Review of General Condition 18

O2 (UK) Ltd (“O2”) welcomes the opportunity to respond to Ofcom’s consultation on the review of General Condition 181.

We have organised our response into two sections: on the routing of calls to ported numbers; and on mobile lead times. In addition we have provided answers to some of the specific questions asked, in an Annex to this response.

Ofcom will note that we have a number of concerns:

- While we support in principle a move to the ACQ/CDB method of routing calls to ported numbers, we are opposed to a regulatory obligation on mobile providers to migrate to by 2009. A better approach would be to migrate all fixed and mobile providers at the same time, perhaps in 2012;

- O2 believes that it is undesirable to change the General Conditions to impose a deadline for migration to ACQ/CDB at this stage;

- We do not support an interim direct routing solution for mobile providers at all. This would compromise delivery of the end ACQ/CDB solution and its costs would be greater than any short term benefits it might deliver; and

- There is no evidence that existing port lead times make it difficult for mobile subscribers to change providers. Indeed, the reverse is true - there is a wealth of evidence that port lead times do not act as a barrier to switching. Accordingly, there is no basis for imposing shorter port lead times through regulation. O2 would, however, be willing to reduce port lead times to three days, on a voluntary and reciprocal basis

We explain our position in detail in this response. We should be happy to discuss the matter with you in due course.

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1 Review of General Condition 18 – Number Portability Ofcom, 16 November 2006
Section 1: Routing of calls to ported numbers

O2 can see the merits of a move to an all call query/central database (ACQ/CDB) system for number portability for all UK operators, fixed and mobile. This is principally because it would facilitate direct routing, which is more efficient than the present onward routing system. As time goes on, it might be expected that more traffic will be sent to customers who have ported, so it follows that the benefits of a move to ACQ/CDB will be greater, further into the future. In addition, and as Ofcom recognises, there are significant costs involved in a move to ACQ/CDB, and Ofcom has, properly, sought to consider both the costs and benefits. This is presented at Annex 6 of the consultation.

O2 has some observations on the cost benefit analysis:

Sensitivity to the donor conveyance charge

The reported positive net present value of a move to mobile ACQ/CDB is highly sensitive to the assumed level of the donor conveyance charge (DCC). Ofcom’s consultants have suggested that a lower figure for the DCC of 0.1ppm may be more appropriate. If their proposed DCC were used, the NPV of the project becomes questionable, as far as mobile is concerned.

In the absence of any robust analysis of an appropriate level of the DCC in the market, O2 does not believe that Ofcom can base its decision on a cost/benefit analysis that is totally predicated on a level of DCC.

Discount factor

A discount factor of 7% is used. This seems to O2 to be too low. Ofcom frequently estimates the cost of capital for mobile operators for the purposes of its long run incremental cost model used to analyse the cost of mobile voice call termination, and those estimates are in the order of 11 and 12%. There is no explanation why a lower figure is used here. O2 notes that the effect of using a lower figure for the cost of capital is that it gives greater values for benefits realised in later years, increasing the net present value for the project. In O2’s view, therefore, the NPV values presented are over inflated.

Opportunity costs

It would seem that Ofcom has considered the financial costs that operators would incur in implementing an ACQ/CDB system of number portability. However, in practice, O2 faces capital and other resource constraints and the effect of these is that its ability to carry out projects of this nature is constrained. Rather than simply undertake all projects which it believes are NPV positive, O2 must rank projects and embark on only those that it perceives are the most important. Since other mobile operators must also seek finance in the same capital and equity markets, O2 believes that they, too, are similarly constrained.

Accordingly, O2 believes that rather than just the financial costs, Ofcom should also reflect opportunity costs in its cost benefit analysis; that is, the benefits of the marginal project foregone to implement ACQ/CDB. It should be clear from the above that the opportunity cost is certain to be higher than the financial cost.
Uncertainty in retail pricing

One benefit of onward routing, not remarked upon in the consultation document, is that it provides the calling party with greater certainty about the cost of a phone call. This is because the retail price reflects the interconnect charge of the donor operator, so the charge to the calling party will be the same regardless of whether or not the called party has ported. Conversely, under direct routing, retail prices will reflect the termination charge of the terminating operator. Since the calling party is not likely to know whether or not the called party has ported, it follows that he cannot know what retail price he will pay for the call. Accordingly, migration from onward routing to any form of direct routing (including ACQ/CDB) could increase uncertainty in retail pricing. O2 believes that Ofcom should consider this factor since it is a cost, in the wider sense, of a move to ACQ/CDB, and in order to arrive at a proportionate solution, an attempt should be made to quantify it.

Conclusions on the cost benefit analysis

O2 believes that the NPVs presented by Ofcom are over inflated. The use of an alternative DCC and cost of capital estimates, and reflecting properly opportunity costs would each tend to reduce the NPVs presented by Ofcom. In addition, a move to ACQ/CDB might result in an additional cost in the form of uncertainty in retail prices, and an attempt should be made to quantify this.

O2 continues to believe that an eventual move to ACQ/CDB will be merited at some stage. However, we do not believe that the case has been made, sufficiently, for regulatory intervention to force such a move within the next few years.

Ofcom should revise its cost benefit analysis as we describe above but, given the information we have now, O2 believes that there may be merit in a common deadline for migration to ACQ/CDB, for both fixed and mobile operators, of 2012.

Quite apart from the results of a revised cost benefit analysis, an advantage of a common deadline is that the basis for retail prices, for both fixed and mobile terminated calls, would change at the same time. As we set out above, under onward routing, retail prices reflect the interconnect charge of the donor operator. A move to direct routing would mean that retail prices reflect the interconnect charge of the recipient operator. In O2’s view, there is merit to moving from onward routing to direct routing for all calls, both mobile and fixed terminated, at the same time, because the basis of all retail prices would also change at the same point in time, minimising consumer confusion. O2 believes that Ofcom should consider this consumer benefit of a common change to the method of porting.

Other presumed benefits of a move to direct routing

Ofcom cites other presumed benefits of a move to direct routing. O2 is sceptical of these. At the very least, if Ofcom is to rely on any of them, it should quantify their effects in a full regulatory impact assessment. Otherwise, amendments to the regulatory regime made because of these supposed benefits cannot be consistent with section 47 of the Communications Act.

We have the following observations in respect of the other benefits cited by Ofcom:

Mobile operators would receive their own voice call termination rates
O2 can well understand why 3 is keen to secure the charges it levies for voice call termination for all the calls it terminates, ported or not. This is because its current charge is around twice that of the other operators’ and, according to Ofcom’s long run incremental cost model, well in excess of its costs. O2 is firmly of the view that, rather than bestowing further unearned rewards on 3, Ofcom should be applying the same regulatory regime to all mobile operators, including 3, and forcing its voice call termination charge down to the same level as other operators’. To the extent that 3’s regulated charge (expected to be implemented from 1 April 2007) remains higher than other operators’, Ofcom should quantify the effect on revenues of onward routing. O2 suspects that it will not be significant, given the call volumes involved.

Donor network congestion, delay in the introduction of new services and “efficient mobile operator behaviour in respect of mobile number portability”

O2 notes that Ofcom has not sought to quantify at all any of these supposed consequences of onward routing/benefits of direct routing. We do not think that it would be unreasonably difficult to do this. Accordingly, we believe that, in the present circumstances, it will not be possible to rely on any of these things to justify regulatory intervention to mandate ACQ/CDB for mobile operators.

Interim solution

Ofcom speculates that the implementation of an interim direct routing solution for mobile networks within a year might be a suitable interim step, ahead of the implementation of ACQ/CDB. O2 has the following observations:

1. Ofcom suggests that the NPV of this option is the same as for the ACQ/CDB option. O2 simply does not understand how this could be. Since this is promoted as an interim solution, it follows that the benefits must be short lived, perhaps a year or two. How can it be possible that the NPV of a project which lasts for a couple of years is as high as one which lasts for many more years, when their costs are broadly similar?

2. In practice, employees of mobile operators involved in the implementation of ACQ/CDB would also be required to make the necessary changes to give effect to the interim solution. The work involved in implementing ACQ/CDB will be significant. There are number of potential technical solutions (eg ENUM) which would need to be considered and the choice of technical solution would need to be agreed by all the existing and new entrant mobile operators. There is a serious risk that the chosen solution would not then be agreed by the fixed operators. In O2’s view, it would simply not be possible for the individuals involved in ACQ/CDB implementation to undertake work, in addition, on the interim solution. Effectively these would be mutually exclusive projects. O2’s strong preference would be to implement only the ACQ/CDB option;

3. [ ]; and

4. O2 has the following concerns as regards the billing of any interim solution:
   a. When discussed at industry level, billing issues were identified, specifically in respect of DCC charges, which meant that the proposed technical solution could not be used; and

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2 Our analysis of Ofcom’s cost benefit work (see above) applies here, too.
b. O2 questions how the billing of the direct routing form of optimal routing would work on a bilateral basis. O2 believes that it is possible that, given the way that the billing arrangements are configured at the moment, the third party operator (which would terminate the optimally routed call) may (incorrectly) charge the termination rate associated with the originating operator, to the originating operator, rather than the donor operator’s rate. [><]

Transition milestones

O2 believes that it is simply not possible, at this stage, to be certain that the intermediate milestones set out by Ofcom can be met. For instance, it is not at all clear that a standard could be agreed by the NICC by June 2007. Indeed, a standard encompassing both future NGN fixed line technology and current mobile networks is likely, in O2’s view, to take considerably longer. Similarly, establishing governance rules and establishing the common database in the timeframe suggested by Ofcom seems ambitious, to say the least. Yet meeting these deadlines is necessary if Ofcom is to change General Condition 14.2 to establish now a deadline to move to ACQ/CDB, as it proposes. O2 believes that relying on meeting these intermediate milestones is a hostage to fortune.

However, O2 does not believe that Ofcom actually needs to amend General Condition 14.2 now. Quite apart from our position, that there is no case to insist on mobile adoption of ACQ/CDB by September 2009, O2 believes that the right approach is to amend the General Condition only once all, or the majority, of the intermediate milestones have been achieved.
Section 2: Mobile port lead times

O2 believes that Ofcom’s analysis on mobile lead times is weak. Ofcom’s proposals are built on two assertions set out in paragraph 1.11:

The benefits of shorter port lead times ensure that consumers are able to switch providers as quickly and as easily as possible. Excessively long port lead times may discourage consumers from switching providers or potentially delay consumers from commencing service on better terms with a new provider.

In O2’s view, mobile number portability is a means to an end, and not an end in itself. In principle, mobile number portability can facilitate switching, on the basis that some subscribers value the capability to keep the same number if they switch provider. The ability to switch providers is an important contributory factor to the extent of competition in the market.

Accordingly, O2 believes that it is the ability and prevalence of switching that is the key consideration, since this affects competition. We agree that, in certain circumstances, mobile number portability can facilitate switching. If, in fact, mobile porting lead times discourage subscribers from porting their number, and if this has an adverse affect on switching, then O2 can see a case for intervening on mobile porting lead times. However, it seems to O2 that Ofcom has failed to demonstrate either of those two necessary conditions and relies, instead, on the two assertions set out in paragraph 1.11 as a basis for its proposals.

A proper analysis of the facts suggests that Ofcom need not concern itself about mobile porting lead times. As we set out below, switching is, in fact, extremely prevalent in mobile and, as Ofcom’s research confirms, the majority of non switchers are satisfied with their present service provider. Ofcom’s separate consumer research confirms that the mobile number portability process does not act as a barrier to switching. Although only a minority of switchers port their mobile numbers, there is nothing to suggest that this inhibits the competitive process. As Ofcom notes, the majority of customers are aware of their right to port and 80% of those who do port are satisfied with the process. This fact sits well with the increase in the use of the porting process.

Rather, the evidence suggests strongly that the majority of customers are either indifferent to the opportunity to port, or actively do not wish to do so. There is precious little evidence to support the idea that mobile subscribers are discouraged to port because of mobile lead times (Ofcom’s research suggests that three quarters of those who have ported are either very satisfied or satisfied with the time taken to transfer their number), and none that port lead times discourage switching.

Accordingly, O2 believes that the case for regulatory intervention to reduce port lead times has yet to be made\(^3\).

\(^3\) It is worth, at this point, contrasting Ofcom’s attitude to the migrations processes in the broadband market, with the proposals put forward in this consultation. In relation to broadband migrations, Ofcom is presented with evidence “that many consumers have found it difficult to switch between broadband suppliers or to move home without experiencing problems. Some have lost their broadband for several weeks, or been given confusing and contradictory information about what they need to do to migrate.” (§1.6 Broadband migrations: enabling consumer choice – Statement and notification 13 December 2006) and that “Ofcom saw a steady increase in the number of customers complaining about problems related to broadband migrations” (ibid §1.8) but Ofcom has introduced only “high level obligations on Communications Providers in relation to broadband migrations” (GC22.2) which extend only to requiring some players in that market to act “in a fair and reasonable manner”. Meanwhile, in the
The extent and ease of switching in mobile

It is generally assumed that a large number of mobile customers switch providers, but an analysis of the facts is, nevertheless, revealing.

According to Ofcom\(^4\), the number of mobile subscribers in the UK increased by 5.8 million in 2005, from 59.7 million to 65.5 million. In that year, mobile operators made at least 24.6 million new connections\(^5\). Logically, therefore, it must be the case that at least 18.8 million subscribers switched providers during 2005 (ie 24.6 million minus 5.8 million). O2 believes that this analysis demonstrates that switching in mobile is prevalent, contributing to the competitive state of the mobile market.

Indeed, Ofcom’s own research would seem to agree with this view. In “The Consumer Experience”\(^6\), Ofcom reported that switching in mobile is increasing and is now higher than in fixed or internet service provision. In terms of other sectors in the UK, switching in mobile is higher than multi-channel TV, home insurance and gas.

The Consumer Experience also considers consumer opinion about the ease of switching in the communications market. Again, mobile scores well. 95% of consumers who have switched believe that switching mobile provider is very easy or easy, higher than fixed, internet service provision or multi-channel TV. Amongst those who have never switched, the figure is 76%, (although only 9% think that switching is fairly difficult or very difficult), also higher than the other forms of electronic communications considered.

The Consumer Experience helpfully also reports on barriers to switching. A number of factors are considered, but the porting process is not mentioned at all as a barrier to switching (and obviously mobile port lead times are not cited).

Ofcom coincidentally published The Consumer Experience on the same day as its Review of General Condition 18, but O2 finds it impossible to reconcile the findings in that consumer research with Ofcom’s assertion in paragraph 1.11 that

> The benefits of shorter port lead times ensure that consumers are able to switch providers as quickly and as easily as possible. Excessively long port lead times may discourage consumers from switching providers or potentially delay consumers from commencing service on better terms with a new provider.

\[\text{[>]}\]

\(^1\) The Communications Market 2006 Ofcom
\(^2\) See Telecommunications Market Data Tables Q1 2006 Ofcom, 3 October 2006. 3 does not provide Ofcom with gross connection figures, but it must have connected at least one million new subscribers – the increase in its base. In all probability, given its reported churn figures, 3 would have connected more than two million new customers in 2005.
\(^3\) Ofcom, 16 November 2006
The extent of porting in mobile

The graph below shows the volume of mobile numbers ported in recent years:

O2 draws two conclusions from this:

1. the number of customers porting their numbers is increasing, markedly. It is also the case that the volume of porting activity in the UK compares favourably with other European countries. As Ofcom notes\(^7\) 60% of the total number of mobile numbers ported in Europe are accounted for by Spain, the UK and Italy. This would suggest that regulatory intervention to promote mobile number portability is not warranted; and

2. in 2005, just fewer than one and a half million customers switched mobile provider and ported their mobile numbers, compared to at least 18.8 million customers who switched mobile provider. In other words, less than 8% of mobile customers who switched provider in 2005 ported their number\(^8\). As we set out above, Ofcom’s “The Consumer Experience” does not cite the mobile number portability process as a barrier to switching at all. In O2’s view, the fact that at least 92% of switchers do not port their number confirms this.

\(^7\) Annex 7, page 84
\(^8\) This doesn’t sit well with Ofcom’s research findings that a quarter of switchers port their mobile number. In our view, the difference is best explained by the recollection of the research interviewees – the connections and porting data seem irrefutable.
Evidence shows that port lead times are not detrimental

O2 is struck by how little cause for concern there is amongst consumers about port lead times. Ofcom’s research suggests that only one quarter of one per cent of consumers said that they hadn’t switched providers because of the time taken to transfer their number. Ofcom has not presented any evidence of complaints received about the issue.

This accords with O2’s experience. [33]

We also note⁹ that port lead times in the UK are not exceptional by international standards. Many other countries have mobile port lead times of five days, and some longer. There appears to be little correlation between port lead times and the extent of porting.¹⁰

Conclusions on the desirability of regulatory intervention to reduce port lead times

Given the evidence, O2 does not understand how an evidence led regulator like Ofcom can possibly conclude that intervention is necessary to bring down port lead times. And it is worth pointing out that it is not in O2’s interest to frustrate mobile number portability in any way – O2 ports in more numbers than it ports out and has done for some time, so it follows that efficient and effective mobile number portability serves O2’s commercial interests.

However, we are firmly of the view that a case has yet to be made for regulatory intervention to reduce port lead times and that Ofcom is instead relying on assertions as a means of justifying its proposal. Not only are these assertions untested in the consultation, they are flatly refuted in Ofcom’s own consumer research, published on the same day.

Accordingly, based on the evidence presented so far by Ofcom, we believe that an attempt to introduce a change to General Condition 18.2, as proposed in Annex 9, will fail to meet the tests set out in section 47 of the Communications Act.

Costs of reducing port lead times

Notwithstanding our firm view, that there would be no justification for imposing shorter port lead times, we have, as asked, analysed the costs of reducing port lead times to both one day and three days. Although not mentioned in the consultation document, we have also considered a change from the present donor operator led porting process to one which is recipient operator led, since the latter is sometimes associated with port lead times of less than one day.

Reduction to three days

O2 considers that a reduction to port lead times to three days is not likely to increase costs significantly. There may be a need to train more staff to ensure that there is a sufficiently large pool of trained staff to deal with any peaks in demand, but since there would continue to be sufficient management time to plan, this is not thought to be significant.

⁹ Annex 7, pages 80 and 81
¹⁰ We note 3’s research, referred to in the consultation document. In our view, that cannot be relied upon since the questions are leading. Accordingly, the results are inconsistent and do not reflect observed consumer behaviour. In any event, the research is over two years old and out of date.


Reduction to one day

O2 anticipates that such a reduction would impose disproportionately large costs:

1. O2 would have to train a very large number of additional staff to carry out mobile number portability work, because it would need a very large pool of trained staff to deal with peaks in demand that cannot be anticipated at all.

   Additionally, providing access to mobile number portability systems to significantly greater numbers of staff would put pressure on those systems, possibly requiring them to be upgraded, at extra cost;

2. squeezing port activity into a time frame of less than a day is likely to increase the number of errors, because of additional time pressure; and

3. [3]

Recipient operator led porting

O2 considers that a move to recipient led activity would be extremely detrimental to the interests of consumers, because it would increase the ability of unscrupulous dealers to engage in mis-selling activity.

O2 has experienced a number of cases of mis-selling and misrepresentation, recently. Earlier this week, O2 passed Ofcom details of a settlement reached with a dealer called Landmark. Landmark had been calling O2 customers, misrepresenting themselves as O2, and signing those customers to 3, without their knowledge. Under the settlement agreement, Landmark has agreed to pay O2 £500,000. There are other cases in the pipeline; this activity is significant in scale and we are happy to provide Ofcom with further information.

In addition, we already have experience of dealers misrepresenting themselves as customers and seeking Porting Authorisation Codes (PACs), without customers’ knowledge. Presently, we are able to identify most of these fraudulent attempts to secure PACs by the use of our standard checks. However, under recipient led portability the opportunity to do this would be denied to us. We understand that, in principle, it might be possible to seek to verify that it is the customer who has asked for the PAC after the event. However, in practice, this is likely to be administratively burdensome, time consuming and, in any event, not necessarily conclusive.

Ofcom will be familiar with other episodes of mis-selling in mobile, such as cash back offers from dealers who cease trading before consumers can claim their cash back (see http://www.mirror.co.uk/news/mirrorinvestigates/ for instance).

Accordingly, it is our strong belief that a move to recipient led porting would be extremely undesirable. If Ofcom is seriously contemplating introducing this, we assume that it would undertake a full and exhaustive regulatory impact assessment and engage in a full consultation in accordance with its consultation principles.
Conclusion on port lead times

In our view, the evidence does not support at all a change in General Condition 18.2 to reduce port lead times. Accordingly, we are convinced that an attempt to institute such a change would fail the requirements of section 47 of the Communications Act.

However, we note that reduction to three days is unlikely to impose significant cost to O2. On that basis, and given that mobile number portability serves the commercial interest of O2, we would be willing to discuss reducing the port lead time to three days. However, this would be on a voluntary basis and on the assumption that other operators would similarly be willing to accept such a reduction. O2 believes that in light of the paucity of evidence presented by Ofcom for any reduction in port lead times, a voluntary agreement with the industry on three days would represent a solution in step with Ofcom’s duties to reduce regulatory burdens, act proportionately in relation to the imposition of General Conditions and make the most appropriate use of Ofcom’s limited administrative resources.
Annex

Answers to specific questions raised in the consultation

**Question 2: Do you agree that an ACQ/CDB solution common to both fixed and mobile networks is the preferred option?**

We do agree that a common ACQ/CDB for both fixed and mobile operators is the right option. However, we believe that there is merit, too, in a common deadline for migration of, perhaps, 2012. The cost benefit analysis undertaken by Ofcom overstates dramatically the net present value of a move, by mobile operators, to ACQ/CDB. We believe that such a move would be desirable, but not for many years. In addition, there are consumer benefits to be realised through adoption by both fixed and mobile operators of ACQ/CDB, at the same time.

**Question 4: Do you agree that it would be beneficial to require the mobile industry to complete its transition to an ACQ/CDB solution by September 2009?**

No. Ofcom’s cost benefit analysis should be revised to reflect more realistic values for the cost of capital and donor conveyance charges and opportunity costs. Taking these into account would reduce the NPVs Ofcom has presented. Since ported traffic is likely to increase over time, O2 believes that the optimal date for migration to ACQ/CDB will be later than 2009.

**Question 5: Ofcom would welcome respondents’ analyses of the costs and benefits of a comprehensive transition of the mobile industry to direct routing using NICC Service description 8 or other suitable standard within one year, ahead of a further transition to ACQ/CDB.**

O2 believes that any benefits of this option would be short lived and that the NPV of this option is, therefore, negative. Further, in practice, mobile operators would be able to implement either the interim direct routing proposal or the steady state ACQ/CDB proposal, but not both; they would be mutually exclusive. Accordingly, the proposal for the interim solution should be rejected.

**Question 7: Do you have any comments on the transition milestones and their corresponding dates? Could the dates be achieved earlier? Alternatively, could any of the dates be at known significant risk of being missed?**

O2 believes that it is not possible to be sure that any of the intermediate milestones will be met, at this stage. Further, amending the General Conditions now on the basis that they will be met is, in our view, a hostage to fortune. A better approach would be to delay amending the General Conditions until all, or the majority, of the milestones have been met.
Question 8: Do you agree that Ofcom should require port lead times to be reduced to less than one working day? If you do not agree, please provide evidence that shows otherwise.

No. Ofcom has not provided robust evidence to support a reduction in mobile port lead times. Accordingly, we do not agree with the proposed requirement bring this down to less than one day. In addition, we have set out, above, the costs of such a change, and these would be significant.

Question 9: Alternatively, do you agree that Ofcom should require port lead times to be reduced to three working days?

No. We do not agree that Ofcom has made the case that mobile operators should be required to reduce port lead times at all. However, since a reduction in port lead times to three days is unlikely to impose significant costs on O2, we would be happy to discuss the introduction of such a change, on a voluntary basis, and on the assumption that any change would be reciprocal.

Question 10: What is a reasonable timeframe for the implementation of a one working day process?

A change in port lead times to one day would impose a large change in the way O2 conducts its business and O2 would need a year to eighteen months to make the necessary personnel and systems changes.

Question 11: Do you consider that a three working days port lead time process could be implemented within 6 months?

Yes, assuming that agreement could be reached amongst all mobile operators.