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BEWARE OF BT MOBILE DOMINATION

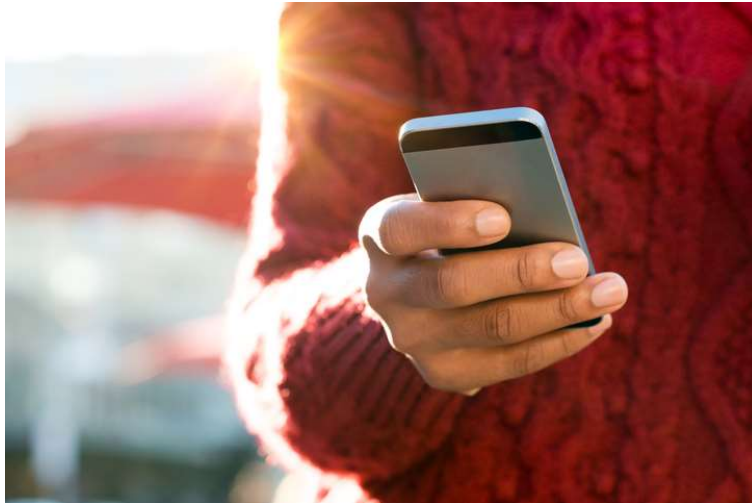


Image Credit: iStock/Getty Images

- Spectrum is used by mobile phone operators to provide 3G and 4G internet services to customers. It is auctioned to mobile operators on an exclusive basis.
- In 2008, spectrum holdings of mobile operators were roughly equal. But the last 4G auction, along with the merger of BT and EE, now leaves BT with a dominant 45% of the spectrum market.
- Growing asymmetry in the spectrum market has been accompanied with higher costs for customers. The cost of average mobile contracts grew by 13% from 2014 to 2015.
- There are concerns that further moves towards an unbalanced spectrum market would be bad for competition. Ofcom is right to propose that BT cannot increase its spectrum share for 4G services.
- BT already has a disproportionate influence in the broadband industry where its rivals are often forced to use its infrastructure, leading to problems with a conflict of interest.
- BT could further dominate the mobile industry without restrictions on the 5G compatible spectrum auction. Ofcom must prioritise action in this area.



1. INTRODUCTION

Spectrum relates to the radio frequencies allocated to – in this case – the mobile industry for communication over the airways. The resource is auctioned off to mobile phone providers on an exclusive basis for them to provide internet and phone services to customers. The UK has previously auctioned spectrum compatible for 3G services in the year 2000 and more recently spectrum that is compatible for 4G services. The auction in 2000 raised £22.25 billion but the more recent auction raised a much more modest £2.3 billion for the Treasury.

Ofcom has now released a consultation document for a further upcoming spectrum auction for mobile phone operators. This will allow mobile phone operators to increase the services to customers.

The auction will make available:

1. Additional spectrum in the 2.3 GHz band, which would be immediately usable by mobile providers offering customers 4G services. This will supplement 4G compatible spectrum that has already been auctioned off.
2. New spectrum in the 3.4 GHz band, which would not be immediately usable by mobile phone operators. This bandwidth is seen as being likely to support the initial deployment of 5G services in the future.

2. CONCERNS ABOUT THE SPECTRUM MARKET

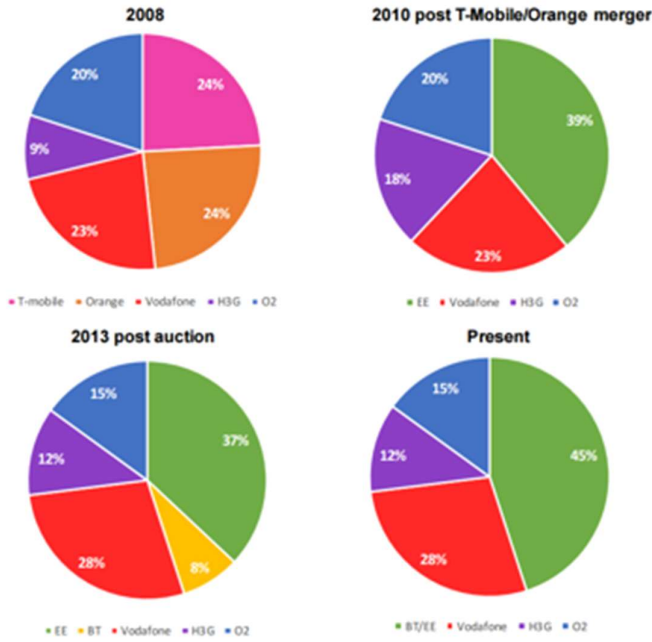
2.1 BT/EE's growing dominance

The UK's mobile phone market is effectively a natural oligopoly with four key players: BT/EE, Vodafone, O2 and Three. In 2008, the mobile spectrum allowances for each of the key players was roughly in balance, meaning that each of the four mobile phone operators had similar capabilities to provide services to customers.

However, following the 4G auction in 2013 and the merger of BT and EE, the mobile spectrum market's concentration ratio has grown dramatically, with BT/EE now dominating the market (see Figure 1). It is estimated that BT/EE now controls 45% of the UK's mobile spectrum, leaving the UK with the 3rd largest spectrum imbalance of the top 50 countries by GDP, according to Three (see Figure 2).

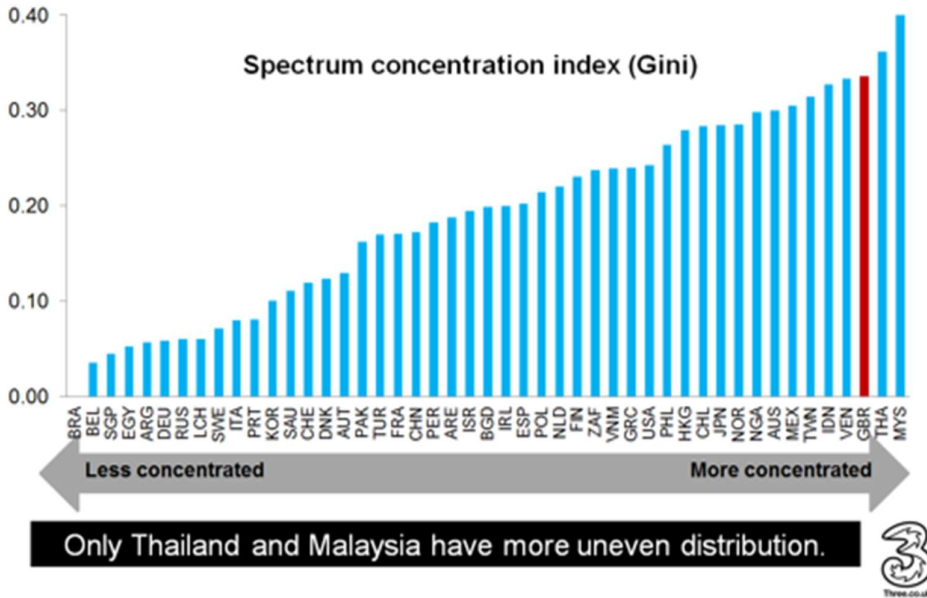


Figure 1: Mobile Spectrum allowances since 2008



Source: [Ofcom consultation](#)

Figure 2: Spectrum imbalances in top 50 countries



Source: Three

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2.2 Implications for Competitiveness

Further moves towards asymmetry in spectrum holdings between the four mobile phone operators could have implications for competitiveness in the mobile market. There are already large differentials in mobile phone providers' data share to spectrum share ratios. For example, data from Ofcom shows that despite Three having more data traffic than BT/EE, BT/EE has nearly four times the share of spectrum (see Table 1).

It is also estimated that some mobile phone operators – particularly BT – do not use a considerable amount of their spectrum, while some of its competitors are constrained with their current share of Spectrum due to its limited nature. Given that some mobile phone providers are much more constrained than others, this may hamper a competitive mobile phone market in the future. It also raises the question as to whether BT is hoarding spectrum as a means of erecting barriers to entry for its competitors.

Table 1: Share of spectrum, data and subscribers (Q2 2016)

	Share of spectrum	Share of mobile data traffic
BT/EE	45%	33%
O2	15%	17%
Vodafone	28%	13%
Three	12%	37%

Source: [Ofcom](#) (Analysys Mason data)

2.3 Three and O2's merger was blocked...

Last year, there was an attempted merger between Three and O2. Unlike the BT and EE merger, this proposal was blocked by the EU Commission. The decision was supported by Ofcom.

Ofcom called for the deal to be blocked because it would see the merger of two of Britain's four mobile phone operators, which could hit rival high street retailers and upset existing network arrangements. The Chief Executive of Ofcom warned that the deal could mean higher prices for consumers.

Ofcom's desire for there to be four viable players in the UK's mobile market is sound from a competition perspective. However, the blocking of the merger between O2 and Three has had the unintentional impact of contributing to a very unbalanced share of spectrum.

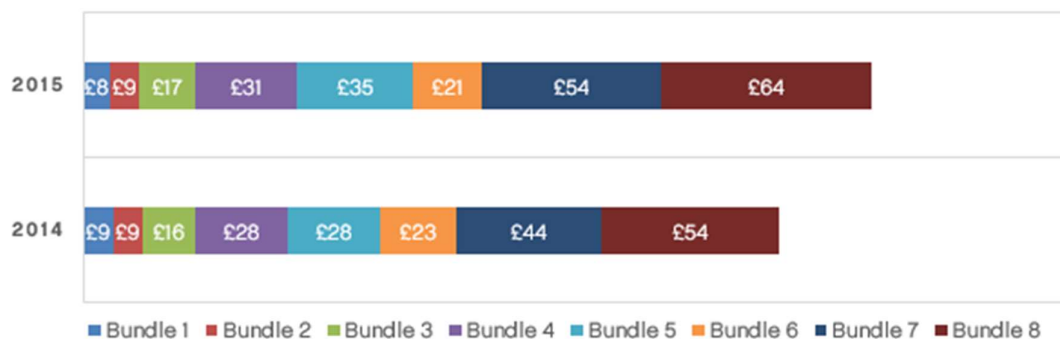


2.4 Costs have been rising recently...

Although data from Ofcom suggests that the UK's mobile phone market is currently cost competitive compared to EU counterparts, recent trends in the cost of mobile phone contracts will be of concern to customers. Historically, mobile phone plans have become cheaper, but costs are now on the rise. Between 2014 and 2015, the relative cost of typical mobile phone bundles has increased by 13.3% on average, according to analysis from Ofcom (see Figure 4). This has come at a time when the Spectrum holdings of mobile phone operators have become increasingly unbalanced.

Figure 3: Average Monthly Price of Mobile Phone bundles (2014 and 2015)

Mobile phone bundles are subdivided into eight – representing typical mobile phone plans offered by operators, from the cheapest (1) to the most expensive (8).



Source: [Ofcom](#)

2.5 BT's dominance could become more entrenched

There is a risk that BT/EE could use the upcoming spectrum auctions to further assert its dominance in the Spectrum market, which could lead to a less competitive market for the mobile phone industry in the UK. It is also notable that – along with the mobile market – BT already has a disproportionate influence in the UK's broadband market. BT's competitors are currently required to use BT Openreach's infrastructure to provide services to customers, which opens up a major potential conflict of interest. This increases the concern about competitiveness in the Telecommunications market more broadly.

3. OFCOM'S PREFERRED RULES FOR SPECTRUM ALLOCATION

Ofcom is concerned about market concentration in the UK's immediately deployable spectrum market (4G compatible). It has therefore proposed a cap of 42% for immediately deployable spectrum, which would effectively stop BT/EE from acquiring more immediately deployable Spectrum. However, Ofcom is proposing no intervention or caps for the 5G spectrum auction. Its reasons include:

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- That it is less concerned about asymmetry in the 5G compatible spectrum as more of this spectrum is likely to become available in the future.
- Large blocks of 3.4 GHz might be needed for 5G deployment. Caps that are set at too low a level may therefore be too restrictive.

4. CONCERNS ABOUT OFCOM'S PREFERRED OPTION

Ofcom has previously argued that asymmetry of spectrum allowances is working for UK customers. The UK's mobile phone market has historically provided customers with competitive prices, but prices have risen in recent years. This followed shortly after increasing unbalanced spectrum allocations between mobile phone providers.

Ofcom clearly does foresee that growing concentration in the immediately deployable spectrum market could lead to an anti-competitive market. The suggested cap for immediately deployable spectrum is evidence of this. However, it is open to question whether the cap of 42% is set at a level that is too high. BT/EE currently has a large amount of unused spectrum. This might be for the purposes of expanding services for its customers, but it could also be used as a means to erect barriers to entry for its competitors – given that Spectrum is a limited resource.

Ofcom will also have to take into consideration that asymmetry in the spectrum market has partially arisen from business investment decisions of the mobile phone operators. This would certainly discourage further intervention from Ofcom into the 4G auction, which may explain why a cap of 42% has been chosen.

However, the lack of any restrictions on the 5G compatible spectrum is the most serious concern for competition. It leaves open the opportunity for BT/EE to acquire the entire spectrum available in the 3.4 GHz bandwidth. This would further increase BT's market dominance in the mobile industry, which – when accompanied with its disproportionate influence in the broadband industry – could have significant implications for competition in the Telecommunications industry more broadly.

Ofcom has highlighted that it is vital for the UK's mobile phone market to have four credible mobile phone operators. The potential for BT to become even more dominant may put this at risk.



5. WHAT ABOUT THE FUTURE OF SPECTRUM USAGE?

The economic impact of spectrum is a vital asset to any economy by making a significant contribution to economic activity through its commercial and public uses, and demand for spectrum is growing significantly due to both existing and new services and applications. There is a strong argument to say that, in the future, there is a need for the mobile spectrum market to become more dynamic and accessible to promote competition. Ofcom has explored the idea of increasing “shared access” to spectrum, which could potentially avoid the problems observed in the current spectrum market where some players are constrained.

6. CONCLUSION

Matthew Hancock MP, the Minister for Digital and Culture, has emphasised that the Spectrum auction must ensure that the UK has a fully competitive mobile market. There is no doubt that Ofcom has a difficult balancing act in achieving this. On the one hand, they do not want to be seen to intervene unfairly in the market to the benefit of any interested party. Yet at the same time, it is in their remit to ensure that the spectrum market continues to be competitive. In a market that is a natural oligopoly, interventions are – on occasions – required to ensure that competition is sustained and that one company does not become too dominant – just as is the case with the supermarket sector.

Ofcom will need to address two key issues:

1. How can the UK ensure that the current allocation of spectrum will promote a competitive mobile phone market?
2. How should the auctioning of spectrum be changed in the future to promote a more competitive market?

It is vitally important the auctioning process does not face unnecessary delays. Any delays would mean a slowing in the roll out of services for customers.

Looking at the current spectrum market, Ofcom will need to take some immediate action in light of mobile phone package costs increasing. By proposing a cap on immediately deployable spectrum, Ofcom has accepted that increasing market concentration in the spectrum market does pose a risk to the competitiveness of the UK's mobile phone market. It is debatable as to whether this cap is at the appropriate level. The proposed cap is so high that it will not tackle the problem of mobile phone providers owning exclusive rights to spectrum but not using it. The hoarding of spectrum might potentially be a way of erecting barriers to entry for competitors, but at the same time it may be for the purposes of expanding services to customers.

Ofcom will also have to take into consideration that asymmetry in the spectrum market has partially arisen from business investment decisions of the mobile phone operators. This would certainly discourage further intervention from Ofcom into the 4G auction,

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which may explain why a cap of 42% has been chosen.

However, the most pressing issue relates to the 5G auction. The lack of any constraints in the 5G auction leaves open the possibility of a single operator acquiring all of that spectrum. If BT were to acquire all of the 5G compatible spectrum that would put it in an even more dominant position in the mobile phone market, adding to its disproportionate influence in the broadband market with its ownership of BT Openreach. This could be detrimental to competition and bad for consumers.

In a rapidly changing mobile industry, there is a danger that already dominant players will be able to further monopolise their position. Ofcom will need to tackle these concerns in the upcoming spectrum auction. Ofcom also has an important task in examining whether, in future, there could be a bigger role for shared spectrum in the 5G market – although any move on this must not adversely impact investment in the industry.

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