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The flaws of a Dutch auction

European governments are failing taxpayers by selling off mobile telephone licences incorrectly, writes **Paul Klemperer**

PERSONAL VIEW

The highly competitive and profitable sale of UK mobile phone licences showed how successful an auction can be. So why did the Netherlands' auction, using similar bidding rules to the UK one, attract so few competitors and such feeble bidding, and raise barely a quarter of the per-capita revenue of the UK auction?

The devil, as ever, was in the detail. The UK has four incumbent operators – British Telecommunications, Vodafone, One-2-One and Orange – but offered five licences. By guaranteeing the success of at least one new entrant, the auction attracted nine newcomers, creating intense competition and record-breaking (£22.5bn) proceeds.

But the Dutch had five incumbents and still offered only five licences. Since a multiple-round ascending auction – unlike a sealed "best and final" bid auction – always allows an incumbent the chance to come back and beat a new entrant's bid, such a newcomer stands little chance. So it was predictable that very few would show up.

Recognising their weak positions, the potential new entrants partnered incumbent operators, leaving only one relatively weak entrant – VersaTel – to compete with the five incumbents for the five licences. Not surprisingly, the auction raised only £1.65bn rather than the nearly £6bn the Dutch government had forecast based on the UK experience.

So what should the Dutch government have done? Two things. First, good auction design is "horses for courses" not "one size fits all". As the UK government recognised when it originally planned to sell only four licences, a different design is called for when the number of licences equals the number of incumbents.

For a four-licence auction, the UK had originally planned to use a so-called "Anglo-Dutch" auction. In such an auction, a multiple-round ascending "Anglo" auction is followed by a sealed "best and final" bid – a "Dutch" bid in the parlance of auction theorists. The last round promotes competition in two ways.

First, entrants know that if they outbid an incumbent, the incumbent will not be able to make another bid. So they know they have a greater chance of success, and they are more likely to participate in the auction. Second, incumbents will have to offer something like a fair price for fear of being outbid by an entrant.

But improved auction design is only half the answer. Now that companies have learnt from the UK how expensive a competitive auction can be, they have strong incentives to avoid one. Past spectrum auctions show just how low prices can be when buyers can coordinate their bidding – one US auction raised less than 1 per cent of forecast revenue.

A joint venture can sometimes create a strong bidder from two weak ones. But the auction in the Netherlands allowed Deutsche Telekom, DoCoMo and Hutchinson, who are all strong established players, even if not yet in the Netherlands, to partner with the local incumbent operators. Tougher competition policy is needed to prevent companies from combining with each other to reduce the number of serious bidders prior to auctions.

Usually, combinations between potential entrants and incumbents should have to wait until after the auction, just as the sale of Orange to France Telecom took place after the UK's auction. Similarly, the sale of part of Hutchison's interest in its UK licence after the auction to KPN and DoCoMo did not harm the British taxpayer, but allowing these companies to combine before the Netherlands auction hurt taxpayers there.

The chief problems in auctioning mobile-phone licences are those any industry regulator would recognize: attracting entry; avoiding collusion; and getting the correct market structure. While the Dutch blundered on the first two counts, the German government is flunking the third.

On Monday, Germany plans to start auctioning 12 blocks from which bidders can create "licences" of either two or three blocks. It seems superficially attractive to "let the market decide" how many licences are created. But bidders are motivated by profits, not consumers' or taxpayers' welfare, and profits are highest when the market is most monopolistic. So the auction is biased towards too few winners each gaining too much spectrum. Some features of the auction mitigate the bias. But the German government risks gaining an overly concentrated market in which consumers pay more for services.

It is too late to save the Dutch and, perhaps, the German auctions. But designers of future auctions should take note. Unless governments get smarter in tailoring their spectrum sales more effectively to local circumstances, tougher in their competition policies, and more careful in choosing the resulting market structures, the remaining European spectrum auctions will serve shareholders' interests rather than those of consumers or taxpayers.

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