Annex A Outline of clock auction rules

A clock auction proceeds in rounds, where each round is a time window set by the auctioneer for bidders to submit their bids for the round.

For each round the auctioneer sets a round price per lot for each lot category. Each bidder can then indicate the number of lots in each category it wishes to acquire at the prevailing round prices (subject to the activity rule). This defines the bidder's clock bid for the round.

At the end of the round, the auctioneer calculates the demand express by bidders for each lot category. If all the clock bids submitted in the round can be satisfied with the lots available, then the auction ends and each bidder is assigned the lots it bid for in the round, at the round prices. Conversely, if there is excess demand in any lot category (i.e. if the total number of lots that bidders indicated that they wish to acquire exceeds the number of lots available), then the price of lots for which there is excess demand will be increased and a further round will be run.

Scheduling of rounds

The auctioneer schedules each round, announcing to bidders the start and end time for the round, and the round prices for the round. No other information about the bids received in any earlier rounds will be disclosed.

Each bidder will be given three extension rights, each of which will grant the bidder an additional 30 minutes to submit its bid if it has not done so by the scheduled end time of the round (provided that the bidder has eligibility to bid).

Bids

A bid is an offer to acquire a package of lots indicated by the bidder at the round prices.

During a round, bidders can indicate the number of lots they wish to acquire at the round prices, subject to no violating the spectrum cap or the activity rules (if applicable) outlined below.

Assessment of bids at the end of the round

At the end of each round, the auctioneer will calculate the 'total demand' for each lot category, by adding up the number of lots in that lot category included in the bids received in the round, across all bidders.

If the total demand for any lot category exceeds the number of lots available, then a further round is needed. Otherwise, if there is no lot category for which the total demand exceeds the number of lots available, then the auction ends.

Setting of round prices

In the first round, the round price for each lot category will be equal to the reserve price for lots in that lot category.

In subsequent rounds:

- the round price for lot categories for which the total demand exceeded the number of lots available in the preceding round will be set to the round price in the preceding round plus a positive increment; and
- the round price for lot categories for which the total demand does not exceed the number of lots available will be set to the round price in the preceding round.

Outcome of the auction

When the auction ends, each bidder will be assigned the lots for which it bid in the last round, and will be required to pay the round price for these lots.

Activity rule

Each lot will be assigned a number of eligibility points.

The activity of a bidder in a round is calculated as the sum of eligibility points of the lots for which it bids in the round.

Each bidder will be assigned an eligibility for each round, which will determine its maximum activity in the round. In any round, the bidder's activity cannot exceed its eligibility.

The bidder will start with a given level eligibility for the first round, which might be set with reference to a bank guarantee, or to the maximum possible activity under the spectrum cap. In subsequent rounds:

- if in the preceding round the activity of the bidder was at least 75% of its eligibility, then its eligibility for this round will be the same as in the preceding round;
- otherwise, its eligibility for this round will be equal to its activity in the preceding round divided by 75%.