

# BT Response to European Commission Consultation on Mobile Roaming

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## SUMMARY

We believe that the mobile market displays a number of problematic characteristics which include a failure to provide cost-oriented cross border roaming services, a failure routinely to provide wholesale access for alternative operators across Europe, and a tendency towards increased consolidation and market concentration. In the short term we believe that the roaming regulation will need to be continued in its present form and extended to cover data services. We believe the exceptional nature of mobile markets suggests that retail regulation is justified at present but the best solution would be for the Commission to mandate wholesale access to a range of mobile network features so that alternative operators can provide both domestic and roaming services. This would facilitate a level of competition that would allow the withdrawal of retail regulation in due course.

### QUESTIONS & ANSWERS

<b>1</b>	<p>To what extent do you believe that the current regulation achieved its objectives in terms of:</p> <ul style="list-style-type: none"><li>(a) Contributing to the single market for roaming services?</li><li>(b) Ensuring consumer protection?</li><li>(c) Promoting competition?</li></ul> <p>Please explain and substantiate your responses with data where possible.</p>
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The current roaming regulation has had a positive effect for consumers in terms of declining prices charged for mobile services when roaming internationally, without any apparent adverse consequences in terms of reducing mobile network investments. However it is undeniable that prices remain very high for international mobile roaming services when compared to national tariffs. This suggests that the current measures have achieved part of the intended objectives set by the EC, but have not achieved them entirely.

From a mobile consumer perspective the choice of network when roaming internationally is generally made automatically by the mobile device, as determined by the home network operator. The consumer generally does not make a choice between several available operators and associated tariffs when roaming. This, in effect, creates a situation where the retail level prices are much higher than would be the case if there were effective competition and choice as seen from a consumer perspective.

At the wholesale level the situation is different in that there is a detailed understanding of the market and generally a choice of several operators with which to establish roaming agreements, but in many cases the roamed network will be wholly or partly owned by the same company or group or there will be a fairly symmetrical volume of wholesale traffic which may lessen the competitive pressure on wholesale prices.

In answer to the question posed, in terms of achieving the three mentioned objectives, the roaming regulation has (a) contributed to, but has not really achieved, a single market for roaming services; (b) helped ensure consumer protection; (c) not had any obvious effect in promoting competition.

2	<p>Do you consider that regulatory intervention for roaming services is needed beyond June 2012? Please consider voice, SMS and data roaming services separately. In particular, if you consider that the Roaming Regulation should expire in June 2012, please explain why, and describe how you consider that the market for roaming services will evolve in the absence of regulation.</p>
<p>For the time being, voice regulation should continue in the current format and data should be regulated at retail and wholesale levels because the current wholesale-only regulation of data has failed to drive down retail prices. In general BT does not favour retail regulation but the mobile roaming market is a special case where downward pressure on wholesale rates has usually failed to translate into lower retail prices. The reasons for this market failure may include the relative lack of emphasis placed on roaming by the majority of consumers when selecting a supplier. As mentioned above in Question 1, the consumer generally does not make a choice between several available operators and associated tariffs when roaming. This in effect creates a situation where the retail level prices are much higher than would be the case if there were effective competition and choice as seen from a consumer perspective.</p> <p>MVNOs are not benefiting from wholesale regulated input prices and this should be addressed.</p> <p>In the longer term we believe that a more competitive retail market can only be created by wholesale access regulation permitting the entry of a range of MVNOs. This should then allow the withdrawal of retail regulation. We also believe that in order for wholesale regulation imposed on MNOs to be effective the Commission should consider the creation of fully transparent wholesale divisions within the MNOs that are capable of delivering Equality of Input (i.e. the same wholesale inputs for MVNOs as for MNOs own retail arms).</p>	
3	<p><b>Maintain current approach</b> Do you consider that the current model of regulation would be effective in the future in light of the desired objectives? Will this approach ensure adequate consumer protection and help stimulate competition? Is it efficient and coherent with EU policies?</p>
<p>Voice and SMS regulation have demonstrably lowered consumer prices and should be maintained or tightened. Data regulation has been less effective and needs improving. Given this experience and the tendency towards consolidation in the industry (as demonstrated to date in the UK), we believe the current regulatory model will be inadequate to stimulate sufficient competition to ensure the interests of the consumer are protected.</p>	
4	<p>If this model is suitable in principle, what modifications may be required in order to achieve a well functioning single market for roaming services? Should this approach be combined with other options?</p>
<p>We do not consider today's model to be suitable without further modification. The present model of roaming regulation could be enhanced to achieve a well functioning single market for roaming services. We make more detailed suggestions for change later in this response.</p>	
5	<p><b>Wholesale and transparency measures only</b> Would regulation of wholesale prices charged to MNOs, combined with transparency measures, be effective, efficient and coherent in light of the single market objective? Would the benefits of regulated wholesale rates be passed through to consumers?</p>
<p>The present evidence as discussed in the BEREC report suggests that wholesale-only price regulation may not achieve the Commission's objectives. If the regulatory environment enabled the establishment of MVNOs in home markets (by regulated wholesale access to MNO networks on cost oriented terms) and these could directly form agreements with the same or other MVNOs in other home markets then this would provide additional competition for retail roaming services and would assist in delivering the Commission's goals without Retail price</p>	

regulation. The arrangements discussed in section 3 (g) and Q12 of the consultation address this possibility further.

It should be noted that there are five UK MNO networks on paper only. 3UK is a 3G-only operator but its services are delivered through a single joint network with T-Mobile under the Joint Venture Mobile Broadband Network Limited (MBNL)<sup>1</sup>. T-Mobile and Orange have combined and rationalised their networks after forming the Joint Venture Everything Everywhere (EE), operating as one company running two brands<sup>2</sup>. The remaining operators O2 and Vodafone have a network infrastructure sharing agreement called Cornerstone and are building their networks together<sup>3</sup>. This gives the possibility for further integration, but at this time we are not aware of any such proposals and the O2 and Vodafone networks are operated separately. Taking into account these close partnerships, effectively the UK has moved towards having only three distinct mobile networks.

We believe the Commission should migrate to a model of competition which encourages competition at multiple levels of the value-chain through mandated wholesale products. While this could begin with access being limited to the provision of roaming services, the Commission should take this opportunity to make a step-change in mobile competition by widening the wholesale access obligations to other services that consumers across Europe want. See our answer to Question 12, below.

Once again we would like to point out that a wholesale access model will work best if there is a solution which ensures that the MNOs deliver Equality of Input with their own retail arms.

**6 Regulation of retail data roaming charges**

Do you consider that retail regulation of data roaming prices is necessary? If not, what are the likely market developments post-June 2012?

On the evidence in the BEREC report, it is necessary. Without it, consumers will be subjected to a similar level of exploitation as was seen in the earlier stages of voice roaming. Data usage is set to continue to increase at a significant level, making it all the more important that regulation is in place to protect end-users.

**7** If retail regulation of data roaming prices was necessary, what would be an appropriate model for such regulation?

We consider that a mandated retail rate ceiling per Megabyte, with minimum increments set down, would be an appropriate basis of regulation. A particular problem arises when a connection repeatedly fails and requires a data transfer to be restarted so we would suggest a minimum chargeable increment of 100kB per day and unit increments of 10kB. As we said in response to Q2, we believe that retail regulation is only justified in exceptional circumstances such as are found in the mobile roaming market.

**8 Approaches based on prices and conditions similar to those prevailing in the domestic markets**

Please indicate the advantages and disadvantages of these approaches, relative to each other and to the current model of price capping, considering also competition aspects such as the possibility of margin squeeze?

Unless domestic market prices are level across all member states, the roamed rates will still vary by member state – therefore demonstrating limited value to end-users. The regulatory approach needs to deliver a logical price and structure to end-users. Nevertheless, of the two

<sup>1</sup> <http://www.mbnl.co.uk>

<sup>2</sup> <http://everythingeverywhere.com>

<sup>3</sup> <http://blog.o2.co.uk/home/2010/01/happy-first-birthday-cornerstone.html>

options described, pricing roaming services based on tariffs in the visited country would seem more appropriate than pricing roaming services on the basis of tariffs in the home country since the wholesale roaming charges would reflect the visited country's costs.

**9 Separate sale of roaming services - decoupling of roaming from mobile services bundles**

In general, would these decoupling approaches be effective in terms of stimulating greater competition for roaming services? Would all customer segments be able to benefit? Would such increased competition be sufficient to give consumers an effective choice of roaming services at (near) domestic prices?

At the moment, and in common with other providers, BT (as an MVNO) sells retail roaming services as part of its domestic services. This follows the standard industry practice as established by the mobile network operators, which sell such bundles at the wholesale level to MVNOs. Decoupling might add an unwelcome additional burden for MVNOs (which would need to construct new propositions to sit alongside existing ones), a burden which may not be sufficiently compensated for by reduced wholesale rates (even if these were subject to regulation).

If, however, all wholesale mobile services were subject to cost-based regulation, we would expect decoupling of roaming to be included and the economies of scale facilitated by this approach may make the burden more acceptable to those providers which wished to offer services across the range at the retail level.

In any event, we are doubtful that the roaming market on its own is sufficiently large to justify the additional entry investment required to attract the required level of additional competition.

**10** Would such 'structural' approaches be efficient? What are the technical implementation issues associated with these approaches?

As mentioned in response to Question 9, we believe that separate sale of roaming services is not a practical option and that opening up the full market to MVNO competition would be more effective.

**11 Spot-trading of wholesale roaming**

How feasible/efficient is the establishment of a spot trading market for wholesale roaming? Would this approach lead to competitive wholesale rates? How effective would this approach be in terms of achieving competitive retail rates?

We believe spot-trading would be extremely difficult to implement though if successful it could have a positive impact. It would also be difficult to communicate to customers as prices could fluctuate.

**12 Access-based approaches**

For each of options (i) to (iii) please indicate whether such approaches can stimulate additional competition for roaming services. In order to achieve significant reductions in roaming prices do you consider that these 'access-based' approaches may need to be combined with other forms of wholesale price regulation (i.e. between MNOs) and/or retail price regulation? Please explain.

(i) Wholesale access at regulated prices for MVNOs for roaming only

(ii) An obligation on the home MNO not to charge in excess of the regulated wholesale cap to any MVNO (possibly combined with (i))

(iii) Mandating full wholesale access at regulated prices for MVNOs (not just roaming)

We believe that option (iii) could stimulate competition not only for the provision of roaming services and domestic services but also for the delivery of truly pan-European mobile services in a fully competitive manner.

At present, the mobile sector has all the characteristics of a tight oligopoly: MNOs are vertically integrated and access to their networks represents an enduring bottleneck. The current level of market concentration (measured through the HHI Index) across Europe always exceeds the 2500 points (a market with an index above 1800 points is considered to be concentrated) and more often exceeds 3000 points<sup>4</sup>. The level of market concentration further increases in the case of the provision of mobile services to business customers: in this case the incumbent mobile operator together with the second mobile entrant jointly control in the vast majority of cases in excess of 80% of the market at national level. In this environment and in view of the price MVNOs have to pay to access MNOs networks, MVNOs are not in a position to compete effectively at least at the retail level against MNOs.

As a result, MVNOs often target niche markets or segments that the MNOs do not wish to address directly. In the absence of wholesale access requirements, these MVNOs are only able to service additional customers on terms (and margins) determined by the MNOs. They are therefore not competitive service providers, but are in reality, simply alternative channels to market for the MNOs. Given the experience BT has had in the UK and other markets in Europe including Italy, Spain, Belgium, France, Germany and the Netherlands, we believe that the wholesale access rates offered by the MNOs restrict the ability of other providers to inject a significant degree of competition into this market.

Regulated wholesale access could open up the market to competition to the benefit of customers and stimulate the emergence of a true pan-European mobile market. Many mobile operators have started to offer converged packages combining fixed and mobile voice and data services. Regulating wholesale access would place mobile and fixed network operators on an equal footing. We note that the removal of the market for wholesale mobile access from the 2007 “Recommendation on Relevant Markets” was in part predicated on the sufficiency of competition; with increasing consolidation in the mobile sector, as well as further convergence of fixed and mobile markets, we believe it is appropriate for the Commission to revisit that analysis and that decision.

In the UK, there is already regulated wholesale access to BT’s fixed network, on equivalent terms which create a level playing field (wholesale access is provided on exactly the same terms and conditions, using the same processes and systems, and on the same timescales, to BT’s retail arm and to BT’s wholesale customers). This is as a result of the Undertakings given by BT to Ofcom in 2005, and which were intended to create a level playing field by mandating equivalent access to enduring fixed bottlenecks. The result of this equivalent, non-discriminatory access is a vibrant UK fixed market, with strong competition and innovation and some of the lowest prices. However, no comparable regulated or mandated wholesale access is available from mobile networks, even though wholesale access to mobile networks is also an enduring bottleneck. In our opinion vertically integrated mobile operators can freely price-discriminate in favour of their retail arms and offer less favourable terms to their wholesale customers (e.g. MVNOs). This is a common anticompetitive practice by MNOs across Europe that only a few regulators and/or national antitrust authorities have so far intervened to address. New entrants will therefore continue to find it very difficult, if not impossible, to compete with the MNOs unless further remedies are contemplated in the form of truly non-discriminatory and cost-based mandated wholesale access and roaming onto and across the MNO networks on a pan-European basis.

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<sup>4</sup> For HHI index in Western Europe see analysys mason press release on the Orange-T-Mobile merger in the UK of 10<sup>th</sup> September 2009 <http://www.analysismason.com/About-Us/News/Insight/OrangeT-Mobile-merger-brings-UK-competition-levels-into-line-with-other-European-markets/>.

BT believes that wholesale access for roaming services alone (option (i)) may attract a small number of new entrants, we believe the market is not sufficiently broad or deep to be a magnet for more than a handful of opportunistic companies and hence it will do very little to stimulate competition at retail level by a large number of pan European players.

In order to encourage deeper competition in the European mobile market, we believe that regulated mobile wholesale access would be better mandated across the full range of services (i.e. option (iii)). In this respect, it is worth pointing out that different forms of wholesale access may be provided and that, whilst it is a crucial underpinning element, it is of little value without many other factors that make up a viable mobile service.

For example, to provide a customer with an end-to-end fully innovative mobile service the access seeker also requires its own full mobile core (for example, billing systems, gateway nodes, HLR, MSCs, IN platform, mobile number ranges, customer service centres etc). Any new entrant may wish to self-provide some or all of these elements itself rather than acquire access to them from the host MNOs.

The type and level of wholesale access regulation would need to be adapted and varied depending on the features of the national market in question. For instance regulated wholesale access to suitable interfaces in the mobile Radio Access Network (RAN) would be appropriate to address bottlenecks in terms of access to spectrum and address problems around the degree of infrastructure competition. This would be of interest in cases where the operator seeking access has its own core and possibly RAN infrastructure. Moreover regulated wholesale access to the mobile network as a whole would also be required where additional competition at the service provider level is considered sufficient (i.e. via MVNOs for operators that do not have network infrastructure). Both these options and scenarios in between should be made possible.

As a result there will be differences in the level of cost and infrastructure that the wholesale supplier and the new entrants will incur in each scenario, which should be reflected in the costs of access. Regulated prices should therefore reflect these differences, by giving a basis for fair competition and also an incentive for new entrants to make their own investments, as was considered when local loop unbundled regulation was introduced in the UK.

The experience from other countries is that MVNOs can constrain MNOs' pricing when MNOs are required to offer MVNOs on regulated terms, but that this competitive constraint is reduced or disappears once legal and regulatory requirements are lifted and MVNOs become purely "voluntary" (as they are in the UK). BT's experience in Europe shows that very often regulatory and/or antitrust pressure have been essential to unlock wholesale mobile access in a number of EU markets. That said the lack of intervention by those very same authorities in determining the terms upon which access had to be granted has helped the MNOs to control MVNO developments to their own advantage.

Analysys Mason<sup>5</sup> has also concluded that "voluntary" MVNOs do not exert the necessary competitive pressure and that mandated MVNOs with regulated terms could constrain MNO's pricing.

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<sup>5</sup> *MVNOs in growth markets: challenges and opportunities for regulators and operators - Daniel Jones March 2009 - Analysys Mason Research Report: "MVNOs in growth markets: challenges and opportunities for regulators and operators", Daniel Jones, March 2009, ISBN 1 905495 87 0*

<b>13</b>	<p><b>Medium to long term view</b></p> <p>In the medium to long term, markets and technologies will possibly evolve to the point where roaming services can be provided by different competing technologies. Such developments seem to be unlikely to be sufficient to eliminate or minimize roaming problems within 5 years. Do respondents share this view? Please explain.</p>
<p>WiFi based services already provide a substitute for mobile roaming services only to an extent, and can provide an attractive low cost substitute to mobile roaming in certain circumstances.</p> <p>This is for a number of reasons and in particular: WiFi hotspots available do not universally provide seamless handover between hotspots so are not suitable for voice or data while on the move. Currently usage is mainly for data services rather than voice and is only relevant in the specific geographic locations where public WiFi is available. It is also only relevant to mobile devices that include a WiFi interface and requires a roaming agreement or subscription to be in place. In most cases use of WiFi requires user interaction to establish the connection.</p> <p>This situation is quickly changing and the extent and ease of use of WiFi when roaming and the range of services that are supported will improve over coming years. However, the geographic limitation of WiFi coverage will always be present to some degree and it is unlikely that WiFi networks will completely eliminate the need to address the mobile network roaming issues.</p>	
<b>14</b>	<p>Do respondents think that the Commission should pursue measures to accelerate these developments (e.g. to encourage the massive deployment of interconnected Wifi networks)? What other measures could be considered? What will the impact be of the transition to an 'all IP' environment on roaming services?</p>
<p>The past support of the European Commission in designation of licence-exempt spectrum at 2.4GHz and 5 GHz for WiFi and continued interest in additional interest in promoting further access to spectrum on a shared basis is welcomed and may provide further options for mobile services availability when roaming.</p> <p>Technology and business models are evolving, but despite the existence of possibilities such as WiFi vouchers, there are, at least for now, likely to be constraints to widespread use of WiFi by consumers across the EU as an alternative to international data roaming arrangements. This is for two reasons:</p> <ol style="list-style-type: none"> <li>1. MNO customers roaming onto visited WiFi networks are usually dependent on contractual agreements between operators, with retail prices set by the home MNO;</li> <li>2. Where national WiFi network operators are vertically integrated with MNOs, there is less incentive to undercut roaming rates.</li> </ol> <p>We would support any moves by the Commission to overcome both these barriers.</p>	
<b>15</b>	<p><b>Inadvertent roaming</b></p> <p>To what extent is the problem of inadvertent roaming still a concern for citizen's living close to borders? What measures could be taken to avoid the adverse effects of inadvertent roaming, whether by means of voluntary co-operation between operators or by means of regulatory or legislative action?</p>
No Comment	
<b>16</b>	<p>If you are an operator, what measures (technical or otherwise) have you taken to deal with the issue of inadvertent roaming, both to prevent it happening and to compensate for the adverse effects once it has been shown to have occurred? How do you raise awareness of the problem and the potential remedies on the part of your customers?</p>
No Comment	



<b>17</b>	<b>Outermost regions</b> What has been the impact on mobile users and service providers of the implementation of the Regulation as far as roaming within, from or between the outermost regions is concerned?
No Comment	
<b>18</b>	What additional measures (if any) have been taken by the Member States or their NRAs to address roaming between the outermost regions and other parts of the EU?
No Comment	
<b>19</b>	<b>Impact on smaller operators</b> What has been the financial impact (revenues, costs, profits, volumes etc.) on smaller mobile telephony providers of the application of the Regulation since its entry into force on 30 June 2007 and amended in 2009? Please provide financial data and any other information in this respect wherever possible (which will be treated as confidential if so requested).
There does not appear to be any improvement in these for smaller operators, and in the MVNO market lack of retail regulation means that the lower cost base that regulation has driven for operators has made it if anything harder to compete as there is no incentive or requirement for this to be passed through to MVNOs.	
<b>20</b>	Has any operator encountered problems when seeking to agree a wholesale roaming agreement with an operator in another Member State? What kind of problems were these (e.g. for SMS interworking)? Were they resolved in the end? Was the issue referred to an NRA? If so, what action has been taken or is in train to address those problems?
In BT's experience, it is very difficult for a small mobile provider to negotiate roaming with a large network operator. Unless the smaller provider is in a position to offer something beneficial to the MNO - typically additional coverage or access to a niche customer base - the MNO is unlikely to have any interest in concluding a deal. The only viable alternative is to negotiate with a third party that has already negotiated roaming services to gain roaming services via their existing roaming agreements. However, that means the small operator has no more bargaining power than it had in any direct MNO negotiations and must invariably pay an additional margin to the third party.	
<b>21</b>	<b>Traffic steering</b> To what extent is the use of traffic steering accompanied by a lower retail price for the roaming customer? Where lower roaming prices are conditional upon the use of a preferred visited network, how effective is the traffic steering in practice in ensuring that the preferred network is used? Please provide detailed data where possible.
No Comment	
<b>22</b>	What techniques are applied to implement traffic steering in practice? Is the roaming customer informed in advance about the steering and does he have the possibility to override it?
No Comment	
<b>23</b>	<b>Impact on domestic prices</b> Have you identified any significant effects on domestic prices or changes in an operator's tariff structure for domestic voice calls or other mobile services introduced after or shortly before the entry into force of the Regulation? If so, please explain providing details of the changes in terms of timing, scope and prices.
We note that prior to the adoption of the Roaming Regulation, some parties expressed concern that the introduction of price regulation for intra-Community roaming services could produce a "waterbed effect" whereby mobile operators would increase their prices for other services (including domestic prices) to compensate for their lost revenue from roaming services. The	

MNOs have sought to generate similar alarm following Ofcom's proposals to follow the European Commission's Recommendation and reduce inland mobile termination rates to lower levels (based on a 'pure LRIC' costing methodology).

Presumably, the argument is that the burden of a reduction in roaming rates will be borne by consumers in the form of higher rates for handsets or domestic outgoing mobile calls.

If a "waterbed effect" in these markets is complete (as the mobile operators may seek to claim), the market will adjust to any new roaming regime with MNOs earning a competitively determined return on capital. If the "waterbed effect" is not complete, the MNOs will lose margin but this is margin that has been generated because of lack of competition for the provision of roaming services. If there has been a detrimental effect on domestic prices as a result of the Roaming Regulation, this would be cause for national regulators to investigate. But if the Commission does not receive evidence that earlier concerns over the damaging effects of the Roaming Regulation on domestic prices were justified, it should feel able to disregard any similar alarm bells that may be run during this consultation.

<b>24</b>	<b>Impact on international roaming arrangements with operators in third countries</b> What, if any, has been the impact of the Regulation on reciprocal roaming arrangements between EU/EEA mobile operators and their counterparts in other third countries?
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No Comment

<b>25</b>	Have any Community-based providers of mobile roaming services negotiated agreements with third country operators concerning a reduction of wholesale roaming tariffs comparable to those set up in the Regulation?
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No Comment