

**AUCTION OF  
2.1 GHZ SPECTRUM RIGHTS (2022) FOR  
5G STANDALONE (SA) NETWORK  
ARCHITECTURE**

**AUCTION RULES**

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INFO-COMMUNICATIONS MEDIA DEVELOPMENT AUTHORITY  
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# AUCTION RULES

## PART I SPECTRUM LOTS AND SPECTRUM RIGHTS

### Section 1 2.1 GHZ SPECTRUM LOTS

- 1.1. These Auction Rules are issued in the exercise of IMDA's powers conferred by the Telecommunications Act and the Telecommunications (Radio-communication) Regulations, and set out the procedures of the Spectrum Auction by which IMDA may grant to a Bidder Spectrum Rights in respect of:
  - 1.1.1. up to five (5) of the twelve (12) 2x5 MHz spectrum lots in the 2.1 GHz spectrum band (each lot to be known as a **2.1 GHz Spectrum Lot**) as specified in Annex 1, unless the circumstances set out in Section 9.9 apply; or
  - 1.1.2. up to six (6) of the 2.1 Spectrum Lots, provided the circumstances set out in Section 9.9 apply.
- 1.2. No Bidder shall bid for or be granted more than (i) five (5) 2.1 GHz Spectrum Lots in the circumstances mentioned in Section 1.1.1 above; and (ii) six (6) 2.1 GHz Spectrum Lots in the circumstances mentioned in Section 1.1.2 above.
- 1.3. Spectrum Rights will be granted only to a company incorporated under the Companies Act (Cap. 50).

## **PART II      PRE-SPECTRUM AUCTION**

### **Section 2      APPLICATION AND INITIAL OFFER PROCESS**

#### **2.1.      Pre-Auction Submission**

- 2.1.1.      A person wishing to participate in the Spectrum Auction must first be pre-qualified by IMDA in accordance with Section 2.2, and must thereafter be registered by IMDA as a Bidder before it may participate in the Spectrum Auction. A person wishing to apply to be pre-qualified to participate in the Spectrum Auction must submit by 5.00 pm on the Spectrum Auction Application Date a duly completed Pre-Auction Submission (accompanied by all relevant supporting documents, and demonstrating the person's ability to meet IMDA's baseline requirements for rollout, deployment, and network design & resilience) in accordance with the requirements of these Auction Rules.

#### **2.2.      Pre-Qualification to Participate In the Spectrum Auction**

- 2.2.1.      Only Existing MNOs may apply to IMDA to be pre-qualified to participate in the Spectrum Auction.
- 2.2.2.      IMDA will review each Pre-Auction Submission, together with any other accompanying documents submitted in accordance with Section 2.1.1:
- (a)      for compliance with these Auction Rules; and
  - (b)      to decide, in IMDA's sole and absolute discretion, whether any person which submitted such documents should be pre-qualified to participate in the Spectrum Auction.
- 2.2.3.      Notwithstanding anything in these Auction Rules, IMDA shall be under no obligation to pre-qualify any person to participate in the Spectrum Auction. IMDA shall have sole and absolute discretion in deciding whether to pre-qualify any person to participate in the Spectrum Auction. In deciding whether to pre-qualify any person, IMDA may consider, among other things:
- (a)      whether, in the opinion of IMDA, such person has demonstrated that it has the financial and technical capability to acquire a 2.1 GHz Spectrum Right (2022), and to operate a telecommunication system for the purpose of providing fifth-generation standalone (hereinafter referred to as "5G SA") telecommunication services, and other telecommunication services (if approved by IMDA) in relation to these Spectrum Rights;

- (b) whether there are any security or public interest concerns or whether it would be in the public interest for such person to be granted a 2.1 GHz Spectrum Right (2022);
- (c) any facts, circumstances or matters as set out such person's Pre-Auction Submission (including, for the avoidance of doubt, all accompanying documents); and
- (d) without being limited by the foregoing, any facts, circumstances or matters which IMDA considers to be relevant.

2.2.4. Without prejudice to the generality of Section 2.2.3 above, IMDA may request at any time such clarification, additional information and/or documents, from any person which has submitted the documents referred to in Section 2.1.1, as may be required for the purpose of making its decision pursuant to Section 2.2.2. If that person fails to submit such clarification, information and/or documents to IMDA by such time as has been specified by IMDA, that person's Pre-Auction Submission may be declared invalid by IMDA by notice in writing to that person, whereupon such person shall not be entitled to participate in the Spectrum Auction.

2.2.5. If, at any time after a person submits a Pre-Auction Submission pursuant to Section 2.1.1 above, that person becomes aware of any change to its ownership and/or control structure and/or any other material information contained in that person's Pre-Auction Submission, such person shall immediately and, in any case, no later than 24 hours from becoming aware of such change, notify IMDA of the same in accordance with Section 19.2. Without prejudice to the foregoing, unless IMDA's prior written approval has been obtained for such change of ownership and/or control structure, IMDA shall have the right to determine, in its sole and absolute discretion, that such Bidder is not eligible to be granted a 2.1 GHz Spectrum Right (2022) and/or to participate or participate further in the Spectrum Auction.

2.2.6. By submitting a Pre-Auction Submission, such person agrees that modifications may be made to its existing FBO Licence, in such manner as IMDA requires, if such person is provisionally awarded a 2.1 GHz Spectrum Right (2022).

2.2.7. Upon the grant of an FBO Licence or upon amendment of an existing FBO Licence (as the case may be) under these Auction Rules, such person shall comply with the conditions of its FBO Licence. In addition, such person shall at all times comply with all other applicable legal and regulatory requirements under the Telecommunications Act and/or any regulations, codes of practice, directions, standards of practice and/or any other regulatory frameworks and instruments issued by IMDA. By submitting a Pre-Auction Submission, a person applying to be a Bidder acknowledges and agrees that:

- (a) prior to the submission of its Pre-Auction Submission, it has been notified of the specific conditions to be included in its FBO Licence, including the Schedule to be contained in the FBO Licence in relation to the provision of 5G systems and services pursuant to the grant of a 2.1 GHz Spectrum Right (2022). Such conditions include, but are not limited to, a requirement to rollout 5G SA telecommunication systems and services nationwide and provide coverage for the whole island of Singapore, the offshore islands and the territorial waters up to 15 km from the coastline of Singapore (except where limitations in service coverage are due to technical requirements imposed by IMDA, such as that to limit interference with neighbouring countries) according to the timeline specified in the respective FBO Licence, as well as resilience and cybersecurity requirements. For the avoidance of doubt, the specific conditions notified by IMDA in accordance with this Section 2.2.7(a) are non-exhaustive and IMDA may in its sole and absolute discretion include in the relevant FBO Licence such other specific conditions as IMDA deems necessary, including but not limited to requiring performance bond(s) to be furnished in respect of certain obligations as set out in the FBO Licence;
- (b) each 2.1 GHz Spectrum Lot shall only be used for the provision of 5G SA telecommunication services in accordance with the terms of the relevant FBO Licences and 2.1 GHz Spectrum Right (2022), save where IMDA's prior written approval has been obtained for the use of such spectrum to provide any other telecommunication services (such approval, if any, shall be at IMDA's sole discretion and IMDA shall not be required to provide any reasons for denying approval);
- (c) if it exercises any First Right of Refusal to obtain FROR Lot(s) pursuant to these Auction Rules, that it has been notified of and accepts the specific conditions of use of the FROR Lot(s), including but not limited to that:

- (i) it shall only use the FROR Lot(s) for the provision of third-generation (hereinafter referred to as “3G”) telecommunication services and shall not use the FROR Lot(s) for the provision of any other telecommunication services, unless and until:
  - (1) it has fully shut down its 3G network (unless an exception has been granted by IMDA, which may be subject to such conditions as IMDA deems fit to impose in its absolute discretion, including in relation to payment of the Top Up Amount);
  - (2) it has paid the Top Up Amount, which shall become payable immediately upon the cessation of its 3G network; and
  - (3) it has obtained IMDA’s prior written approval for such intended use (such approval, if any, shall be at IMDA’s sole discretion and IMDA shall not be required to provide any reasons for denying approval);
- (ii) where it is a Consortium, that if an Existing MNO in the Consortium should obtain IMDA’s approval (as referred to in Section 2.2.7(c)(i)) to use an FROR Lot for the provision of 5G telecommunication services, that FROR Lot granted pursuant to a 2.1 GHz (FROR) Spectrum Right (2022) shall be incorporated into the Joint 2.1 GHz Spectrum Right (2022) issued to the Consortium, and the 2.1 GHz (FROR) Spectrum Right (2022) shall be correspondingly cancelled thereafter;
- (iii) where it is not a Consortium, that if an Existing MNO should obtain IMDA’s approval (as referred to in Section 2.2.7(c)(i)) to use an FROR Lot for the provision of 5G telecommunication services, that FROR Lot granted pursuant to a 2.1 GHz (FROR) Spectrum Right (2022) shall be incorporated into the 2.1 GHz Spectrum Right (2022) issued to such an Existing MNO, and the 2.1 GHz (FROR) Spectrum Right (2022) shall be correspondingly cancelled thereafter; and

- (d) the submission of a Pre-Auction Submission to IMDA constitutes (i) a representation by the Applicant that it shall abide by, fully implement and satisfy all of the representations and commitments made in its Pre-Auction Submission if it is provisionally awarded a 2.1 GHz Spectrum Right (2022); and (ii) the Applicant's acceptance of and accession to the specific conditions of its FBO Licence to be granted or amended (as the case may be).

For the avoidance of doubt, the above is without prejudice to IMDA's right to amend, delete or add to the conditions of the FBO licence and/or of the grant of the spectrum rights in accordance with Section 7 of the Telecommunications Act and Regulation 15 of the Telecommunications (Radio-communication) Regulations respectively, at any point of time.

- 2.2.8. Additionally, where the Applicant, Prospective Bidder, Bidder or Winning Bidder (as the case may be) is a Consortium, the submission of a Pre-Auction Submission by the Consortium constitutes: (i) a representation by each of the Existing MNOs within the Consortium and Antina Pte Ltd ("**Antina**") that each of them shall abide by, fully implement and satisfy all of the representations and commitments made in its Pre-Auction Submission if it is provisionally awarded a 2.1 GHz Spectrum Right (2022); and (ii) each of the Existing MNOs within the Consortium and Antina's acceptance of and accession to the specific conditions of its respective FBO Licence to be granted or amended (as the case may be).
- 2.2.9. IMDA will make a decision, in its sole and absolute discretion, after the Spectrum Auction Application Date as to whether a person is to be granted an in-principle pre-qualification to participate in the Spectrum Auction at such time as may be notified by IMDA.
- 2.2.10. If IMDA determines:
  - (a) that the documents submitted by a person in accordance with Section 2.1.1 and, where applicable, Section 2.2.4, comply with the requirements of these Auction Rules; and
  - (b) in IMDA's sole and absolute discretion, that such person may be pre-qualified to participate in the Spectrum Auction,

IMDA will notify that person, at such time as may be determined by IMDA, that it is pre-qualified to participate in the Spectrum Auction.



2.2.11. If IMDA determines:

- (a) that the documents submitted by a person in accordance with Section 2.1.1, and, where applicable, Section 2.2.4 do not comply with the requirements of these Auction Rules, or
- (b) in IMDA's sole and absolute discretion, that such person should not be pre-qualified to participate in the Spectrum Auction,

IMDA will notify that person, at such time as may be determined by IMDA, that it is not pre-qualified and is not entitled to participate in the Spectrum Auction. IMDA has no obligation to give any reason for its decision in this respect.

### 2.3. Registration of Prospective Bidders

2.3.1. Where IMDA notifies a person that it has been pre-qualified to participate in the Spectrum Auction, such person shall, within five (5) Business Days of IMDA's notification, submit to IMDA the following, in accordance with the requirements of these Auction Rules:

- (a) A duly completed Initial Offer Document; and
- (b) A Bank Guarantee or Bank Guarantees for a Guaranteed Amount which shall be no less than such person's Reserve Guaranteed Amount as calculated in accordance with Section 2.3.3.

2.3.2. No person shall be registered as a Bidder unless it has first submitted to IMDA a duly completed Initial Offer Document, and a Bank Guarantee or Bank Guarantees, in accordance with the requirements of these Auction Rules.

2.3.3. The ***Reserve Guaranteed Amount***, in relation to a person that has submitted an Initial Offer Document, shall be calculated as the total Singapore dollar value of the (i) number of FROR Lots requested in the Initial Offer multiplied by the Continuity Price plus (ii) the number of remaining 2.1 GHz Spectrum Lots requested in the Initial Offer (less any FROR Lots) multiplied by the Reserve Price.

- 2.3.4. Upon receiving a Bank Guarantee from a Prospective Bidder, IMDA will determine whether the Bank Guarantee complies with the requirements of these Auction Rules. If so, IMDA will notify the Prospective Bidder that it is registered as a Bidder to participate in the Quantity Stage of the Spectrum Auction. If IMDA determines that the Bank Guarantee submitted by the Prospective Bidder does not comply with the requirements of these Auction Rules, IMDA will notify the Prospective Bidder that it is not registered as a Bidder and is not entitled to participate in the Quantity Stage of the Spectrum Auction.
- 2.3.5. Notwithstanding Section 2.3.4, if IMDA determines that the Bank Guarantee submitted by a Prospective Bidder does not comply with the requirements of these Auction Rules, IMDA may (but shall be under no obligation to) notify the Prospective Bidder of this fact and provide the Prospective Bidder with an opportunity to submit an amended Bank Guarantee by such date and time as may be specified by IMDA. Upon receiving such amended Bank Guarantee, if IMDA determines that the amended Bank Guarantee complies with the requirements of these Auction Rules, IMDA will notify the Prospective Bidder that it is registered as a Bidder to participate in the Quantity Stage of the Spectrum Auction.
- 2.3.6. IMDA may also announce, on its website or by such other means as it considers appropriate, the identity(s) of the Bidder(s) which are registered to participate in the Quantity Stage of the Spectrum Auction.

## **2.4. Initial Offers**

- 2.4.1. An Initial Offer Document must confirm a Prospective Bidder's commitment to participate in the Quantity Stage and the subsequent Assignment Stage, and shall specify:
- (a) the number of Spectrum Lots (up to five (5)) for which the Prospective Bidder is submitting an Initial Offer;
  - (b) if the Prospective Bidder is an Existing MNO that currently holds an existing spectrum right to provide telecommunications services using spectrum in the 2.1 GHz band and is providing nationwide 3G services, whether it is exercising its First Right of Refusal for one (1) 2.1 GHz Spectrum Lot;
  - (c) if the Prospective Bidder is a Consortium, whether the Bidder is exercising its First Right of Refusal for one (1) or two (2) 2.1 GHz Spectrum Lot(s); and

- (d) the names of at least two (2) and a maximum of twelve (12) Authorised Representatives of the Prospective Bidder (together with specimen signatures) and documentary evidence satisfactory to IMDA of the appointment of each of such Authorised Representatives as a natural person having authority to act alone on behalf of, and bind, the Prospective Bidder in the Spectrum Auction.

- 2.4.2. If the Prospective Bidder wishes to exercise its First Right of Refusal to acquire 2.1 GHz Spectrum Lot(s) at the Continuity Price, then the Prospective Bidder, if registered to participate in the Spectrum Auction and not disqualified during the Spectrum Auction, will obtain the FROR Lot(s) in the quantities described in Section 2.4.1(b) or 2.4.1(c) above (as the case may be), in addition to any Spectrum Lots that it may acquire in the Spectrum Auction, all of which are subject to the limits of Section 1.2. For the avoidance of doubt, any FROR Lot(s) included in the Bidder's Initial Offer will not be included in the determination of the Bidder's Eligibility.
- 2.4.3. An Initial Offer Document which does not comply with the requirements of Section 2.4.1 shall be deemed not to be a duly submitted Initial Offer Document.
- 2.4.4. An Initial Offer submitted by a Prospective Bidder (including any application for FROR Lot(s)) in its Initial Offer Document, which complies with Section 2.4.1 cannot be withdrawn and will remain a legally binding offer from that Prospective Bidder in respect of the Spectrum Lot(s) specified by that Prospective Bidder in its Initial Offer Document, unless and until such time that IMDA:
  - (a) notifies such Prospective Bidder that it is not registered and is not entitled to participate in the Spectrum Auction in accordance with Section 2.2.11; or
  - (b) issues a Provisional Award Notice in respect of any of the 2.1 GHz Spectrum Lot(s) to one or more other Bidders under Section 9.12.
- 2.4.5. For the purpose of Sections 2.4.1 to 2.4.4, the **Prospective Bidder** shall include a person which has submitted an Initial Offer Document and a Bank Guarantee in accordance with Section 2.3.1.

## **2.5. Bank Guarantee for Bidding in the Quantity Stage of the Spectrum Auction**

- 2.5.1. A Bidder will be permitted to submit Bids in the Quantity Stage of the Spectrum Auction in excess of the aggregate Guaranteed Amount of all Bank Guarantee(s) submitted to IMDA by such Bidder, provided that such Bidder has earlier submitted a Bank Guarantee to IMDA of a Guaranteed Amount sufficient to comply with Section 2.3.1.
- 2.5.2. Notwithstanding Section 2.5.1, if such Bidder receives a Provisional Award Notice following the close of the Quantity Stage of the Spectrum Auction, IMDA may require, at IMDA's sole and absolute discretion, that such Bidder shall submit to IMDA such further Bank Guarantee(s) as are necessary in order for the aggregate Guaranteed Amount of all its Bank Guarantees submitted to IMDA to be at least 75% of the total sum of all Spectrum Lot Fees in respect of all Spectrum Lot(s) which that Bidder is provisionally awarded under Section 9.12.
- 2.5.3. Should IMDA require further Bank Guarantee(s) as per Section 2.5.2, each Winning Bidder shall within five (5) Business Days from the date of the Provisional Award Notice, ensure that it has submitted to IMDA a Bank Guarantee or Bank Guarantees for a Guaranteed Amount which is at least 75% of the total sum of all Spectrum Lot Fees in respect of all Spectrum Lot(s) which that Bidder is provisionally awarded under Section 9.12.
- 2.5.4. Any further Bank Guarantee(s) submitted to IMDA shall be in addition to, and not in replacement of, any other Bank Guarantee(s) previously submitted to IMDA. Any person submitting such further Bank Guarantee(s) to IMDA shall not be entitled to the return of its earlier submitted Bank Guarantee(s), save in accordance with these Auction Rules.
- 2.5.5. IMDA reserves the right to reject any purported Bank Guarantee(s) submitted by a Bidder under Section 2.5.3, if IMDA determines that such purported Bank Guarantee(s) do not comply with the requirements of these Auction Rules or is not otherwise in a form acceptable to IMDA. In such event, IMDA will return the rejected Bank Guarantee(s) to the Bidder, and the rejected Bank Guarantee(s) will not count towards the aggregate Guaranteed Amount referred to in Section 2.5.2.
- 2.5.6. For the avoidance of doubt, it shall be the sole responsibility of all Bidders to manage their affairs and make all necessary arrangements so as to submit sufficient Bank Guarantee(s) to IMDA in good time.

- 2.5.7. The Bank Guarantee(s) (less any Forfeiture Amount which may be subject to Forfeiture determined by IMDA in accordance with Section 11.2 or any other provision in these Auction Rules) will be returned to the relevant Bidder if any of the circumstances described in Sections 2, 3.8, 9.14 and/or Section 13 applies.
- 2.6. Determination of Number of Spectrum Lots Available in the Spectrum Auction**
- 2.6.1. The number of Spectrum Lots available in the Spectrum Auction depends on the number of FROR Lot(s) that are obtained pursuant to Section 2.4.2. Specifically, there will be twelve (12) 2.1 GHz Spectrum Lots less the total number of FROR Lots that are obtained by Existing MNOs currently providing nationwide 3G services.
- 2.7. Determination as to whether Quantity Stage of Spectrum Auction is to Proceed**
- 2.7.1. If IMDA receives Initial Offers that specify a total of more than twelve (12) 2.1 GHz Spectrum Lots from persons that IMDA determines should be registered as Bidders, then the Quantity Stage of the Spectrum Auction will proceed. Otherwise:
- (a) the Quantity Stage of the Spectrum Auction will not proceed,
  - (b) each Bidder will provisionally be awarded the number of 2.1 GHz Spectrum Lots specified in its Initial Offer (including any lot for which the Bidder may have exercised its First Right of Refusal) in line with the procedure in Section 2.8; and
  - (c) the Spectrum Auction will commence with the Assignment Stage.
- 2.7.2. Notwithstanding any other provision of these Auction Rules, IMDA may at any time prior to the Auction Start Date determine that the Spectrum Auction will not proceed. In such event, IMDA may elect not to grant any 2.1 GHz Spectrum Right (2022).
- 2.7.3. IMDA will determine whether the Quantity Stage or Assignment Stage of the Spectrum Auction will proceed based on the number of Initial Offers received, and will notify each Bidder of IMDA's determination after receiving the requisite Bank Guarantee(s) by the stipulated deadline.

## **2.8. Provisional Awards where Quantity Stage of Spectrum Auction does not Proceed**

- 2.8.1. If the Quantity Stage of the Spectrum Auction does not proceed in accordance with Section 2.7.1, IMDA may provisionally award up to five (5) 2.1 GHz Spectrum Lots to each Bidder in accordance with their Initial Offers, including any Spectrum Lots for which the Bidder has exercised its First Right of Refusal. The Spectrum Lot Fee payable for a FROR Lot shall be the Continuity Price and the Spectrum Lot Fee payable for each 2.1 GHz Spectrum Lot (that is not a FROR Lot) provisionally awarded under this Section 2.8.1 shall be the Reserve Price. Accordingly, the total sum of all Spectrum Lot Fees payable in respect of all Spectrum Lots allocated under this Section 2.8.1 shall be the **Reserve Guaranteed Amount**. Such provisional awards will be made by issuing to each Bidder a Provisional Award Notice notifying that Bidder of:
- (a) the number of Spectrum Lots provisionally awarded to the Bidder;
  - (b) the sums to be paid by that Bidder pursuant to Part IV of these Auction Rules; and
  - (c) the schedule for the Assignment Stage.
- 2.8.2. All Bidders issued a Provisional Award Notice will be considered Winning Bidders for the purpose of these Auction Rules.
- 2.8.3. In the event that IMDA has provisionally awarded the available 2.1 GHz Spectrum Lots under Section 2.8.1, IMDA will issue Provisional Award Notices to the Winning Bidder(s) at such date as determined by IMDA.

## **Section 3 AUTHORISED REPRESENTATIVES, INFORMATION SESSION AND TRAINING SESSION FOR QUANTITY STAGE**

- 3.1. IMDA will hold an Information Session before the Auction Start Date at such date as determined by IMDA. IMDA will notify all Bidders of the date, time and location of the Information Session at least one (1) Business Day in advance.
- 3.2. The purpose of the Information Session is to provide the Bidders with an opportunity to clarify any matter relating to these Auction Rules, the Spectrum Auction framework and the bidding procedures in the Spectrum Auction, and to familiarise themselves with the Spectrum Auction framework and the bidding procedures in the Spectrum Auction.

- 3.3.** At the Information Session, IMDA will provide each Bidder with details on the processes of the Spectrum Auction, including where relevant, the use of an online software application for the Quantity Stage of the Spectrum Auction (the **Auction System**) provided for this purpose, and how each Bidder should communicate with IMDA during the Spectrum Auction.
- 3.4.** If IMDA considers it relevant, a Training Session on the use of the Auction System will be conducted by IMDA or the Auction Service Provider for all Authorised Representatives following the Information Session. All the Authorised Representatives of each Bidder shall be required to attend such Training Session if it is held.
- 3.5.** All Bidders must name their Authorised Representatives in the Disclosure List in their Initial Offer Document. A Bidder may replace any of its Authorised Representatives at any time prior to the commencement of the Information Session by notifying IMDA in writing (such notification must be submitted in accordance with Section 18.1) provided that:
- (a) the particulars and documentation referred to in Section 2.4.1(d) in respect of the new Authorised Representative(s) are submitted to IMDA in its written notification; and
  - (b) each new Authorised Representative was named in the Disclosure List submitted by that Bidder in its Pre-Auction Submission.
- 3.6.** It shall be the sole responsibility of all Bidders to manage their affairs and make all necessary arrangements for its Authorised Representatives to attend the Information Session and (if relevant) complete the Training Session, and thereafter, submit a written declaration to IMDA (in the form stipulated by IMDA), at least one (1) Business Day before the Auction Start Date, stating that such Authorised Representative understands and undertakes to observe the Auction Rules, as well as any further details on bidding procedures for the Spectrum Auction as may be provided to Bidders at the Information Session and Training Session. If an Authorised Representative of a Bidder does not submit the written declaration required by Section 3.6, that Authorised Representative will not be permitted to represent the Bidder in the Spectrum Auction.

- 3.7.** Representatives of each Bidder, in addition to the Bidder's Authorised Representatives, will be permitted to attend the Information Session, provided that: (a) no more than twelve (12) natural persons (including the Authorised Representatives) may attend on behalf of any Bidder; and (b) where there are location constraints (which IMDA will determine in its sole and absolute discretion), no more than five (5) natural persons (including the Authorised Representatives) may attend on behalf of any Bidder. Only the Authorised Representatives may attend the Training Session. Each Bidder must submit to IMDA, a complete list of its representatives (other than Authorised Representatives) whom it proposes to attend the Information Session on behalf of that Bidder, including their respective names and identity card/passport numbers. Any person (other than Authorised Representatives) not included in such a list will not be permitted to attend the Information Session. A Bidder may replace any of the representatives identified in such list at any time prior to the commencement of the Information Session upon written by notifying IMDA in writing (such notification to IMDA must be submitted in accordance with Section 18.1.). Such notification must identify the representatives (by their respective names and identity card/passport numbers) whom the Bidder wants to replace and provide the names and identity card/passport numbers of the representatives to be appointed in replacement thereof.
- 3.8.** Notwithstanding that a Bidder has been successfully registered as a Bidder to participate in the Spectrum Auction under Section 2, if a Bidder does not have at least two (2) Authorised Representatives who are permitted to represent the Bidder in the Spectrum Auction, such Bidder shall not and shall no longer be entitled to participate in the Spectrum Auction, and the IMDA will notify such Bidder that it will not be permitted to participate, or participate further, in the Spectrum Auction or any restart of the Spectrum Auction. Where there is location constraint, a Bidder must have at least two and may have no more than five (5) Authorised Representatives representing the Bidder during the Quantity Stage of the Spectrum Auction. The Spectrum Auction will not proceed if there is no more than one (1) Bidder entitled to participate in any stage of the Spectrum Auction.



## **PART III SPECTRUM AUCTION FRAMEWORK**

### **Section 4 PARTICIPATION IN SPECTRUM AUCTION**

- 4.1.** Only persons who have been notified that they are registered as Bidders in accordance with Sections 2.3.4 and have at least two (2) Authorised Representatives who are permitted to represent the Bidder in the Spectrum Auction will be permitted to participate in the Spectrum Auction. Bidders which have been excluded from the Spectrum Auction by notice from IMDA pursuant to these Auction Rules will not be permitted to participate, or participate further, in the Spectrum Auction or any restart of the Spectrum Auction. IMDA may exclude a Bidder from the Spectrum Auction at any time by giving notice to such Bidder pursuant to Sections 2.2.4, 2.2.11, 11.1.1, 14.2 and/or 19.2(a). Any Valid Quantity Stage Bid or Valid Assignment Bid placed by a Bidder (as the case may be) which is excluded from consideration in the Spectrum Auction pursuant to these Auction Rules shall immediately lapse and cease to have any effect.
- 4.2.** Subject to Section 4.1, by participating in the Spectrum Auction, each Bidder agrees to be bound by the outcome of the Spectrum Auction, including the allocation of specific 2.1 GHz Spectrum Lots to the Bidder as a result of the Spectrum Auction.

### **Section 5 COMMENCEMENT OF QUANTITY STAGE OF SPECTRUM AUCTION**

- 5.1.** If the Quantity Stage of the Spectrum Auction proceeds pursuant to Section 2.7.1, IMDA will notify all Bidders minimally of the following:
- (a) the Auction Start Date;
  - (b) the location where the Auction will be conducted;
  - (c) the number of available Spectrum Lots; and
  - (d) the Quantity Stage schedule, specifying:
    - (i) the time at which the Quantity Stage will start and finish on the first day of the Quantity Stage;
    - (ii) the time at which the first Round will start and finish; and
    - (iii) any other information which IMDA may consider to be relevant.
- 5.2.** IMDA will notify each Bidder separately of that Bidder's Eligibility in Round 1. The Bidder's Eligibility shall be expressed as the number of Spectrum Lots on which the Bidder can, and must, place a Bid in Round 1, and shall be equal to the number of Spectrum Lots specified in the Bidder's Initial Offer less one (1) or two (2), as the case may be, if the Bidder has been awarded FROR Lot(s).

- 5.3. If the Spectrum Auction proceeds directly to the Assignment Stage, pursuant to Section 2.7.1, IMDA will provide each Winning Bidder with the information regarding the Assignment Stage in accordance with Sections 2.8.1, 2.8.2 and 2.8.3.
- 5.4. The Quantity Stage of the Spectrum Auction will commence on the Auction Start Date at the time specified in the notification given under Section 5.1 unless Bidders are notified otherwise. The Quantity Stage of the Spectrum Auction will continue until it is considered closed in accordance with Section 9, unless delayed, cancelled, suspended, abandoned and/or restarted by IMDA pursuant to these Auction Rules.

## **Section 6      QUANTITY STAGE BIDDING PROCEDURE**

- 6.1. If the Quantity Stage of the Spectrum Auction proceeds pursuant to Section 2.7.1, IMDA will determine the means by which the Quantity Stage of the Spectrum Auction will be conducted. IMDA may decide to conduct the Quantity Stage of the Spectrum Auction using an Auction System. In this event, the Auction System will be the primary means by which Bidders will place their Bids. The Auction System will be password-protected, and passwords will be distributed only to the Authorised Representatives of Bidders.
- 6.2. If an Auction System is used, every Bidder will be provided with one bidding account. Each Authorised Representative of each Bidder will be notified of the Bidder's username and password for the Auction System and the process to access the Auction System at which the Quantity Stage of the Spectrum Auction will be held, prior to the Quantity Stage of the Spectrum Auction. It is the responsibility of each Bidder's Authorised Representatives to safeguard their passwords and control access to the Auction System using these passwords.
- 6.3. The Quantity Stage of the Spectrum Auction shall commence at the scheduled time on the Auction Start Date notified by IMDA in accordance with Section 5.1.
- 6.4. All communications between each Bidder and IMDA during the Quantity Stage of the Spectrum Auction must be made in accordance with such protocols as may be contained in any detailed information that IMDA may disseminate to Bidders at the Information Session and/or Training Session (including protocols pertaining to message content, message format and means of communication). IMDA, at its sole discretion, will determine the means by which Bids may be placed, whether electronically or manually.

## **Section 7      CONDUCT OF QUANTITY STAGE**

### **7.1.      Rounds and Standing Prices**

- 7.1.1.      The Quantity Stage of the Spectrum Auction shall be conducted using a Clock-Plus auction format in respect of all Spectrum Lots that IMDA notified were available in accordance with Section 5.1.
- 7.1.2.      The Clock-Plus auction proceeds in a series of Rounds in which IMDA specifies the Standing Price of Spectrum Lots and Bidders indicate the number of Spectrum Lots they wish to acquire at that price.
- 7.1.3.      The minimum time period for each Round will be ten (10) minutes. The minimum time period between the end of a Round and the start of the following Round will be ten (10) minutes.
- 7.1.4.      IMDA will notify Bidders at the end of a bidding day of the time at which bidding will start and finish on the next day of the Quantity Stage and of the time at which the first Round of the next day will start and finish.
- 7.1.5.      At the end of each completed Round, the value of Excess Demand in the completed Round will be calculated as the total number of Spectrum Lots included in all Valid Quantity Stage Bids received at the Standing Price of that particular Round, less the number of Spectrum Lots available for bidding.
- 7.1.6.      If Excess Demand is more than zero (0) in a completed Round, the Standing Price, which is the price at which IMDA solicits Bids, will be increased by an Increment (as determined by IMDA) from the last completed Round to the following Round and the Quantity Stage will continue to the following Round. Otherwise, there will be no further Rounds and the Quantity Stage will close.
- 7.1.7.      The Increment shall be at least S\$10,000 and shall not exceed 10% of the Standing Price in the immediately preceding completed Round.

### **7.2.      Requests for Additional Time**

- 7.2.1.      Each Bidder is entitled to two (2) Extensions during the Quantity Stage. The duration of each Extension is fifteen (15) minutes.
- 7.2.2.      A Bidder will automatically trigger an Extension if it does not place a Valid Quantity Stage Bid by the end of the scheduled Round, provided that the Bidder has not already used its two (2) allowable Extensions. For avoidance of doubt, a Bidder may not trigger its two (2) extensions in the same Round, so the Round will not be extended a second time if the Bidder does not place a Valid Quantity Stage Bid by the end of its first Extension.

- 7.2.3. Only Bidders that have triggered an Extension pursuant to Sections 7.2.2 and 7.2.3 above respectively will be allowed to place Bids during the Extension.
- 7.2.4. A Round may only be extended once (i.e. by fifteen (15) minutes) regardless of the number of Bidders who have triggered an Extension. Each Bidder that has triggered an Extension will use up one (1) allowable Extension regardless of how many Bidders triggered an Extension for that Round.
- 7.2.5. Each Bidder is entitled to request two (2) Recesses during the Quantity Stage. The duration of each Recess is ninety (90) minutes.
- 7.2.6. A Recess may only be requested by a Bidder after the close of a Round and where there is at least five (5) minutes before the start of the next Round. Recesses may only be requested by notifying IMDA in accordance with Section 6.4.
- 7.2.7. If IMDA receives a Recess request notification that is made in accordance with Section 7.2.6, IMDA will, before the scheduled start of the next Round, notify all Bidders that the Spectrum Auction is in Recess, and the revised date and time at which the next Round will commence. If IMDA receives a Recess request notification with less than two (2) hours left between the time the Recess request notification is received and the scheduled finish time for that bidding day, the next Round will commence on the next bidding day.
- 7.2.8. For the avoidance of doubt, if IMDA receives more than one (1) request for a Recess before the same Round, the Recess will only last ninety (90) minutes. Each Bidder that has requested a Recess will use up one (1) allowable Recess request regardless of how many Bidders requested a Recess for that Round.
- 7.2.9. IMDA may at any time notify Bidders that the current or any subsequent Business Day or any part thereof will be a Recess during which no Rounds will take place. This will not affect the number of allowable Recess requests Bidders have remaining at that point.

### **7.3. Bids, Valid Quantity Stage Bids, and Eligibility**

- 7.3.1. A Quantity Stage Bid shall comprise:
- (a) **Clock Bid.** The Bidder's Clock Bid for the current Round, which specifies the number of Spectrum Lots the Bidder wishes to acquire at the Standing Price. Only the Spectrum Lots in the Clock Bid will be considered by IMDA when establishing the level of Excess Demand.

- (b) **Exit Bid(s) (where applicable).** If a Bidder reduces the number of Spectrum Lots in its Clock Bid for the current Round from the previous Round, the Bidder must place Exit Bid(s) in accordance with the following requirements:
- (i) The Bidder must place an Exit Bid in respect of each possible number of Spectrum Lots between its previous Clock Bid (including the exact number of Spectrum Lots in its previous Clock Bid) and its current Clock Bid (excluding the exact number of Spectrum Lots in its current Clock Bid).
  - (ii) For each Exit Bid, the Bidder must specify a price per Spectrum Lot, at which the Bidder offers to purchase Spectrum Lots specified in that Exit Bid (i.e. the Exit Price).
  - (iii) The Exit Price specified in respect of each Exit Bid must be a multiple of S\$100, and must be lower than the Standing Price in the current Round, and equal to or higher than the Standing Price in the immediately preceding completed Round.
  - (iv) Unless Section 7.4.1 applies, where multiple Exit Bids are placed, the Exit Price specified in an Exit Bid for a larger number of Spectrum Lots must be equal to or lower than the Exit Price specified in an Exit Bid for a smaller number of Spectrum Lots.

A Bidder to whom this Section 7.3.1 applies will only be allowed to place its Quantity Stage Bid if it includes all Exit Bid(s) in accordance with the requirements in this Section 7.3.1.

#### **Illustration**

In Round  $n$ , Bidder A places a Valid Quantity Stage Bid, comprising a Clock Bid for four (4) Spectrum Lots at the Standing Price of \$X, and no Exit Bids.

In the following Round  $n+1$ , the Standing Price increases by \$100,000 to \$Y.

Bidder A now intends to reduce the number of Spectrum Lots specified in its Clock Bid from four (4) Spectrum Lots to one (1) Spectrum Lot.

In addition to a Clock Bid for one (1) Spectrum Lot, Bidder A must also place three separate Exit Bids for four (4), three (3) and two (2) Spectrum Lots respectively.

Each Exit Bid placed by Bidder A must specify an Exit Price (i.e. the price per Spectrum Lot at which Bidder A is offering to purchase the Spectrum Lots specified in that Exit Bid).

The Exit Price of each Exit Bid placed by Bidder A must be lower than the Standing Price in the current round (\$Y), and equal to or higher than the Standing Price in the immediately preceding completed Round (\$X).

Additionally, the Exit Price of Bidder A's Exit Bid for four (4) Spectrum Lots must be equal to or lower than the Exit Price of Bidder A's Exit Bid for three (3) Spectrum Lots, which in turn must be equal to or lower than the Exit Price of Bidder A's Exit Bid for two (2) Spectrum Lots, which in turn must be lower than \$Y.

- 7.3.2. The Standing Price in Round 1 will be the Reserve Price. In Round 1, and in Round 1 only, a Quantity Stage Bid will be placed automatically on behalf of a Bidder that will consist of a Clock Bid for:
- (a) the number of Spectrum Lots in its Initial Offer, if the Bidder has not applied for FROR Lot(s); or
  - (b) the number of Spectrum Lots in its Initial Offer less the number of FROR Lot(s) that the Bidder has applied for.
- 7.3.3. The Bidder's Eligibility is denominated in Spectrum Lots and determines the maximum number of Spectrum Lots for which the Bidder can, and is required to, bid in a Round (either through its Clock Bid or through Exit Bids). The Bidder's Eligibility in Round 2 and any subsequent Round is equal to the number of Spectrum Lots in the Bidder's Clock Bid in the immediately preceding completed Round.
- 7.3.4. A **Valid Quantity Stage Bid** in a Round, in relation to the Spectrum Auction, is one in which:
- (a) the number of Spectrum Lots in the Bidder's Clock Bid does not exceed the Bidder's Eligibility in that Round; and
  - (b) the Bidder has specified all compulsory Exit Bids in accordance with the requirements in Section 7.3.1.

7.3.5. Further details of the procedure for placing bids will be provided to each Bidder at the Information Session. If an Auction System is used, each Bidder will submit its Quantity Stage Bid in two steps:

- (a) First, a Bidder will enter its Quantity Stage Bid into the Bid Form provided by the Auction System, which will issue warning(s) to the Bidder if the Quantity Stage Bid are not in conformance with Section 7 of these Auction Rules.
- (b) Second, the Bidder will verify submission of the Quantity Stage Bid in the Bid Form.

Only Quantity Stage Bids that have been both entered and verified during a Round may be considered Valid Quantity Stage Bids. For the avoidance of doubt, if a Bidder enters a Clock Bid and/or any Exit Bids in its Bid Form in a Round but fails to verify its Quantity Stage Bid before the end of the Round, the Quantity Stage Bid shall not be considered a Valid Quantity Stage Bid, even if the Clock and/or Exit Bids entered otherwise adheres to these Auction Rules.

7.3.6. To be clear, a Valid Quantity Stage Bid will constitute a legally binding offer made by the Bidder to IMDA to purchase:

- (a) the number of Spectrum Lots specified in the Clock Bid at the Standing Price; or
- (b) the number of Spectrum Lots specified in any of the Exit Bids at the corresponding Exit Price.

Valid Quantity Stage Bids will remain valid and binding on the relevant Bidder unless IMDA notifies the relevant Bidder that it is not the Winning Bidder and returns its Bank Guarantee in accordance with Part IV of these Auction Rules. Only Valid Quantity Stage Bids will be considered for the purpose of identifying Winning Bids, as described in Section 9.

## 7.4. Failure to place a Valid Quantity Stage Bid

- 7.4.1. If a Bidder does not place a Valid Quantity Stage Bid in a Round<sup>1</sup>, then the Bidder will be deemed to have submitted a Clock Bid for zero (0) Spectrum Lots in that Round. In such event, the Bidder's Clock Bid in the immediately preceding completed Round that included any Spectrum Lots will be converted into the corresponding Exit Bids for all possible numbers of Spectrum Lots between the number of Spectrum Lots in the Bidder's Clock Bid in the previous Round and one (1), with an Exit Price equal to the Standing Price in the immediately preceding completed Round.

### **Illustration**

In Round  $n$ , a Bidder places a Valid Quantity Stage Bid, comprising a Clock Bid for four (4) Spectrum Lots at the Standing Price of S\$X for each Spectrum Lot, and no Exit Bids. In Round  $n+1$ , that Bidder fails to place a Valid Quantity Stage Bid.

In Round  $n+1$ , that Bidder will be deemed to have placed:

- a Clock Bid for zero (0) Spectrum Lots;
- an Exit Bid for four (4) Spectrum Lots at the Exit Price of S\$X per Spectrum Lot;
- an Exit Bid for three (3) Spectrum Lots at the Exit Price of S\$X per Spectrum Lot;
- an Exit Bid for two (2) Spectrum Lots at the Exit Price of S\$X per Spectrum Lot; and
- an Exit Bid for one (1) Spectrum Lots at the Exit Price of S\$X per Spectrum Lot.

## 7.5. Information Provided to Bidders

- 7.5.1. After each Round but before the start of the next Round, IMDA will notify all Bidders which have not been excluded from the Spectrum Auction of:
- (a) the results of the last completed Round;
  - (b) whether there will be another Round pursuant to Section 7.6, and if so, the timings at which the next Round will start and finish; and

<sup>1</sup> For the avoidance of doubt, a Round includes the duration of an Extension (if any) under Section 7.2.2.



- (c) if a further Round is required, the level of Excess Demand in the last completed Round and the Standing Price in the next Round.

7.5.2. In addition, after each Round but before the start of the next Round, IMDA will provide each Bidder individually and privately with the following information with respect to the Bidder:

- (a) the number of remaining Extensions and Recesses to which the Bidder is entitled;
- (b) its Quantity Stage Bid (Clock Bid and any Exit Bids) in the completed Round (if any); and
- (c) its Eligibility in the next Round.

7.5.3. IMDA will not provide Bidders with information specifically regarding another Bidder during the Quantity Stage.

## **7.6. Continuation of the Quantity Stage of the Spectrum Auction**

7.6.1. The Quantity Stage of the Spectrum Auction will continue until it is closed in accordance with Section 9.

7.6.2. If IMDA decides to restart the Quantity Stage of the Spectrum Auction in accordance with Section 8, Section 10.4 or Section 16, IMDA will notify all Bidders (except any excluded Bidder(s)) that the Quantity Stage of the Spectrum Auction will be restarted and of the information referred to in Sections 7.5.1 and 7.5.2 in respect of the Round at which the Quantity Stage of the Spectrum Auction will be restarted.

7.6.3. If IMDA decides to suspend the Quantity Stage of the Spectrum Auction in accordance with Section 8.3(iv), IMDA will notify each Bidder (except any excluded Bidder(s)) that the Quantity Stage of the Spectrum Auction is suspended and, if IMDA has determined at such time, the time and date at which the Quantity Stage of the Spectrum Auction will be restarted.

## **Section 8 EXCEPTIONAL CIRCUMSTANCES**

**8.1.** If at any time IMDA considers it necessary to delay, cancel, suspend, abandon and/or restart the Quantity Stage of the Spectrum Auction (or a particular Round thereof) due to any circumstance, IMDA will notify all Bidders of its decision, together with such other details and instructions to the Bidders as IMDA may consider appropriate.

**8.2.** If IMDA notifies Bidders that a Round will be abandoned after its commencement, and the Round is subsequently restarted, the Round will be restarted as if the Round and all subsequent Rounds have not taken place.

**8.3.** In the event that:

- (a) one or more Bidders are excluded from the Quantity Stage of the Spectrum Auction and IMDA considers that the conduct of the excluded Bidder(s) which gave rise to such exclusion or the fact of their exclusion may have a material effect on the identity of the Bidder(s) which would be granted a 2.1 GHz Spectrum Right (2022) and/or the amount payable for a 2.1 GHz Spectrum Right (2022); or
- (b) IMDA becomes aware that an error has occurred in registering the value of a Quantity Stage Bid placed by a Bidder in a previous Round and IMDA considers that the error is one that, if the Quantity Stage of the Spectrum Auction proceeds, may have a material effect on the identity of the Bidder(s) which would be granted a 2.1 GHz Spectrum Right (2022) and/or the quantity of 2.1 GHz Spectrum Lots allocated in respect of such Spectrum Rights,

IMDA may, having consulted all Bidders (other than, in the event of Section 8.3(a), the excluded Bidder(s)),

- (i) continue the Quantity Stage of the Spectrum Auction;
- (ii) restart the Quantity Stage of the Spectrum Auction with the first Round;
- (iii) restart the Quantity Stage of the Spectrum Auction commencing with the start of the Round in which the error referred to in Section 8.3(b) occurred or, in the event of an exclusion due to grounds set out in Section 8.3(a), commencing with the start of the Round in which the results of the Quantity Stage of the Spectrum Auction were or may have been materially affected by the conduct of the excluded Bidder(s) if practicable or commencing with Round 1 of the Quantity Stage of the Spectrum Auction otherwise; or
- (iv) suspend the Quantity Stage of the Spectrum Auction until such time and date as IMDA may determine.

**8.4.** In the event that IMDA determines to restart any Round of the Quantity Stage of the Spectrum Auction:

- (a) any excluded Bidder(s) will not be entitled to participate in the restart of any Round of the Quantity Stage of the Spectrum Auction unless permitted by IMDA;

- (b) each Bidder's number of Extensions and Recesses remaining, and the Bidder's Eligibility shall be re-calculated to equate with such number as applied to the relevant Bidder at the original start of the Round at which the Quantity Stage of the Spectrum Auction is restarted; and
  - (c) any Round(s) subsequent to the original Round at which the Quantity Stage of the Spectrum Auction is restarted shall, subject to Section 8.5, be deemed not to have taken place.
- 8.5.** Any restart of a Round or the Quantity Stage of the Spectrum Auction will not affect any Forfeiture determined by IMDA pursuant to Section 11.2.1.
- 8.6.** If IMDA returns any Bank Guarantees to Bidders during a suspension of the Quantity Stage of the Auction, Bank Guarantees for an equivalent amount and on the same terms and conditions must be submitted to IMDA prior to any restart of the Quantity Stage of the Auction.

**Section 9 CLOSE OF THE QUANTITY STAGE AND DETERMINATION OF WINNING BIDS**

- 9.1.** The first time that Excess Demand is zero (0) or negative in a Round, there will be no further Rounds and the Quantity Stage of the Spectrum Auction will close at the end of such Round. The immediately preceding completed Round will be the final Round.
- 9.2.** Upon the close of the Quantity Stage of the Spectrum Auction, all Bidders will win at least the number of Spectrum Lots they specified in the Clock Bid they have placed in the final Round.
- 9.3.** If the final Round ends with negative Excess Demand (i.e. if the total number of Spectrum Lots assigned in accordance with Section 9.2 is less than the number of Spectrum Lots available in the Quantity Stage) or if IMDA has received a notice to withdraw a Provisional Winning Bid under Section 9.7, IMDA will use the Exit Bids from the final Round to assign all of the Spectrum Lots available in the following manner:
- 9.3.1. IMDA will rank the Exit Bids placed in the final Round according to their Exit Price in descending order, with any ties broken at random;
  - 9.3.2. IMDA will then consider each of these Exit Bids in turn, accepting it instead of the Clock Bid or any previously accepted Exit Bid for the Bidder, until all Spectrum Lots are assigned, or until there are no more Exit Bids from the final Round;
  - 9.3.3. These Bids will become Provisional Winning Bids. IMDA will then notify each Bidder of its Provisional Winning Bid (i.e. the number of Spectrum Lots provisionally awarded to that Bidder under Sections 9.2 and 9.3).

- 9.4.** A Bidder who reduced its demand in the final Round from three (3) or more Spectrum Lots to zero (0) (either by placing a Clock Bid for zero (0) Spectrum Lots or by failing to place a Valid Quantity Stage Bid in the final Round) and has one of its Exit Bids for one (1) or two (2) Spectrum Lots selected as a Provisional Winning Bid may provide notice to IMDA that it wishes to withdraw its Provisional Winning Bid. For the avoidance of doubt, if such a Bidder has its Exit Bid for three (3) or more Spectrum Lots selected, it will not be entitled to withdraw its Provisional Winning Bid under this Section 9.4.
- 9.5.** A Bidder who reduced its demand in the final Round from two (2) Spectrum Lots to zero (0) (either by placing a Clock Bid for zero (0) Spectrum Lots or by failing to place a Valid Quantity Stage Bid in the final Round) and has its Exit Bid for one (1) Spectrum Lot selected as a Provisional Winning Bid may provide notice to IMDA that it wishes to withdraw its Provisional Winning Bid. For the avoidance of doubt, if such a Bidder has its Exit Bid for two (2) Spectrum Lots selected, it will not be entitled to withdraw its Provisional Winning Bid under this Section 9.5.
- 9.6.** For the avoidance of doubt, Bidders are not permitted to withdraw their Provisional Winning Bid under any other circumstances nor for any other quantities of Lots except for those set out under Sections 9.4 and 9.5.
- 9.7.** A notice to withdraw a Provisional Winning Bid under Sections 9.4 or 9.5 must be signed by an Authorised Representative of the Bidder and delivered by hand or sent in electronic form by electronic mail to IMDA within two (2) Business Days of the notice of the close of the Quantity Stage, to:

**Info-communications Media Development Authority  
10 Pasir Panjang Road  
#03-01 Mapletree Business City  
Singapore 117438**

**Email: ILO@IMDA.gov.sg**

**For the attention of: Ms Aileen Chia**

- 9.8.** If a Bidder withdraws its Provisional Winning Bid in the specific circumstances set out in Sections 9.4 and/or 9.5 above, and in accordance with the procedure set out in Section 9.7 above, then no Forfeiture will be imposed solely for such withdrawal, and that Bidder will not be issued a Provisional Award Notice issued under Section 9.12 in respect of such Spectrum Lots. For the avoidance of doubt, the Provisional Winning Bids will become Winning Bids if IMDA has not received any notice to withdraw a Provisional Winning Bid under Section 9.7.

- 9.9.** If IMDA receives any notice to withdraw a Provisional Winning Bid under Section 9.7, IMDA will recalculate Provisional Winning Bids for the other Bidders pursuant to Section 9.3 but will exclude all Bids placed by any Bidder(s) who have submitted a notice to withdraw a Provisional Winning Bid, using Exit Bids placed in the final Round by other Bidders. Any Spectrum Lots that cannot be assigned through this process (“**Withdrawn Lots**”) will be re-auctioned through a second Quantity Stage, where:
- 9.9.1. The Standing Price of each of the Withdrawn Lots for the first Round will reset to the Reserve Price;
  - 9.9.2. Only Bidders who were awarded a Provisional Winning Bid and did not withdraw such Provisional Winning bid shall be allowed to put in Bids for the Withdrawn Lots, subject to a cap of **six (6)** 2.1 GHz Spectrum Lots for each such Bidder (including all 2.1 GHz Spectrum Lots that are provisionally awarded to that Bidder in its Provisional Winning Bid); and
  - 9.9.3. Subject to the above, the rest of the rules as set out in the Auction Rules apply *mutatis mutandis* to the second Quantity Stage.
- 9.10.** Winning Bidders will pay the Spectrum Lot Fee for each Spectrum Lot they are provisionally awarded, which will be equal to the lowest price (Standing Price or Exit Price) across all Winning (Clock and Exit) Bids of all Bidders in:
- (a) the Quantity Stage referred to in Section 9.1 above, for Spectrum Lots that are provisionally awarded pursuant to such Quantity Stage; and
  - (b) the second Quantity Stage referred to in Section 9.9 above (if applicable), for Spectrum Lots that are provisionally awarded pursuant to such second Quantity Stage.
- 9.11.** After the close of the Quantity Stage referred to in Section 9.1 above; and the second Quantity Stage referred to in Section 9.9 above (if applicable), IMDA will notify each Bidder of:
- (a) its Winning Bids, the number of Spectrum Lots provisionally awarded to that Bidder under Sections 9.8 or 9.9;
  - (b) the total sum of all payable Spectrum Lot Fees in respect of all provisionally awarded Spectrum Lots, determined in accordance with Section 9.10; and
  - (c) the identity of all Winning Bidders and the number of Spectrum Lots provisionally awarded to each Winning Bidder.

- 9.12.** IMDA will provisionally award the quantity of 2.1 GHz Spectrum Lots including any FROR Lots to Bidders in accordance with the results of the relevant Quantity Stage at the price established pursuant to Section 9.10 for the Spectrum Lots other than the FROR Lot, and at the Continuity Price for the FROR Lot. Each such provisional award will be made by issuing to each Bidder a Provisional Award Notice notifying the relevant Bidder of:
- (a) the quantity of 2.1 GHz Spectrum Lot(s) which that Bidder is provisionally awarded;
  - (b) the total sum of all payable Spectrum Lot Fees in respect of all provisionally awarded Spectrum Lots determined in accordance with Section 9.10;
  - (c) the Annual Frequency Management Fee in respect of the Spectrum Lot(s) which that Bidder is provisionally awarded under this Section 9.12;
  - (d) the Application and Processing Fee in respect of each Spectrum Lot; and
  - (e) the schedule for the Assignment Stage.
- 9.13.** All Bidders that have been issued a Provisional Award Notice will be considered Winning Bidders.
- 9.14.** For Bidders that are not the Winning Bidders, IMDA will return each Bank Guarantee to the relevant Bidder which submitted that Bank Guarantee in accordance with Section 2.5 (less any Forfeiture Amount which may be subject to Forfeiture determined by IMDA in accordance with Section 11.2 or any other provision in these Auction Rules).

## **Section 10 CONDUCT OF ASSIGNMENT STAGE**

### **10.1. Assignment Stage Phases**

- 10.1.1. All Winning Bidders from the Quantity Stage (including the second Quantity Stage referred to in Section 9.9 above) of the Spectrum Auction, or the Initial Offer Stage if the Quantity Stage does not proceed, are required to participate in the Assignment Stage of the Spectrum Auction. Following the completion of the Quantity Stage (or the Initial Offer Stage as the case may be), IMDA will notify all Winning Bidders of the schedule for Phase 1 of the Assignment Stage. The Assignment Stage of the Spectrum Auction will proceed in either one or two phases:
- (a) Phase 1: The submission of a joint proposal by all Winning Bidders indicating whether there is agreement by all Winning Bidders on the assignment of the allocated 2.1 GHz Spectrum Lots; and

- (b) Phase 2 (if there is no agreement by all Winning Bidders on the assignment of all the allocated 2.1 GHz Spectrum Lots): The conduct of a single-round sealed bid auction for the set of 2.1 GHz Spectrum Lots.

## **10.2. Phase 1: Submission of Joint Proposal**

- 10.2.1. IMDA will provide all Winning Bidders with a Form for Agreement or Non-Agreement of Spectrum Assignment and the name and contact details of a specified Authorised Representative of each Winning Bidder. If there are unsold Spectrum Lots, IMDA will also inform all Winning Bidders of IMDA's preference, if any, of the frequency assignments for the unsold Spectrum Lots.
- 10.2.2. The Winning Bidders shall jointly indicate in the Form for Agreement or Non-Agreement of Spectrum Assignment whether there is an agreement amongst all of them as to the assignment of all of the Spectrum Lots to which all Winning Bidders agree, or whether no such agreement is reached. If there is an agreement on an assignment of all of the Spectrum Lots, the Winning Bidders shall also jointly indicate the specific frequency assignment(s) for which all the Winning Bidders agree.
- 10.2.3. A proposal is only valid if:
  - (a) It has been submitted using the relevant Annex to the Form for Agreement or Non-Agreement of Spectrum Assignment;
  - (b) The Form for Agreement or Non-Agreement of Spectrum Assignment has been signed by at least two (2) Authorised Representatives of each Winning Bidder;
  - (c) Each Winning Bidder is assigned exactly the same number of lots as it was provisionally awarded prior to the Assignment Stage; and
  - (d) If there are any unassigned lots, these are placed in accordance with the preference expressed by IMDA in Section 10.2.1.
- 10.2.4. The Winning Bidders must jointly submit at least one (1) duly completed copy of the relevant Annex to the Form for Agreement or Non-Agreement of Spectrum Assignment, subject to Sections 10.2.2 to 10.2.3(d). The Winning Bidders may jointly submit additional copies of the relevant Annex if there is more than one (1) assignment of Spectrum Lots that all Winning Bidders agree on. The Form for Agreement or Non-Agreement of Spectrum Assignment shall be delivered by hand or sent in electronic form by electronic mail, to:

**Info-communications Media Development Authority  
10 Pasir Panjang Road  
#03-01 Mapletree Business City  
Singapore 117438**

**Email: ILO@IMDA.gov.sg**

**For the attention of: Ms Aileen Chia**

no later than the Assignment Stage Phase 1 deadline, which will be 5.00 pm on the date specified in the Assignment Stage schedule. IMDA will determine whether the Assignment Stage will further proceed, and inform all Winning Bidders of the outcome at such time as shall be determined by IMDA.

- 10.2.5. A Form for Agreement or Non-Agreement of Spectrum Assignment which does not comply with Sections 10.2.2 to 10.2.3(d) shall be deemed not to be a duly submitted Form for Agreement or Non-Agreement of Spectrum Assignment.
- 10.2.6. After the Assignment Stage Phase 1 submission deadline, IMDA will review the Form for Agreement or Non-Agreement of Spectrum Assignment received:
  - (a) if only one (1) valid proposal is submitted, IMDA may, at its sole discretion, accept or reject the proposal;
  - (b) if more than one (1) valid proposal is submitted, IMDA may, at its sole discretion, accept one of the proposals or reject all the proposals;
  - (c) if IMDA does not accept any of the valid proposals under (a) or (b), or if IMDA does not receive any duly submitted Form for Agreement or Non-Agreement of Spectrum Assignment, or if the Winning Bidders submit a Form for Agreement or Non-Agreement of Spectrum Assignment indicating that there is no agreement on any assignment, IMDA will proceed to Phase 2 of the Assignment Stage for all Spectrum Lots.
- 10.2.7. IMDA may determine in its sole and absolute discretion whether to accept or reject a proposal under Section 10.2.6. IMDA is not required to provide a reason for its determination. IMDA may reject a proposal if, among other things, the placement of any unassigned Spectrum Lots under the proposal is not sufficiently conducive to long-term market competition.



- 10.2.8. If IMDA accepts a proposal under Section 10.2.6(a) or Section 10.2.6(b), the Winning Bidders will be assigned the relevant Spectrum Lots as applicable according to the agreed assignment specified in that Form for Agreement or Non-Agreement of Spectrum Assignment. The Assignment Stage will then close and the provisional award of Spectrum Rights will proceed according to Part IV of these Auction Rules.

### **10.3. Phase 2: Sealed Bid Auction**

- 10.3.1. Phase 2, if required, will consist of a single-round sealed-bid auction.
- 10.3.2. IMDA shall have sole and absolute discretion to identify for each Winning Bidder a list of Assignment Bid Options using an Assignment Bid Form. In identifying the Assignment Bid Options, IMDA will take into consideration factors such as the minimisation of disruption to existing services. Each Assignment Bid Option shall:
- (a) prioritise the minimisation of disruption to existing 3G services;
  - (b) preferably, but not necessarily, be a contiguous frequency assignment;
  - (c) consist of exactly the same number of Spectrum Lots that the Winning Bidder was provisionally awarded in the Spectrum Auction (including the FROR Lots); and
  - (d) be compatible with frequency assignments for any unassigned Spectrum Lots that IMDA deems acceptable.

For avoidance of doubt, the Assignment Bid Options may be provided to Winning Bidders before the Assignment Stage Phase 2.

- 10.3.3. Winning Bidders may (but shall not be obliged to) propose alternative Assignment Bid Options (in addition to those identified by IMDA pursuant to Section 10.3.2 above) for IMDA's consideration. In determining whether or not to accept and include such alternatives to the updated Assignment Bid Form referred to in Section 10.3.4 below, IMDA shall take into consideration the factors mentioned in Section 10.3.2 above.

- 10.3.4. IMDA will update the Assignment Bid Form to include any accepted alternative Assignment Bid Options received pursuant to Section 10.3.3 above (in addition to the original Assignment Bid Options identified by IMDA pursuant to Section 10.3.2 above). IMDA will also inform each Winning Bidder of the date and time by which each Winning Bidder must submit its Assignment Bid Form in accordance with the Assignment Stage schedule.
- 10.3.5. A **Valid Assignment Bid** comprises a clear indication, on an Assignment Bid Form as prescribed by IMDA, of a bid for one or more Assignment Bid Options, representing the price that the Winning Bidder is willing to pay for that frequency assignment. A Valid Assignment Bid must be in increments of whole Singapore dollars. Each Winning Bidder must make all its Valid Assignment Bids on a single Assignment Bid Form. In respect of any Assignment Bid Option where the Winning Bidder does not specify any price, or does not make a Valid Assignment Bid, IMDA shall deem that the Winning Bidder has placed a Valid Assignment Bid for that Assignment Bid Option at the amount of S\$0.
- 10.3.6. Under Phase 2 of the Assignment Stage, a Winning Bidder must submit its Assignment Bid Form, delivered by hand or sent in electronic form by electronic mail to:

**Info-communications Media Development Authority  
10 Pasir Panjang Road  
#03-01 Mapletree Business City  
Singapore 117438**

**Email: ILO@IMDA.gov.sg**

**For the attention of: Ms Aileen Chia**

by the Assignment Stage Phase 2 deadline, which will be 5.00 pm on the date specified in the Assignment Stage schedule.

- 10.3.7. A Winning Bidder that fails to submit a duly completed Assignment Bid Form by the Assignment Stage Phase 2 deadline will be deemed to have submitted an Assignment Bid at the amount of S\$0 for all of its Assignment Bid Options.
- 10.3.8. Provided that disruption to existing 3G services can be minimised, IMDA will consider the following non-exhaustive considerations in its determination of the Winning Assignment Bids:
- (a) the aggregate value of all feasible combinations of Valid Assignment Bids, taking exactly one bid from each Winning Bidder;

- (b) the combination of Valid Assignment Bids that yields the highest total value, amongst the feasible combinations; and
- (c) where two or more feasible combinations of Valid Assignment Bids yield the same highest total value, IMDA has absolute discretion to select the final assignment from amongst these combinations

The Valid Assignment Bids identified by IMDA through this Section 10.3.8 will be the Winning Assignment Bids.

- 10.3.9. Following IMDA's determination of the Winning Assignment Bids pursuant to Section 10.3.8 above, each Winning Bidder shall pay an amount equal to the amount associated with its Winning Assignment Bid. Each Winning Bidder shall be assigned the 2.1 GHz Spectrum Lots according to the results of the Assignment Stage. IMDA will inform all Winning Bidders of the final assignment of spectrum frequencies and any payment amounts due for their Winning Assignment Bid(s) at such time as determined by IMDA after the Assignment Stage Phase 2 deadline. The Assignment Stage of the Spectrum Auction shall then close<sup>2</sup>. After the close of the Assignment Stage of the Spectrum Auction, the provisional award of Spectrum Rights will proceed according to Part IV of these Auction Rules.

#### **10.4. Exceptional Circumstances**

- 10.4.1. The Assignment Stage of the Spectrum Auction will continue until it closes in accordance with Section 10.2.8 or Section 10.3.9.
- 10.4.2. If IMDA at any time considers it necessary to delay, cancel, suspend, abandon and/or restart the Assignment Stage of the Spectrum Auction due to any circumstance, IMDA will notify all Winning Bidders of its decision, together with such other details to the Winning Bidders as IMDA may consider appropriate.

<sup>2</sup> Such close of the Assignment Stage of the Spectrum Auction may be publicly announced on IMDA's website or notified to the Winning Bidders in such manner as IMDA considers fit.

- 10.4.3. If IMDA decides to suspend the Assignment Stage of the Spectrum Auction, IMDA will notify each Winning Bidder that the Assignment Stage of the Spectrum Auction is suspended, either for a fixed period or indefinitely until further notice by IMDA. During the period for which the Assignment Stage of the Spectrum Auction is suspended, IMDA may, in its sole and absolute discretion, decide whether to resume, cancel, abandon and/or restart the Assignment Stage of the Spectrum Auction. Upon reaching such decision, IMDA will notify each Bidder of its decision, together with such details as IMDA may consider relevant.
- 10.4.4. In a case where IMDA decides to abandon the Assignment Stage of the Spectrum Auction at Phase 1 or Phase 2, IMDA will notify the Winning Bidders of its decision and whether the Assignment Stage of the Spectrum Auction will be restarted at Phase 1 or Phase 2.
- 10.4.5. Without prejudice to the generality of Section 16.1(c) and Sections 10.4.1 to 10.4.4, in the event that:
- (a) one or more Winning Bidders are excluded from the Assignment Stage of the Spectrum Auction and IMDA considers that the conduct of the excluded Winning Bidder(s) or the fact of their exclusion may have a material effect on the assignment of the Spectrum Lot(s) in respect of which a 2.1 GHz Spectrum Right (2022) and/or the amount payable for a 2.1 GHz Spectrum Right (2022); or
  - (b) IMDA becomes aware that an error has occurred in registering the value of a Valid Assignment Bid submitted by a Winning Bidder and IMDA considers that the error is such that, if the Assignment Stage continues, the error may have a material effect on the assignment of the Spectrum Lot(s) in respect of which a 2.1 GHz Spectrum Right (2022), and/or the amount payable for a 2.1 GHz Spectrum Right (2022),
- IMDA may, having consulted all Winning Bidders (other than, in the event of Section 10.4.5(a), the excluded Winning Bidder(s)),
- (i) continue with the Assignment Stage of the Spectrum Auction;
  - (ii) restart the Assignment Stage of the Spectrum Auction at Phase 1 or Phase 2; or
  - (iii) suspend the Assignment Stage of the Spectrum Auction until such time and date as IMDA may determine.

- 10.4.6. If IMDA decides to restart the Assignment Stage of the Spectrum Auction at Phase 1 or Phase 2, IMDA will notify all Winning Bidders (except any excluded Bidder(s)) that the Assignment Stage will be restarted, and the Phase at which the Assignment Stage of the Spectrum Auction will be restarted. IMDA will also provide details relating to the restart as it may consider relevant, such as the time and date at which the Assignment Stage of the Spectrum Auction will be restarted.
- 10.4.7. In the event that IMDA decides to restart the Assignment Stage of the Spectrum Auction:
- (a) any excluded Winning Bidder(s) will not be entitled to participate in the Assignment Stage of the Spectrum Auction or any restart of the Assignment Stage of the Spectrum Auction unless permitted by IMDA; and
  - (b) if IMDA decides to restart at Phase 1 of the Assignment Stage, any prior activity for Phase 1 and Phase 2 of the Assignment Stage shall be deemed not to have taken place.
- 10.4.8. Any restart of the Assignment Stage of the Spectrum Auction will not affect any Forfeiture determined by IMDA pursuant to Section 11.2.1.

## **Section 11 EXCLUSION/FORFEITURE OF GUARANTEED AMOUNT**

### **11.1. Exclusion**

- 11.1.1. Notwithstanding any other provision in these Auction Rules, if at any time IMDA determines in its sole and absolute discretion that a Bidder has failed to comply with one or more provisions of these Auction Rules and/or the procedures relating to the Spectrum Auction (including without limitation the bidding procedure set out in Section 6 above) and/or otherwise acted in a manner which IMDA considers to be prejudicial to the Spectrum Auction, IMDA may at any time by notice in writing, exclude that Bidder from the Spectrum Auction. Where IMDA has notified a Bidder that it has been excluded from the Spectrum Auction, that Bidder shall not participate, or participate further, in the Spectrum Auction or any restart of the Spectrum Auction.
- 11.1.2. Without limitation to the generality of Section 11.1.1, IMDA may exclude a Bidder from the Spectrum Auction at any time by giving notice to such Bidder pursuant to Section 14 and/or Section 15.

- 11.1.3. If a Bidder is excluded from the Spectrum Auction, any Bid submitted by that Bidder for the Quantity Stage or Assignment Stage of the Spectrum Auction will be deemed invalid. IMDA may restart the Quantity Stage or Assignment Stage of the Spectrum Auction as appropriate in accordance with these Auction Rules.

## **11.2. Forfeiture of Guaranteed Amount**

- 11.2.1. IMDA may determine, in its sole and absolute discretion, that a Bidder shall forfeit all or part of that Bidder's Guaranteed Amount under any or all of its Bank Guarantees in any of the circumstances specified in Section 11.1.1 and Section 11.2.2 by serving a Forfeiture Notice on that Bidder. A Forfeiture Notice will be given, and deemed received, in accordance with Section 18.2. Forfeitures will be settled in accordance with Section 13.
- 11.2.2. IMDA may serve a Forfeiture Notice on a Bidder in each of the following circumstances:
- (a) if that Bidder acts in a manner that disrupts the Spectrum Auction;
  - (b) if that Bidder is excluded from the Spectrum Auction pursuant to Section 11.1;
  - (c) if that Bidder is a Winning Bidder and fails to pay the entire amount payable pursuant to Section 13.3 on or prior to the Payment Date;
  - (d) if that Bidder engages in any of the prohibited activities referred to in Section 14 and/or Section 15;
  - (e) if that Bidder does not comply with any of its obligations under Section 19; and/or
  - (f) if that Bidder does not comply with any of its obligations under these Auction Rules.
- 11.2.3. The amount which shall be forfeited by a Bidder in any of the circumstances specified in Section 11.2.2 shall be determined by IMDA in its sole and absolute discretion. IMDA shall be absolutely entitled to draw down and retain all Forfeiture Amounts secured by the Bidder's Bank Guarantees provided to IMDA, provided that the aggregate of the amounts forfeited by a Bidder shall not exceed the Bidder's Guaranteed Amount under all of its Bank Guarantees at the time the Forfeiture is determined.

## **PART IV PROVISIONAL AWARD AND GRANT OF NEW SPECTRUM RIGHTS**

### **Section 12 PROVISIONAL AWARDS OF SPECTRUM RIGHTS**

**12.1.** Subject to the provisions of these Auction Rules (including but not limited to Section 1.2 and Section 13), a Winning Bidder will be provisionally awarded the relevant Spectrum Rights in respect of the Spectrum Lot(s) assigned to it following the close of the Assignment Stage of the Spectrum Auction, at such time as is determined by IMDA.

**12.2.** IMDA may (but shall not be obliged to) offer any Spectrum Lot(s) for which a 2.1 GHz Spectrum Right (2022):

(a) has **not** been provisionally awarded in accordance with Section 12.1; and/or

(b) has been revoked pursuant to Section 13.7

in another auction or allocate such Spectrum Lot(s) in such other manner as IMDA deems fit and appropriate, including but not limited to precluding:

(i) in scenario (a) above, a Bidder who has withdrawn its Winning Bid pursuant to Sections 9.6, 9.7 and/or 9.8 above; and

(ii) in scenario (b) above, a Defaulting Bidder,

from participating in any such future auction or allocation.

**12.3.** The following sums shall be payable by a Winning Bidder in accordance with Section 13, for provisionally awarded Spectrum Rights, within fifteen (15) Business Days of the Final Provisional Award Notice following the close of the Assignment Stage of the Spectrum Auction:

(a) the Spectrum Lot Fee in respect of each Spectrum Lot provisionally awarded to the Winning Bidder;

(b) the amount associated with its Winning Assignment Bid for Spectrum Lots, if any;

(c) the applicable Application and Processing Fee in respect of each 2.1 GHz Spectrum Lot for which it has been provisionally awarded Spectrum Rights;

(d) the Annual Frequency Management Fee in respect of the Spectrum Rights;

(e) any Forfeiture Amounts; and

(f) any applicable GST.

**12.4.** After the close of the Assignment Stage of the Spectrum Auction and at such date as is determined by IMDA, IMDA will issue to each Winning Bidder provisionally awarded Spectrum Rights a Final Provisional Award Notice notifying that Winning Bidder of:

- (a) the specific spectrum frequency assignment of the 2.1 GHz Spectrum Right (2022), 2.1 GHz (FROR) Spectrum Right (2022) and/or Joint 2.1 GHz Spectrum Right (2022) (as the case may be) which that Winning Bidder is provisionally awarded;
- (b) the total sum of all payable Spectrum Lot Fees payable in respect of all Spectrum Lots included in the Spectrum Rights which that Winning Bidder is provisionally awarded;
- (c) any applicable Winning Assignment Bid;
- (d) the Annual Frequency Management Fee in respect of the Spectrum Lot(s) which that Winning Bidder is provisionally awarded;
- (e) the Application and Processing Fee payable in respect of each Spectrum Lot for which that Winning Bidder has been provisionally awarded a Spectrum Right respectively;
- (f) any applicable GST;
- (g) any Forfeiture Amount; and
- (h) details of the IMDA Bank Account.

**12.5.** IMDA will, at such time as determined by IMDA after the close of the Assignment Stage of the Spectrum Auction (or such later date as is determined by IMDA), publicly announce:

- (a) the identity of each Winning Bidder entitled to a provisional award of Spectrum Rights; and
- (b) the total sum of all Spectrum Lot Fees and Winning Assignment Bid(s) (if any) payable by each Winning Bidder in respect of all Spectrum Rights provisionally awarded to that Winning Bidder.

**Section 13 SETTLEMENT OF SPECTRUM RIGHT PAYMENT AND FORFEITURES (IF ANY) AND GRANT OF SPECTRUM RIGHTS**

**13.1.** If at the close of the Assignment Stage of the Spectrum Auction, a Bidder is not entitled to a provisional award of a Spectrum Right and is not subject to any Forfeitures, IMDA will return that Bidder's Bank Guarantee to that Bidder after the issuance of the Final Provisional Award Notice at such date as may be determined by IMDA.



- 13.2.** Without prejudice to the generality of IMDA's rights pursuant to Section 11 above and if upon the close of the Assignment Stage of the Spectrum Auction, a Bidder is not entitled to a provisional award of a Spectrum Right, but is subject to one or more Forfeitures, the Forfeiture Amount payable by that Bidder shall be transferred by that Bidder within five (5) Business Days of the close of the Assignment Stage of the Spectrum Auction to the IMDA Bank Account. If the aggregate Forfeiture Amount are received in the IMDA Bank Account within five (5) Business Days of the close of the Assignment Stage of the Spectrum Auction, that Bidder's Bank Guarantee will be returned to that Bidder within twenty (20) Business Days of the issuance of the Final Provisional Award Notice. If the Forfeiture Amounts are not received in the IMDA Bank Account within five (5) Business Days of the close of the Assignment Stage of the Spectrum Auction, IMDA shall be absolutely entitled to draw down and retain all Forfeiture Amounts secured by the Bidder's Bank Guarantee provided to IMDA.
- 13.3.** If, upon the close of the Assignment Stage of the Spectrum Auction, a Winning Bidder is issued a provisional award of one (1) or more Spectrum Rights in respect of one (1) or more Spectrum Lots, the Winning Bidder shall, within fifteen (15) Business Days from the date of issuance of the Provisional Award Notice following the close of the Assignment Stage of the Spectrum Auction (**Payment Date**), transfer to the IMDA Bank Account:
- (a) the total sum of all payable Spectrum Lot Fees and the amount associated with any Winning Assignment Bid(s) in respect of all Spectrum Lot(s) included in the Spectrum Right(s) to which that Winning Bidder is entitled to a provisional award;
  - (b) the Application and Processing Fee for each Spectrum Lot for which it is entitled to a provisional award of a Spectrum Right;
  - (c) the Annual Frequency Management Fee in respect of these Spectrum Rights;
  - (d) any applicable Winning Assignment Bid;
  - (e) any Forfeiture Amount (to the extent that any such Forfeiture Amount has not been received by IMDA); and
  - (f) any applicable GST.

- 13.4.** If the entire amount payable by a Winning Bidder pursuant to Section 13.3 is received in the IMDA Bank Account on or prior to the Payment Date, IMDA will:
- (a) grant the Spectrum Rights in respect of the 2.1 GHz Spectrum Lot(s) provisionally awarded to that Winning Bidder; and
  - (b) return that Winning Bidder's Bank Guarantee(s) to that Winning Bidder within five (5) Business Days of the Payment Date.
- 13.5.** If the entire amount payable by a Winning Bidder pursuant to Section 13.3 is not received in the IMDA Bank Account on or prior to the Payment Date that Winning Bidder will not be granted the Spectrum Rights) and IMDA may in its discretion determine that the Winning Bidder is subject to a further Forfeiture in accordance with Section 11.2.2 and IMDA shall be entitled to draw upon that Winning Bidder's Bank Guarantee(s) for the aggregate amount of the Forfeitures and the amount of any further Forfeitures payable pursuant to this Section 13.5.
- 13.6.** A Spectrum Right granted in accordance with Section 13.4 shall be effective as of the Effective Date in accordance with the conditions of such Spectrum Rights, as IMDA may determine. If the procedure for award of the Spectrum Rights has not been completed by that date, the relevant Spectrum Rights shall become effective on such later date as IMDA may determine.
- 13.7.** In the event that IMDA does not receive by the Payment Date the entire amount in Section 13.3 payable by a Winning Bidder which has been provisionally awarded Spectrum Rights (a **Defaulting Bidder**), IMDA will revoke such provisional award to that Defaulting Bidder and no Spectrum Rights will be granted to the Defaulting Bidder. For the avoidance of doubt, in the event that there is a Defaulting Bidder, IMDA shall be under no obligation to identify and/or award any of the Spectrum Lots provisionally awarded to the Defaulting Bidder (whether on a provisional basis or otherwise) to any other Bidder.
- 13.8.** Any GST payable on any sum payable to IMDA pursuant to these Auction Rules, or a 2.1 GHz Spectrum Right (2022), shall be payable by the relevant Winning Bidder.
- 13.9.** No 2.1 GHz Spectrum Right (2022) will be granted to an entity which does not comply with Section 1.3, in accordance with the information provided in that Bidder's Initial Offer Document and any clarification or additional information and documents submitted by that Bidder.

## **PART V PROHIBITED ACTIVITIES**

### **Section 14 COLLUSION, DISCLOSURE OF INFORMATION, MISLEADING OR FALSE INFORMATION, AND CONNECTED PERSONS**

#### **14.1. Before and during the Spectrum Auction, no Bidder:**

- (a) may disclose any Confidential Information, whether directly or indirectly, to any person other than IMDA or the persons named in the Disclosure List submitted by that Bidder, provided that no Confidential Information may be disclosed by a Bidder to a person named in such Disclosure List if IMDA has notified that Bidder that disclosure is not permitted to such person because that person is also named in the Disclosure List submitted by any other Bidder or otherwise; or
- (b) shall collude or enter into any arrangement for purposes of colluding with any other Bidder(s) in an attempt to influence the proceedings or results of the Spectrum Auction or any allocation of the 2.1 GHz Spectrum Lots.

Each Bidder will remain bound by the provisions of this Section 14.1 until the grant of the Spectrum Rights) notwithstanding that any such Bidder may be deemed to have retired from the Spectrum Auction or may be excluded from the Spectrum Auction in accordance with the provisions of these Auction Rules.

- 14.2.** If IMDA determines that any Bidder has disclosed any Confidential Information in breach of the obligation pursuant to Section 14.1 or has colluded or is colluding with any other Bidder(s), IMDA may by notice in writing exclude that Bidder from the Spectrum Auction. Where IMDA has notified a Bidder that it has been excluded from the Spectrum Auction, that Bidder shall not participate, or participate further, in the Spectrum Auction or any restart of the same.
- 14.3.** If IMDA only becomes aware of any breach of Section 14.1 after the grant of the Spectrum Rights or after the close of the Assignment Stage of the Spectrum Auction, and any Bidder that IMDA considers to have been involved in such breach was provisionally awarded or granted any Spectrum Rights, IMDA may, in its sole and absolute discretion, revoke the provisional award or grant of such Spectrum Rights
- 14.4.** Every Bidder shall submit a Pre-Auction Submission and any document attached thereto, or any document submitted in response to a request for clarification from IMDA shall contain information that is true, accurate and complete.

- 14.5.** Any person who is an employee of a Bidder or a member of a Bidder's Group and who is also an employee of one or more other Bidders or other Bidders' Group(s) (for the purpose of this Section 14, a **Connected Person**) will be excluded from participating, directly or indirectly, in the Spectrum Auction. Each Bidder is obliged to ensure that:
- (a) any Connected Person is not in any way involved in the Bidder's preparation for, or participation in, the Spectrum Auction);
  - (b) no Confidential Information is disclosed to or otherwise enters the possession of any Connected Person; and
  - (c) no Connected Person is an Authorised Representative.
- 14.6.** For the purpose of this Section 14, **Bidder** shall include a person which has submitted a Pre-Auction Submission in accordance with Section 2.1.1.

## **Section 15 ANTI-COMPETITIVE ACTIVITY**

- 15.1.** No Bidder shall enter into, or permit to subsist, any arrangement whatsoever, (whether oral or in writing, formal or informal) with any equipment provider or software supplier or other person which places or may place any restriction on the quantities of equipment or software or other goods or services which the provider, supplier or other person supplies or offers to supply to another Bidder or on the price or any other term or condition upon which such equipment or software or other goods or services is supplied or offered to be supplied to any other Bidder in connection with planning, building or operating a network to be operated in relation to any 2.1 GHz Spectrum Lot(s).
- 15.2.** By submitting a Pre-Auction Submission, each Bidder warrants and represents that it has not, and undertakes that it shall not, communicate (verbally or otherwise) or have any arrangement or arrive at any understanding with any of the other Bidders or with any employee of an association of which it or any of the other Bidders is a member concerning the Auction Rules or any aspect of the Spectrum Auction and, without limitation, further warrants, represents and undertakes that it has not and shall not engage in:
- (a) any discussion or correspondence with such entities concerning any of its Bids;
  - (b) any collusive bidding with any of the other Bidders; and

- (c) any other conduct or have any other arrangement or arrive at any other understanding with any of the other Bidders, which in any way reduced, or could have the effect of reducing, the competitiveness of any of the Bids.

For the purpose of this Section 15, **Bidder** shall include a person which has submitted a Pre-Auction Submission in accordance with Section 2.1.1.

## **PART VI      GENERAL**

### **Section 16      IMDA'S DISCRETIONARY POWERS AND DISCLAIMERS**

**16.1.** Notwithstanding any other provision in these Auction Rules, IMDA may at any time in its sole and absolute discretion:

- (a) change any of the times or dates and/or shorten or extend any of the time periods referred to in or determined pursuant to these Auction Rules (including the date on which any of the Spectrum Rights is to become effective), provided that IMDA will give all Bidders at least twenty-four (24) hours' notice of any such change, save in emergency situations where such changes may be made without notice;
- (b) change the location of the Auction provided that IMDA will announce to Bidders the new location;
- (c) delay, cancel, suspend, abandon and/or restart the Quantity or Assignment Stage of the Spectrum Auction, a Round of the Spectrum Auction, a Phase of the Assignment Stage of the Spectrum Auction, and/or the Spectrum Auction;
- (d) reject any of the Pre-Auction Submission documents, including any of the Initial Offer Documents, for the Spectrum Auction;
- (e) clarify any issue relating to the Auction Rules or Spectrum Auction, requirements or documents; and/or
- (f) amend, supplement and/or vary any element of these Auction Rules at any time, whether during the Spectrum Auction process or otherwise, including the issuance of additional or supplementary documentation, or by making additional arrangements, provided that IMDA will give all Bidders at least twenty-four (24) hours' notice of any such amendment, supplement and/or variation.

IMDA may, but shall not be obliged to, announce and/or make available on its website or by such other means as it considers appropriate, such further information and/or details on the Quantity or Assignment Stage of the Spectrum Auction, and/or any other related matter which IMDA considers to be relevant to the Bidders and/or any other party.

**16.2.** Any additional or supplementary documentation issued by IMDA during the Spectrum Auction shall be deemed to be part of the Auction Rules and shall supersede any part of the Auction Rules to the extent as indicated in the additional or supplementary document.

- 16.3.** In the event of any inconsistency, the Auction Rules (including any revisions and such additional or supplementary documents as may be issued by IMDA) shall supersede all previous communications between IMDA and the Applicants, Prospective Bidders or Bidders. The Applicants, Prospective Bidders and Bidders are also advised not to rely on communications (whether informal or formal) with IMDA in respect of the Spectrum Auction, unless and to the extent that such communications are made in accordance with the Auction Rules.
- 16.4.** At any time prior to the Quantity Stage of the Spectrum Auction:
- (a) IMDA may (but shall not be obliged to) initiate, discontinue or terminate discussions with the Applicants, Prospective Bidders or Bidders and/or require the Applicants, Prospective Bidders or Bidders to attend clarification meetings;
  - (b) IMDA may (but shall not be obliged to) give Applicants, Prospective Bidders or Bidders the opportunity to submit new or amended proposals on the basis of such discussions and/or clarifications as well as any revised requirements issued by IMDA, in accordance with such deadline(s) as stipulated by IMDA; and
  - (c) IMDA may at its sole and absolute discretion disqualify any Applicant, Prospective Bidder or Bidder or specific member of the Consortium from further participation in the Spectrum Auction if misleading, frivolous or otherwise unsatisfactory inputs were communicated to IMDA and/or included in their applications, proposals, responses or submissions.
- 16.5.** IMDA will have sole and absolute discretion in making any determination pursuant to these Auction Rules and may take into account all or any facts, circumstances or matters which it considers to be relevant.
- 16.6.** For the avoidance of doubt, IMDA is not bound by any determination made pursuant to these Auction Rules to make a similar determination in any future reallocation exercise over any Spectrum Lots that are the subject of the Spectrum Auction. All determinations by IMDA will be based on its policy objectives and on the facts at that point in time.

- 16.7.** Nothing in these Auction Rules shall be regarded as a commitment or representation on the part of IMDA to enter into any form of contractual arrangement with any person. Nothing in these Auction Rules shall create any contract or other relationship under which IMDA is legally obliged to conduct the Spectrum Auction in any manner or at all, including any obligation to grant any spectrum to any person. There shall be no procedural or substantive limitation upon the manner in which IMDA may (in its absolute discretion) conduct the Spectrum Auction. To the extent permitted by law, IMDA does not make any warranty, guarantee or representation about the way in which it may conduct the Spectrum Auction, including but not limited to its assessments and/or determinations under these Auction Rules.
- 16.8.** Nothing in these Auction Rules is, or shall be taken to be, a representation of fact or a promise as to the future. To the extent that the draft documents contain any summary or description of documents or contractual arrangements, such summary or description cannot be, and is not intended to be, comprehensive, nor is it intended to be a substitute for the underlying documentation. Further, the Applicants, Prospective Bidders and Bidders shall not claim or assert any form of legitimate expectations against IMDA, whether procedural or substantive in nature, in respect of any action that IMDA may or may not take in the exercise of its powers or discretion.
- 16.9.** Under no circumstances shall IMDA or its advisors incur any liability arising out of or in connection with the issue of the Auction Rules, the process by which IMDA examines or evaluates any applications, proposals, responses or submissions, or any changes to the Auction Rules or Spectrum Auction process.
- 16.10.** IMDA shall not be responsible or liable to any Applicant, Prospective Bidder or Bidder for any errors or omissions, loss or damage howsoever caused whether direct or indirect, or for any decisions, actions or consequences arising from the Applicants', Prospective Bidders' or Bidders' applications, proposals, responses or submissions vis-à-vis the Auction Rules and/or the Spectrum Auction.
- 16.11.** Each Prospective Bidder agrees and acknowledges that by submitting an Initial Offer Document, and/or Pre-Auction Submission in accordance with Section 2.1.1, and/or by participating in the Spectrum Auction in any way:
- (a) it is submitting to these Auction Rules because it considers that this represents a valuable commercial opportunity for the Prospective Bidder, as the case may be, and it has obtained independent legal advice as to the effect of the provisions of these Auction Rules;



- (b) it shall release IMDA from all claims in respect of any costs, expenses, losses or damages incurred or suffered as a result of or in connection with the Spectrum Auction, the rejection of, failure to evaluate or failure to accept any Bids made by a Bidder, and any failure to comply with the Auction Rules;
- (c) IMDA's proceeding with the Spectrum Auction is strictly on the basis of, and in reliance upon, the warranties, representations, agreements, acknowledgements and releases set out in these Auction Rules; and
- (d) it shall indemnify IMDA in respect of all claims, losses, damages, liabilities, costs and expenses of any kind suffered or incurred as a result of or in connection with any breach of any acknowledgement or release given under this Section,

where **claims** in this Section shall refer to any and all claims, whether at law or in equity, including without limitation: (i) by statute; (ii) in tort for negligence or otherwise, including without limitation negligent misrepresentation; or (iii) for restitution.

## **PART VII MISCELLANEOUS**

### **Section 17 QUERIES RELATING TO AUCTION RULES**

- 17.1.** Any person participating in the Spectrum Auction must take all necessary steps to carefully examine and acquaint itself with these Auction Rules. The submission of a Pre-Auction Submission in accordance with Section 2.1.1 shall be deemed to constitute such person's acknowledgement of, and agreement to abide by, these Auction Rules.

### **Section 18 COMMUNICATIONS AND NOTIFICATIONS**

- 18.1.** Unless otherwise specified, any notification or other communication to be given to IMDA by a Bidder must be in writing and signed by or on behalf of the person giving it and must be delivered by hand or sent in electronic form by electronic mail to:

**Info-communications Media Development Authority  
10 Pasir Panjang Road  
#03-01 Mapletree Business City  
Singapore 117438**

**Email: ILO@IMDA.gov.sg**

**For the attention of: Ms Aileen Chia**

Any such notification or other communication:

- (a) if delivered by hand, will be deemed received by IMDA when delivered; and/or
- (b) if sent by electronic mail, will be deemed received by IMDA at the time of receipt, according to the time stamp determined by the IMDA email server,

provided that where delivery occurs after 6.00 pm on a Business Day or on a day which is not a Business Day, receipt will be deemed to occur at 9.00 am on the following Business Day.

- 18.2.** Unless otherwise specified by IMDA, any notification or other communication to be given by IMDA to a Bidder will be in writing and delivered by hand to the address, or sent by electronic email to the email address, given to IMDA in the Bidder's Pre-Auction Submission.

Any notification or other communication:

- (a) if delivered by hand, will be deemed received at the time of delivery; and/or
- (b) if sent by electronic mail, will be deemed received upon the successful transmission of the electronic mail provided that no notice of electronic mail delivery failure is received by the sender as the case may be,

provided that where delivery occurs after 6.00 pm on a Business Day or on a day which is not a Business Day, receipt will be deemed to occur at 9.00 am on the following Business Day.

- 18.3.** During the Quantity Stage and Assignment Stage of the Spectrum Auction, all notifications and other communications made pursuant to Part III of these Auction Rules between IMDA and any Bidder must be made in accordance with the protocols as may be contained in any detailed information that IMDA may disseminate to Bidders at the Information Session and/or Training Session, provided that IMDA may at any time send any notification or other communication by electronic mail in accordance with Section 18.2.

- 18.4.** For the purpose of this Section 18, **Bidder** shall include a Prospective Bidder.

## **Section 19 DUTY TO INFORM IMDA**

- 19.1.** If at any time during the Spectrum Auction, a Bidder knows or ought reasonably to have known that IMDA has made an error with regard to a Bid or other information communicated to one or more Bidders, the Bidder shall inform IMDA in accordance with Section 18.1 (or, where applicable, Section 18.3) of the error at the earliest opportunity.
- 19.2.** If at any time a Bidder becomes aware of any change in the ownership and/or control structure of the Bidder (direct or indirect) or of any shareholder of the Bidder, or any other material information submitted in the Pre-Auction Submission or any documents attached thereto, or any document submitted in response to a request for clarification from IMDA, the Bidder shall immediately, and in any case no later than 24 hours from becoming aware of such change, notify IMDA of such change in writing in accordance with Sections 18.1 or 18.3. Unless IMDA's prior written approval has been obtained for such change, IMDA shall have the right to determine, in its sole and absolute discretion, that such Bidder is not eligible to be granted a Spectrum Right as a result of such change in ownership and/or control structure. In such event:
- (a) IMDA may upon notification to that Bidder exclude that Bidder from the Spectrum Auction and that Bidder may not participate, or participate further, in the Spectrum Auction or any restart of the same, or
  - (b) if the close of the Assignment Stage of the Spectrum Auction has taken place and the relevant Bidder is entitled to a provisional award of a Spectrum Right, IMDA may upon notification to that Bidder revoke the Spectrum Lot(s) included in the respective Spectrum Right provisionally awarded to that Bidder, determine that the Spectrum Lot(s) included in the respective Spectrum Right provisionally awarded to that Bidder will not be provisionally awarded to that Bidder and that no Spectrum Right will be granted to that Bidder.
- 19.3.** Any change in ownership and/or control as referred to in Section 19.2 shall be deemed to take place on: (i) the date on which any document effecting or purporting to effect the transaction giving rise to that change in ownership and/or control; or (ii) the date on which that transaction is completed, whichever is earlier.
- 19.4.** For the purpose of this Section 19, ***Bidder*** shall include a Prospective Bidder.

## **Section 20 GOVERNING LAW AND JURISDICTION**

- 20.1.** These Auction Rules and the relationship between IMDA and each of the Bidders shall be governed by, and interpreted in accordance with, Singapore law.

- 20.2.** The courts of Singapore are to have exclusive jurisdiction to settle any disputes which may arise out of or in connection with the creation, validity, effect, interpretation or performance of, or the legal relationships established by, these Auction Rules or otherwise arising in connection with these Auction Rules. The submission of an Initial Offer Document shall be deemed to constitute each of such Bidder's irrevocable submission to the jurisdiction of the courts of Singapore.
- 20.3.** For the purpose of this Section 20, ***Bidder*** shall include a Prospective Bidder.

## **PART VIII LIST OF APPENDICES**

Appendix 1: Pre-Auction Submission

Appendix 2: Initial Offer Document

Appendix 3: Bank Guarantee and Declaration of Submission of Bank Guarantee

## PART IX DEFINITIONS AND INTERPRETATION

The following rules of interpretation shall apply to these Auction Rules, unless otherwise specified or the context requires otherwise:

- (a) a reference to a Section, is to a section in these Auction Rules;
- (b) a reference to a statute, ordinance or by-law includes regulations and other instructions under it and consolidations, amendments, re-enactments or replacements of any of them;
- (c) different grammatical forms of the same word defined herein shall have the corresponding meaning;
- (d) words importing the singular only shall also include the plural and vice versa;
- (e) examples or words of inclusion, are illustrative only and do not limit the generality of the relevant subject;
- (f) a reference to "\$", "\$\$" or "dollar" is a reference to the Singapore Dollar; and
- (g) no Section in these Auction Rules will be construed adversely to a party solely on the ground that the party was responsible for the preparation of these Auction Rules or any Sections herein.

The following definitions shall apply in these Auction Rules, unless the context requires otherwise.

**2.1 GHz Spectrum Lot or Spectrum Lot** means a frequency bandwidth of 2 x 5 MHz as set out in Annex 1 which (a) is used for the provision of 5G SA telecommunication services and such other telecommunication services (as may be expressly approved by IMDA); and (b) in the case of a FROR Lot, used for the provision of 3G services by an Existing MNO currently providing nationwide 3G services.

**2.1 GHz Spectrum Right (2022)** means the right to use the frequencies specified in that 2.1 GHz Spectrum Right (2022) for the provision of 5G SA telecommunication services, in accordance with the relevant conditions. For the avoidance of doubt, a 2.1 GHz Spectrum Right (2022) includes a Joint 2.1 GHz Spectrum Right (2022).

**2.1 GHz (FROR) Spectrum Right (2022)** means the right to use the frequencies specified in that 2.1 GHz (FROR) Spectrum Right (2022) for the provision of 3G telecommunication services only, unless the grantee of such 2.1 GHz (FROR) Spectrum Right (2022) has fully shut down its 3G network and obtained IMDA's prior written approval to utilise the frequencies specified in that 2.1 GHz (FROR) Spectrum Right (2022) for the provision of any other telecommunication services.

**5G Spectrum Lot Fee** means:

- (a) the Reserve Price, if the Quantity Stage of the Spectrum Auction does not proceed in accordance with Section 2.7.1; or
- (b) the fee referred to in Section 9.10(a), if the Quantity Stage of the Spectrum Auction proceeds in accordance with Section 2.7.1.

**Annual Frequency Management Fee** means the annual fee for use of radio frequencies for Public Mobile Radio (as stipulated in the Telecommunications (Radio-communication) Regulations).

**Applicant** means an Existing MNO submitting a Pre-Auction Submission as its application to be pre-qualified to participate as a Bidder in the Spectrum Auction.

**Application and Processing Fee** means the application and processing fee for use of radio frequencies as stipulated in the Telecommunications (Radio-communication) Regulations excluding the applicable GST.

**Assignment Bid** means a Bid for an Assignment Bid Option indicated by a Winning Bidder on an Assignment Bid Form made in Phase 2 of the Assignment Stage of the Spectrum Auction.

**Assignment Bid Form** means the document upon which each Winning Bidder shall indicate its Valid Assignment Bids in accordance with Section 10.

**Assignment Bid Option** means a specific assignment of frequencies within the 2.1 GHz band for which a Winning Bidder may place an Assignment Bid.

**Assignment Stage** has the meaning given in Section 10.

**Assignment Stage Phase 1 deadline** has the meaning given in Section 10.2.4.

**Assignment Stage Phase 2 deadline** has the meaning given in Section 10.3.6.

**Auction Rules** means these rules published by IMDA relating to the procedures by which IMDA may allocate the 2.1 GHz Spectrum Lots and/or grant 2.1 GHz Spectrum Rights (2022) or 2.1 GHz (FROR) Spectrum Rights (2022) in respect of the respective 2.1 GHz Spectrum Lots as amended or varied by IMDA from time to time in accordance with these rules.

**Auction Service Provider** means the service provider engaged by IMDA to conduct the Quantity Stage of the Spectrum Auction.

**Auction System** means the system provided by the IMDA's Auction Service Provider for the Quantity Stage of the Spectrum Auction referred to in Section 3.3.

**Auction Start Date** means the date on which the Quantity Stage of the Spectrum Auction will start, which IMDA will notify Bidders of under Section 5.1;

**Authorised Representative** means a person whom a Bidder has authorised to act in the Spectrum Auction on its behalf, the particulars of whom have been submitted to IMDA in accordance with Section 2.4.1 or Section 3.5, as the case may be.

**Bank Guarantee** means an irrevocable, unconditional, on-demand performance bond in the form of a standby bank guarantee issued by a financial institution, licensed by the Monetary Authority of Singapore to provide the full scope of services falling within the definition of banking business in the Banking Act (Cap. 19) substantially in the form as set out in Appendix 3 to these Auction Rules (as the case may be) or with such amendments as may be approved in writing by IMDA.

**Bid** means a binding offer to buy spectrum. A Bid in the Quantity Stage of the Spectrum Auction consists of a Clock Bid and any Exit Bids, as described in Section 7.3. An Assignment Bid consists of an offer to make an additional payment in return for being assigned specific frequencies for the 2.1 GHz Spectrum Lots won in the Quantity Stage of the Spectrum Auction, as described in Section 10.3.5.

**Bidder**, unless otherwise specified in these Auction Rules, means any person or Consortium which:

- (a) for a singular person, is an entity which complies with Section 1.3, and for a Consortium, are each an entity which complies with Section 1.3;
- (b) has submitted an Initial Offer Document and Bank Guarantee(s) in accordance with Section 2.3.1;
- (c) has been notified that it is a registered Bidder pursuant to Section 2.3.4; and
- (d) has not been notified of its exclusion from the Spectrum Auction by IMDA.

For avoidance of doubt, a Consortium will be treated as a single Bidder in this Spectrum Auction and for the purposes of these Auction Rules.

**Bidder's Eligibility** has:

- (a) for Round 1: the meaning given in Section 5.2; and
- (b) for any subsequent Round: the meaning given in Section 7.3.3.

**Bid Form** means the form provided to the Bidder (including the input mask presented by an auction system) through which the Bidder will submit its Bids.

**Business Day** means a day excluding Saturdays, Sundays and Singapore public holidays.

**CFP** means the 5G Call for Proposal that IMDA issued and awarded in 2019 and 2020 respectively, for the deployment of two nationwide 5G SA networks using two 100 MHz lots of spectrum in the 3.5 GHz band.



**CFP Winner** refers to each of (1) Singtel and (2) the Joint-Venture Consortium formed by StarHub and M1, who were allocated 3.5 GHz spectrum for the provision of 5G and/or IMT-2020 telecommunication services pursuant to IMDA's 5G Call for Proposal in 2020.

**Clock Bid** has the meaning given in Section 7.3.1.

**Confidential Information** means any information whatsoever directly or indirectly relating to any proposed action or omission by a Bidder relating to the Spectrum Auction, any information pertaining to the results or the proceedings of the Spectrum Auction or any information, whether oral or in writing, which has not been made public by IMDA, which if made public or disclosed would be likely to have an effect on the amount which any Bidder proposes to bid, including without limitation information relating to a Bidder's business case, auction strategy and any amount a Bidder is willing to bid, but excluding any information which enters the public domain other than as a result of a breach by any Bidder of these Auction Rules. For the purposes of this definition, a reference to a Bidder will be deemed to include any Bidder excluded from the Spectrum Auction by IMDA.

**Connected Person** has the meaning given in Section 14.5.

**Consortium** means the Joint-Venture Consortium formed by StarHub and M1.

**Continuity Price** means \$3 million, being the price of an FROR Lot.

**Defaulting Bidder** has the meaning given in Section 13.7.

**Disclosure List** means a list of all persons to whom Confidential Information has been disclosed or it is proposed that Confidential Information will be disclosed by any Prospective Bidder which has submitted a Pre-Auction Submission, which list is provided to IMDA by that Prospective Bidder in accordance with paragraph 1.5 of Appendix 1.

**Effective Date** means the date on which a 2.1 GHz Spectrum Right (2022) or 2.1 GHz (FROR) Spectrum Right (2022) takes effect, being such date as specified by IMDA, or such other date as IMDA may determine in accordance with these Auction Rules.

**Excess Demand** has the meaning given in Section 7.1.5.

**Existing MNO** means a person that is the holder of a FBO Licence which is valid and in force as of the Spectrum Auction Application Date, and under which such person has an obligation to provide nationwide 4G telecommunication services.

**Exit Bid** has the meaning given in Section 7.3.1.

**Exit Price** is the price per Spectrum Lot, specified by a Bidder in an Exit Bid, at which a Bidder offers to purchase Spectrum Lots specified in that Exit Bid, as described in Section 7.3.1.

**Extension** means a fifteen (15) minute extension to the time available to submit bids in a Round, as described in Section 7.2.

**FBO Licence** means a licence to provide facilities-based operations issued by IMDA under Section 5 of the Telecommunications Act.

**Final Provisional Award Notice** means a notice of provisional award of a Spectrum Right issued to a Winning Bidder following the close of the Assignment Stage of the Spectrum Auction in accordance with Section 12.4.

**First Right of Refusal** or **FROR** refers to the setting aside by IMDA of one (1) 2.1 GHz Spectrum Lot in the Spectrum Auction for each of the Existing MNOs currently providing nationwide 3G services. For the avoidance of doubt:

- (a) where a Bidder is a single Existing MNO who is currently providing nationwide 3G services, it will be entitled to a FROR in respect of one (1) 2.1 GHz Spectrum Lot; and
- (b) where a Bidder is a Consortium, the Bidder will be entitled to a FROR in respect of two (2) 2.1 GHz Spectrum Lots.

**Forfeiture** means the forfeiture of all or part of a Prospective Bidder's, Bidder's, or Winning Bidder's (as the case may be) Guaranteed Amount as may be determined by IMDA in accordance with Section 11.2.

**Forfeiture Amount** means the aggregate of any Forfeitures to be settled by a Prospective Bidder, Bidder or Winning Bidder (as the case may be).

**Forfeiture Notice** means a notice in writing of the imposition of a Forfeiture pursuant to Section 11.2.2.

**Form for Agreement or Non-Agreement of Spectrum Assignment** means the document upon which all Winning Bidders shall indicate whether there is agreement among all Winning Bidders on spectrum assignment in accordance with Section 10.2.2

**FROR Lot** refers to a 2.1 GHz Spectrum Lot that may be acquired by an Existing MNO currently providing nationwide 3G services on a First Right of Refusal Basis.

**Group** refers to, in relation to a Prospective Bidder or Bidder, the following members who shall be part of the same Group:

- (a) any holding company of the Prospective Bidder or Bidder;
- (c) any subsidiary of the Prospective Bidder or Bidder;
- (d) any subsidiary of any holding company of the Prospective Bidder or Bidder; and
- (e) any other company in which two or more of the shareholders or directors (directly or indirectly) own more than 50 per cent of or control more than 50 per cent of the voting rights attaching to, shares of the Prospective Bidder or Bidder.

For the purpose of this definition, the terms **holding company** and **subsidiary** will have the meanings given in the Companies Act (Cap. 50).

**GST** means goods and services tax payable in accordance with the Goods and Services Tax Act (Cap. 117A).

**Guaranteed Amount** means the face amount for which one or more Bank Guarantee(s) are submitted to IMDA in accordance with these Auction Rules.

**IMDA** means the Infocomm Media Development Authority of Singapore and/or its lawful successor, heir, or assign as may be applicable.

**IMDA Bank Account** means the bank account to which payments are to be made as notified by IMDA.

**Increment** means the amount by which the Standing Price of a 2.1 GHz Spectrum Lot is increased in the next Round of the Quantity Stage of the Spectrum Auction, as described in Section 7.1.

**Information Session** means the information sessions held in accordance with Section 3.

**Initial Offer** means, in relation to a 2.1 GHz Spectrum Lot a legally binding offer made by a Bidder in its Initial Offer Document to acquire that 2.1 GHz Spectrum Lot.

**Initial Offer Document** means an initial offer document submitted by a Bidder in accordance with Section 2.4, the form of which is attached as Appendix 2 to this Auction Rules.

**Joint 2.1 GHz Spectrum Right (2022)** refers to a 2.1 GHz Spectrum Right (2022) that is awarded jointly to the persons in a Consortium.

**Payment Date** has the meaning given in Section 13.3.

**Person or person** shall mean any company incorporated under the Companies Act (Cap. 50), unless a specific context in these Auction Rules otherwise requires, or these Auction Rules otherwise specify, that such "Person" or "person" must only refer to a natural person instead.

**Phase 1 (of the Assignment Stage)** means the first phase of the Assignment Stage of the Spectrum Auction, as described in Section 10.2.

**Phase 2 (of the Assignment Stage)** means the second phase of the Assignment Stage of the Spectrum Auction, as described in Section 10.3.

**Pre-Auction Submission** means the application in the form of Appendix 1 to these Auction Rules (including all accompanying documents) submitted by an Applicant in the pre-auction stage in accordance with Section 2.1.1 which IMDA will in its sole and absolute discretion use to assess and determine whether the Applicant may be pre-qualified to participate in the Spectrum Auction as a Bidder. For the avoidance of doubt, this includes but is not limited to the Initial Offer Document.

**Prospective Bidder** means a person which has submitted an Initial Offer Document to IMDA in accordance with Section 2.4, and includes a person which has been pre-qualified but has yet to be registered to participate in the Spectrum Auction.

**Provisional Award Notice** means a provisional award notice issued to Bidder pursuant to Sections 2.8 or 9.12. For the avoidance of doubt, the issuance of a Provisional Award Notice shall not confer any right, entitlement or expectation on any person to acquire, obtain or be awarded any Spectrum Right in respect of any specific range of frequencies, and the range of frequencies in respect of which IMDA will award any particular Spectrum Right to a Winning Bidder shall be subject to the Assignment Stage of the Spectrum Auction.

**Provisional Winning Bid** means a Bid determined as a Winning Bid pursuant to Section 9.3, prior to exercising potential rights to withdraw under Sections 9.4, 9.5 and/or 9.7.

**Quantity Stage** means the procedure specified in Section 6 to Section 9 of these Auction Rules for allocating a quantity of 2.1 GHz Spectrum Lots prior to the provisional award of spectrum rights in respect of such Spectrum Lots.

**Quantity Stage Bid** comprises a Bidder's Clock Bid and any compulsory Exit Bids in a Round, as specified in Section 7.3.6.

**Recess** means a period of time lasting ninety (90) minutes during which no Rounds take place as determined in accordance with Sections 7.2.

**Reserve Guaranteed Amount** has the meaning given in Section 2.3.3.

**Reserve Price** means \$12 million, which is the lowest price at which a 2.1 GHz Spectrum Lot in the Spectrum Auction may be awarded.

**Round** means any single period in the Quantity Stage of the Spectrum Auction in which Bidders may submit a Valid Quantity Stage Bid Form.

**Spectrum Auction** means the procedure specified in these Auction Rules for granting Spectrum Rights in respect of one or more of the twelve (12) 2.1 GHz Spectrum Lots as specified in Annex 1.

**Spectrum Auction Application Date** means the final date on which IMDA will accept applications to be pre-qualified to participate in the Spectrum Auction (i.e. the Pre-Auction Submissions) in accordance with Section 2.1.1, as announced publicly on IMDA's website or by any other means as IMDA considers appropriate.

**Spectrum Lot Fee** means:

- (a) for each FROR Lot: the Continuity Price, per FROR Lot;
- (b) for each Spectrum Lot that is not an FROR Lot, if the Quantity Stage of the Spectrum Auction does not proceed in accordance with Section 2.7.1: the Reserve Price, per Spectrum Lot that is not an FROR Lot;
- (c) for each Spectrum Lot that is not an FROR Lot, where the Quantity Stage of the Spectrum Auction proceeds in accordance with Section 2.7.1: the fee referred to in Section 9.10, per Spectrum Lot that is not an FROR Lot.

**Spectrum Rights** refers to the 2.1 GHz Spectrum Right (2022), 2.1 GHz (FROR) Spectrum Right (2022) and/or Joint 2.1 GHz Spectrum Right (2022) (as the case may be).

**Standing Price** means the price of each 2.1 GHz Spectrum Lot provided to Bidders in each Round of the Quantity Stage, which is determined according to the procedure described in Section 7.1.

**Telecommunications Act** means the Telecommunications Act (Cap. 323).

**Top Up Amount** means the difference between the 5G Spectrum Lot Fee and the Continuity Price, pro-rated on a straight-line basis with reference to the remaining period of the Spectrum Rights in respect of the FROR Lot, and shall be calculated as follows:

$$\left[ (5G \text{ Spectrum Lot Fee} - \text{Continuity Price}) * \left( \frac{\text{Spectrum Rights duration (in days}_{\text{cal}}) - \text{Number of days}_{\text{cal}} \text{ FROR Lot used for 3G service provisioning}}{\text{Spectrum Rights duration (in days}_{\text{cal}})} \right) \right]$$

where  $\text{days}_{\text{cal}}$  = calendar days

**Training Session** means the training session conducted by IMDA and/or IMDA's Auction Service Provider in accordance Section 3.

**Valid Assignment Bid** means a bid submitted in Phase 2 of the Assignment Stage which complies with Section 10.3.5.

**Valid Quantity Stage Bid** means a Quantity Stage Bid submitted in the Quantity Stage of the Spectrum Auction which complies with Section 7.3.5.

**Winning Assignment Bid** has the meaning given in Section 10.3.8.

**Winning Bid** means the number of Spectrum Lots provisionally awarded to a Winning Bidder under Sections 9.8 and 9.9.

**Winning Bidder** means a Bidder provisionally awarded any 2.1 GHz Spectrum Lots pursuant to the Quantity Stage of the Spectrum Auction, or if the Quantity Stage does not proceed, pursuant to its Initial Offer.

**ANNEX 1****2.1 GHz Spectrum Lots**

<b>2.1 GHz Spectrum Lot Number</b>	<b>Paired</b>	
	<b>Lower Band (MHz)</b>	<b>Upper Band (MHz)</b>
1	1920 – 1925	2110 – 2115
2	1925 – 1930	2115 – 2120
3	1930 – 1935	2120 – 2125
4	1935 – 1940	2125 – 2130
5	1940 – 1945	2130 – 2135
6	1945 – 1950	2135 – 2140
7	1950 – 1955	2140 – 2145
8	1955 – 1960	2145 – 2150
9	1960 – 1965	2150 – 2155
10	1965 – 1970	2155 – 2160
11	1970 – 1975	2160 – 2165
12	1975 – 1980	2165 – 2170