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Hutchison 3G UK Limited
Response to
Mostly Mobile
Ofcom's Mobile Sector Assessment
Second consultation
NON-CONFIDENTIAL

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Summary

Hutchison 3G UK Limited (“3UK”) would like to take this opportunity to welcome Ofcom’s second mobile sector assessment ‘Mostly Mobile’¹. It offers the industry and other stakeholders the opportunity to think broadly about the evolution of the mobile sector over the last year including what options have been delivered to date, as well as future trends. We agree with Ofcom that the mobile sector is at an important junction in its evolution and innovation is ongoing, we are excited at the prospect of playing a central role in shaping how the market evolves going forward.

3UK’s insight into how the market is developing derives from its position as market leader in a number of key areas. 3UK is driving the expansion of mobile broadband infrastructure and growth in the range of mobile internet options available to the consumer, and has been at the forefront of many key sector developments. We actively look to new ways to harness internet technologies and bring their benefits to consumers. Our partnership with Skype is a prime example of our market leadership on price and innovation. We have just announced an innovative offer under which 3UK will allow its customers to use Skype and Windows Live Messenger (WLM) for free indefinitely on its network. 3UK has been at the forefront of driving the success of data services; mobile internet access is successfully taking off and 3UK continues to challenge the wider mobile broadband market through competitive prices.

1. Introduction

3UK welcomes Ofcom’s decision to undertake further analysis in these areas, placing a greater focus on some key issues in light of stakeholder responses from the Mobile Sector Assessment I (“MSA I”) consultation.² In this response to Ofcom’s Mostly Mobile Consultation document (“Mostly Mobile Consultation”), 3UK sets out its views on some of the key issues raised in that consultation.

1.1 Mobile Market and Investment

The mobile broadband sector is in a state of rapid development. Consumer take-up is accelerating and MNOs are competing vigorously in their product offerings. There is no doubt that consumers are finding value in mobile broadband as well as contract and PAYG mobile deals. Handset manufacturers are launching improved smart phones which are capable of supporting the delivery of rich video and media traffic to handsets with increased user-friendliness and higher quality audio-visuals.

Data services (specifically internet based mobile communications services like Facebook, WLM and Skype) are becoming established as mass market consumer products. Handsets and dongles are constantly evolving, showing signs of innovative up-and-coming services and technical capabilities. As consumers take advantage of new applications and services, operators are driven to invest further in infrastructure to improve access speeds and backhaul network capabilities. In practice, dramatic increases in data traffic may make

¹ This consultation can be found on Ofcom’s website at : <http://www.ofcom.org.uk/consult/condocs/msa/>

² This consultation can be found on Ofcom’s website at : <http://www.ofcom.org.uk/consult/condocs/msa08/>



this challenging unless there are measures taken to relieve these pressures in the form of spectrum release.

There is real potential for increased competition between fixed and mobile networks. As fixed mobile convergence (FMC) takes place the distinctions between the two types of technologies are becoming increasingly blurred as time goes on. The increasing sophistication of mobile devices is an important enabler of many mobile market developments. Devices, which were once exclusive to fixed networks markets are now capable of interfacing with fixed and mobile networks (through their embedded radio interfaces), as well as supporting various data applications. The development of these devices is being hindered in part by substantially higher mobile termination rates between the mobile and fixed sectors, creating arbitrage opportunities.

1.2 Competition and New Entry

There is a potential for further new entry into mobile markets, both through fixed mobile convergence type operators and through forthcoming spectrum auctions. Given these changes, 3UK strongly believes that the next charge control should take a new approach to regulating mobile termination rates which leads to significantly lower rates, rather than simply continuing the current system. This would create greater benefits for consumers and promote competition by encouraging new entrants into the market.

It is 3UK's contention that the existing Mobile Termination Rate (MTR) Regime and Mobile Number Portability (MNP) system create structural barriers that protect the position of larger incumbent operators and prevent smaller new entrants from competing. As the market matures there is a great potential for market consolidation to take place which may only exacerbate current regulatory issues. Therefore any market consolidation should importantly be accompanied by fast regulatory reform correcting for these market distortions.

1.3 Consumers

3UK acknowledges that some consumers are potentially unserved or have experienced consumer harm. However, rather than focus on bespoke regulatory responses, 3UK believes that Ofcom should address these issues through the optimisation of competition in the market. The current MTR and MNP regimes limits competition, which in turn reduces the pressure on providers to compete on quality of service, price or choice, eventually creating consumer harm.

Ofcom contend that "*competition alone is not always sufficient to ensure consumers are protected*", however 3UK believes that it is sub optimum competition that results in a lack of consumer protection and the failure to serve some consumer segments. Rather than focus on bespoke regulatory mechanisms aimed at managing outcomes for specific groups of consumers, Ofcom should instead focus on removing the existing regulatory impediments to competition.

1.4 Coverage and Spectrum

New technologies and network approaches are increasing the potential for network efficiencies in delivering mobile services. 3UK is already dealing with



'not-spot' problems through their network share agreement with T-Mobile – Mobile Broadband Network Limited (MBNL). With the availability of new spectrum, 3UK will be able to further aid government in achieving its 99% coverage objectives through the Digital Britain process.

1.5 Further areas for review

By addressing the issues considered above, Ofcom can strengthen competition in the UK mobile sector, generating substantial benefits for consumers. However, in some areas, competition alone may not be able to generate the most beneficial outcomes. Here, however, Ofcom may also have an active role to play. The challenge for the regulator is to choose when and how to intervene in these particular areas. Ofcom should consider providing guidance to the market, using as minimal a level of intervention as possible, to stimulate the right market conditions without distorting competition. There are still key elements of the existing UK regulatory regime that are no longer fit for purpose and if not addressed will harm UK consumers. These elements have been and/or could continue to be a barrier to competition in the mobile market, these being;

- The existing **Mobile Termination Rate** system and specifically Ofcom's 2007 Mobile Call Termination statement³ has restricted competition in the provision of voice services by the new entrant. The large gains from competition from the new entrant in mobile data have not been matched by equivalent price reductions in voice and indeed what gains we have seen may be under threat. Ofcom need to reassess the MTR's as part of the current market review process that is now underway.
- Access to additional **Spectrum** is key to the maintenance of effective competition in the mobile sector and particularly mobile broadband services. 3UK supports the objectives of Digital Britain and commits to delivering 2Mbps access to over 99% of the UK population within their homes or offices by 31 December 2012, conditional only on the timely availability to 3UK of sufficient and appropriate spectrum.
- The current donor-led **Mobile Number Portability** system is used by the incumbent mobile operators to maintain a significant barrier to customer switching. This has significantly undermined the benefits of competition in the provision of mobile voice services which would otherwise have accrued to customers.

The areas above will be of particular concern if any market consolidation takes place. These should be the top priorities for regulatory attention and reform as part of the MSA process and further future market reviews. By enabling a competitive mobile sector across all services, Ofcom will be delivering valuable benefits to consumers. However, in some areas, the market alone will not be able to achieve desirable outcomes. Here, we believe Ofcom should take a more active role in bringing parties together and overcoming coordination problems between many participants in the market and helping overcome these market distortions.

³ See http://www.ofcom.org.uk/consult/condocs/mobile_call_term/statement/



2. The Changing Mobile Market and Investment

2.1. Introduction

It is becoming ever more important for consumers to be able to access internet services effectively and conveniently. The Government and the European Commission recognise that mobile broadband is vital to maximising the benefits of the internet and empowering business and citizens to keep pace with developments across the EU and the developed world. In the current uncertain economic times, the UK cannot afford to fetter its potential.

The way in which consumers communicate has undergone a significant transformation over the past 3-5 years. In order to unlock the internet on handsets, it is important to understand what consumers are using it for. The Internet is fundamentally changing the way in which people communicate, access information, and transact. New communication services such as e-mail, instant messaging (IM), and social/member communities have become mass market applications, and command an increasing amount of people's time spent online. The significant trends include:

- Wireless access is increasingly a viable alternative to fixed line for the delivery of both traditional voice services and broadband services;
- The internet has driven changes in how people communicate through the introduction of new forms of communication services such as social networking and instant messaging;
- Untethered (e.g. mobile) access to these new services is now being offered and would appear to be highly valued by consumers - the opportunity to release significant consumer surplus through these services is high.

In the UK, as well as internationally, new entrants like 3UK have been the catalyst for increased competition in the mobile sector; this has been good for consumers. Incumbent operators are not as incentivised as new entrants to change or innovate and therefore new entrants must (and do) drive increased competition and innovation (i.e. reducing tariff prices, introducing innovative new products and services).

There continues to be growth in voice and data usage. The key trends can be seen in Ofcom's recent 'Communications Market 2009' report which states that "Mobile use continues to increase. Despite falling overall spend on mobile, average minutes per mobile connection were up 6% in 2008 to 123 minutes a month. Use of text messaging increased by 29% to an average of 99 per mobile connection as users increasingly took advantage of tariffs with 'unlimited' inclusive text messages."

2.2. The importance of mobile termination rates

3UK agrees with Ofcom that it is crucial to understand the key developments within the mobile market to make informed regulatory choices for the future. The coming years should see significant investment in mobile networks, exciting new developments in technology and services and the rolling out of ubiquitous mobile broadband which will provide very real social and economic benefits. Providing longer term certainty around the regulation of call



termination rates on a sound basis which is consistent with the European approach is one important part of the regulatory jigsaw which is required to ensure that these future developments occur. A new approach to regulating MTRs will also ensure a level competitive playing field: and strong competition will mean that the benefits of these evolutions will flow through to consumers. Prevention of effective competition between fixed and mobile voice services results in high MTRs artificially inflating the costs of calling mobiles from fixed networks and other mobile networks. Consequently some consumers retain a fixed line connection where a single mobile subscription would be more efficient. Increasing use of alternative, internet based forms of communication is a trend which is also accelerating.

Implementation of the final European Commission (“EC”) Recommendation of 7 May 2009 on the Regulatory Treatment of Fixed and Mobile Termination Rates in the EU” (the “EC Recommendation”)⁴ on MTRs therefore has the benefit of promoting harmonisation across Europe. This is a legal requirement on Ofcom (in the absence of compelling reasons to take a different approach) and will provide significant consumer benefits, in both the short-run and the long-run, over continuing the current approach or any other approach which continues to lead to relatively high mobile termination rates.

2.3. Network Share and Spectrum

Vigorous competition in the mobile sector is critical to delivering such long lasting benefits. However competition can only take place where an effective spectrum policy is implemented which enables operators to support changes in the sector and which does not distort competition or reduce commercial incentives to invest, innovate and provide the best value and quality of services. For operators without the ability to respond to market developments in the next few years, their market position will be tarnished for many years thereafter. 3UK is the only operator with T-Mobile that is investing in their network through a network share agreement whereby both are consolidating sites. To date MBNL has consolidated around 2500 sites resulting in over one thousand additional sites on 3UK’s network. The net result is that nearly one million extra people are covered by indoor coverage. By the end of 2010 3UK will have just under 13,000 sites on its network offering over 98% UK outdoor population coverage and over 85% UK indoor population coverage. Even so, as users take advantage of new applications and services, operators are driven to invest further in infrastructure to improve access speeds and backhaul network capabilities. In practice, dramatic increases in data traffic may make this even more challenging without the timely release of spectrum.

2.4. Facebook and Skype

The mobile market has changed since the previous MSA I consultation and the use of data services has exploded. 3UK has offered competitive tariffs that

⁴ EC(2009) 3359 final. See also the associated documents, “Commission Staff Working Document accompanying the Commission Recommendation on the Regulatory Treatment of Fixed and Mobile Termination Rates in the EU: Implications for Industry, Competition and Consumers” (the “EC Implications Document”) and “Commission Staff Working Document accompanying the Commission Recommendation on the Regulatory Treatment of Fixed and Mobile Termination Rates in the EU: Explanatory Note” (the “EC Explanatory Memorandum”).



have reduced uncertainty about the costs of using mobile data services and encouraged consumer take-up and use. Ofcom have identified some key trends in the Mostly Mobile Consultation that have shown how mobile services have evolved over the last few years and how they continue to change. Facebook, Skype and WLM have all been contributing factors to the growth in data use over the last year and are a predominantly strong trend for 3UK's mobile network. 3UK has embraced the internet and [●]

Figure 1: [●]⁵

⁵ [●]



Figure 2: [●]

Figure 3: [●]

New services such as VOIP and IM do not generate termination revenues (for either voice termination or SMS termination) for MNOs and as such most operators actively restrict usage by customers to protect their existing (termination) revenues. Consumers lose out because they are unable to use these new services as other operators prefer to offer older technologies over



more modern equivalents as a result of arbitrary and discriminatory regulatory treatment. 3UK is once again the catalyst for providing increased competition through prices, choice and innovation by being the only operator that allows VOIP and IM services on its network.

2.5. Mobile Broadband

Another key trend for 3UK is the growth in mobile broadband since its launch in September 2007. Mobile broadband can and should be a mass market product available to all. We believe that given the continuing evolution of mobile broadband and mobile internet communications services, the customer demand and appetite for which has been clearly demonstrated, regulatory policy is required to evolve further. Where pricing and competition are not distorted, the current UK telecommunications sector will deliver significantly greater benefits to consumers. The recent history of mobile broadband (“MBB”) provides an illustration of what competition can deliver when pricing is not affected by regulatory and wholesale arrangements. 3UK launched HSDPA USB modems in September 2007 and significantly reduced the average pricing available at that time for any data model products. Table 1 below illustrates the falling price trend which has resulted from 3UK challenging the wider mobile broadband market.

**Table 1: Pricing snapshots for mobile broadband⁶**

	3UK	Vodafone	T-Mobile	Orange	O2
Sep 2007					
Data Allowance (per month)	3GB	3GB	3GB	1GB	1GB
Cost (per month)	£15	£25	£29	£53 ⁷	£53 ⁸
Jun 2008					
Data Allowance (per month)	5GB	3GB	3GB	3GB	3GB
Cost (per month)	£15	£15	£15	£15	£20
Jul 2009					
Data Allowance (per month)	15GB	3GB	3GB	3GB	3GB
Cost (per month)	£15	£15	£15 (£10 for first 3 months)	£14.68 (£7.34 for first 3 months)	£14.69 (£9.79 for first 4 months)

Figure 4, shows the numbers of 3UK's MBB subscribers over time. MBB has now become a key product being sold at competitive rates by all networks. In order to help consumers we have focused on reducing bill shock, which is a significant negative driver of "value", by introducing a credit limit on contract accounts to help customers manage their usage, particularly when roaming overseas, and we have reduced our out-of-bundle charges on PAYG from £1 to 30p per Mb.

⁶ This table shows an illustrative headline tariff at each point in time for comparison purposes. We acknowledge that all operators naturally offer alternative tariffs with greater data allowances for heavier users and that contract lengths have also been changing.

⁷ Flex data 45 £0.045 per MB excluding VAT.

⁸ O2 Data Max 1024 £45 per month excluding VAT. Source: Pure Pricing.



Figure 4: [●]

This case study clearly demonstrates the benefits which can accrue to UK consumers and the positive impact which 3UK can have on the market when competition is not distorted. 3UK strongly believes that competition combined with the rapid evolution of mobile technologies (leading to greater capacity in mobile networks over the coming years) will have an equally significant impact on the mobile voice market, subject to the right regulatory regime for MTRs being in place which reflects the new market conditions.

However, it is important to note that there is a “chicken and egg” issue here, and that the form of regulation itself may impact on the speed at which such newer communication forms are able to represent a constraint on switched telephony. The call termination revenue itself and the margin which incumbent Mobile Network Operators are able to recover from such revenues, represent an incentive for operators to block and hinder the development of such services. Given its traffic imbalance, 3UK does not have such an incentive and it is therefore informative to consider the growth of these services amongst 3UK’s customer base, as shown in figure 5.



Figure 5: [●]

Increasing use of alternative, internet based forms of communication is a trend which continues to accelerate within the mobile industry.

2.6. Fixed Mobile Convergence

Ofcom highlights this key trend in its recent 'Communications Market 2009' report which states that "44.5% of all call minutes originated on mobile phones in 2008 and if current trends continue mobile call minutes are set to overtake fixed-line in 2010." This demonstrates the importance of the mobile sector in the telecoms market and the continued growth over the last year. The extent to which fixed mobile convergence type products are able to represent a competitive substitute will depend on the form of regulation set by Ofcom. The current approach, where there are significantly different termination rates between fixed and mobile services, creates a regulatory barrier to the development of these FMC services. If the future form of regulation creates a more level competitive playing field and reduces the incentives of incumbent operators to protect switched telephony revenue streams from substitute forms of communication (whether they be FMC style products or IP based communications services) then the pace of change could be extremely rapid. Even if Ofcom considers that, at 2011, the market definition has not substantially changed, sufficient flexibility must be included in the regulatory approach which allows this decision to be revisited should market conditions change going forward. Therefore, it is crucial that Ofcom take a holistic approach to setting MTRs in the next charge control.



2.7. Investment

Economic conditions have deteriorated over the last 12 months and companies are facing a very challenging economic climate due to the credit crunch and the recession, hence it is even more important that Ofcom encourage efficient investment by promoting competition and providing greater regulatory certainty. 3UK, even through the difficult economic climate, has undertaken investment through its network share agreement with T-Mobile and will deploy around 13,000 sites in the network by the end of 2010. Deploying next generation mobile technology (such as “Long Term Evolution” or “LTE”) within the 3UK network will depend on the timely availability of new spectrum. Stability in investment also requires regulatory certainty whether it is through spectrum release or MTR certainty: both are important for the profitability of a mobile operator. Ofcom should not distort investment incentives by imposing unnecessary regulation on mobile operators. In the future, thanks to the revisions of the 3G technology standard, such as 3G LTE, operators possessing larger amounts of contiguous spectrum will be able to deliver greater headline speeds to a particular terminal than those possessing only fragmented spectrum. These advantaged operators will then be able to advertise higher speeds and thus gain a competitive edge with consumers.

2.8. Future developments

European Commissioner Viviane Reding said in February this year that “we are at the start of a new phase of internet driven innovation and growth”. To predict the future mobile network requirements to support mobile broadband is to predict the evolution of the internet itself – all that can be said is massive changes will occur in the next 2-4 years and consumer demands for large size data offerings will increase exponentially. The infrastructure demands of this evolution cannot be overstated. 3UK believes that customer demand will require ever increasing data allowances and sufficiently high data speeds to support the quick download of large data files. Implementation of Digital Britain initiatives will form a catalyst increasing the momentum of these changes and consumer education and improved devices are likely to lead to broader adoption.

All commentators expect huge increases in the volumes of data passing over mobile broadband. Developments will include increasingly high quality (and high data size) music, video and gaming offerings, further developments in social networking and a vast array of new services for consumers and businesses. They report that web developments in the business world will gain increasing focus, leading to interoperability across different business segments (delivering more and more sophisticated and high added value products and services). Further, the development of an “Internet of Things” is expected to be imminent – this “Internet of Things” will connect myriads of objects and devices of all kinds. It is estimated that this could create a market of €30 billion by 2016. It is not difficult to imagine the scale of uptake of mobile broadband in the short term.

Mobile broadband dongles were new in September 2007 and are now prevalent in the UK. Many new devices will emerge in the short, medium and in the long term. These will involve anything in which a mobile SIM can be installed to



provide internet access. SIMs may be included in cameras, credit cards, devices linking consumers to home appliances – in fact, there is no limit to the uses for mobile internet use. Such new developments will give rise to significant business opportunities for those MNOs that have the vision to grasp them and the technical infrastructure to support such new services and associated increases in traffic volumes.

There is a great potential for mobile to grow as a payment mechanism, however the current regulation of the mobile payment mechanism is discriminatory and in need of urgent review. At present direct to bill charged fixed line services and other online transactions do not have to adhere to the same regulatory requirements as direct to mobile charged transactions.

Historically payments have been made on mobile and fixed communications networks by premium rate charging mechanisms. Here the customer would be charged via a per minute call or reverse billed SMS, with access and consumption of the service being achieved via the same mechanism (i.e. the call or the SMS). Increasingly however consumers are browsing online and choosing a service or item of content and instructing the service/content provider to debit their communications account directly without recourse to a chargeable call or SMS, much as they would with any other online transaction such as ordering from Amazon.com and instructing the merchant to debit their credit card. In both instances the consumption and charge are decoupled. However regulation of the mobile charging mechanism has yet to reflect this move away from traditional premium rate services (PRS) charging, and any charge for a service or content made directly to a mobile customers account is deemed by Ofcom as Premium Rate and Ofcom applies additional regulation to that transaction in the form of the PhonepayPlus Code of Practice. This places the mobile payment at a regulatory disadvantage to other payment mechanisms which are not regulated as PRS.

Furthermore a fixed provider which enables its customer to browse and charge for a service or item of content online and charge that item to their fixed communications bill does not currently have premium rate regulation applied to that transaction. For example, Tiscali who enable their customers to purchase a catch-up TV episode or BT who enable their broadband customers to charge their virus software or an iTunes download through BT click and buy (debited direct from their BT bill), are not required to adhere to the PhonepayPlus code of practice when operating their direct to bill payment mechanism.

Despite Ofcom promising to fully review this issue in 2005 it is only in the last four months that Ofcom have consulted on the scope of premium rate regulation and even then the question of fixed direct to bill payment mechanisms has not been addressed in the consultation. Ofcom needs to give MNOs assurance that this matter will be reviewed in full.



3. Competition and New Entry

3.1. Introduction

3UK's broad view is that the regulatory approach must take account of the rapid pace of development in the industry and ensure that regulation itself does not hinder technological and commercial change which might affect the relevant market definition and market power within those markets. Regulatory certainty is required to provide a firm basis for further investment and innovation and the regulatory approach should ensure that operators compete on a level playing field: large protected and regulated revenue streams should not be a source of competitive advantage. These are more matters of ensuring the right regulation is in place, rather than arguments around the appropriate relevant market to regulate and therefore are dealt with in more detail in subsequent sections of this response.

3UK, part of the global Hutchison Whampoa Group, was the successful bidder in the 2000 auction for the 3G licence reserved by the British Government for a new entrant to the UK mobile market. It became the first operator to offer 3G services when it started commercial operation in 2003.

3UK has been the most innovative of the mobile operators. In particular, it has driven the roll-out of 3G technology and services including mobile broadband dongles, the delivery of music tracks and videos to mobile handsets, voice over IP (i.e. Skype) on mobile handsets, mobile instant messaging, mobile TV services, user generated content sharing and mobile social networking sites. 3UK is leading the market with respect to mobile broadband.

3UK was the first operator to meet its licence commitment to roll-out 3G coverage to 80% of the UK population and has rolled-out the largest 3G network of any of the operators. In addition, 3UK and T-Mobile announced in December 2007 that they had agreed to share radio access networks and 3UK plans to provide 3G outdoor coverage to over 98% of the population by the end of next year. This will be as close as any operator has yet come to offering universal mobile broadband.

3UK is passionate about seeing mobile broadband widely available and affordably priced. If other regulatory impediments can be removed, such as inefficiently high mobile termination rates, we would wish to offer fixed-price "all you can eat" deals for voice, text and data. Mobile broadband can and should be a mass market product available to all.

This will require an infrastructure of the highest quality. Our 3G network provides mobile broadband services through handsets and modems. We have rolled out a High Speed Downlink Packet Access ("HSDPA") network which currently supports the 3.6 Mbps technical standard and will soon be supporting the 7.2 Mbps technical standard. 3UK is marketing its mobile broadband service based on plug and play USB modems. In addition to both mobile broadband and handset based services 3UK offers mobile use of major internet branded services such as Google and Yahoo search, Skype (internet telephony), Windows Live Messenger Service and Yahoo Messenger (instant messaging) and Facebook (social network and content sharing). Through



software installation on particular handsets, such as on the innovative and recently launched INQ1, 3UK is promoting the ease of use of mobile internet communications services. The result is that 3UK is seeing a significant increase in the usage of such services by its customers. For example 3UK has offered Skype services on its network since November 2006 and the number of Skype minutes carried on its network has continued to increase significantly over the last 6 months.

Limitations and restricted access to specific handsets with the emergence of exclusive deals between operators and handset providers are clearly affecting competition, and are likely to do so more in a consolidated market.

We believe that the continuing evolution of mobile broadband and mobile internet communications services, the customer demand and appetite for which has been clearly demonstrated, will require regulatory policy to evolve further.

The time is ripe for an open re-appraisal of the appropriate regulatory approach going forward and there is a vital need for regulatory certainty. The mobile sector has evolved significantly since the current regulatory approach was put in place, as follows;

- The mobile voice subscriber market has become saturated.
- Data services (especially mobile broadband, but also other forms of internet based mobile communications services) are becoming established as mass market consumer products.
- New technologies and network approaches are increasing the potential for network efficiencies in delivering mobile services.
- There is real potential for increased competition between fixed and mobile networks (and the distinctions between the two technologies are becoming increasingly blurred): potential which is, in part, being hindered by different termination rates between the two sectors.
- There is a potential for further new entry into mobile markets, both through fixed mobile convergence type operators and through forthcoming spectrum auctions.

In the UK, as well as internationally, incumbent operators are not as incentivised to innovate as new services risk cannibalising existing voice and/or fixed line revenue streams and the potentially high margins that these represent. Evidence suggests that they are more likely to follow the change efforts of other operators rather than lead them themselves.

There are some important issues that Ofcom need to address when looking at competition, market consolidation and new entry; namely MNP, MTRs, spectrum, AIP and net neutrality. Each of these is considered in more detail in the following sections

3.2. SMP for new entrants, Interconnection, and MNP

The logic applied to the five existing MNOs applies equally to other operators using mobile number ranges and mobile technologies. As such, if the existing MNOs are found to have SMP and are subject to regulatory remedies



technology neutral regulation would require that the same conclusion is reached with respect to other operators using mobile type technologies or offering services using mobile (07) number ranges. 3UK is disappointed that Ofcom does not even raise this issue in the Mostly Mobile Consultation especially given that this issue has been causing commercial uncertainty and has already led to disputes needing to be resolved by Ofcom. Further this is an issue which 3UK has repeatedly requested that Ofcom consider and which the last market review conclusions suggest would need to be addressed. Clarity on the regulatory treatment of termination rates for such operators would benefit all parties and is now overdue. Ofcom has confirmed its finding of SMP on the existing five MNOs, therefore there is no reason for the same logic not to be applied to all these other operators and appropriate SMP conditions subsequently applied to such operators.

Similar issues arise in respect of MNP. Some mobile new entrants have now gone live on the current MNP system. However, the complexities of the current arrangements inevitably mean that progress has been slower than Ofcom would have liked because as each new entrant comes on board, the system requires them to engage both commercially and technically with all the operators that currently support MNP. There is an increasingly urgent requirement to move the system away from the current bilateral framework, to a central hub solution that will facilitate faster entry onto the MNP system. A market consolidation may result in an increase in porting numbers which could arise in churn away from smaller operators. As the market matures, the greater the proportion of calls to ported numbers and the greater the need for an industry direct routing solution. 3UK will raise these points in more detail in its response to the two MNP consultations that Ofcom has recently issued.

3.3. Mobile Termination Market Review

The existing MTR system limits competition in the provision of voice services. It also disadvantages new entrants who have been active in leading the uptake of mobile data services. It is becoming ever more important for citizens and consumers to be able to access internet services effectively and conveniently. The Government and the European Commission recognise that mobile broadband is vital to maximising the benefits of the internet and empowering business and citizens to keep pace with developments across the EU and the developed world. In the current uncertain economic times, the UK cannot afford to fetter its potential.

3UK believes that implementing the EC Recommendation is practical, feasible and desirable. It is also the only approach that achieves the harmonisation objectives of the EC Recommendation and the Framework Directive, and that is consistent with the requirements of section 4(4) Communications Act 2003. Doing so will recognise the major changes in the commercial and regulatory landscape and benefit UK consumers. Such an approach will provide benefits to competition and UK consumers and place the UK at the forefront of international best practice on regulation of MTRs.

On-net and off-net price discrimination is still a prevalent problem in the mobile market. Existing tariff offers reveal there is significant price discrimination



included in all the operators' tariff structures driving on-net usage and, where there are relatively high MTRs, creating a competitive distortion adverse to a later entrant operator such as 3UK. The extent to which this price discrimination impacts consumers will depend on the relative volumes which are charged at these discriminatory prices. 3UK, of course, does not have access to the data of other operators on the volumes of minutes where they are able to charge lower on-net rates and higher off-net rates. Ofcom could easily seek this information from 3UK's competitors properly to assess the impact and extent of such price discrimination. 3UK in recent years has introduced aggressive on-net tariffs to attempt to mitigate the competitive effects of the current MTR regime which has marginally increased its "reciprocation" rate (ratio of incoming calls to outgoing calls). The limited impact large bundles of included on-net calls (300 minutes per month) has had on this reciprocation rate shows the competitive imbalance which 3UK faces and the ongoing strategic importance of this discriminatory pricing. These competitive imbalances and discriminatory pricing will only deteriorate in a consolidated market.

In practice, such price discrimination operates in more subtle ways than simply whether calls to particular numbers are included in-bundle. For example, operators are increasingly offering discounted or free rates to specified (on-net) numbers. O2 offers a "bolt-on" for a fixed fee giving free on-net calls. Business tariffs also contain significant on-net discounts.

3.4. The Spectrum, Speed and Coverage review

The Government recognises the importance of the development of mobile broadband. In June 2009 the Government published the Digital Britain Final Report. The report outlined the Government's vision for a Digital Britain, a vision which 3UK shares. 3UK sees the Final Report's vision of Digital Britain as one in which there is universal broadband connectivity and thriving competition to provide all citizens of the UK with the best, most innovative broadband products at the cheapest prices. In particular, 3UK strongly supports the rolling out of mobile broadband to as many as possible, as soon as possible with the widest coverage possible.

3UK wholeheartedly agrees with the view of the Final Report that mobile broadband has an important role to play in stretching the universal coverage of broadband to the extremities of the UK and in extending broadband access to groups that would not otherwise have access to it. Indeed, mobile broadband plays an important role both as an important complement to fixed broadband access and as an alternative technology providing such access, especially as 20% of some socioeconomic groups have "cut the wire" and now only use mobile telephones. We expect this number only to increase.

The Chancellor of the Exchequer provided further support for these proposals in his 2009 Budget delivered on 22 April 2009. He indicated there that the Government would provide financial support (reported to be the surplus from the Digital Switchover assistance fund held by the BBC Trust) to make a reality of the 2 Mbps universal service proposed in the Digital Britain Final Report. However, the pre-requisite to achieving such aspirations is the provision of high



quality infrastructure, which in the case of mobile broadband includes the provision of spectrum which supports that infrastructure.

3.5. Administrative Incentive Pricing (AIP)

Looking to the future, when liberalisation and trading are introduced, it will be all the more important for Ofcom to ensure that AIPs are set at the correct level since failure to achieve this will mean that 2G operators do not face the correct economic incentives to use their spectrum allocation efficiently. Such an outcome would not only undermine Ofcom's liberalisation policy, but also seems difficult to square with Ofcom's statutory duty to maximise the efficient use of spectrum.

The way in which AIP fees are set should ensure that there are no competitive distortions and that efficient spectrum usage is promoted. 3UK considers that any AIP regime for spectrum not awarded through an auction process should at a minimum take into account the following factors:

- the value of spectrum with similar characteristics sold at auction;
- network cost differentials with similar spectrum resulting from the physical characteristics of that spectrum (i.e. the cost differences arising from the fact such spectrum will be at, at least slightly, different frequencies);
- any first mover advantages conferred on those using retained rather than auctioned spectrum; and
- the financing advantage conferred on operators paying annually for spectrum rather than up front in an auction.

Any such AIP arrangements must be agreed at the same time as any decision on liberalising the existing 900 MHz and 1800 MHz bands because otherwise it is not possible to assess any spectrum liberalisation proposal. Importantly, unless certainty is given around such arrangements before any related auctions are held, those MNOs not enjoying the rights to retained spectrum will be at a disadvantage in such auctions.

Finally, as spectrum is a finite resource which is critical to the development of mobile communications in the UK, it is important that measures be implemented to ensure that it is used efficiently and for the benefit of UK consumers. Therefore, spectrum which is made available for 3G and next generation technologies (whether by allocation, auction or other means) should be subject to licence conditions which ensure the efficient use of that spectrum. These licence conditions could include, for example, an obligation to provide nationwide coverage for 3G or next generation technologies using that spectrum (consistent with the Government's objectives in Digital Britain).

Overall, such an approach should ensure a fair equitable solution by which all MNOs have an equivalent ability to compete (even if through different means) and no individual mobile network operator (MNO) is able to gain a competitive advantage through its spectrum allocations. Each MNO should have an equal opportunity to access spectrum for capacity, contiguous bandwidths for maximum download speed and spectrum for coverage. The AIP regime should



ensure that no MNO is at a significant cost disadvantage solely as a result of spectrum holdings.

3.6. Net Neutrality

With the explosion of mobile internet and data services on mobile platforms, 3UK want to have the ability to supply as much choice to the consumer as possible. We are a strong advocate of services like Skype, Facebook and Windows Live Messenger and fully support access to such services which other operators feel might detract from their voice and data offerings. We consider this important to growing our business and are championing access to internet services without being required to do so by regulation. Customers in the UK already have a range of choices when accessing internet services, through current market offerings. The market is working in the UK without regulatory intervention.

4. Consumer Protection and Empowerment

3UK welcomes Ofcom's view that the mobile market works well for consumers. However 3UK is concerned that Ofcom's analysis of the consumer protection and empowerment focuses on the response Ofcom should make to specific issues as they might arise rather than on why, in a supposedly competitive market, mobile operators are not incentivised to rectify consumer problems.

3UK believes that the competition in current mobile market is sub-optimal, and that consequently there is insufficient market pressure on providers to either address issues that affect only a minority of consumers or to innovate to compete for those customers currently unserved. 3UK notes that Ofcom consulted a number of consumer organisations when compiling the consultation and that these groups suggested that "mobile operators are not as responsive to customers' needs as would be expected in a fully competitive market". Disappointingly however the mostly mobile consultation then fails to go on and consider whether the market is therefore fully competitive.

3UK agrees that whilst retail regulation is unnecessary, the regulation of the wholesale termination rate market requires comprehensive review. The current regulated rate for MTRs enables larger incumbent providers to focus on revenue generation from per minute of per text based tariffs. This pushes operators to develop ever more complex tariff options all based on a multiple of per minute/per text charges. Yet as Ofcom identifies such bundled multiples can bewilder and confuse some consumers. 3UK believes that a significant lowering of MTRs would enable mobile operators to develop simplified fixed price unlimited tariffs comprising voice, SMS and data services. Such tariffs would not only eliminate complex multiples of call and text allowances but would also reduce the incidence of bill shock. It would force operators to compete on other criteria such as customer service and provision to specific



consumers, such as elderly or disabled customers who Ofcom argue are currently largely unserved.

According to the Mostly Mobile Consultation Ofcom should “continue to play a role in ensuring that mobile consumers are empowered and equipped to get a good deal⁹”. However the current system of MNP means that all the ‘good deals’ are hidden under the counter and reserved for retentions activity by the customer’s existing provider. The donor led system means that every mobile customer must first speak to their existing provider to request a PAC code and in the majority of cases the existing provider will offer a tariff comparable to or better than the one offered by the provider the customer has indicated they wish to join. Yet the tariff offered by the existing provider will not usually be available in the market, so no matter how empowered, consumers cannot currently get the “best deal” as mobile operators reserve these for customers who have already made the decision to switch. In effect the current MNP system both limits switching and disincentives providers from putting their best deals into the market. In short the consumer loses out twice.

The consultation goes on to outline the criteria which underlies Ofcom’s consumer policy objective, however 3UK believes that each of these criteria would be met through reform of the MTR and MNP regimes. MNP reform would meet Ofcom’s criteria for easy and reliable switching, access to the information needed to get a good deal and competition. Whilst MTR reform would force mobile to compete on services other than price thereby increasing the importance of good customer service and complaints handling, and increase the likelihood of operators targeting unserved consumer segments.

The only criteria that potentially would not be met would be protection from misleading or exploitative practices, however 3UK believes this is best achieved through recourse to general consumer law rather than bespoke sectoral regulation.

3UK therefore recommends that rather than consider extending sectoral consumer regulation further, Ofcom should refocus on its primary duty namely “to further the interests of consumers in relevant markets, where appropriate by promoting competition” principally through the removal of those regulatory barriers that 3UK believes currently impede competition – MNP & MTR.

5. Access and Inclusion

3UK notes that it is Ofcom’s intention to “encourage and facilitate a dialogue between mobile operators, other sectoral organisations and groups representing the disabled to further investigate ways to tackle barriers to access and use of mobile by disabled people¹⁰”; however 3UK is unclear as to which barriers in particular Ofcom believe require attention.

⁹ Mostly Mobile paragraph 6.2

¹⁰ Mostly Mobile 7.50



The Mostly Mobile Consultation identifies several issues that have been raised by disabled people and disability organisations, however as the Consultation makes clear the majority of these are either not issues or are being addressed.

On pricing, the argument is that tariffs are complex and therefore particularly challenging for some minority groups. However as we have already set out we believe reform of the MTR regime would pave the way for unlimited single price tariffs thereby reducing complexity. We further note that some groups allege there to be a problem with cheap voice based tariffs which are inaccessible to deaf and hard of hearing consumers, but – as Ofcom has identified – the market has already responded to demand for non voice based products either through SMS only tariffs or mixed tariffs like 3UK's mix and match which allow the customer to alter their use of voice and text according to their needs.

SMS emergency access is identified as an issue, but as Ofcom point out this is already being addressed by the networks with a pilot due this year. Similarly Ofcom found no issue with customer service provision for disabled customers, and 3UK provides both a Minicom and dedicated email address for customers who cannot access customer services through a voice call.

Of the remaining issues, problems with mobile handsets and service innovation lay outside of the immediate control of the mobile networks, although we stand ready to engage with Ofcom and other stakeholders to encourage other players in the value chain to develop products and services that enable disabled customers to better use mobile. That said a number of mainstream products, in particular Skype and IM, enable deaf and hard of hearing customers to communicate on the move and, on 3UK's network, without charge.

Ofcom do identify Text Relay as an area where Ofcom will "*build the case for introducing improved relay services*". 3UK is concerned that despite the extremely low level of take up of the existing regulated bespoke relay service Ofcom would appear to be considering further extending the regulatory requirements on mobile operators to meet what is in effect a social need. In most other sectors – housing, transport and education – that social need is funded not by private companies but rather through general taxation. 3UK would therefore strongly recommend that any discussion on the development of relay services is co-ordinated jointly with the Department for Work and Pensions (DWP) who have the public policy responsibility for meeting the needs of disabled people in the UK.

6. Mobile Content

3UK welcomes Ofcom's acknowledgement of the extensive and ground breaking work the MNOs have undertaken in relation to the self regulation of mobile content. The UK Code of Practice for the Self Regulation of new



forms of content was first published in 2004 and Ofcom's recent review of the Code found it to be largely effective in protecting under 18s from accessing age inappropriate content. It is a model that has since been replicated in other countries and formed the basis of the European Commission's Memorandum of Understanding with the European Mobile Operators.

3UK notes that the consultation goes on to identify a number of issues in relation to 'mobile content' however, many of these issues sit outside of the definition of what could be termed 'mobile only content'. As the consultation acknowledges the move away from walled garden content has resulted in more and more access to internet content on mobile, and whilst mobile operators can seek to protect younger customers from accessing age inappropriate content on the internet, this protection can only be delivered while the customer uses the mobile operator's own portal.

Furthermore 'mobile' devices no longer mean just mobile phones. PSPs, PDAs, MP3 players now all come with internet connectivity and with no filters to protect younger users from accessing inappropriate or harmful content.

Similarly as the consultation identifies online services like Google latitude or Twitter, deliver location based services without any supervision or regulation. Whilst mobile operators have, and continue, to self regulate mobile based location services, it is increasingly the case that mobile users are accessing location services that sit outside of the control of mobile operators.

3UK is unclear what Ofcom believes should be done from a regulatory perspective in relation to mobile content. Indeed given the increasing complexity and the diverse number of players in the 'mobile content' space – the majority of whom fall outside of Ofcom's remit as a communications regulator – the dialogue on how 'mobile content' is regulated or not regulated may be more appropriately led by Government.

7. Coverage and Spectrum

7.1. Introduction

Becoming the Best Network is one of our top priorities. Improving the overall experience of our customers and the perception of the consumer is a key part of this. We're making some good progress to improve our coverage and capacity wherever possible. 3UK is continuing to invest in the network upgrade programme through MBNL - our network share joint-venture with T-Mobile. Over the next 16 months we expect to add thousands of new masts to the network and increase the quality of indoor and outdoor coverage for millions of people across the country. 3UK already has the largest 3G network, covering 91 per cent of the UK population. This programme is allowing us to fill in the gaps and to improve the quality of indoor coverage for those who already have access to our network. 3UK is providing monthly updates to all its partners to highlight areas of the country where we are making changes to the network and



where we see progress positively impacting on customer experience. As a result of the upgrade programme we now have the 7.2 Megabytes per second HSDPA technical standard in sites covering 43 per cent of the UK population. This work will be completed and cover 100 % of our network by the end of next year. Unlike impossible claims made by some operators about the level of speed that this can provide for customers, we will only say that it will enable more of our customers to achieve a good 1-2 Mbps user speed which will enable them to browse, read emails and download music to their mobile devices more effectively.

To date MBNL have consolidated around 2500 sites resulting in over one thousand additional sites on Three's network. The net result is that nearly one million extra people are covered at our indoor coverage level. By the end of 2010 3UK will have just under 13,000 sites on its network, offering over 98% UK outdoor population coverage and over 85% UK indoor population coverage. 3UK will have 3G coverage levels equivalent to those of a 2G network once the MBNL site consolidation has been completed at the end of 2010.

We realise the importance of interacting and responding to our customer's coverage and connectivity issues as well as all retail issues to allow customers to better understand the changes to our network. We have changed our terms and conditions to make it much easier for customers to trial our products and to return them if they don't get good mobile broadband coverage, or if the service is not what they were anticipating. We have also made it easier for customers to transfer or terminate their contract if they move home or find that a network change affects their ability to use the service. We are significantly upgrading our customer communications activity to help customers better understand the improvements we are making to the network and to alert them when upgrade activity is likely to impact coverage in their area.

7.2. Coverage

A simple example of how new internet offerings are likely to increasingly place strain on mobile broadband networks is the rapid growth of BBC iPlayer. Even the largest mobile broadband packages currently available only allow about 13 minutes of iPlayer viewing per day (and high definition downloads will impose even greater demands). And this is just today's offering: future internet innovations will include enormous uplift in the use of data hungry internet services. The existing UMTS spectrum is insufficient to support future mobile broadband requirements, even in the short term. As spectrum is a scarce and finite resource which underpins the mobile industry, the way in which existing spectrum is liberalised and newly available spectrum is awarded is key to ensuring a level playing field for competitors in the future. In order for MNOs to deliver mobile broadband services they will require:

- Sufficient capacity to carry current and projected consumer traffic;
- Sufficient coverage to deliver their services to customers across the UK and
- Data speeds which are high enough to support new data services and to meet customer demand.



Each of the three elements above must be achievable in a manner and at a cost which supports the ongoing financial viability of our business and each of these factors is influenced by the timely release of spectrum.

Along with limitations of planning permission, commercial viability and cell site availability we believe one of the biggest problems to the lack of coverage and capacity is the availability of new spectrum. Operators retaining 900MHz spectrum for 3G use will gain a significant advantage in coverage. The propagation characteristics of 900MHz spectrum will allow these operators to deliver better coverage of rural areas and within buildings (given a certain density of cell sites).

800 MHz, 900 MHz and 1800 MHz spectrum bands are all important to achieve deeper coverage and wider availability of mobile broadband services. These bands will provide important additional capacity to the sector as mobile broadband becomes a mass market product, provide important options for MNOs to enhance speed and deploy future technologies LTE and, particularly the lower frequency 800 MHz band will, as recognised by Ofcom, better enable access to mobile broadband services in rural areas and inside buildings.

Many of the coverage and capacity benefits provided by spectrum may be mitigated by the addition of additional sites (but only at great cost to the MNO). There are greater environmental benefits of using a low frequency spectrum band such as the 800MHz spectrum band, which results in fewer base stations being built¹¹. However, spectrum is the primary determinant of download speeds of a network because up and coming technologies require contiguous spectrum bands to provide improved download speeds. As a result, spectrum can be the key source of competitive advantage.

If MNOs do not obtain suitable spectrum to support future mobile broadband use they will miss the boat of the mobile broadband explosion and they will:

- not be able to support increased consumer uptake by their existing customer base;
- not be able to support increases in their customer base;
- not be able to support increasing data sizes of internet offerings available online (and may need to throttle usage); and
- not be able to take advantage of new business opportunities associated with new mobile devices.

In short, they will miss out on huge competitive opportunities which are likely to arise in the short, medium and long term.

3UK believe it is impossible to provide 100% seamless geographical coverage. Not-spots will still exist due to commercial viability, planning permission, extremely challenging topographies and cell site availability, therefore 3UK does support local initiatives to try and improve areas where not-spots persist

¹¹ Ofcom recently commissioned a report into the environmental impact of communications systems supporting fewer base stations to reduce negative environmental impacts:

<http://www.ofcom.org.uk/research/technology/research/sectorstudies/environment/environ.pdf>



but we as an operator should not be placed under any regulatory or financial obligation to undertake or help these projects. 3UK are fully supporting the Independent Spectrum Broker's (ISB) work as part of the Digital Britain process, but at the same time we should not be subject to any other obligations outside this process. 3UK believe that additional spectrum with a network consisting of 13,000 sites at the end of 2010 will achieve the Digital Britain objective of providing 2Mbps/s to virtually every household in the UK, close to 99.8% of the population and will hopefully eradicate most of the existing not-spot areas.

7.3. Femtocells and Repeaters

Studies into deploying Femtocells in operation are ongoing but their success in other networks as well as the availability of additional spectrum is expected to be the driving factors as to whether 3UK will deploy them in the future. It is also important to note that Femtocells are operator specific and they do require a broadband connection which means they are not a commercially viable proposition for customers. 3UK are also investigating other customer premises equipment such as repeaters to enable the network to reach the remaining population in terms of coverage and improve the service of 'edge of cell' users. Repeaters are already deployed in Ireland as a part of the National Broadband Project.

7.4. 999 Roaming

3UK notes that progress is underway to initiate a trial of the so-called 999 "roaming" service, although the Limited Service State (LSS) technology that the trialling parties and Ofcom have agreed to use. However this project should not be confused with the national roaming services that Orange provides to 3UK. Unlike LSS, when a 3UK customer initiates a 999 call whilst roaming on Orange, Calling Line Information (CLI), Location Information and a network identification is passed to the emergency authorities. LSS cannot provide this functionality and it is important that customers and emergency call handling agents are aware of the limitations.

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8. Conclusion

3UK strongly supports the ISB process as part of the Digital Britain initiative and looks forward to playing a significant role in helping the Government to achieve many of the objectives set out in the Final Report in June 2009. 3UK commits to delivering 2Mbps access to over 99% of the UK population within their homes or offices by 31 December 2012. This commitment is conditional on the availability of sufficient and appropriate spectrum over a reasonable time frame.



Competition in the mobile sector is critical to delivering long lasting benefits. However competition can only take place where effective MNP and MTR policies are implemented which enable operators to support changes in the sector and which do not distort competition or reduce commercial incentives to invest, innovate and provide the best value and quality of services. For operators without the ability to respond to market developments in the next few years, their market position will be tarnished for many years thereafter. 3UK therefore encourages Ofcom to look at fast regulatory reform in the light of new market developments.