

Letter from Deutsche Telekom regarding German 4G Auction

Telefonica UK Ltd ("Telefonica") is grateful for the opportunity to respond to the letter to Ofcom from Thomas Dannenfeldt, CFO of Deutsche Telekom ("DT"), dated 13 August 2015.

Telefonica notes that:

- DT's joint subsidiary, EE, had already responded to Ofcom's consultation;
- the letter is dated six days after the closing date of Ofcom's consultation;
- there is no suggestion that DT sought, or was granted, permission to submit a response after the end of the consultation period; and
- the letter was sent to the Ofcom's CEO, (rather than the team in Ofcom dealing with ALFs) and appears to be date stamped 17 August (ten days after the end of the consultation period).

Accordingly, it is not clear to Telefonica that Ofcom is bound to have regard to DT's late submission.

Nevertheless, Telefonica is keen to comment on matters of substance. In the letter, Mr Dannenfeldt makes a number of observations regarding the motivations and behaviour of bidders in the auction, on which basis he argues that the "*results from the auction, are very unlikely to be representative of the market value of spectrum in the UK*". Telefónica does not recognize Mr Dannenfeldt's characterisation of the auction as one in which prices were driven more by "*special features*", including "*strategic bidding*", than market value. Telefonica remains of the view that the German 2015 auction is one of the best, possibly the best available, benchmarks for UK market value, for the reasons we set out in our August response to the July 2015 update document.

In the following paragraphs we comment on the four points raised in Mr Dannenfeldt's letter. Contrary to Mr Dannenfeldt's position, we argue that:

- There was vigorous competition at 900 MHz and there is no evidence that the spectrum cap inhibited such competition;
- Although there is evidence that some bids placed in the auction were strategic, there is no evidence that such bids affected the auction outcome;
- Telefonica Deutschland's bids for 1800 MHz in the German auction were based solely on intrinsic value [§<]; and

- The relative price of 900 MHz and 1800 MHz provides valuable information that is relevant to the UK.

1. Spectrum cap on 900 MHz

Telefonica agrees with Mr Dannenfeldt that the purpose of the cap at 900 MHz was to ensure that each bidder would gain sufficient spectrum to maintain its existing GSM infrastructure. However, we disagree that there is any evidence that this cap reduced competition for the available 900 MHz spectrum. For this to be the true, at least one operator must have had a marginal value for a fourth block that exceeded Vodafone's value for a third block. No evidence has been presented to suggest that this was the case. Indeed, as each operator already had 2x10 MHz at 800 MHz and presumably anticipated winning 2x10 MHz at 700 MHz, their incremental value of a fourth block at 900 MHz for LTE use was likely low. Even if we cannot assess a concrete value, it is clear that the value of a fourth block for any bidder is much lower than the final average 900 MHz auction prices of €192.2m, which is 2.6 times the reserve price.

Mr Dannenfeldt's implicit argument that the 900 MHz band might have more value if cleared for LTE is misguided, as one cannot divorce the value of the band from its position as the leading legacy band for 2G and (increasingly) 3G services. Across European countries, the value of 900 MHz for LTE is depressed because, after accounting for high-value legacy use, there is little residual capacity for LTE. While the handset ecosystem for LTE at 900 MHz is improving, lack of available spectrum means its prospects are less certain than the 700 MHz, 800 MHz, 1800 MHz and 2600 MHz bands. The fact that there is likely to be no demand for LTE 900 MHz in Germany, the EU's largest handset market, for the foreseeable future, is significant in this respect.

2. Allegations of strategic bidding

It is apparent to anyone who has looked at the German bid data that some bids placed during the auction were based on "strategy" rather than intrinsic value. The use of strategic bids, for signaling or other purposes, is common in spectrum auctions under any format, and especially common in long SMRAs, where only the bids standing in the final round are ultimately material. What matters is whether the alleged strategic bids affected the auction outcome. In this respect, Mr Dannenfeldt (in common with the responses from BT, EE and Analysis Mason & Aetha) provides no compelling evidence that strategic bids had a significant impact on final prices for 900 MHz and 1800 MHz.

Mr Dannenfeldt's specific accusation is that alleged strategic bids by Vodafone (presumably the ones that pushed up the price of 700 MHz late in the auction) may

have brought an earlier end to the auction than if Vodafone had bid straightforwardly on its most valuable package in every round. We have corresponded with Dirk Grote, Director Strategy for Telefonía Deutschland, who managed its bid team. He has made the following points:

- At the time Vodafone submitted the jump bids on 700 MHz, prices of 900 MHz and 1800 MHz had already reached high levels, so it is highly speculative to suppose that prices would have increased much further if Vodafone had not behaved in this manner.
- [redacted].
- Vodafone's bidding across 900 MHz and 1800 MHz was consistent with it viewing a 3rd block at 900 MHz and a 5th block at 1800 MHz as substitutes, but with a preference for 1800 MHz. It is possible that if Telefonía Deutschland had not dropped demand at 1800 MHz, that the 900 MHz price would have increased further but, based on past bidding patterns, Vodafone would likely have switched back from 900 MHz to 1800 MHz, in which case [redacted].

This description is entirely consistent with our portrayal of the auction in our August 2015 response, when we argued that the German 900 MHz was a Tier 1 benchmark.

3. Telefonía Deutschland's demand for 1800 MHz spectrum

Mr Dannenfeldt claims that the price for 1800 MHz spectrum in the auction was driven up significantly due to uncertainty around the outcome of BNetzA's investigation into Telefonía Deutschland's 2100 MHz spectrum holdings. Specifically, he alleges that: *"[i]n order to manage the risk of foregoing its 2100 MHz spectrum, Telefonía bid on more 1800 MHz spectrum than it otherwise would have needed."* This may be DT's view of Telefonía Deutschland's business case, but it is not one recognized by my colleagues at Telefonía Deutschland. Mr Grote has advised Telefonica that [redacted]

We do agree with Mr Dannenfeldt that the price of 1800 MHz spectrum may have been overstated relative to market value, but for different reasons. Specifically, Telefonía Deutschland has advised Telefonica that [redacted]. For this reason, we believe that the German 1800 MHz is a Tier 1 benchmark, but with a greater risk of overestimate than understatement.

4. Relative prices of 900 MHz and 1800 MHz

Mr Dannenfeldt argues that the value of the German 2015 auction as a benchmark for the UK should be discounted because 1800 MHz cleared at a price above 900 MHz. We strongly disagree. As we explained in our previous responses, there are good reasons to believe that the value of the two bands have converged over the last five years:

- 1800 MHz is now firmly established as the leading capacity band for LTE deployment. Across Europe, it is a more important band for LTE than 900 MHz, primarily because 900 MHz will continue to be used to support legacy technologies for the foreseeable future, meaning there is little supply or demand for spectrum for LTE at 900 MHz.
- Germany was the first European country to award 700 MHz. The relatively low price outcomes for both 700 MHz and 900 MHz provides the first evidence that availability of 700 MHz, a band that is already identified for release in the UK, has reduced the forward-looking value of 900 MHz for LTE deployment. The historic premium for sub-1 GHz spectrum is being eroded. In particular, once an operator has a critical mass of low frequency spectrum for coverage, it may be indifferent between sub-1 GHz and 1800 MHz spectrum for additional capacity, especially in urban areas where frequency re-use of 1800 MHz may be easier to plan.

The very fact that there has been an obviously competitive auction in which the 900 MHz price finished below the 1800 MHz price is clear evidence that Ofcom has previously over-estimated the UK value of 900 MHz relative to 1800 MHz. Local factors may have affected the exact benchmarks but, in our view, there is no evidence of distortion on the scale that would merit downgrading Germany as a benchmark. Rather, the appropriate approach is to maintain Germany as a Tier 1 benchmark but acknowledge the possibility of understatement at 900 MHz and overstatement at 1800 MHz with respect to UK values.

In conclusion, Ofcom should interpret Mr Dannenfeldt's observations on the German auction with great caution. Firstly, he obviously has a self interest in supporting the arguments put forward by EE in its submission to Ofcom dated August 2015. DT is a major shareholder in EE and, Telefonica understands, will retain a substantial shareholding in BT if BT's takeover of EE is approved. Secondly, and more importantly, as we have shown in this letter, Mr Dannenfeldt's observations are based on assertions, primarily regarding the behaviour of other bidders (of which he has no direct knowledge), which are not backed by substantive evidence. Tellingly, his statements regarding Telefonica Deutschland's approach to the auction are uninformed or simply wrong.

The arguments set out by Mr Dannenfeldt (and by EE, before him) against the German 2015 auction being included as a Tier 1 benchmark set an absurdly high bar for

identifying evidence points for determining UK ALFs. The presence of local factors and some strategic bids is not sufficient by itself to justify downgrading a benchmark. Rather, it is necessary to show that there is material likelihood that auction prices were significantly affected by such factors. No such evidence has been presented by any respondent to this consultation. In this context, were Ofcom to downgrade the German 2015 auction, it is our view that it could not credibly maintain any of its other Tier 1 benchmarks. We refer to our August 2015 response for additional reasons why it remains our opinion that the German 2015 auction is an excellent benchmark for UK market value.