

## **Hong Kong 3G – Auction Design and Rules on Connected Bidders Explanatory Note**

### **Background**

The Government has decided to use a hybrid process to allocate licences to use third generation mobile spectrum. Primary legislation to empower Secretary for Information Technology and Broadcasting (SITB) and Telecommunications Authority (TA) to undertake such a process is currently under consideration by a Bills Committee.

The Bills Committee has asked for additional information regarding proposed ownership rules and the treatment of closely related bidders (“Connected Bidders”). This note responds to the questions raised and also provides further information on the overall licence allocation framework to put the ownership rules in their proper context.

### **Auction Design**

In designing the overall auction framework, the issues that need to be taken into account include:

1. Who should be allowed to apply?
  - Potential bidders should have in particular sufficient financial resources to satisfy their obligations under the licences (roll out of a 3G network, payment of licence fees etc).
  - A rapid and relatively light prequalification process promotes entry: bona fide bidders should be confident when submitting their applications that they will be able to prequalify. This would need to rely largely on self-certification.
  - A rapid process also makes collusion more difficult.

*Working hypothesis: prequalification should be relatively light, and undertaken rapidly so that the auction can start as soon as possible after applications are submitted.*

## 2. How are licensees selected?

- It has been decided that an auction should be used to select the licensees. In order to promote entry and mitigate the financial burden of licence fees, it has been decided that licence fees should be structured as royalties.
- Different royalties could create distortions in the market for 3G services. It would therefore be preferable that licensees should pay the same royalty percentage.
- Rapid auction processes are less vulnerable to collusion.

*Working hypothesis: the auction should be designed as an ascending auction that allocates licences at a common royalty percentage. It should proceed very rapidly, concluding shortly after applications are received.*

## 3. What is the procedure for dealing with bidders who are closely connected through ownership, or who share some form of common ownership (“Connected Bidders”)?

- The auction process should not produce a result that awards licences to parties that are too closely connected, lest this impair competition in the mobile market.
- Some bidders may share a substantial common owner who, notwithstanding the size of their ownership stakes, may not be able to control which bidder enters the auction, but whose presence as a shareholder may give rise to competition concerns in the future.

*Working hypothesis: any two or more of the provisional winners with common ownership of 15% or more should be required to separate. If they fail to do so, they should be forced to compete against each other for the right to a licence. Bidding will be for cash up-front payments, which would leave the common royalty percentage from the main auction undisturbed.*

4. How should commercial groupings with more than one 2G operator involved be dealt with?

- If two 2G operators, or their commercial groups, were to co-operate and invest in a single 3G bidder, competition in the future mobile market might be significantly decreased.

*Working hypothesis: If two 2G operators (or their commercial groups) are co-investors in a 3G bidder, that bidder will only be permitted to enter the auction with the express permission of TA, which must be obtained in advance of the application date.*

- If two 3G bidders, or their commercial groups, were linked to the same 2G operator, and both 3G bidders were to win licences, then a 2G operator and two 3G licensees could have very strong interests in co-operating. Competition in the future mobile market might be significantly decreased, particularly if two of the four 3G licensees had incentives to co-operate.

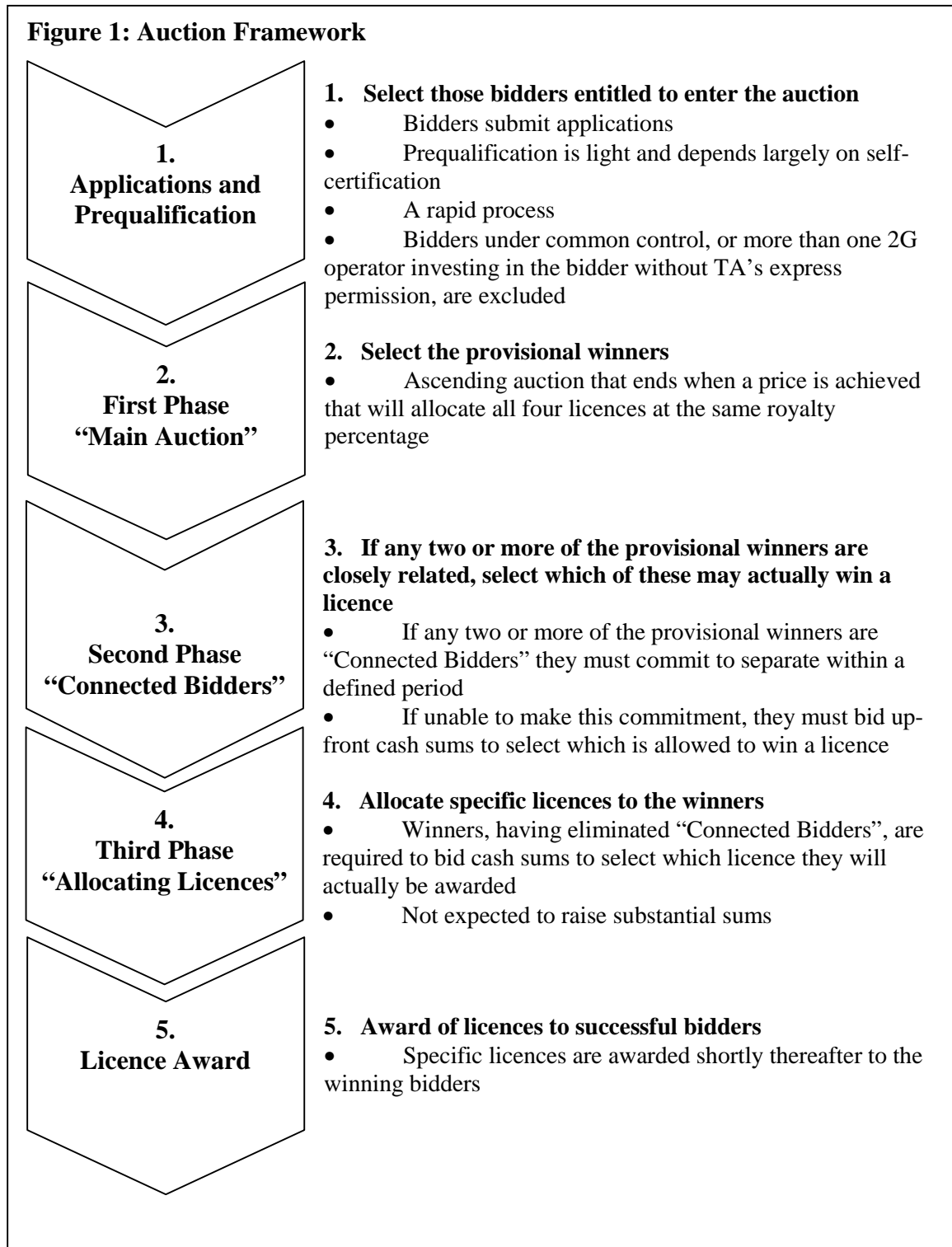
*Working hypothesis: If two bidders are closely related to the same 2G operator, they will be treated as Connected Bidders.*

5. How are specific licences awarded to the winners?

- The auction will have produced winners with a common royalty percentage (and disposed of any connected bidders). However, these winners will have a right to a licence, but will not have selected a specific licence.
- Licences are likely to have slightly differing technical capabilities, which may also be perceived differently by individual bidders.
- Given the above, allocating specific licences by lot may not be efficient or fair.

*Working hypothesis:* the winners of a right to be awarded a licence must bid for specific licences. Again, bidding would be by way of up-front cash sums. Bidders who did not enter a bid would be allocated a licence by lot. This final phase would not be expected to raise significant sums (if any).

The overall process based on the working hypotheses is summarised in Figure 1 below.



The process outlined in Figure 1 contains a specific element (the “Second Phase”) which is intended to govern how closely related bidders (“Connected Bidders”) are treated in the auction. The reasoning behind the inclusion of such a process is explained in the following sections, together with a summary of how “Connected Bidder” is defined.

## 6. How should Tie Bids be resolved?

- It is possible that the last two bidders to withdraw from the auction, both pull out of the auction at the same time, resulting in a tie bid. This tie will need to be resolved before the provisional winners are selected. Work is still underway on the best mechanism to use, but options under consideration include:

**Selection by drawing lots.** The bidder who is allowed to enter into the next phase is simply chosen by lot.

**Selection by time of withdrawal.** The precise time of withdrawal could be used to determine which of two tied bidders was deemed to have won the opportunity to enter into the next phase.

**Tied bidders must bid again.** Those bidders which are tied would be offered the chance to bid again, but only up to a single extra bidding increment. If these two bidders were to tie again, selection would be made by drawing lots. The price that all successful licensees pay would be determined by this extra bid (the bidders which had not withdrawn when the tie occurred would in any event have implicitly accepted a bid on one extra increment).

**All bidders continue to bid.** The auction would restart at the increment where the tie occurred, with all bidders continuing in the auction. All bidders would be able to bid again at the increment at which the tie occurred. The auction would proceed, as if there had been no interruption, until one bidder dropped out. If the same two bidders both pulled out again at the price at which the auction restarted, then the bidder who would be allowed to enter into the next phase would be selected between them by drawings lots.

## Rules on Connected Bidders and other ownership issues

The ownership rules are intended to govern the treatment of closely related bidders in the auction, so as to ensure that eventual licensees are independent. They are also intended to govern the manner in which 2G operators, or their commercial groups, may co-operate to enter bidders to the auction.

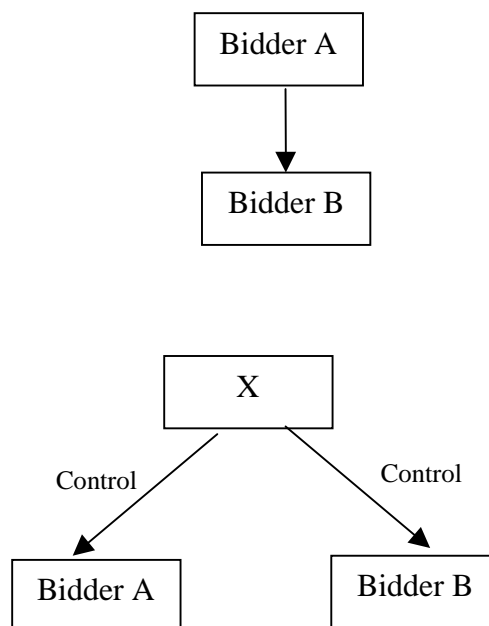
### Ownership links

The TA is concerned to ensure that successful licensees should be independent from each other, so as to preserve competition in the market for mobile services. The basic principles are that:

- a) Bidders under common control will not be allowed to enter the auction.

If bidders are under common control, they will not be permitted to enter the auction. This will be decided at prequalification. Companies are therefore prevented from entering more than one bidder into the auction – if they were to do so, they would not be permitted to bid at all.

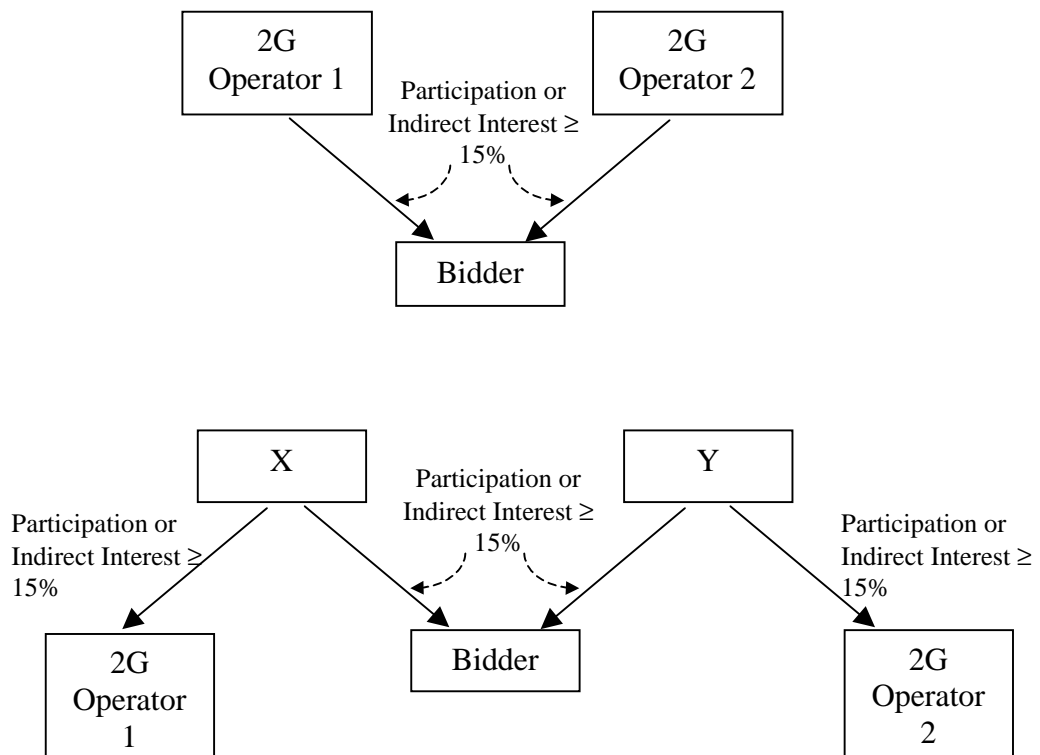
To illustrate:



- b) If a bidder is closely related to more than one 2G operator, it must have received permission for such an arrangement in advance from the TA.

As for bidders under common control, this will be decided at prequalification. Any arrangement with more than one 2G operator involved in a bidding consortium must be expressly approved by the TA in advance.

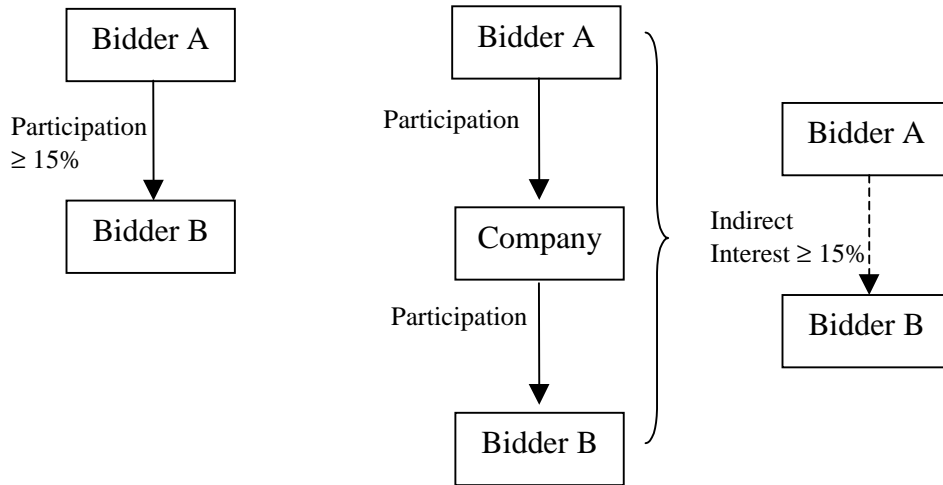
To illustrate:



- c) If bidders have a substantial element of common ownership, this should be removed, or only one of them should be permitted to win a licence.

This principle is intended to discourage bidders from putting themselves in a position where they are closely related to another bidder. If however such a situation does arise, it is necessary to decide which of two Connected Bidders will be able to obtain a licence. If bidders irrevocably commit to separate, it will be possible to award a licence to both bidders. If they are unable to make such a commitment, they will be required to bid against each other: only the winner will be allowed to win a licence.

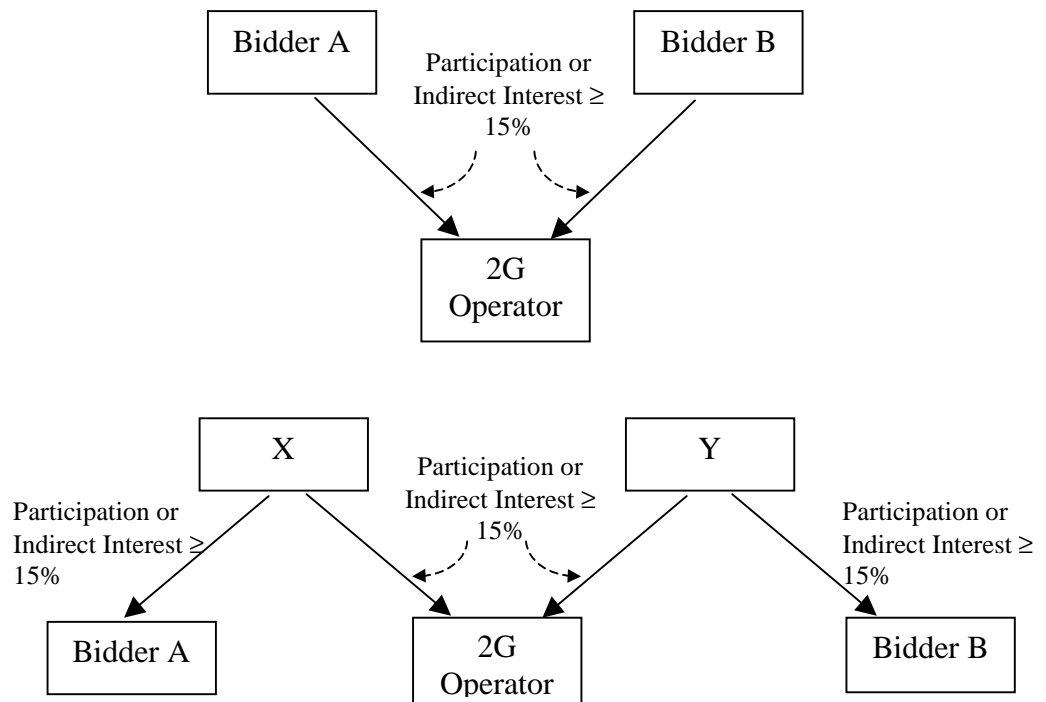
To illustrate:



- d) Bidders with common interests in a 2G operator should not both be permitted to win licences.

This principle is intended to ensure that commercial groupings with substantial interests in a 2G operator are not both able to win a licence. If this was permitted, it would be possible for two 3G licensees and one 2G licensee to be closely linked by ownership, jeopardising their independence in the market.

To illustrate:

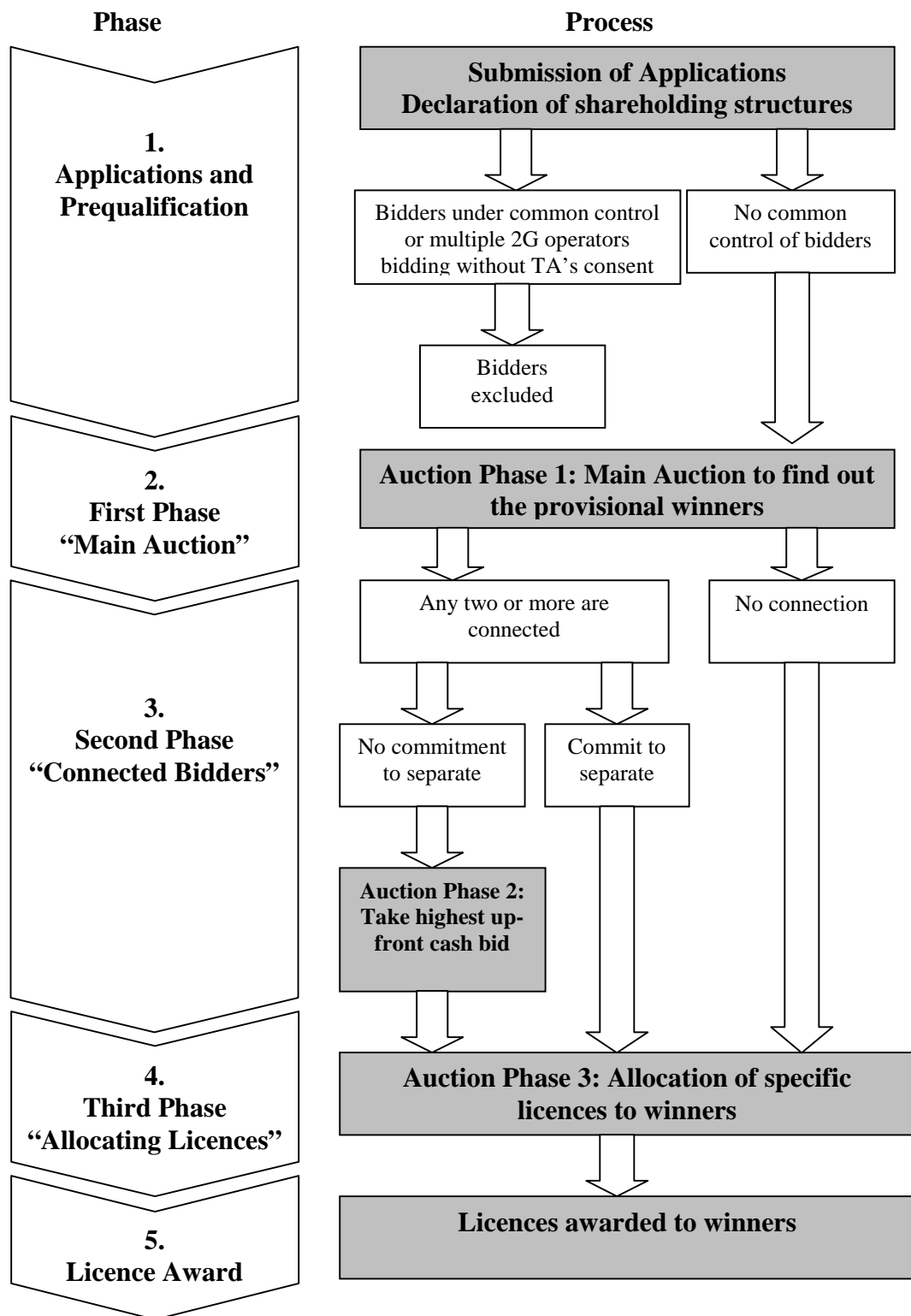




The mechanisms to deal with Connected Bidders have been used in a number of other countries (e.g. Austria, Belgium and the UK). It would not be expected that such situations would arise, but the auction process must nevertheless accommodate them, and resolve these issues in a fair and objective manner if they were to occur.

Figure 2 sets out the interaction between the overall auction design and the ownership rules.

**Figure 2: Auction Process and Ownership Rules**



The result of this process should be that successful bidders are independent.

## Consultation by OFTA

This note aims to give the Bills Committee the principles for setting the rules on connected bidders and other ownership issues. The objectives of these rules are to:

- (a) prevent collusion which would be against public interest and affect the integrity of the auction; and
- (b) ensure that the market structure produced by the auctioning exercise would not adversely affect competition in the market for mobile services.

OFTA is conducting a consultation on the proposed rules. The consultation paper issued on 23 March 2001 contains the text of the proposed rules and is available in OFTA's website [www.ofta.gov.hk](http://www.ofta.gov.hk). It invites views and comments from the industry and public by 9 April 2001.