



Germany's 4G Auction Outcome

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Mobile Spectrum License Values and the Outcome of the German Auction

Spectrum valuation is an increasingly important consideration in wireless business planning – dealing with the “devil in the details” will ensure you pay the right price in the specific circumstances. The bidding in the German 4G auction, which lasted from April 12 to May 20, 2010, is testimony to this. The auction ended at Round 224 with a total value of about €4.38 billion... much lower than what some analysts apparently had pegged for the proceeds.

On the other hand, the proceeds from the Indian 3G auction, which ended May 19, 2010 after 183 rounds, were higher than expectations, but actually in line with the range of values seen for emerging markets.

Why did the German spectrum values turn out to be lower than some expected? Based on research we conducted in development of our report “International Review of Mobile Spectrum Pricing and Licensing”, here are a few possible reasons for the relatively low valuation:

Market conditions – very high mobile penetration leads to lower incremental spectrum values

Past auction processes around the world show that the value of new mobile spectrum trends lower in countries with very high mobile penetration compared to countries with low penetration. There appears to be a “sweet-spot” in the range of 60% to 80% penetration, where the market is well-developed enough for bidders to see a high value in holding licenses, but not so penetrated that there is not room for considerable growth.

Germany is a country where mobile penetration is well over 100% of the population. Based on 82 licensing processes we have tracked, the value of additional spectrum in a market with over 100% penetration can be one-third to one-half that of the value in a market with 80% penetration.

Auction structure – few bidders, no entrants and significant amounts of spectrum

In the German auction process there was considerable spectrum available – over 350 MHz in four different bands, there were many licenses on which to bid – 29 paired and 12 unpaired blocks, all with national coverage, and there were only four bidders. Auctions where there are few bidders and a lot of spectrum typically result in low bid values.

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Experience also shows that values are lower in auctions that are only amongst incumbents bidding on incremental spectrum. If incumbents bid to keep out new entrants, this is also a factor that can result in higher prices. While the German auction rules did not preclude the possibility of entry, and also had rules restricting any one entity from monopolizing the coveted 800 MHz spectrum (which accounted for over 80% of the proceeds), incumbents were the only bidders.

There is not a “one size fits all” for spectrum pricing

It should also be kept in mind that “inside” the detailed results of many auctions there is often considerable variability in spectrum prices: by license, by block, by geography, by band, by bidder. The closest comparable for the 800 MHz “digital dividend” portion of the German auction is the US 700 MHz auction held in 2008. Values in the US 700 MHz auction varied widely with the most expensive license going for more than 10x the least expensive license (in terms of value expressed in \$/MHz-pop).

Verizon and AT&T were by far the largest bidders in the US 700 MHz auction, accounting for over 80% of the total proceeds – 49% in the case of Verizon and 35% for AT&T... However on a valuation basis (\$ per MHz-pop) Verizon paid half of what AT&T paid. The value of the 800 MHz portion of the German auction is in the range of 60% of the average value from in the US 700 MHz auction, a difference that fits well within the variability seen within the US auction.

LYA’s report “International Review of Mobile Spectrum Pricing and Licensing” provides the numbers behind the charts. Spectrum bands are not all created equal. “Expectations” of auction proceeds need to be aligned with specific market, economic and license conditions, which can lead to dramatically different values. Spectrum valuation will be an increasingly important consideration in wireless business planning... please consult www.LYA.com to acquire your copy of our Report or contact us to discuss how we can provide assistance in development of your wireless business plans.