Cable&Wireless

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REVIEW OF GENERAL CONDITION 18 – NUMBER PORTABILITY:

CABLE&WIRELESS RESPONSE

CONTENTS

INTRODUCTION

Cable&Wireless welcomes the opportunity to respond to Ofcom's Review of General Condition 18 – Number Portability. We support Ofcom's decision to review the current Number Portability regime in light of NGN developments. The timing of this review is apposite, in light of the aggressive timescales being proposed. We believe now is the correct time to review progress and establish regulatory imperatives rather than create an artificial delay, for example until after the replacement charging mechanism commercials have been agreed as has been suggested in some quarters.

The main elements of our response are set out below, followed by a section addressing each of Ofcom's questions.

BENEFITS OF COMMON NUMBERING DATABASE:

It is our view that the use of a central database (CDB) has benefits far beyond Ofcom's stated aim of removing the reliance upon the Donor Network. We agree that a CDB solution does achieve Ofcom's stated goal, but we also foresee that larger benefits are to be gained from generic number administration; exceeding the benefit relating solely to Number Portability.

As set out in Cable&Wireless' response to Ofcom's consultation document *Telephone Numbering – Safeguarding the future of numbers* we believe that the bulk of number exhaustion in the UK is caused by the way that numbers have been assigned to operators rather than through increased demand or any particular shortage in the numbers themselves. A move to routing on an individual number basis will facilitate the decoupling of number administration from routing. This would allow Ofcom to allocate number blocks according to a CPs actual demand requirements rather than in 10k or 1k blocks.

In the absence of this change, for which a common numbering database is an integral part, Cable&Wireless views it as being inevitable that there will be a need for further number changes and / or the adoption of anti-competitive overlay codes (see the Cable&Wireless response to *Telephone Numbering – Safeguarding the future of numbers*).

PROPOSED TIMESCALES:

The timescales set out in the consultation document are aggressive, but we do not believe them to be unrealistic. We refer Ofcom to the NICC submission which has more detailed input on current progress from a technical standpoint. Cable&Wireless expect standards to be available later this year, but caution that the June milestone at this stage appears likely to slip. No work to date has been done in relation to the governance arrangements and due to the unavoidable lag required after addition to the technical activity it is unlikely that July 2007 will be achievable. It does not follow that September 2008 is not a reasonable target for implementation of the database, but a review point should be established in order to account for any potential slippage with the earlier activities.

The 2012 date to compel CPs to use the common database appears to be intrinsically linked to the completion of 21CN migration. Cable&Wireless used a similar timescale when responding to the *Telephone Numbering* document and we believe it to represent a fair proxy date. However we

strongly urge Ofcom to consider a review date in 2009 / 2010 when the actual speed of migration to NGN's may be re-assessed.

MOBILE NETWORK COMMON DATABASE:
The requirement for Mobile network Operators (MNOs) to support a common numbering database in 2009 does not represent a logical step in the development of a numbering database common to both mobile and fixed network operators. Cable&Wireless agree with Ofcom's assertion that MNO traditional networks are better able to support all call query (ACQ) to a central database than fixed TDM networks. However it would appear that the assumption is that this will allow a seamless migration to NGN. This is not the case.

The common database solutions under development by NICC are based solely upon NGN/IMS technology (probably DNS based), be they mobile or fixed. We do not believe that the MNOs will have migrated to IMS-based voice networks by 2009. As a result any solution devised by MNOs will be based on legacy technology and there is likely to be a tension between this legacy solution and the fixed networks drive for an NGN-based solution. Cable&Wireless does not believe that a transitional process is a viable option and indeed believes that compelling MNOs to adopt a legacy solution in 2009 will disrupt progress in achieving what are already aggressive timescales. We urge Ofcom to reconsider this proposal.

Cable&Wireless seeks clarification as to Ofcom's definition of a MNO. Cable&Wireless has recently obtained guard-band spectrum for providing fixed-mobile convergence services and the implementation of this is integrated into our NGN network. We seek clarity as to whether this classifies Cable&Wireless, and other operators in the same position, as MNOs and whether this means an obligation under the current proposal to query a database by 2009.

DATABASE STRUCTURE:
Any common numbering database should contain all numbers irrespective of whether they are fixed or mobile, ported or non-ported. This allows for the greatest benefit in terms of number administration. We agree that the database need not be real-time and indeed from a resilience point of view suggest that it is not. Alternative architectures exist which allow a periodic copy of the database to be taken or even hybrids where a periodic copy is taken but those numbers scheduled to be ported are queried in real time.

COMMERCIAL MODEL:
Cable&Wireless broadly supports the requirement to implement the latest version of ND1208 (formerly Service Description 008) to facilitate direct routing from the mobile part of our network, but we believe that the basis for this requirement is based on the flawed logic set out in sections 3.17 and 3.18 of the consultation document.

Our understanding of the basic commercial model is that the originator collects the retail revenue from the caller; sends the call to the donor and pays the donor termination rate. The donor sends the call to the recipient and pays the previously received donor termination rate minus the donor conveyance charge (0.8ppm). This model could lead to an operator over or under recovering due to

the current different levels of termination rates. As a result of this it is possible that the Donor Conveyance Charge has been incorrectly set to not reflect costs.

We maintain that this level does not reflect the cost in comparison to those rates on a fixed network. The work required to export a mobile number (HLR lookup) is similar to that of exporting a non-geographic number (IN lookup). In contrast to a conveyance rate of 0.8ppm, the highest rates of BT APC In Payments for NGNP are 0.0967 (day), 0.0443 (eve) and 0.0349 (wkd). This does not mean that the system is fundamentally flawed; rather it highlights a lack of consistency and a lack of regulatory intervention to ensure that donor conveyance charges are kept in line with underlying costs.

The existing solution is not perfect. Where a recipient MNO has higher termination rates than the donor, they will lose out as they will only receive the donor termination rates. However this is unavoidable even with direct routing (be it ND1208 or via a common numbering database). Under this model a donor operator should not be in the position that they pay out more to the for the termination rate than they have received. Nor is it a reasonable expectation that every originating CP billing system should be dynamically updated to provide differential billing according to an individual number's termination rate, which could change as and when network providers change. In addition there is a clear link to the retail price. The caller must be clear of the price of the call before they make it. Retail pricing is fundamentally linked to number range and it follows that the termination rates must share the same linkage.

MOBILE NUMBER PORTABILITY TIMESCALES:

Cable&Wireless is generally supportive of shortening the timescales for mobile number portability; however there are more fundamental issues at stake for Cable&Wireless and our customers than purely driving down lead times**.** Business portability as a whole needs to be addressed to ensure customers are able to port their numbers without experiencing delays or a lack of reliability. We believe there is a need to amend the current process to ensure that it is no longer necessary for the customer to contact the losing provider and therefore present the ideal winback opportunity.

Ofcom need to consider that a truncated porting period also has implications on the technical solution for the central database. If a periodic copy of the database is to be taken any port lead time within 24hrs will require a more frequent download. In Cable&Wireless' opinion a one working day porting timescale is unachievable without significant and disproportionate cost.

RESPONSE TO QUESTIONS

QUESTION 1: DO YOU AGREE THAT AN ACQ / CDB SOLUTION IS REQUIRED TO ACHIEVE INDEPENDENCE OF DONOR NETWORKS?

Cable&Wireless agrees that if Ofcom's primary objective is to achieve rangeholder network independence, then the only way to achieve this is for the originating network to query a common numbering database. However we would query whether this is essential purely from a Number Portability perspective? The existing solution in most instances works well and we would caution Ofcom not to neglect those issues that do exist with the current process in the expectation that a common database will prove to be a panacea.

Whilst the example of Atlantic Telecom's failure does provide important lessons, it should be remembered that the worst case scenario of such a network failures has only occurred twice in the last eleven years. The risk posed by a catastrophic failure to a centralised 'real time' database could potentially affect the entire country. It is important that a practical and resilient solution is found which would enable networks to use a 'local copy' of the database.

Cable&Wireless maintains that the adoption of a CDB solution is justified by the gains it allows in Numbering administration and that this should be a key driver.

As set out in more detail below Cable&Wireless does not support the implementation of an ACQ solution as this is specific to TDM architecture and is not cost effective, as concluded in the previous Oftel and Ofcom investigations. A NGN-based CDB solution is our preferred result and we believe offers the most efficient long-term answer.

QUESTION 2: DO YOU AGREE THAT AN ACQ / CDB SOLUTION COMMON TO BOTH FIXED AND MOBILE NETWORKS IS THE PREFERRED OPTION?

We agree that a solution that addresses both fixed and mobile networks is preferable. The increasing levels of convergence mean that distinctions between the two technologies are rapidly becoming irrelevant. A common approach at this stage provides the most 'technology neutral' solution and is the most efficient option open to Ofcom. Cable&Wireless believe this is most efficiently achieved via an NGN based CDB solution. As already stated our mobile developments are closely linked to NGN implementation and any obligation for Cable&Wireless to participate in a separate mobile solution before this date would be highly inefficient.

QUESTION 3: DO YOU AGREE THAT ANY TRANSITION TO ACQ / CDB SHOULD OCCUR IN THE COURSE OF MIGRATION OF FIXED NETWORKS TO NGN ARCHITECTURES?

We concur with Ofcom that the transition to NGN architectures provides the ideal opportunity to move to a CDB solution, particularly in light of the previous research conducted by Ofcom which concluded that a TDM based alternative is not a cost-effective solution.

It should be noted that an industry wide solution should not lead to forced migration, dictated by the plans of any one network. Migration to NGN will not be a simultaneous process for all industry members. BT's approach of forced migration for residential customers onto 21CN for example is diametrically opposed to the Cable&Wireless strategy where customers will be moved when they are ready, not when they are dictated to by Cable&Wireless.

Care must be exercised to ensure that the move to a CDB solution does not become a 'tipping factor' which forces CPs to migrate from TDM to NGN architecture at an artificially introduced point. Ofcom needs to exercise caution that it does not distort the market in this way. Ofcom must also give consideration to any CP that may continue to use TDM based networks after this date.

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?

Cable & Wireless believe that forcing an early migration by the mobile network operators will actually be a net dis-benefit. It makes sense for the timing to be aligned across mobile and fixed networks especially as convergence is likely to continue over the timescales proposed. By 2009 NGN will be more significant than it is today and therefore there is a risk that an early move could soon be redundant.

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 SUITABLE STANDARD BY THE END OF 2007, AHEAD OF A FURTHER TRANSITION TO ACQ/CDB.

Cable&Wireless is not opposed to this transition per se; however we do question the logic that has been used to arrive at this proposal. As set out above we do not agree with the reasoning behind why donor networks may be over-recovering on portability conveyance charges. Rather than the model being flawed it is our view that this is the result of ineffective regulation in this area.

The transition to direct routing does not resolve the issue. Retail charging must remain linked the number range and wholesale termination rates must reflect this.

QUESTION 6: OFCOM WELCOMES VIEWS FROM STAKEHOLDERS AS TO THE APPROPRIATE APPROACH TO BE ADOPTED IN ACHIEVING THE IMPLEMENTATION OF ACQ / CDB WHILST ENSURING THAT SUCH CO-OPERATION IS LIMITED TO TECHNICAL MATTERS DIRECTLY RELATED TO THE ACQ / CDB SOLUTION.

The approach suggested by Ofcom is supported by Cable&Wireless. We agree that the technical specifications should be developed by NICC. For governance issues we believe it is appropriate for NGNUK in conjunction with the existing Number Portability focus groups to perform the initial activity, before handing over to a free-standing company.

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?

As stated previously we believe that the suggested timescales are aggressive, but not unrealistic. We do not believe there is scope for bringing forward any of the key milestones and have set out the major milestones and risks below:

- Standards / June 2007 — Risk of target being missed. Potential delay in months
- Governance / July 2007 — Significant risk of being missed
- Database availability / Sep 2008 — Achievable, but requires review in light of any earlier delays.

• MNO usage / 2009	Cable & Wireless fundamentally disagree with this proposal.
• Compulsion / 2012	Realistic but we would suggest this is reviewed during 2009/10 to reflect the actual speed of migration to NGN architecture.

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.

Cable&Wireless disagrees with this proposal to reduce port lead times to less than one working day. Customer feedback to Cable&Wireless suggests that contrary to the research Ofcom have set out in *Review of General Condition 18 – Number Portability*, paragraph 4.11 the primary concern for porting is not to do with lead times. We suggest that Ofcom's research concentrates solely on the residential market and does not address the concerns of business customers. From a business customer perspective we believe Ofcom should concentrate on the deficiencies in the current process that cause porting to be difficult to initiate, confusing due to the use of 'temporary numbers' and prone to failure, significant delays and subsequent service failures.

Ofcom's research neglects the fact that business customers primarily change service as part of a managed exercise, where the lead time is of less significance than to residential subscribers. Resilience of service is of greater importance than a one day lead time in a process that may take six months of planning. The shortened timescale appears to only benefit the residential market.

From a business perspective Cable&Wireless believes Ofcom would be better advised to tackle issues surrounding the Porting Authorisation Code (PAC) in order to improve efficiencies through the process rather than attempting to drive down lead times. In particular we would suggest that the removal of the requirement for the customer to obtain a PAC code and its limit to cover only 25 numbers would greatly improve timescales. It would also remove the 'win-back' opportunity the current process provides. Cable&Wireless Access faces similar issues in the Wholesale provision of services. The need for individual PAC codes for each end user and the requirement to meet a one working day lead time places a large burden on Cable&Wireless Access which we do not believe to be commensurate to the level of benefit.

There are also technical considerations to such a short timescale that need to be taken into account. A timescale of less than one working day necessitates that network routing tables are downloaded from an implemented CDB multiple times a day. Consequently this will also include downloading during network busy hours. The risk posed to the stability UK PLC communications as a whole clearly outweighs any consumer benefit that may ensue from shorter timescales.

QUESTION 9: ALTERNATIVELY DO YOU AGREE THAT THAT OFCOM SHOULD REQUIRE PORT LEAD TIMES TO BE REDUCED TO THREE WORKING DAYS?

A three working day timescale appears to be a much more realistic timescale. We envisage this would work along the basic principle:

- Day one: Receipt of order.
- Day two: Order process into CDB.
- Day three: Download from CDB into originating networks.

Once again there are complications for those CPs that are providing a Fixed-Mobile Convergence offering to businesses. Unlike a residential port, C&W would also be required to provide handsets /

SIMs, network infrastructure and to manage site migration activity (including on site presence to transfer device information). This places a scheduling burden on Cable&Wireless' provide process which is not felt in the residential arena.

Whilst there are obvious advantages from having the ability to initiate a port at short notice, once again Cable&Wireless must stress the importance of ensuring a port happens without delay or downtime and potentially outside business hours (as per NGNP) rather than squeezing down port lead times.

QUESTION 10: WHAT IS A REASONABLE TIMEFRAME FOR THE IMPLEMENTATION OF A NEW ONE WORKING DAY PROCESS?

The implementation of a one working day process is not supported by Cable&Wireless. We do believe that a three working day process is realistic, but we envisage that timescales of around a year will be required to allow for workflow modification.

QUESTION 11: DO YOU CONSIDER THAT A THREE WORKING DAYS PORT LEAD TIME PROCESS COULD BE IMPLEMENTED WITHIN 6 MONTHS?

Cable&Wireless believe that a six month timescale is too aggressive and as per question 10, we believe a 12 month timescale is more realistic.