EXECUTIVE SUMMARY

It is essential for the growth and resilience of the UK economy, especially coming out of recession, that the mobile equivalent of superfast broadband[1] is rolled out right across the nations and regions that make up the UK. This will require mobile operators to invest in the industry's growth. However, we have a number of concerns about the direction of the current regulatory model, as we have expressed in responses to formal consultations previously. Giving correct signals to investment, and facilitating moves to faster mobile broadband speeds, remain the key need for the regulatory regime to address, and we consider that the balance between investment, competition and prices has yet to move to the most optimal position.

Our submission to this Ofcom consultation argues the following main points:

- significant amounts of monies spent on licence fees will, in the extremely competitive market which characterises the UK, subtract from, or delay, investments in mobile networks. Ultimately, this will be to the detriment both of consumers and, indeed, the UK as a whole. It is clear that network operators are struggling to monetise the datawave and there is no guarantee of a clear or meaningful return from this in the future

- insufficient consideration has been given to the affordability of the proposed fees and to the impact these will have on investment. This represents as much a consideration of 'full market rate' as Ofcom's preferred approach to recasting the sums spent in the recent 800 MHz and 2.6 GHz auctions. Behaviour in auctions, when there is a significant cost to not having the good being auctioned, tends to differ greatly from behaviour when such pressures are not there

- the spectrum on offer in the LTE auction was a significant amount – some three-quarters of the spectrum already in use. Yet the proposed fees for the administratively-assigned spectrum, over the next twenty years and in today's terms, total more than two-and-a-half times the amount bid in the LTE auction. This is simply an unrealistic perspective, not least since the LTE spectrum auction actually realised a sum lower than expected

- ultimately, the good for which a price is being set in this process (900 MHz and 1800 MHz spectrum) was not on offer in the auction which is being relied upon. Consequently, the price is very much the product of educated guesswork and, as a result, this opens up the possibility for the inclusion of a range of other important factors, such as affordability, the need for investment and the desirability of more rapid and more extensive deployments of networks able to deliver LTE-based services, to be incorporated into Ofcom's thinking

- Ofcom must have regard to the impact of its decisions on investment and innovation, but there is little evidence in the consultation document that a serious consideration has been made of this and we do not believe that Ofcom has, therefore, taken these vital issues properly into account

- we therefore believe that Ofcom should reconsider the sums it is proposing to charge network operators for their 900 MHz and 1800 MHz spectrum, so as to be able to take these other factors into account in the price it sets. Our view is that an 'inflation plus' mechanism should be applied to the existing fees, with a clawback mechanism should returns prove that operators have been able to extract a return on their investment in the datawave.

[1] Mobile superfast broadband and 'true' 4G will only occur via the implementation of LTE-Advanced, commercial deployments of which remain some years away. LTE provides a welcome interim step in the development of mobile broadband speeds, but cannot be seriously termed '4G'. With that in mind, and cognisant of the International Telecommunications Union's relatively relaxed view, we refer to LTE in a 'superfast' context although mobile broadband remains some way away from actually being 'superfast'.

INTRODUCTION

1. Prospect is an independent trade union representing over 120,000 managers, specialists and professionals in both the private and the public sectors in a range of industries and organisations from the communications, media and digital industry to aviation, agriculture, defence, energy, environment, heritage, industry, scientific research and children's services.

2. Our members working in the information and communications technology area work extremely hard for network operators and service suppliers to deliver timely and cost-effective network upgrades and high-speed digital communications and entertainment services. It is clearly in their interest, in terms both of the health of the companies that they work for and the ability of such companies to deliver good jobs characterised by decent working conditions, that the regulation of their industries is fair and takes full account of the positions of the companies for which they work.

3. We acknowledge that our members' direct interests, whether they lie in maintaining secure jobs with attractive working conditions, or in delivering projects which increase their level of satisfaction with the jobs that they do, depend on investment in the industry. However, we also believe that consumers' interests lie ultimately in the same direction: it is investment in networks that will drive the development of innovative new services that they can enjoy; and that an over-emphasis on prices, while attractive to consumers in the short-term, is likely to inhibit the development of their interests in the medium-term by slowing network investment.

4. Consequently, our starting point is the primacy of investment and that anything which reduces the ability of network operators to make investments will, ultimately, undermine the interests of consumers. We would, as we have argued before, prefer Ofcom to have a general statutory duty to promote investment although we appreciate that this is not the focus of this particular consultation. In this instance, our view is that, while we see the attractions of trying to level the playing field between operators, this is an impossible task and that significant amounts of monies being spent on licence fees will, in the extremely competitive market which characterises the UK, subtract from, or delay, investments in networks. Ultimately, both consumers – and, indeed, the UK as a whole – will suffer as a result.

5. Prospect welcomes the opportunity to respond to this consultation. Our submission focuses on articulating the main principles which we consider to be at stake and then moves on to a consideration of the questions which Ofcom has posed for consideration. We particularly appreciate the open nature of the consultation and Ofcom's desire not to impose a rigid response structure based directly on the consultation questions.

GENERAL POINTS

6. The Direction given to Ofcom by the government in July 2010 to revise the fees in the 900 MHz and 1800 MHz bands such that they reflect 'full market value', with particular attention to the outcome of the recent 800 MHz and 2.6 GHz auctions, and following on from the use of the same phrase in the 2009 Independent Spectrum Broker's report, clearly gives Ofcom little room for manoeuvre. At this stage, however, and knowing what we now do about the state of mobile network operators' finances and the intense competition which exists in the industry, as well as the formation of EE,[2] we would that this were not so. Governments clearly have a requirement for maximising returns to taxpayers on privatised assets, and also for assisting the Treasury to balance the books, but this does not always sit easily with the interests of taxpayers as consumers in the context of their take-up and use of mobile telecoms services.

7. The primary requirement right now is for the industry to get on with the task of building 4G networks to increase the speeds, and thus the services, available to consumers; and to improve the economic gains which will flow to the UK as a result of people being better able to make transactions online while mobile. Some time ago, Everything Everywhere estimated these gains to

[2] The merger of the UK interests of Orange and T-Mobile into the joint venture now known as EE was announced in September 2009, some four months after the ISB published his final report.

the UK as a whole as constituting up to 0.5% of GDP, or around £7.5bn per annum.[3] We believe that the hike in licence fees will delay investment to the point where the Treasury, while gaining from the increase in annual licence fees, is experiencing at the same time a loss from the slower start and build-up of revenues (and other gains, for example in the area of transformed public sector services) associated with mobile superfast broadband. We do not know the dimensions of what that loss will be, but it is typical of the Treasury – and perhaps of governments generally – that such losses tend not to be recognised as such.

8. Communications infrastructure is at the heart of the modern economy and will produce economic gains in excess of the hike in fees. Boston Consulting Group points to 5.5m jobs across Europe being sustained by the digital economy by 2016, alongside the sector making a 6% contribution to GDP.[4] Building the infrastructure to support the digital economy in the quickest, most inclusive way and achieving near-universal coverage for mobile broadband is, therefore, not only an economic but also a social policy priority, with mobile broadband expected to play a role in taking coverage of superfast broadband to places deep in the final 10% where it is too expensive for fixed infrastructure to go. However, we are already exceedingly late with this: the Independent Spectrum Broker's report spoke of the 'prize' (of breaking the logjam between the operators which was inhibiting the LTE auction) of it being:

> *Within the UK's grasp to achieve within five years mobile broadband at around 4 megabits per second across the UK as a whole and more than 50 megabits per second in many urban areas.*[5]

9. LTE speeds across all the major mobile networks offer download speeds which at least match that[6] – at least, in some of the major urban areas, if not the 'many'. But we are still nowhere near 4 Mbps across the UK as a whole, while near-universal coverage of mobile broadband is – still – at least two-three years away. May 2014 marks the fifth anniversary of the publication of the Independent Spectrum Broker's report and we have fast run out of time to deliver that vision in line with that timescale.

10. The UK mobile market is, of course, intensely competitive with three major operators having a subscriber base of around the same sort of size[7] while 3 and a number of virtual network operators, headed by Virgin Mobile and Tesco Mobile, have sufficient scale to be able to mount a serious competitive challenge. The most recent Ofcom data report declining retail revenues: restatements of data do make comparisons difficult, but retail revenues in Q2 of 2013 were £3.82bn – a drop of £221m, or 5.4%, on the same quarter in 2012 (£4.04bn). *Enders Analysis* reports that underlying market service revenue growth is now at zero while reported growth stands at -4.3%. Both are on a slide, while the outlook is for continuing negative growth. Contract average revenue per user growth is negative for all four mobile network operators.[8] Consumer prices are, clearly, falling: Ofcom's own data on the real price of a basket of mobile services shows that this was just £14.10 per month in 2012 – a decline of 42% on 2007 while the price of the line rental fee, and bundled packages of UK landline calls and inclusive calls, texts and data, stood at £9.15 per month – a slight growth on the 2010 and 2011 level but still a fall of nearly 13% on 2007.[9]

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[3] http://explore.ee.co.uk/our-company/newsroom/4g-provide-uk-annual-economic-boost-reaching-05-gdp-end-decade.
[4] In a report produced for the European Telecommunications Network Operators Association. Boston Consulting Group (2013) *Reforming Europe's Telecoms Regulation to Enable the Digital Single Market* available at: http://www.etno.eu/datas/publications/studies/BCG_ETNO_REPORT_2013.pdf. Interestingly, the report points to the decline in revenues and in investment and indicates that the former will lead to lower investment across the sector as a whole and missed targets for broadband coverage and mobile penetration (Exhibit 4 and p. 14). One of the other factors contributing to declining investment, not least in mobile, is that one in three operators in Europe are unable to cover their costs of capital (p. 20).
[5] *Report from the Independent Spectrum Broker: findings and policy proposals* Final Report, May 2009, p. 8. Available at: http://webarchive.nationalarchives.gov.uk/+/http:/www.culture.gov.uk/images/publications/ISB_final_report.pdf.
[6] And probably while there isn't much other traffic on the networks. See, for example: http://www.bbc.co.uk/news/technology-23878111.
[7] It is a pity that Ofcom's quarterly telecoms market data updates stopped including mobile subscriber numbers by network operator at the end of 2010.
[8] Enders Analysis (2013) *UK mobile market Q1 2013* [2013-056].
[9] Ofcom (2013) *Communications Market Report* Figure 5.71, available at: http://stakeholders.ofcom.org.uk/binaries/research/cmr/cmr13/UK_5.pdf.

11. Against this backdrop, consumption of data is rising rapidly: an annual increase of over 70% in 2012 alone.[10] Revenues from mobile data might be rising relatively fast, but from a very low base and to a point at which they still represent only a fraction of overall mobile revenues (less than 16%).[11]

12. These are the effects of the scale and intensity of competition in the industry – and they make an unpromising background from which to start a complex, and expensive, programme of network investment in the UK. In particular, it is not clear that revenues from data – with data being the focus of the LTE auction being used as the basis for the re-calculation of the fees in respect of the 900 MHz and 1800 MHz spectrum – will be sufficient to justify the near-400% hike in licence fees now being proposed. Given the state of competition in the industry, together with the guidance that Ofcom has recently produced on mid-contract price rises, the costs of moving to a financing model which properly captures the explosion in data are, in terms of market share, potentially hugely significant. This clearly acts as a strong deterrent on mobile operators moving to the sorts of data revenue models which we find, for example, in the US.

13. We should be clear that the scale of the increase being proposed to the fees is immense. Ofcom is proposing an increase from £24.8m to £138.5m per year for the 900 MHz licences (an increase of 460%); and from £39.7m to £170.4m per year in respect of the 1800 MHz licences (an increase of 329%). It is one thing to argue that the mobile operators were aware that an increase was coming (which is undeniable) and would have built this into their LTE auction bidding plans; another thing entirely to propose an increase of these sorts of magnitude (and then only after the auction process had been completed). At the same time, it is hard to point to declining revenues and operators' apparent inability to monetise the datawave and state unequivocally that spectrum is increasing in value – still less that it has increased by nearly 400%.

14. Additionally, *Enders Analysis* also points out that cashflow margin per operator (EBITDA minus capex) is already low. Its figures are as follows, alongside the 900 MHz and 1800 MHz licence fees proposed for each operator:

Operator	Cashflow margin (£m)	Proposed licence fees 900 MHz and 1800 MHz combined (£m)	% of cash flow
EE	586	107.1	18.3
Vodafone	608	83.1	13.7
O2	718	83.1	11.6
H3G	31	35.7	115.2
Total	1,943	309	15.9

15. The licence fees are, in this context, 'affordable' in the sense that they can be financed out of cashflow (for all operators other than H3G, that is). Across them all, the sums being proposed are an additional £1 out of every £6.29 of cashflow margin. Put another way, the £309m also represents some 2% of current mobile retail revenues[12] and that is a serious bite into operators' existing revenue models.

16. Clearly, however, the sums proposed will take money out of mobile operators' profitability and, with a recent history of falling revenues, on top of some years of decline and then only fragile growth, as well as significant levels of competition, that has to have an implication for investment – especially for H3G, whose cashflow alone isn't sizable enough to sustain the proposed fees. We should be in no doubt that mobile operators are struggling and that taking finance out of the industry, as the proposed hike in licence fees will do, represents a significant additional burden to operators at a time when they are required to invest in their networks.

[10] *ibid*. See Figure 5.8.
[11] *ibid*. See Figure 5.23.
[12] Of £15.3bn, according to Ofcom (2013) *Communications Market Report*. Revenues have grown in each of 2011 and 2012 but are still below the level of 2008 and have grown just 2% in five years. As we have seen above, 2013 data seems to support the case that revenues are, again, falling.

17. We should also comment that the level of investment required is significant. Mobile networks are changing very rapidly alongside the data explosion and, with the transfer to LTE (and, soon, LTE Advanced) they will have to re-think their networks – at least, in urban areas – around small cell architecture, and the expense of getting backhaul to these, while still building out networks to meet UK-wide coverage targets.[13] The level of increased expenditure that this represents, in the words of Inge Hansen, EE's head of spectrum 'a real headache'.[14] Nevertheless, it is clear that operators are investing, and significantly: Vodafone regularly talks of investing £900m in 2013 in the UK;[15] O_2 refers to having invested £1bn over the 'last few years' and to investing currently £1.5m per day;[16] EE is investing £1.5bn over three years in rolling out 4G mobile to 160 towns and cities;[17] Three UK is a little more coy about its investment expenditure, although its parent company accounts report that, in 2012, capital expenditure in the UK was £250m on top of £253m in 2011.[18] This represents a total annual investment programme among the mobile network operators alone of £2.2bn – i.e. some 14% of operators' annual retail revenues – and this can only increase over the next few years. Adding an additional 2% on top, to cover the increased fees for 900 MHz and 1800 MHz licences, thus represents a considerable challenge given the uncertainties over revenues and one in which the potential for the freezing of investment plans is a real possibility.

18. We think that Ofcom has made a decent attempt at defining what is the 'full market rate', as it has been required by the government to do. Nevertheless, this is a complex phenomenon, and we would like to have seen a consideration of the impact of what Ofcom has proposed on investment; the failure to do so represents, we believe, a significant failure to take into account all the factors which go into defining what is the 'full market rate'.

19. It is clear that behaviour in auctions is different to behaviour in other contexts: the pressure of being in an auction, in particular when a scarce good is being auctioned of which the absence, post-auction, poses real threats to the continuing business of the operator and the investment made in other licences, makes people act very differently. We would thus, on these grounds, discount evidence that operators were prepared, in principle, to pay – perhaps significantly – more for their licences than they have ended up paying as something which contributes little to our understanding of what is 'affordable' to them. Ofcom insists that the auction was competitive, which presumably implies a process that entailed sums being bid that are, perhaps, less economically 'rational' than might otherwise have been the case.

20. At the same time, we do not think that it is at all obvious that what operators were prepared to pay in the 800 MHz and 2.6 GHz auctions has much to say about what value they place on the licences they already hold in other frequency bands. The 800 MHz and 2.6 GHz auctions essentially provided a large amount of spectrum for launching 'high speed', LTE-based mobile broadband (so-called '4G') and for easing the pressure on operators' network capacity of the datawave, driven by smartphone usage, which was threatening to engulf the industry. The revenue flows from the datawave (presuming that operators are able to realise money from this) are very different to the revenues from the voice-based services with which 900 MHz and 1800 MHz were originally associated. These latter are, of course, in heavy decline[19] while data revenues are increasingly only slightly[20] and are also insufficient to compensate (hence the concerns over whether operators are able to make money from the datawave).

21. It might be argued, in the context of the extent to which the LTE spectrum auctions are able to place a value on the 800 MHz and 1800 MHz licences, that operators' newly-liberalised ability to

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[13] We might note in this context that, despite a £900m investment programme in the UK in 2013, Vodafone missed the end-June target for the extension of 3G coverage to 90% of the UK's population.
[14] Quoted in totaltele.com's review of 2013: http://www.totaltele.com/view.aspx?ID=484850.
[15] Vodafone frequently cites this figure in press releases and in public comment: see, for instance, http://www.techweekeurope.co.uk/news/ofcom-3g-vodafone-coverage-131257.
[16] http://static.o2.co.uk/www/docs/business/chat-mat-4gv2.pdf.
[17] http://explore.ee.co.uk/our-company/about-ee.
[18] Against £281m of EBITDA, and confirming Enders Analysis's figures. Hutchison Whampoa's 2012 Annual Report and Accounts can be found at: http://file.irasia.com/listco/hk/hutchison/annual/2012/ar2012.pdf, p. 64.
[19] Comparisons are difficult, for a number of reasons, including the problems with stripping out call charges from bundled access and call packages. Nevertheless, the most recent Ofcom quarterly data reports that retail revenues from calls (of all types), plus SMS/MMS revenues, declined by 43% (£537m) from 2012 Q2 (£1,779m) to 2013 Q2 (£1,242m). http://stakeholders.ofcom.org.uk/binaries/research/cmr/telecoms/Q2-2013.pdf.
[20] By just £27m (4.3%) from Q2 2012 to Q2 2013, although full-year 2011 to full-year 2012 saw an increase of £359m (16.7%), to a total of £2.51bn.

refarm spectrum from one use (2G) to another ('4G') makes all spectrum licences equally as valuable, since spectrum in any band can be used to deliver any type of service. This, essentially, is the basis for the reliance on the LTE auctions to deliver an idea of what value operators place on spectrum. However, given the current inability of LTE to handle voice,[21] operators of course need sufficient spectrum to handle both voice and data (and the equipment to switch from one to another at the appropriate time). Nevertheless – and aside of the extent to which, technically speaking, 900 MHz lends itself to the appropriate spectrum combinations required to deliver LTE;[22] or of the availability of desirable handset equipment which can deliver LTE-based services over such frequencies – it is clear that the spectrum required to handle 'voice' (where revenues are in decline) ought to have a lower value than spectrum required to handle 'data' (where revenues are growing). This is the case whatever the frequency of the spectrum in use at any one time to deliver which type of service. Consequently, an auction of spectrum for 'data' has a higher value than spectrum required for 'voice', even if either can be used in practice interchangeably.

22. If the UK LTE auctions provide little prediction of the value which operators place on 900 MHz and 1800 MHz spectrum, auctions of the same spectrum overseas are of even less use. Different operators, in different markets and facing different scales of competitive challenges, and in differently-organised auction processes, can not possibly provide a guide to what operators might be prepared to pay in the UK. We admire the research that has gone into producing such analysis, and the invention of the efforts to turn that into a meaningful basis for comparison, but the sheer spread of the difference in sums raised, as Ofcom recognises, to say nothing of Ireland seeing the highest price per MHz[23] despite the economic problems that have hit Ireland in recent years, and where Telefónica is selling out, indicate the low predictive value that overseas comparisons really have for the behaviour of UK operators in auctions taking place in this country.

23. We would, unfortunately, given the research that has gone into developing this activity, prefer to discount such evidence as being insufficiently robust for determining what fees should be paid given the particular circumstances of the UK's mobile market. Ofcom might believe that such evidence should be regarded as in some way 'potentially informative', and it has clearly worked hard to determine between those auctions which ought to carry greater weight and those which ought to carry lesser. However, we would argue that, instead of being informative, it simply confuses the issue of what operators in the UK should pay in respect of the future value of licences to offer mobile services in the current UK market that were not won in auctions taking place in the recent past but administratively awarded some twenty or thirty years ago. The UK market now and in the next few years represents the only criterion which has any value in determining the value of licences to offer mobile services in this country and within that timeframe.

24. The consequence of all this is that arriving at a figure for what is 'full market value' is, ultimately, a 'finger in the wind' exercise. It is impossible to arrive at a determinative value based on a mechanistic application of the evidence. Furthermore, market value represents the optimum price for a good settled in a market place between traders and buyers – yet this good (900 MHz and 1800 MHz spectrum) was not actually being offered in this market place. Consequently, it is possible to point to a wide range of figures as representing the 'full market value' of 900 MHz and 1800 MHz spectrum against which it be almost impossible to argue.

25. We observe that the proposed annual licence fees, of a combined £309m, add up to a total of £6.2bn, in today's terms, over the notional twenty-year licence term. The total sums realised in the 800MHz and 2.6GHz LTE auctions were, ultimately, £2.4bn after the additional prices were paid in the assignment stage. Now, it may well be that 1800 MHz spectrum is no less valuable than 2.6 GHz spectrum, and that 900 MHz spectrum has a value similar to 800 MHz spectrum and that both sub-1 GHz frequencies are more valuable than 1800 MHz.[24] Nevertheless, it is counter-intuitive to believe that the spectrum offered in the LTE auctions, which released a considerable amount of spectrum to the market – some three-quarters of the amount of spectrum already in

[21] Voice over LTE (VoLTE) is, of course, on the way but not substantially present yet in commercial roll-outs.
[22] It is worth noting that Ofcom itself acknowledges in this consultation that the 900 MHz frequency may 'not be readily available for LTE' – paragraph 5.34.
[23] See Figure 4.2 of Ofcom's ALF consultation document.
[24] The latter point is clearly arguable in view of the short-term LTE advantages that 1800 MHz carries over the sub-1 GHz frequencies.

use, according to Ofcom[25] – is collectively so much *less* valuable than the frequencies administratively assigned some two and three decades ago and which concern a much smaller amount of spectrum.

26. Additionally, the dimensions of this gap between the proposed licence fees for 900 MHz and 1800 MHz spectrum and those actually paid in the LTE spectrum auctions are simply not credible. We would point out that, while Ofcom (completely understandably) consistently refused to engage in any speculation as to what the auction would raise ahead of time, the sums eventually realised were widely accepted as being lower than envisaged.[26] Given this scenario, we find it hard to believe that the LTE spectrum auctions provide supporting evidence for an assessment that spectrum has risen in value by some 400% on the current valuation.

27. This is so even if the 900 MHz and 1800 MHz licences are now held to be of an 'indefinite' duration since it is far from certain that they will, indeed, be held indefinitely without further fees being payable. The expectation of the international industry, as well as the approach which Ofcom has taken to the calculation of the present day value of the licences, is that twenty years is the likely duration of the value of the licences.

28. Ofcom has been required to 'have particular regard to' the sums paid in these auctions; but it is another step entirely for it to be proposing a fee regime in respect of the older (and smaller) licenses which entails licensees paying over two-and-a-half times, in present day terms and stretching over the next twenty years, the total sums they actually bid in the LTE spectrum auctions.

29. We might also reasonably further speculate as to whether the value of administratively-assigned licences is actually lower in practice than the ones for which operators were made to bid in an auction process.

30. Ofcom freely acknowledges that the figures it has come up with for lump sum full market value are estimates. Prospect believes that it should take this acknowledgment further, by taking into account a range of other factors as we have identified above, including affordability, the need for investment, and the desirability of more extensive deployments of networks capable of offering LTE-based services, i.e. on a basis which is more inclusive of rural and remote areas across the nations and regions of the UK, and come up with different proposals on what represents 'full market value'. We appreciate that Ofcom might regard its hands as having been tied in this matter by the tone and shape of the Direction that it was given in 2010 by the government, but Ofcom is still able to discharge its duties in this direction by having regard not only to the outcome of the LTE auctions but also a range of these other factors in defining 'full market value'.

31. Consequently, we would urge Ofcom to re-think its proposals.

32. Our preference would be for an 'inflation plus' mechanism to be introduced under which the existing fees are raised by the level of inflation each year, while allowing for a 'clawback' mechanism to increase these further should the returns prove to be above a certain level. We would suggest a model based on cashflow margin (EBITDA minus capex), since this would retain incentives for investment, particularly in the early years but also as a means of providing continued support for continued investment in capacity growth further on. Given the lower network investment costs associated with the lower frequencies, the use of cashflow margin as a proxy for the returns which operators have made also takes clear account of such lower investment costs, either by effectively requiring greater investment or by subsequently clawing these back.

33. Clearly, this would produce much lower licence fees than the ones Ofcom is proposing. We are aware of Three's view that the existing licence fees are a form of state aid to industry and, given

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[25] http://media.ofcom.org.uk/2012/07/24/ofcom-unveils-plans-for-4g-auction-of-the-airwaves/.

[26] Including by the Treasury and the Office of Budgetary Responsibility. We note the potential for the annual licence fee regime for 900MHz and 1800 MHz licences to be used to compensate for the 'disappointing' financial outcome of the 800 MHz and 2.6 GHz auctions, and would urge Ofcom to do all in its power to resist this. In this context, we do note that the total of the first three years of the proposed licence fees (i.e. from 2013-2015 inclusive), and escalating the initial £309m by 2.5% for inflation, would realise £951m, thus taking the proceeds from the auction and the first three years of licence payments much closer to the sum on which the Treasury has budgeted (the Treasury had budgeted for auction proceeds of £3.5bn. See: http://www.independent.co.uk/life-style/gadgets-and-tech/news/george-osbornes-billion-pound-drop-4g-auction-falls-short-of-treasurys-budget-8501923.html).

that Ofcom is proposing much higher fees as being aligned with what it thinks is 'full market value', it may fall to Ofcom to substantiate, perhaps in response to a European Commission inquiry, that this is not a form of state aid. We do not think that a proposal for an increase in the fees paid in respect of the administratively-assigned licences are a form of state aid and, as we have argued, it is impossible to pin down precisely (and in a legally watertight way) what is 'full market value'. Furthermore, the licence fees are applied to all network operators, since all have holdings of spectrum in these bands. Only so much can be done to unpick the policy decisions of 1983 and 1993[27] – and the mobile world has moved on apace since those decisions were made.[28] We believe that the policy interest in encouraging, all operators alike, to roll out their networks as quickly as possible, and on an equitable basis right across the nations and regions of the UK, are not only a legitimate government priority but a sufficient one to overcome state aid charges as well as helping to level the playing field between operators.

34. It may also – and equally evidently – be regarded that Ofcom would not have delivered 'full market value' under our suggestion. However, we observe that such a requirement was handed over fully three and a half years ago, on the basis of an analysis completed fifteen months prior to that in circumstances in which the mobile industry looked very different than it does at the start of 2014. What is most important is the future, not the past: Ofcom needs to deliver an annual spectrum licence fee regime – and we have no quibble with the idea of such a regime in principle – which looks forward, as much as possible over the notional remaining lifetime of the licences, and which is appropriately geared towards the needs of consumers over that period rather than the one which might have applied some years previously. Additionally, 'full market value' is an amorphous concept and it would be difficult to argue that Ofcom had not delivered this concept by taking a more pragmatic approach based on maximising the potential for investment. Presentationally speaking, we think that an approach which prioritises the ability of the network operators to make a case for investment in the interests of consumers could be attractive.

35. We also believe that our suggestion for a revised approach fits suitably with the headline legislative duties which Ofcom has. Such a move would support the Article 8[29] requirement on national regulatory authorities to '[promote] efficient investment and innovation in new and enhanced infrastructures', as well as being firmly in line with Recital 32 of the Authorisation Directive[30] that spectrum usage fees should 'not hinder the development of innovative services and competition in the market.' It also completely reflects the Section 3 imposition of a general duty on Ofcom to 'further the interests of citizens in communications matters'[31] and to do so not least by 'encouraging investment and innovation in relevant markets' as well as by having regard to the 'desirability of encouraging the availability and use of high speed data transfer services'.

36. In proposing such a major hike in the fees which 900 MHz and 1800 MHz spectrum licences attract, without any apparent consideration of the investment environment, we do not believe that Ofcom has sufficiently taken account of its duty to have regard to the impact of its decisions on investment and innovation under s. 3(4)(d) of the Communications Act. This fundamental aspect does not appear, from the consultation document, to have been taken into account at all in the determination of what fees should apply, featuring largely only in Annex 9 in the context of a discussion on the efficient use of spectrum holdings and whether there is an asymmetric risk from over- or under-valuing annual licence fees. The question of welfare loss arising from the inefficient use of spectrum is clearly an important question, but it seems to us secondary to the practical importance of a consideration as to the impact of whether investment can take place in the first instance as a result of the proposals being made, and under what conditions. It is not

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[27] Vodafone and O2 were awarded licences in 1983; EE (via what became its two progenitors) in 1993. Given the notional twenty-year period assigned to the licences, it is extremely interesting to reflect on how the mobile industry looks now compared to how it looked even twenty years ago, when Orange and One2One were just starting out (and a timely reminder of the risks involved in making predictions over a twenty-year timeframe).

[28] To pick some examples, the first mobile call in the UK was made in 1985, with the first GSM call being made in 1991; and the first text message was sent at the end of 1992 ('Happy Christmas') although SMS – use of which may now have peaked – did not see a commercial launch until 1995.

[29] Directive 2002/21/EC of the European Parliament and of the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services (Framework Directive), available at: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2002:108:0033:0033:EN:PDF.

[30] Directive 2002/20/EC of the European Parliament and of the Council of 7 March 2002 on the authorisation of electronic communications networks and services (Authorisation Directive) available at: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2002:108:0021:0021:EN:PDF.

[31] Communications Act 2003, s. 3(1)(a), s. 3(4)(d) and s. 3(4)(e), available at: http://www.legislation.gov.uk/ukpga/2003/21/contents.

just whether lower annual licence fees may benefit consumers as a result of lower prices; it is the dimensions of the loss to consumers caused by potentially delayed or frozen investment, and that is a rather different question. We would agree with Ofcom that spectrum is scarce and that operators are unlikely to be handing any blocks back on the grounds that the licence fees are too large. This is a highly competitive market and the costs of doing that are immense. But that is a rather different matter when set against the perspective of the impact of large licence fees on the scale, and timing, of the investment plans that operators make to use those blocks to offer services. Even in a competitive market, these may be slowed where margins are squeezed too tightly across the industry as a whole as a result of having to pay substantial annual licence fees.

37. The approach that Ofcom has taken to the assessment of the value of the administratively-assigned licences simply does not take into account the key investment and financial realities facing the industry here in the UK.

CONSULTATION QUESTIONS

Question 1. Do you agree with the approach that we propose to deriving a lump sum estimate of full market value for licences for 900 MHz spectrum and for 1800 MHz spectrum?

38. No, we do not agree. The assessment of full market value fails to take into account the impact on investment in the industry and, therefore, fails a vital test. Ofcom has, in addition, not demonstrated that it has delivered on its statutory duty in this area. In practice, we do not disagree with the setting of a lump sum and deriving from this an annual payment over the notional twenty-year licence period, but these are secondary considerations.

39. Ofcom should be congratulated for having delivered a determined analysis which seeks to make the best job of the demands placed on it. However, we believe that Ofcom should re-consider its approach and substitute it with a fresh one which takes account of the current and future requirements of the industry, and particularly the need for investment in a time of uncertainty, rather than those which applied when the Direction was first given by the government.

40. Just to be clear, we do not disagree with the concept that mobile operators should pay fees for the 900 MHz and 1800 MHz licences; our issues are concerned with the approach to determining what those fees should be and which has delivered such a hike in the amounts payable. Consequently, we have proposed above an alternative approach to assessment which places a simple inflation linkage on the existing fee structure while imposing a clawback mechanism which prioritises investment while providing a form of recoupment where investment has not been made.

Question 2. Do you have any comments on our assessment of the lump sum value of (a) a licence for 900 MHz spectrum; or (b) a licence for 1800 MHz spectrum?

41. Ofcom freely acknowledges that the 900 MHz and 1800 MHz licences (we are taking both (a) and (b) together here) were not the subject of the LTE auctions. Clearly, it is impossible therefore to state with any degree of reliability that Ofcom's calculations represent a fair assessment of the sums which operators would have paid for these licences had they been offered them one year ago. We do accept that spectrum liberalisation allows operators to offer LTE services over any frequency combination but it is not a simple jump from there to assume that the frequencies are equally valuable. 900 MHz and 1800 MHz frequencies were awarded for voice, revenues from which are currently declining; while the revenues for data are, despite the explosion in data consumption, growing comparatively slowly and are currently insufficient to match the decline in voice revenues on a pound-for-pound basis. There is no evidence that this gap is likely to be closed in the near future. Competition acts as a major constraint on operators' ability better to monetise the datawave and, not least at this stage, we believe it is therefore desirable to prioritise investment. Quite simply, we do not believe that the proposed lump sum values are in any way an accurate reflection of the future value over the next twenty years of the administratively-assigned licences.

42. We do accept – as a result of the lower network build costs associated with the lower frequency bands – that the 1800 MHz licences are likely to have a lower value than 800 MHz ones, and for there to be a differential in the fees paid in respect of each.

Question 3. Do you agree with our approach to annualising the proposed lump sum value, including the cost of capital which we propose to use?

43. We are happy in principle with the determination of a lump sum value that the licences are 'worth', and then annualising this. Doing so over the notional period of twenty years, in line with the initial term of the LTE licences, is also reasonable while consistency is an important consideration in the light of spectrum liberalisation.

44. We fail to see the importance in practice, at this juncture, of a consideration of whether the licence has terminal value beyond the end of the initial twenty-year period and whether that should be reflected in the annual licence fees payable now. It seems to us that a better approach would be to reconsider these questions closer to the end of this initial period; just because the licences have been made indefinite does not preclude a later consideration of the appropriateness of licence fees for year 21 and beyond for those who then hold those licences (and regardless of whether they have been traded in this time). Given the developments in the industry over the last twenty years, it is impossible to predict now with any degree of reliability what (or, indeed, if any) value there is in existing 900 MHz or 1800 MHz spectrum holdings some twenty years into the future. Consequently, we agree with Ofcom that the market value of the licences over the next twenty years represents the entirety of the application of the auction prices.

45. We have no comment to make on the question of whether Ofcom uses pre-tax or post-tax weighted average cost of capital in discounting the identified lump sum back to a present value. However, we would agree that the focus ought to be a position of tax neutrality between those who have paid lump sums for their licences (as in the 2.1GHz and 800 MHz/2.6GHz auctions) and those who are paying annual fees (the administratively-assigned frequencies in the 900 MHz and 1800 MHz bands).

Question 4. Do you agree that fees should be specified in constant real terms and should be adjusted annually in the light of changes to the Retail Prices Index (RPI)?

46. We agree that it is appropriate to take a 'flat' profile to the value of the licence fee over the twenty-year notional period. It is, as we have just argued, impossible to predict with any degree of reliability whether the value of the licences might increase or decrease over time; furthermore, the value that is set for the licence is the value which is currently ascribed to it; building in any potential for an increase in the value over time (or indeed a decrease) would be potentially iniquitous, in our view.

47. Consequently, we do believe that it is appropriate to take a real price profile and to update the annual licence fees by inflation. This will give certainty to network operators, facilitating in turn the ability to plan their investments.

48. Given the recent debate about RPI, and its demotion on the grounds that it does not 'meet the required standards for designation as [a] National Statistic[]', as well as the associated shift away from its use in much of the public sector, we are slightly surprised to see RPI being proposed here as the basis for indexation. The grounds for this are consistency, since the Mobile Termination Statement uses RPI in its calculation of the weighted average cost of capital and clearly inflation expectations are also built into the discount rate. We note that, given its fall from grace, it is entirely possible that RPI may not be published as a measure of inflation when it comes to 2024, let alone 2034. However, we are content to leave the issue of selecting the most relevant base for indexation to Ofcom.

49. It is worth making the point in the context of the general discussion about the weighted average cost of capital and about inflation that an assumption of RPI over the next twenty years of 2.5% is somewhat on the optimistic side: RPI over the last twenty years has actually been a little higher than that, at 2.84%; and that commentators do expect a forthcoming period in which inflation levels will be quite sharply higher than they have been for virtually all the last twenty years other

than the last five (while interest rates are also expected to rise sharply from their historic low point, not least in response to rising inflation). Currently, RPI stands at 2.6%, but it has not been at 2.5% (other than the exceptional year of December 2008-December 2009 inclusive) since March 2006 and it has only been 2.5%, or below, in seventy of the 240 months since January 1994.[32]

Question 5. Do you agree that revised fees should be implemented in a manner which has an effect such that all licensees are charged higher fees simultaneously, even though payment dates of individual licensees may vary?

50. We do not think that the current situation of an eight-month period over which fee payment dates fall due presents material difficulties to operators, and note that this structure has been in place for some time, including in the context of the existing licence fee regime, thus earning the benefits of clarity and consistency. Our preferred approach, of an 'inflation plus' mechanism based on the existing fee structure implicitly recognises a continuation of the differences in payment dates anyway, although these could of course be changed in the context of our proposal. However, given that we do not think the differences present material difficulties, we have no comment on whether all licensees should be charged the revised fees simultaneously.

Question 6. Do you agree it is appropriate that revised fees should be payable in full as soon as practicable after revised fee regulations are made?

51. Were Ofcom to stick to its current proposals then, for the reasons we expressed above concerning potential impact on investment, we would much prefer to see a phased-in introduction of the payments so as to minimise the impact on operators' immediate investment plans. Operators have been aware that the fees are to increase – but the dimensions of that increase, and the scale of the difference between the 900 MHz and 1800 MHz licences, and the 800 MHz and 2.6 GHz ones, may well come as something of a surprise. Consequently, we do believe – in contrast to Ofcom – that the absence of a phased-in period will create shocks which may have a quite deleterious impact in delaying services to consumers.

52. Neither is it credible for Ofcom to claim that the sums that operators bid in the auctions, and which they could have had to pay for new licences, means that they will be easily able to absorb the increases in the existing licence fees. We have pointed out that people act differently when under pressure in auctions; while, more practically, we need to recognise that there is a significant difference between the sums bid for new spectrum licences, in the context of the release of a significant amount of new spectrum on to the market, and ongoing fees paid in respect of much older licences concerning a much smaller amount of spectrum.

Question 7. Do you have any views about the minimum period that should elapse before we should consider revising fees again?

53. Aside of the inevitable emergency consequences of a model-disruptive event, or series of events, we see no reason to revisit the question of annual fees before the end of the twenty-year notional period ascribed to these licences (other than to plan fees for a subsequent period). Licences that have had fees attached to them, based on discounted present day value and with an inflation linkage ought, under the normal chain of events, to have that period play out in full before the fees are revisited. Any short-term gains (or losses) are part of the risks that mobile companies take on when planning such major investments in their networks.

54. Equally, it seems to us to make little sense for Ofcom to maintain a stance that the licences are for an indefinite period. The calculations – including the discount rate – reflect a 20-year period of use and, while this 20-year period should not be interrupted, neither should it be unduly extended.

55. Were such a model-disruptive event to occur which saw the licences take on a value which could not have been predicted today – either upwards or downwards – then there would be a need to reconsider the fees payable: this is an inevitable consequence of trying to predict the value of

[32] Including the thirteen highly exceptional months of December 2008 to December 2009.

something related to digital communications twenty years into the future. However, we agree that this would have to be an extremely significant event going well beyond the scope of normal investment risk-carrying.

Contact

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