it to the operators to coordinate and deploy the necessary interference mitigation techniques. IDA will continue to manage and co-ordinate frequency usage at the Government level, while, individual operators will be responsible for detailed co-

ordination with other operators in neighbouring countries to avoid frequency interference in the border areas, as is the current arrangement.

For the 2.5 GHz band, IDA has coordinated with Malaysia on the use of the said band for WBA telecommunication services. The planned allocations for Malaysia (subject to change without notice) in the 2.5 GHz band are given in Schedule 1 of the Information Memorandum. For the 2.3 GHz band in Malaysia, there are existing microwave link services using the band. Separately, IDA understands that Indonesia has fixed services and fixed satellite services (downlink) in the 2.3 GHz and 2.5 GHz bands.

Q29: Apart from the applications identified above, the frequency range 2300 MHz to 2450 MHz is also allocated to amateur radio services, on a secondary basis, in this region. As amateur radio applications are sporadic in nature and unregulated, we are concerned that the proposed introduction of WBA telecommunication services in the 2.3 GHz band would result in interference issues between the two sets of services. We would therefore appreciate IDA's advice on the safeguard measures that IDA would put in place to protect the commercial WBA telecommunication services.

IDA's Response: The 2300 – 2350 MHz band is allocated for WBA services on a primary basis and the 2300 – 2450 MHz band for amateur radio services on a secondary basis. At present, there are no amateur radio users operating in the 2300 – 2350 MHz band in Singapore. Nonetheless, as stated in Section A18 of the Information Memorandum, IDA will continue to manage and co-ordinate frequency usage between different radio services.

Q30: We would like to enquire whether IDA intends to facilitate access in the event that a party were to encounter difficulties in acquiring and/or accessing certain sites for equipment installation. Site acquisition forms a critical part of the network deployment plan, and of late, we have encountered an increasing number of demands from building owners that directly impact on our network deployment schedule and cost. In some cases, negotiation with the building owners could last for an extended period of time and delay the service delivery schedule. We would like to enquire if IDA would intervene in the negotiation between WBA service providers and building owners.

IDA's Response: In accordance with the current practice, IDA leaves co-ordination with site owners to commercial negotiations.

Q31: In relation to the WBA Auction Rules, we would request confirmation from IDA that there is no restriction on the number of times a Bidder can exercise a Withdrawal with respect to a WBA Spectrum Lot.

Consider the example of a Bidder who has previously withdrawn from a particular WBA Spectrum Lot ("Spectrum Lot A"), and has accordingly transferred the Bidding Right associated with Spectrum Lot A to another WBA Spectrum Lot ("Spectrum Lot B"). The Bidder is allowed to return to the bidding for Spectrum Lot A subsequently, if he so chooses by exercising a Withdrawal in respect of Spectrum Lot B and transfers the retained Bidding Right back to Spectrum Lot A.

Kindly confirm that the above scenario is permissible under the WBA Auction Rules.

IDA's Response: Please see IDA's response to Q22 above. The above scenario is permissible under the Auction Rules. However, in exercising a Withdrawal with respect to a WBA Spectrum Lot, the Bidder may be subject to a Withdrawal Penalty in accordance with Section 7.11.3 of the Auction Rules.

Q32: We would also request clarification from IDA on the treatment of those WBA Spectrum Lots that are not taken up after the completion of the WBA Auction. In particular, what are the processes (if any) for interested parties to request from IDA WBA Spectrum Lots that are not allocated during the WBA Auction? Does IDA intend to impose any moratorium period before the next WBA Spectrum allocation exercise can take place (regardless of whether the spectrum to be allocated resides in the WBA Spectrum or otherwise)?

IDA's Response: Please see IDA's response to Q19, 24 and 25 above. Any WBA Spectrum Lots that are not taken up at the close of the Auction will be allocated to Bidders who have elected not to bid for Uncontested WBA Spectrum Lots in accordance with Sections 2.6.2(c) and 11.1(d) of the Auction Rules. Thereafter, IDA will not impose any moratorium on future allocation of WBA Spectrum Lots by IDA. IDA will decide on any future allocation based on market demand and industry interest.

Q33: The IDA has stated that it will use an allocation method where the total number of Initial Offers received by the IDA does not exceed 25 but there is more than one Initial Offer received in respect of any of the 25 WBA Spectrum Lots and will then inform Bidders of the WBA Spectrum Lots allocated. The IDA has however, not stated the timeframe by which it will inform the Bidders. We seek clarification as to the actual timeframe by which the IDA will inform the Bidders.

IDA's Response: Based on the new timetable listed in the revised Information Memorandum, IDA will inform Bidders between 22 April 2005 and 3 May 2005.

Q34: The IDA has stated that an Application and Processing Fee of S\$2,700.00 will be payable by the successful Bidders to IDA in respect of each WBA Spectrum Lot included in a WBA Spectrum Right awarded to them under the Auction or otherwise allocated to them by the IDA if the Auction does not proceed.

Please confirm:

(a) whether the fee of S\$2,700.00 per WBA Spectrum Lot is inclusive of GST or exclusive of GST; and

(b) whether the fee of S\$2,700.00 per WBA Spectrum Lot is levied as a one-time charge.

IDA's Response:

For part (a) of this question, as stated in Part VII of the Auction Rules, the Application and Processing Fee of S\$2,700 per WBA Spectrum Lot excludes the applicable GST. Successful Bidders will be required to pay the applicable GST.

For part (b) of this question, the Application and Processing Fee is a one-time charge.

Q35: The IDA has stated that all successful Bidders must hold an FBO licence and will be required to pay the annual FBO licence fees, currently set at one per cent (1%) of annual gross turnover ("AGTO").

Similarly, in Section 18(i) of the Explanatory Memorandum the IDA states that an FBO is required to pay a minimum of S\$100,000 per annum or the licence fee of 1 % of AGTO.

As we understand it, the licensing framework put in place by the IDA requires that an entity should be issued a single licence for all the networks/services it intends to operate/offer. The IDA has also stated that existing FBOs who intend to offer WBA telecommunication services will be required to modify their licences to cater for it.

We seek confirmation that successful Bidders who already hold an existing FBO licence will not be required to pay the minimum S\$100,000 in respect of the WBA operations in addition to their existing licence fee requirements. Rather, successful Bidders who are existing FBOs will have their relevant licence schedules amended and will continue to pay the 1% AGTO of all the services they are licensed for (under their single FBO licence), or a minimum of S\$100,000 per annum for all the services they are licensed for (under their single FBO licence).

IDA's Response: Yes, successful Bidders who hold existing FBO licences will have their relevant licence schedules amended and will continue to pay the 1% AGTO for all the services that they are licensed to provide under their FBO licence, subject to a minimum of S\$100,000 per annum.

Q36: The IDA states that WBA operators cannot offer mobile or restricted mobile services at vehicular speeds above 10 km/hour before 1 January 2006.

We seek confirmation that there are no limitations on when the WBA operators can offer mobile services or restricted mobile services at vehicular speeds above 10 km/hour, as long these services are offered (if at all) after 1 January 2006.

IDA's Response: Please see Condition 11.5 of the WBA Spectrum Right Template. From 1 January 2006, successful Bidders may use their assigned WBA Spectrum Lots to provide WBA telecommunication services to end-users without any restriction on the mobility speeds for such services.

Q37: ITU identified 2500-2690 MHz band as the band for 3G expansion during WRC-2000. Europe will be adopting the band to be made available for IMT-2000/UMTS systems in Europe. The possibility that HSPDA or other 3G technologies may be supported by vendors for deployment in this band should not be ruled out. IDA does not limit the deployment to solely WiMAX technology, i.e. 3G-based technologies can be deployed.

In view of this, please confirm / clarify the following:

- (a) whether the IDA has similar plans to use the 2500-2690 MHz band for IMT-2000 systems expansion in future; and
- (b) in view of the potential to use the 2.5 GHz band for a 3G/HSPDA service, please confirm that M1 will be subject to the same cap as the 3G mobile operators, i.e. SingTel and StarHub, if they wish to use it for this purpose. If not, please explain the basis for discriminatory treatment.

IDA's Response:

For part (a) of this question, as explained in Section 15 of the Explanatory Memorandum, successful Bidders will be allowed to deploy any technologies, including IMT-2000 systems.

For part (b) of this question, as explained in Section 18(f) of the Explanatory Memorandum, IDA has assessed that 3G and WBA do not fully complement each other so there is no justifiable basis to impose any additional spectrum cap on 3G mobile operators *per se*, by reason only of their 3G operation. Therefore, as explained in Sections 18(e) to (g) of the Explanatory Memorandum, IDA takes

the view that a lower cap of 4 lots be imposed only on broadband infrastructure providers with existing networks of extensive geographical reach. In this regard, SingTel Mobile and StarHub Mobile, being part of the SingTel Group and StarHub Group respectively, are therefore subject to a lower spectrum cap of 4 lots. IDA does not consider the lower spectrum cap imposed on the SingTel Group and StarHub Group as amounting to any discriminatory treatment. IDA also takes the view that the lower cap of 4 lots is sufficient to complement their existing infrastructures.

Q38: The IDA has not specified the conditions under which spectrum trading will be allowed or approved. It is necessary for Bidders to be aware of any conditions or obligations which may apply should they wish to engage in spectrum trading.

We request that the IDA publishes well before the Application Date and provides clarification in relation to the following:

- (a) the conditions, i.e., the conditions under which IDA would consider and approve spectrum trading;
- (b) any additional obligations that a successful Bidder has to undertake should they wish engage in spectrum trading;
- (c) the obligations, over and above those identified in the FBO licence for the successful bidders, that the recipient of the traded spectrum has to undertake (if any);
- (d) any restrictions on the prices that the IDA may impose on the spectrum to be traded; and
- (e) confirmation that successful Bidders can only trade in the spectrum to affiliated parties.

IDA's Response:

For parts (a), (b) and (c) of this question, please see IDA's response to Q5 above. IDA will not permit any spectrum trading in the WBA Spectrum Lots for a period of one year from the effective date of the WBA Spectrum Right. Thereafter, IDA will assess each application for spectrum trading based on market conditions and on a case-by-case basis.

For part (d) of this question, following the expiry of the said one-year period, IDA will not impose any restrictions on the prices of the spectrum to be traded.

For part (e) of this question, following the expiry of the said one-year period, and subject to IDA's approval and applicable licensing and regulatory requirements,

successful Bidders are free to trade the spectrum with any party. (Please also see IDA's response to Q5 above.)

Q39: The IDA has stated the roll-out obligations for successful Bidders, i.e. that successful Bidders must provide publicly available WBA telecommunication services within 18 months (in the case of WBA Spectrum Lots in the 2.5 GHz band) and 36 months (in the case of WBA Spectrum Lots in the 2.3 GHz band). We request the following clarifications with respect to these obligations:

- (a) the IDA has not stated the actual criteria or requirements for fulfilment of the roll-out obligations. For example, please clarify whether setting up one single commercial site within the stipulated timeframe is sufficient;
- (b) the applicable penalties that can be imposed on a successful Bidder in the event that the roll-out obligations are not met or are partially met; and
- (c) definition of what "publicly available" WBA telecommunication services actually means.

IDA's Response:

For part (a) of this question, please see IDA's response to Q2 above.

For part (b) of this question, please see IDA's response to Q13 above.

For part (c) of this question, "publicly available" WBA telecommunication services to end-users means trial and/or commercial WBA telecommunication services that must be made available to any member of the public who desires to participate in the trial WBA telecommunication services and/or use the commercial WBA telecommunication services provided such person agrees with the operator's terms for participation or use of the services. Operators will have the commercial flexibility to design their trials, be it for free or for a fee.

Q40: In respect of the roll-out schedule, i.e. within 18 months (in the case of WBA Spectrum Lots in the 2.5 GHz band) and 36 months (in the case of WBA Spectrum Lots in the 2.3 GHz band), we request that the IDA reviews this and provides for the roll-out obligation and schedule to be adjusted depending on the availability of technical solutions.

IDA's Response: IDA considers the specified timeframes to be reasonable given that WBA equipment is available in the market for deployment. Accordingly, there is no basis for IDA to consider any adjustment to the specified timeframes.

Q41: The IDA requires that parties registering as Bidders deposit a Bank Guarantee of S\$200,000 with the IDA and another Bank Guarantee of S\$200,000 if the aggregate value of all bids submitted by a Bidder in a round equals or exceeds S\$200,000.

Given the size of our group, it is unlikely that there will be a need to minimize risk associated with our group in the bid. We propose that this requirement be removed for our group; alternatively, the requirement can be imposed only on Bidders who do not have a minimum amount of paid-up capital.

IDA's Response: IDA is aware of the status of certain operators as established entities. Nevertheless, IDA requires the submission of the Bank Guarantees to ensure that Bidders carefully consider their Initial Offer and their actions during the Auction, including in particular complying with the Auction Rules.

Q42: Please clarify the modifications required to an existing FBO's licence where the FBO is awarded a WBA Spectrum Right provisionally.

IDA's Response: Modifications to an existing FBO licence are required in order to authorise the operation of WBA telecommunication systems and the provision of WBA telecommunication services, and to incorporate the roll-out obligations in relation to providing publicly available WBA telecommunication services to end-users (please see IDA's response to Q2 and Q39 above on roll-out obligations).

Q43: The IDA has stated that the Auction will proceed, in respect of all twenty-five (25) WBA Spectrum Lots identified in Schedule 1 of the Information Memorandum, where a Bidder who is allocated any WBA Spectrum Lot rejects the allocation.

There will be circumstances where several Bidders submit an Initial Offer for the same WBA Spectrum Lot and only one (1) Bidder rejects the WBA Spectrum Lot that is allocated by the IDA. Under such circumstances, we believe it is neither productive nor efficient for the Auction to proceed in respect of all 25 WBA Spectrum Lots.

We request that the IDA amends the Auction Rules such that:

- (a) Bidders who have accepted the allocation need not participate in the Auction and will obtain the WBA Spectrum Lot they have been allocated; and
- (b) Bidders who have rejected the allocation will participate in the Auction and under such circumstances, only the unallocated WBA Spectrum Lots will be made available for Auction.

IDA's Response: IDA does not consider such amendment to the Auction Rules to be appropriate. The Auction must proceed in respect of all 25 WBA Spectrum Lots because Bidders that have rejected IDA's allocation may require some other WBA Spectrum Lots that IDA may have proposed to be allocated to another Bidder. Under such circumstances, IDA believes that the most fair and efficient method of allocation is to proceed with an auction of all 25 WBA Spectrum Lots.

However, IDA also recognises the commercial interest of Bidders who have submitted an Initial Offer for Uncontested WBA Spectrum Lots. In this respect, IDA has allowed such Bidders, before the start of the Auction, to elect not to participate in the Auction in respect of the Uncontested WBA Spectrum Lots and instead, at the close of the Auction, accept IDA's allocation of the remaining WBA Spectrum Lots in lieu of the Uncontested WBA Spectrum Lots (please see Sections 2.6.2(c) and 11.1(d) of the Auction Rules).

Q44: The IDA has stated that in its allocation exercise, it may at its discretion allocate to a Bidder any WBA Spectrum Lot in lieu of any Uncontested WBA Spectrum Lot.

We believe it is not productive nor efficient that Bidders be allocated another WBA Spectrum Lot where the Bidder had submitted an Initial Offer for an Uncontested WBA Spectrum Lot. We request that the IDA amends the Auction Rules such that Bidders be allocated the Uncontested WBA Spectrum Lots under such circumstances.

IDA's Response: Please see IDA's response to Q43 above. IDA does not consider such amendment to the Auction Rules to be appropriate. Bidders must decide whether they want to be allocated any remaining WBA Spectrum Lots in lieu of any Uncontested WBA Spectrum Lots, or participate in the Auction and bid for specific WBA Spectrum Lots.

Q45: The IDA will notify Bidders if the Auction does not proceed. Please confirm the timeframe within which it will inform the Bidders.

IDA's Response: Based on the new timetable listed in the revised Information Memorandum, IDA will inform Bidders by 3 May 2005.

Q46: The IDA states that it will notify each Bidder within seven (7) Business Days of the Application date if the Auction is to proceed. However, in Section (B) of the Information Memorandum, the date of the announcement whether the Auction will proceed was indicated as 14 April 2005 which is five (5) Business Days from the Application Date.

Please confirm whether the IDA will notify each Bidder on 14 April 2005 and if not, the timeframe within which the IDA will notify each Bidder.

IDA's Response: In the Information Memorandum, IDA anticipated that it should be able to announce whether the Auction will proceed by the fifth Business Day of the Application Date, notwithstanding that under Section 2.6.5 of the Auction Rules, IDA has up to 7 Business Days to notify the Bidders. However, to avoid confusion, IDA has revised the time schedule to seven Business Days, as reflected in the updated Section (B) of the Information Memorandum.

Q47: Under Sections 2.7.3 and 12.3 of the Auction Rules, if the Auction does not take place and Bidders are awarded Provisional Award Notices, the Bidders are required to make WBA Spectrum Right Initial Payment *prior* to the Final Payment Date which is 7 Business Days from the date of the Provisional Award Notice.

However, the IDA states that it will only grant the Bidder a WBA Spectrum Right and return the Bidder its Bank Guarantee if the WBA Spectrum Right Initial Payment is received *prior to or on* the Final Payment Date.

We seek the following clarification / confirmation in respect of the following:

- (a) the date on which the IDA requires the WBA Spectrum Right Initial Payment to be made and/or received before it returns the Bank Guarantee and issues the WBA Spectrum Right;
- (b) whether Bidders / Applicants can submit the payment in the form of a cheque, rather than making the payment via electronic transfer; and
- (c) that both the WBA Spectrum Right will be issued and the Bankers Guarantee will be returned within 7 business days from the Final Payment Date. If this was not the case, then please clarify the timeframe in which the WBA Spectrum Right will be issued and the timeframe in which the Bankers Guarantee will be returned.

IDA's Response:

- (a) As specified in Sections 2.7.3 and 12.3 of the Auction Rules, IDA requires the WBA Spectrum Right Initial Payment to be received in the IDA Bank Account prior to or on the Final Payment Date. In this respect, the successful Bidder must ensure that any transfer made to the IDA Bank Account in payment of the WBA Spectrum Right Initial amount, regardless of when such transfer is made, will be received into the IDA Bank Account prior to or on the Final Payment Date.

- (b) IDA requires Successful Bidders to submit payment via electronic transfer so as to ensure that payment will be received in the IDA Bank Account prior to or on the Final Payment Date. If payment is made in the form of a cheque, IDA will only consider payment to be received when IDA receives notification from the bank that the cheque has cleared and the funds credited into the IDA Bank Account.
- (c) Subject to the successful Bidder's proper discharge of all payment obligations owing to IDA, IDA will issue the WBA Spectrum Right and return the Banker's Guarantee, within 7 Business Days from the Final Payment Date. (Please see Sections 2.7.3 and 12.3 of the Auction Rules.)

Q48: The IDA has said that no more than six (6) Authorised Representatives will be allowed at the Auction Location at any one time.

Please confirm that the IDA allows:

- (a) replacement of any of the Authorised Representatives of a Bidder after the Application Date. If yes, what would be the prescribed process for such replacement;
- (b) replacement of any of the Authorised Representatives of a Bidder after the Information Session and Trial Auction. If yes, please clarify what would be the prescribed process for such replacement; and
- (c) the Authorised Representatives to bring into the Auction Location advisors, staff members and other agents, none of whom are themselves Authorised Representatives of the Bidder. If this is not allowed, please clarify how timely communication and interaction between the Authorised Representatives and their advisors, staff members and other agents would be facilitated.

IDA's Response:

For part (a) of this question, please see Section 3.4 of the Auction Rules for the procedures for replacement of Authorised Representatives.

For part (b) of this question, bidders cannot replace the Authorised Representatives after the Information Session. However, Bidders may rotate the 6 Authorised Representatives that will be allowed at the Auction Location within the 12 Authorised Representatives that have been appointed, provided such rotation does not occur during a session (please see Section 3.4 of the Auction Rules). The process for such rotations will be prescribed during the Information Session.

For part (c) of this question, persons other than the Authorised Representatives are not allowed into the Auction Location. The Authorised Representatives will be

able to communicate with their advisors, staff members and other agents using the permitted equipment stated in Sections C2.9.4 to C2.9.6 of the Information Memorandum.

Q49: IDA allows no more than six (6) Authorised Representatives of the Bidder entry into the Auction Location. Depending on the final arrangements that IDA will allow in relation to the manner and times at which the Authorised Representative may communicate with their respective Bidders and the procedures regarding how Authorised Representatives may enter and leave the Auction Location, the number of Authorised Representatives set at six may be insufficient particularly if the Auction is prolonged.

We request that the IDA amends the Auction Rules to allow a maximum of twenty (20) potential Authorised Representatives to be “pre-qualified” by attending the Information Session and Trial Auction and undertaking the written declaration to the IDA. In the event that any of the six (6) Authorised Representatives becomes incapacitated before or during the Auction, or the Bidder wishes to have any of its Authorised Representatives replaced for whatever reason, that Authorised Representative could be replaced by someone from this pool of “pre-qualified” Authorised Representatives.

IDA’s Response: IDA’s position is that up to 12 Authorised Representatives constitute a sufficient pool for the Bidder to rotate during the Auction.

Q50: The IDA has stated that no more than twenty – five (25) natural persons can be allowed to attend the first half of the Information Session. Please confirm that the IDA allows:

- (a) replacement of any of the 25 natural persons after the Application Date; and
- (b) the prescribed process for such replacement.

IDA’s Response: The procedures for the replacement of Authorised Representatives are specified in Section 3.4 of the Auction Rules (please see IDA’s response to Q48 above). In relation to the other representatives appointed under Section 3.8 of the Auction Rules to attend the first part of the Information Session, IDA has amended Section 3.8 of the Auction Rules to provide for a notification process to allow for replacement of any such representatives before the Information Session takes place

Q51: Please clarify the conditions under which the IDA will cancel, suspend or abandon any round of the auction.

IDA's Response: The conditions that merit cancellation, suspension or abandonment of any Round in the Auction are determined by considering all factors at the relevant point in time.

Q52: Under the Application Form Note 1.5(j), the term "concerned" is defined to include person(s) who are in possession of Confidential Information relating to the Applicant or has entered into any agreement or understanding with the Applicant to finance the Applicant or assist the Applicant in any other way in connection with billing for a WBA Spectrum Right.

Please confirm that this excludes accountants and legal advisers and system, technical and other consultants or advisers as these are not part of the ownership structure of the Applicant.

IDA's Response: Please see IDA's response to Q27. Accountants, legal advisers or consultants engaged by the Bidder in relation to this Auction are not excluded.

Q53: The IDA requires that the Applicant produces a documentary evidence of the appointment of the Authorised Representatives.

Please confirm that:

- (a) a Letter of Appointment signed by any authorised officer of the Bidder's company will suffice; and
- (b) if otherwise, please clarify the kind of documentary evidence that is required as proof of appointment and provide examples.

IDA's Response: A Letter of Appointment signed by any authorised officer of the Bidder's company will suffice.

Q54: We would like to insert these text in italics and underlined in the Bank Guarantee:

Clause 2b

- (a) all reasonable costs and expenses whatsoever incurred by IDA in connection with IDA protecting or enforcing its rights under this Guarantee and/or the Auction Rules, on a full indemnity basis.

Clause 3.2

The Bank's liability under this Guarantee shall not exceed the aggregate of the principal sum of an amount equal to the Guaranteed Amount and all interests

under clause 12 and all reasonable expenses (including banking and other charges and fees) whatsoever incurred by IDA in connection with IDA protecting its rights under this Guarantee or seeking to recover or enforce any of the amounts owing to IDA by the Bidder under the Auction Rules, on a full indemnity basis.

Clause 6.4

This Guarantee shall remain valid until the expiry of a four-month period commencing on the Application Date. All demands under this Guarantee must be received by the Bank [on or before the date of expiry]/[within 3 months of the date of expiry].

IDA's Response: IDA has reviewed the proposed amendments and IDA does not consider such proposed amendments to be either appropriate or necessary.

Q55: Can Successful Bidders enter into commercial arrangement with 3rd parties of the following nature?

1. Successful Bidder takes ownership of the WBA Spectrum Lots and makes it available to 3rd party.
2. 3rd party provides the equipment.
3. Successful Bidder purchases the WBA telecommunication services off 3rd party for resale to the end-users.

IDA's Response: Only the holders of the WBA Spectrum Rights are authorised to use the WBA Spectrum Lots for the purposes of operating WBA telecommunication systems for the provision of WBA telecommunication services to end-users. Accordingly, Sections 2.2.5 and 2.2.6 of the Auction Rules require the successful Bidder to either agree to the modification of its existing FBO licence or apply for an FBO licence to authorise the operation of WBA telecommunication systems and the provision of WBA telecommunication services to end-users. (Please also refer to Condition 14.1 of the WBA Spectrum Right template, which prohibits the holder of a WBA Spectrum Right from authorising any person from using the assigned WBA Spectrum Lots to operate any radio-communication station or network.) Notwithstanding, nothing prevents the WBA operators from appointing agents or employing independent contractors or sub-contractors to carry out any works or provide any services for the WBA operators.

Revised Documents

Please note that IDA has updated the Information Memorandum, the Auction Rules, the Bank Guarantee and the WBA Spectrum Right Template. The revised documents are now uploaded on IDA's website, www.ida.gov.sg.