

Communications Consumer Panel and ACOD response to DCMS' consultation on Tackling Partial Not-Spots in Mobile Phone Coverage

Introduction

The Communications Consumer Panel and the Advisory Committee on Older and Disabled People welcome this opportunity to comment on DCMS' consultation - Tackling Partial Not-Spots in Mobile Phone Coverage.

The Panel works to protect and promote people's interests in the communications sector. We are an independent body, established by the Communications Act 2003. The Panel carries out research, provides advice and encourages Ofcom, Government, the EU, industry and others to look at issues through the eyes of consumers, citizens and micro businesses. The Panel pays particular attention to the needs of older people and people with disabilities, the needs of people in rural areas and people on low incomes, and the needs of micro businesses, which face many of the same problems as individual consumers. There are four members of the Panel who represent the interests of consumers in England, Northern Ireland, Scotland and Wales respectively. They liaise with the key stakeholders in the Nations to understand the perspectives of consumers in all parts of the UK and input these perspectives to the Panel's consideration of issues.

There is also cross-membership with Ofcom's Advisory Committee on Older and Disabled People (ACOD). This means that Members, in their ACOD capacity, also provide advice to Ofcom on issues relating to older and disabled people including television, radio and other content on services regulated by Ofcom as well as about issues concerning the postal sector.

Response

The Panel has for some time urged Ofcom and communications providers to explore ways of improving coverage where there are complete or partial mobile not-spots. Whilst we appreciate that there are technical complexities and commercial considerations, the fact that partial/full not spots persist suggests that, given the fundamental economic challenge of providing multiple fixed cost infrastructures in low demand areas, this is a problem that normal market forces will not solve for consumers.

We remain unconvinced by the arguments against a national roaming solution. We believe that, if properly structured, mandated national roaming, and the associated economic flows between Mobile Network Operators (MNOs), has the particular benefit of moving the problems caused by poor coverage away from individual consumers (who have limited opportunity to solve the problem) to the MNOs who can muster the resources and

competence to address the issues. Consumers have never been able to do anything about not spots other than buy SIMs from more than one MNO and swap them over to gain coverage - which is not a solution, but a costly and inconvenient process; whereas the MNOs do have the capability, technology and financial resources to fix the problem for their customers.

We believe that an intervention is required to deliver an outcome that is simple, effective, and timely for all consumers.

If implemented properly, national roaming could represent a win for consumers with better coverage, a win for citizens not exposed to further blight from more or higher towers in rural and other areas, and, critically, a win for MNOs who can direct their capital expenditure programmes in more productive directions. The only disadvantaged groups we identify currently are rural site landlords who will miss out on a rental boom, providers of backhaul connectivity who will not be able to sell lots of new connections, and network equipment vendors who will not be able to see their market expanded through network duplication.

We urge Government, Ofcom, and MNOs to work to this common point of understanding so that we can move to ubiquitous mobile voice and data services sooner rather than later and underpin our economy's role as a leader in the digital world.

Context

Consumers and micro businesses are increasingly reliant on mobile devices and their associated services.

The Ofcom research into *consumer views on the importance of communications services and their affordability* referenced in the consultation¹ highlights that the services now seen as essential by consumers reflect changes in the way people communicate with each other, a change made possible by the increasing availability of new technology. The research found that for most consumers, mobile services are seen as essential or important to access voice calls and text-based communication. Overall, 64% of respondents rated any element of their mobile service as essential (any of voice, text, access to the internet), 59% rate either voice or text via mobile as essential, and 57% mention at least one method of personal access to the internet as essential (across all devices) enabling consumers to communicate and participate in society and to access information, education and key services easily wherever they are. Ofcom's research also highlights that 28% of respondents saw internet access via a smartphone as essential, with 53% of 16-24 year-olds regarding internet access from a smartphone as essential².

¹ http://stakeholders.ofcom.org.uk/binaries/research/affordability/affordability_report.pdf

² http://stakeholders.ofcom.org.uk/binaries/research/affordability/affordability_report.pdf

As technology develops further, the way that consumers access essential communications is likely to continue to change. Ofcom's recent *Communications Market Report*³ shows that nearly six in ten consumers (57%) said they personally used their mobile phone to access the internet. 4% of UK adults reported that their household's only means of internet access was a smartphone. This access to data services as well as voice and text is very important.

This would suggest that the growing dependence on mobile is no longer constrained principally to voice and text, but is rapidly incorporating the internet and apps that need mobile data - bringing with it all the attendant economic and social benefits they enable.

The vital importance of data

We are very surprised and concerned that data seems to be relegated in importance in the consultation. Coverage problems can have enormous negative effects for citizens and micro businesses, for example when it comes to financial transactions and obtaining information whilst on the move (or indoors). Given this dependence on mobile, a lack of voice and/or data coverage is no longer one of simple irritation for consumers and micro businesses but is now an issue of real detriment. Coverage of transport networks - especially for disabled consumers - is in desperate need of improvement. As highlighted in the consultation document, partial not-spots affect 3% of UK premises, 10% of A roads, 16% of B roads and 21% of landmass. These figures have a disproportionately high impact in rural areas and may give rise to serious safety issues - not all of which would warrant resorting to a 999 call but could be solved if roaming were in place.

If the UK is to have a world-class digital economy, then we would suggest that ubiquitous mobile data coverage is essential. Geographic partial not-spot gaps for data are even more substantial than for voice - a situation that no stakeholder should regard as acceptable.

We are concerned that, given this coverage position and consumers' and micro-businesses' reliance on all forms of mobile communication, the consultation misses a significant opportunity in its decision to concentrate only on voice and text. Indeed paragraph 84 notes that DCMS technical advisers consider that consumers value data access higher than voice.

The inclusion of data in national roaming would enable not only businesses to continue and increase trading in such areas, but would enable consumers to engage in online transactions, thus boosting the significant online economy. Given the drive to place more government services online and encourage people to self-serve as part of the digital by default initiative, internet access should be universal.

The Economic and Technical Case

We would argue that building more sites to make all partial not-spots fully covered is fundamentally uneconomic - that is the reason why they have not been built in the last 15

³ http://stakeholders.ofcom.org.uk/binaries/research/cmr/cmr14/2014_UK_CMR.pdf

years. In order to achieve the same levels of coverage for all consumers of all mobile networks, the Panel would argue that national roaming should be the preferred option as it could deliver the desired coverage with a relatively small incremental cost compared to the massive costs of ensuring that all networks have sites (albeit shared over two or three physical networks) in all locations.

Today, the MNOs seem to be against national roaming in principle. Before 2005/6, MNOs were similarly against the idea of any network sharing. Since then, they appear to have concluded that there is no significant advantage in owning physical sites when the savings across the industry from sharing sites massively outweigh any disadvantages. Ultimately, the MNOs will gain no competitive advantage from building out competing networks in low demand areas; they simply incur much more capital and operating costs, which are either borne by their shareholders or, more likely, their customers.

In the network build case, these duplicated costs are incurred and would have to be passed on to customers. These areas have not been built out in the past by multiple networks because the traffic for a second or third or fourth network does not justify the cost of delivering extra coverage by those additional networks. We would expect with roaming, significantly more traffic can be delivered to customers at marginal capacity cost. Capacity additions to handle roaming traffic are easy to deliver (especially in these poorly served areas which are almost always, de facto, low traffic,) and would require no new site build (which is also a significant environmental and aesthetic benefit). If the operators present in a partial not spot run short of spectrum due to capacity demands resulting from national roaming, then spectrum sharing/borrowing from those MNOs without coverage could easily solve the problem. Aggregation of larger slices of spectrum onto a single network also provides options for extending data coverage from existing sites and increasing their economic efficiency.

In comparing the cost of implementing national roaming to the cost of building additional infrastructure, it is also important to take into consideration the time required to build the additional infrastructure and the potential impact on the environment, particularly in areas of outstanding natural beauty. We are concerned that the economic analysis seems to omit these very important factors.

The Panel believes that if national roaming is considered the best option, then it should not be geographically constrained. Partial not-spots are widespread across the whole UK, including London and other major cities, particularly indoors.

The Panel would be interested to see a more comprehensive cost analysis in relation to the potential savings/ additional costs of national roaming against ensuring that all networks have sites in all partial/not-spot locations.

The Panel would appreciate more detail on the technical challenges MNOs have raised in relation to national roaming. We believe that similar issues were previously discussed in relation to the introduction of emergency roaming, and the Panel is pleased to see that this service works to good effect. Furthermore, the fact that roaming seems to work quite adequately for overseas visitors or those who choose to buy an overseas-registered SIM card seems to indicate that the technical challenges are not insuperable.

Specific points

On specific paragraphs, we would make the following additional points:

Paragraph 53(a) - We are very concerned about the potential delays and cost associated with renegotiating commercial agreements between MNOs and landlords.

Paragraph 76 - The consultation document refers to the argument that national roaming raises the risk of diverting resources from 4G. Whilst we understand that 4G rollout is important, we would argue that it is far more democratic and equitable for all parts of the UK to have access to at least some form of mobile voice and data provision via 2G and 3G than for only some areas to have access to 4G and others to be left with a vastly inferior service. Concentrating all resources on 4G implementation at the expense of providing basic facilities to poorly served areas accelerates the widening of the digital divide. In any case, 4G roll out for O2 is a statutory requirement, which cannot be avoided. 4G coverage cannot therefore be put at risk by this move.

Paragraph 78 - It is the Panel's understanding that, whilst national roaming requires an incremental capital investment in Home Location Register (HLR)/ Visitor Location Register (VLR) capacity in the core networks of MNOs. This would provide MNOs with an increase in both economic efficiency and utilisation of the massive capital investment already made in their much more extensive access networks in less densely populated parts of the country compared to building competing networks in all locations that currently have a partial service.

Paragraph 80 - The Panel does not believe this to be a significant issue and would argue that a reduction in battery life would be a minor issue in return for being able to access network coverage to receive and make calls. It is also the case that there will be an impact on battery life as consumers would actually be able to make calls, so that would be no more than would be expected in line with the effect of normal usage on a battery.

Paragraph 81 - It is our understanding that phones will only drop a call on a return to home covered network areas if the temporarily visited network becomes unavailable. During a call, a phone will not be looking for its home network unless the call is terminated by the customer or drops due to poor coverage of the visited network.

The consultation mentions consumer detriment (in the context of national roaming) and we would urge that care is taken to understand fully whether the scale of any such risk and impact comes anywhere close to the benefits that could be achieved. It may be that there is a risk of, for example, dropped calls but that the impact is minimal (a customer would just redial) compared to having no ability whatsoever to make a call without national roaming.

Paragraph 82 - We do not understand how it would be possible for calls to bounce between networks in the manner suggested in this paragraph.

Paragraph 83 - This statement would suggest that a significant proportion of dropped calls are due to poor network configuration as opposed to gaps in coverage. We believe that

national roaming would help MNOs pinpoint locations where their consumers actually want to use their services but cannot, due to lack of coverage. This could guide MNOs in their network build investment decision and the service levels that they offer their own customers.

Paragraph 84 - The paragraph indicates that DCMS technical advisers believe that consumers value data more than voice. As mentioned earlier, the Panel would be interested to understand why increasingly vital data services have not been included as part of the consultation.

Paragraph 87 - The Panel would be keen to see further evidence from the MNOs to understand in more detail the arguments set out here.

Paragraph 89 - The cost/benefit analysis relates to voice and text but has not taken into account the wider business benefits to the economy that could be realised by the provision of voice and data services in these areas.

Paragraph 91 - The Panel would urge DCMS to consider a single regulated wholesale roaming rate - linked to Mobile Termination Rates (MTRs) for voice, and an equivalent for data. If all networks had a comparable extent of coverage, albeit in different areas, they would each pay the other equal wholesale charges, netting out to a zero cash flow between operators. If a network has better coverage, then it will benefit financially; if poorer, it will lose. This is a classic "make versus buy" decision for the operator. The economic model discussed does not consider this approach. Consumers should certainly not be required to pay a premium for national roaming minutes or megabytes. Such a move would be illogical, unfair and counter to the position which is soon to be achieved with regard to roaming in Europe.

Paragraph 98 - The Panel would argue that it is critical that cost analysis and any determination of wholesale charges focuses only on the incremental cost of providing capacity, not a fully allocated cost of new site build. It is the Panel's understanding that certain geographical locations are poorly covered due to limited demand. The introduction of national roaming will not generate an increase in demand that is unable to be easily accommodated.

Paragraph 103 - Based on our expertise, we do not believe that these are unresolvable issues and would be happy to discuss this matter at a meeting. Whilst we recognise that there may well be technical and security concerns, we would welcome greater detail about the extent of the impact that these issues may have when balanced against the widespread benefits for consumers, society, business and the economy. We would also welcome, more detail on what mitigation options exist to meet these concerns.

Summary

The Panel strongly supports the introduction of national roaming for all voice, text and data services across the whole of the UK. We believe that this is not only in the interests of consumers, businesses and the economy in general, but is actually in the best interests of MNOs as well. National roaming can quickly deliver enhanced services for their

customers without massive, wasteful and environmentally damaging additional network infrastructure investments.

In summary:

- The Panel strongly supports national roaming as the preferred choice for quickly and comprehensively tackling partial not-spots; We believe that MNOs have the capability, technology and financial resources to fix the problem of partial not-spots for their customers; whilst consumers currently have no realistic way of working round the problem;
- If the UK is to have a world-class digital economy, then ubiquitous mobile data coverage is also essential;
- If government services are moving to 'digital by default', then government must ensure internet access is universal;
- National roaming should be the preferred option as it could deliver the desired coverage with a relatively small incremental cost compared against the massive costs of ensuring that all networks have sites at all these locations;
- The cost/benefit analysis relates to voice and text but has not taken into account the wider business benefits to the economy that could be realised by the provision of voice and data services in these areas, nor the environmental and resource impact of infrastructure build;
- Care must be taken to fully understand the purported risk and impact of consumer detriment (in the context of national roaming), and where they stand in proportion to the potential benefits;
- Whilst we understand that 4G rollout is important, we would argue that it is far more democratic and equitable for **all** parts of the UK to have access to at least some form of mobile voice and data provision via 2G and 3G than for only some areas to have access to 4G and others to be left with a vastly inferior service; National roaming should not be geographically constrained. Partial not-spots are ubiquitous across the whole UK, including London and other major cities, particularly in-building;
- We would urge DCMS to consider a single regulated wholesale roaming rate - linked to Mobile Termination Rates (MTRs) for voice and regulation to ensure these costs are not simply passed on to the individual customers who require roaming due to the poor service of their home network provider; and
- The Panel would appreciate more detail on the technical and security challenges MNOs have claimed in relation to national roaming.