

Workshop on auction rules and procedures for the award of the spectrum bands 2500-2690MHz and 2010-2025MHz

Riverside House, London
29 November 2007

Introduction to Workshop

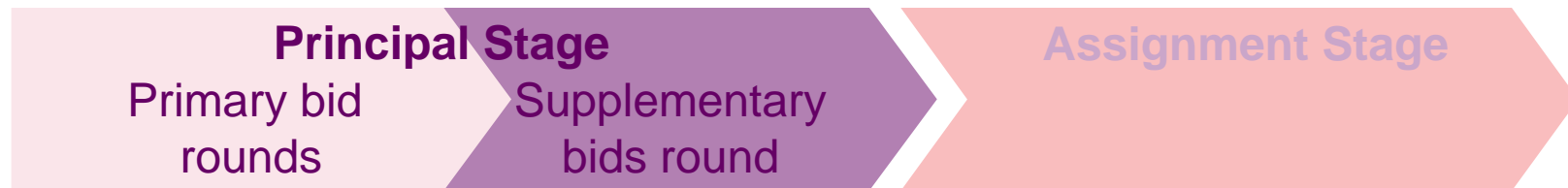
- Focus is on the detailed auction rules and procedures as set out in Annex 11 of 1st August Discussion Document
- Today's agenda covers following points raised in responses:
 1. Transparency
 2. Assignment stage bidding
 3. Rules for deposits
 4. Association rules
 5. Switching
- ... following a brief reminder of the main auction design
- Output from today's discussion will feed into the preparation of draft auction regulations on which we plan to begin consultation before Christmas
- Today's workshop does not cover technical conditions and their potential implications for auction design
- Finish scheduled for 12pm

Overview of the auction design – August proposals



- Three categories of lot: 2010MHz lot, 2.6GHz paired lots, 2.6GHz unpaired lots
- Stage 1 – the Principal Stage consists of two parts
 - Primary bid rounds – an open, multi-round process
 - Supplementary bids round – a single-round, sealed bid process
- Principal Stage Part 1 - Primary bid rounds
 - Bidders bid for a package of lots specifying the number of lots they want within each of the three categories; prices per lot increase from round to round
 - Main activity rules
 - bidders cannot increase their demand from one round to the next
 - switching between the three categories is possible

Overview of the auction design – August proposals



- Principal Stage Part 2 - Supplementary bids round
 - Single round sealed bid process with constraints from Primary bid rounds
 - Bidders can place additional bids consistent with their primary round bids and bidders for unpaired spectrum can additionally bid for split assignments
- The following are determined at the end of Principal Stage
 - winner of the 2010MHz lot
 - split between paired and unpaired spectrum in the 2.6GHz band
 - identity of winning bidders and number of paired / unpaired lots they've won (but not frequencies)... and whether any of the winning unpaired bids are split bids
 - the base prices they must pay for spectrum they have won, using a 'second-price' rule

Overview of the proposed auction design



- Stage 2 – assignment stage
 - Two parallel single-round sealed bid processes
 - one for 2.6GHz paired lots
 - one for 2.6GHz unpaired lots
 - The options setting out the alternative ways for assigning the spectrum to the winning bidders (in contiguous blocks) are specified
 - Bidders submit assignment round bids - the amount they would be willing to pay *in addition to the base prices determined in the principal stage* for each assignment option (n.b. a bidder could bid zero for all options if indifferent as to which frequencies they are assigned)
 - The winning set of assignments is the highest value combination of these bids
 - The additional price for each bidder is determined using a second-price rule

1. Transparency

Comments received

- Additional information should be released (to bidders) at end of each primary bid round
- Base prices and details of all primary and supplementary bids should be released (to bidders) at end of principal stage

Changes Ofcom is minded to make

- Disclose (to bidders) details of all primary bids made after each primary bid round, but without revealing which bidder made each bid
- Considering publication of base prices at end of principal stage (once all winning bidders have paid 100% deposit) but **not** details of bids at this stage (unnecessary for bidding in assignment stage and may create opportunities for strategic bidding therein)
- Also considering publication of summary info at end of each primary bidding day (details to be decided)

2. Assignment stage bidding

Comments received

- Bidders should be able to express preference for whom they are next to, as well as which frequencies they would prefer

Current Ofcom thinking

- Allowing bidders to express preference for neighbours as well as frequencies would significantly increase complexity of the assignment stage
- Could also potentially create opportunities for strategic behaviour e.g. bidding to put competitors in a disadvantageous position
- Benefits by contrast appear modest
- Therefore not currently minded to make any change in this regard

3. Deposits

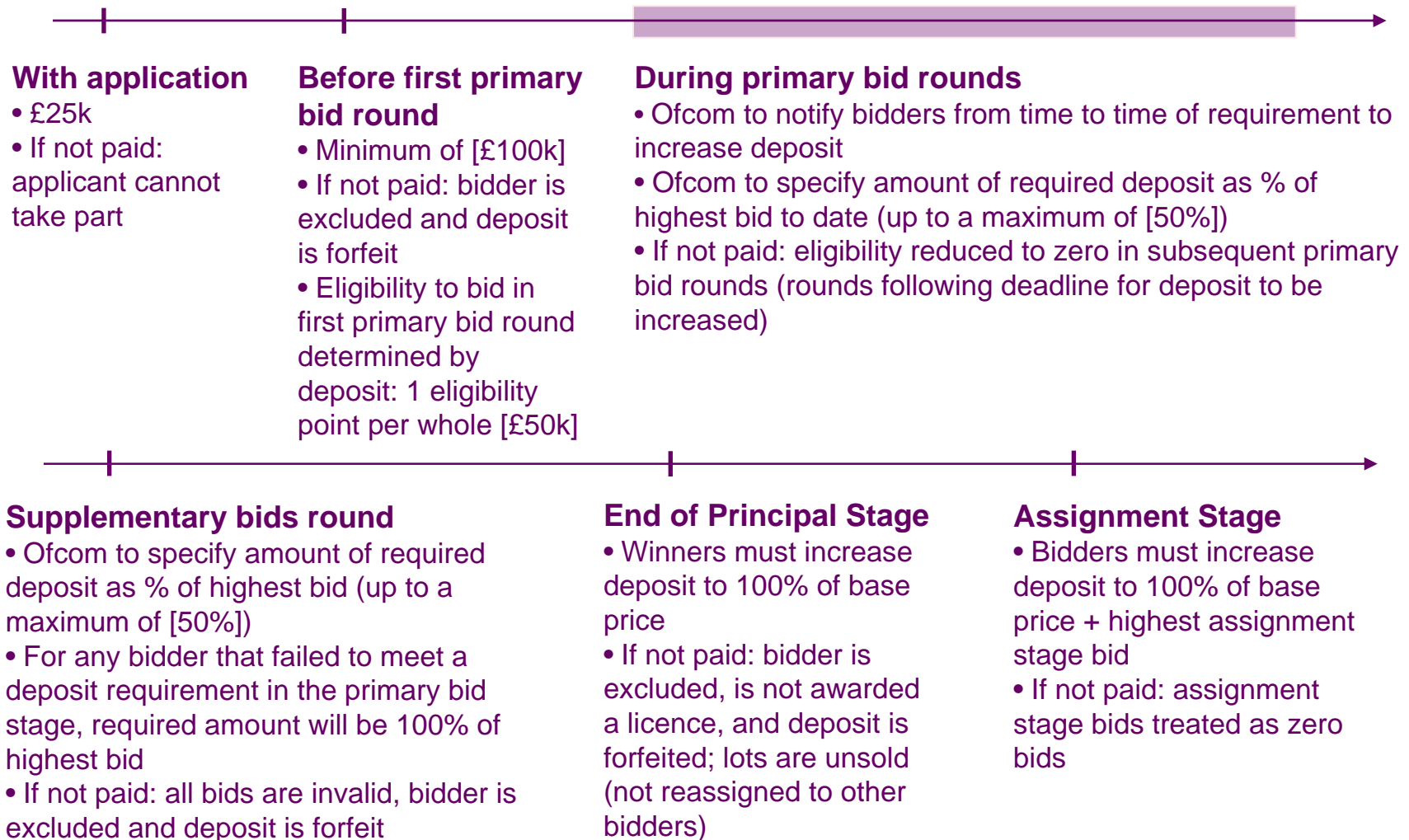
Comments received

- Deposits should be less than 100% of highest amount bid
- Should be a clear rule for when deposits need to be increased in primary bid rounds

Changes Ofcom is minded to make

- Agree that deposit of less than 100% should be sufficient to discourage default, and that lower deposit is more likely to lead to an efficient outcome absent default - next slide outlines an approach that we consider likely to meet our objectives
- Not currently minded to create a rigid rule for when deposits must be increased – need for us to balance objectives dynamically as auction proceeds – but will look to provide additional guidance

Deposits



4. Association rules

Comments received

- Requiring no common members of bidder groups may limit competition – investors should be permitted to hold an interest in more than one bidder provided that they do not receive confidential information, and are not involved in any decisions concerning the award, in respect of all but one bidder

Changes Ofcom is minded to make

- Allow associates (persons with a material interest) to ‘opt out’ of the bidder group, subject to Ofcom’s consent, provided that they and the bidder undertake that they will not receive any confidential information, and will not be involved in any decisions concerning the award, in respect of that bidder

5. Switching (1)

Comments received

- Bidders interested in switching between paired and unpaired lots may have to bid on lots they don't really want in order to maintain sufficient eligibility to switch

Changes Ofcom is minded to make

- Only include unrestricted unpaired lots in eligibility calculations – eligibility required for bids that include unpaired lots would be one (or two) points less than total number of unpaired lots included in bid (two less in the case of bids for split assignments)

Switching (2)

Comments received

- Bidders should not be allowed to switch their demand from one type of lot to another between the final primary bid round and the supplementary bids round – frustrates price discovery

Current Ofcom thinking

- Round prices for lots in 2.6GHz band will only differ from 2:1 ratio if deficient demand for unpaired spectrum (bids for less than 9 lots in total) – whether bids are for paired or unpaired lots will not affect relative round prices except in those circumstances
- Whether bids are for paired or unpaired lots will only affect absolute level of round prices to the extent that it alters the amount of spectrum that has to be left unassigned in order to ‘fit in’ the bids
- Bidding for the ‘wrong’ type of lot, particularly in later primary bid rounds, risks winning the ‘wrong’ type of lot

Switching – a possible alternative rule

Current Ofcom thinking

- Therefore not currently minded to change rules but...
- ...if we were to decide to do so, we would be inclined to implement a full 'relaxed revealed preference' activity rule, rather than to modify the existing eligibility points based rule:
 - Eligibility points would disappear
 - In each primary bid round each bidder would be allowed to bid on the same selection of lots as in the previous round, or on any selection of lots whose price had not increased by 'too much more' than the price increase for that previously preferred selection
 - Bidders would be free to submit a supplementary bid for any selection of lots, but the amount of their supplementary bid could not be 'too much more' than the amount of their highest bid for any selection of lots that they had chosen to bid on in a primary bid round (their preferred selections)