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Consultation on The Evolution of Geographic Telephone Numbering in Ireland

Submissions to Consultation

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Content

1 British Sky Broadcasting Group plc

SKY RESPONSE TO

THE EVOLUTION OF GEOGRAPHIC TELEPHONE NUMBERING IN IRELAND: COMREG DOCUMENT NO. 13/121

CONFIDENTIAL

1. SUMMARY

1.1 This is the response of Sky Ireland (Sky) to ComReg's consultation document entitled *"The Evolution of Geographic Telephone Numbering in Ireland."* [1]

1.2 Sky is supportive of numbering conservation techniques that are the least costly and disruptive, both to electronic communication service (ECS) providers and to the wider business and enterprise sector.

2. SKY'S RESPONSE TO COMREG'S PROPOSALS

(i) ComReg should make better use of existing number ranges and avoid costly and disruptive measures

2.1 ComReg identifies a potential future scarcity for numbers in the main urban areas of Cork, Galway, Dublin, Waterford and Limerick. In Dublin, absent measures, ComReg suggests there could be a significant number scarcity in 10 years. ComReg identifies two overall options to address this:

(1) Make better use of existing number ranges; or
(2) Provide additional numbers.

2.2 Sky agrees that these are, in principle, the two overall options open to ComReg. However, Sky considers that recourse to option 2 should prove unnecessary, once ComReg avails of appropriate techniques to make better use of existing number ranges under option 1.

2.3 Sky agrees with ComReg's statement that number changes / the provision of additional numbers (option 2) are likely to prove costly and disruptive. For example, database and systems changes would be costly and impractical, not just for fixed ECS providers, but also for businesses throughout the country, involving for example, changes to databases, stationery and other printed and non-printed material. Therefore, Sky considers that it would be more proportionate for ComReg to consider ways to improve number management first.

2.4 ComReg identifies the following possible measures to improve number efficiency:

(1) Setting effective utilisation targets;
(2) Reducing the sizes of blocks in allocations;
(3) Charging for numbers;
(4) Shortening the interval between assignments;
(5) Retrieving unused numbers;
(6) Pooling numbers;

[1] Dated 19 December 2013.

(7) Maintaining the linkage of numbers to locations (minimum numbering area, "MNA"); and
(8) Removing the distortions in demand due to tariffs.

(ii) Sky supports ComReg's proposal to use measures (1), (5), and (6) in the first instance

2.5 ComReg's preferred first option is to make better use of existing number ranges, using the following techniques from the list set out above:

(1) Setting effective utilisation targets;
(5) Retrieving unused numbers; and
(6) Pooling numbers.

2.6 Sky is broadly supportive of measures (1), (5), and (6) as ComReg's first and preferred option, given that they appear to be proportionate and the least costly conservation techniques. In particular, Sky supports more efficient retrieval of unused numbers and their timely release from quarantine—all the more so, if there is evidence to suggest that eircom (as the largest holder of fixed geographic number allocations) is holding on to unused numbers for any longer than is necessary.

2.7 Sky notes and supports ComReg's proposal that measures (1), (5) and (6) could be supplemented by the following:

(1) Reducing the size of number allocation blocks (provided that this does not result in the need for frequent allocation requests in areas of high utilisation); and
(2) Shortening the interval between assignments.

2.8 Sky notes the proposals specific to the Dublin (01) area and agrees with the proposed approach, which is initially to continue with the current practice of issuing 01 numbers. However, if this does not meet demand, ComReg should as far as possible, use techniques (1), (5), and (6) instead of using the other techniques proposed.[2]

(iii) Charging for numbers should not be an option for number conservation

2.9 ComReg proposes that it would only consider other conservation techniques, such as *(3) charging,* if measures (1), (2), (4), (5), and (6) have failed. Sky agrees with this approach and considers that charging for number allocations would not be proportionate or necessary, but if considered at all, should only be as an option of last resort, once ComReg has reviewed the efficacy of all other proportionate measures. Charging for numbers would involve many significant challenges and complexities. For example, if under a charging regime an ECS provider pays for and owns an allocation of numbers, it is not clear who owns numbers from that allocation when customers subsequently port their numbers between networks. It is also unclear what (if any) compensatory mechanism would exist and how that would work for the ECS provider who has paid for an allocation of numbers, but subsequently loses those numbers to another ECS provider in the switching/porting process. In addition, charging for numbers would likely be costly to implement and impose significant administrative burdens on ECS providers.

(iv) The condition for maintaining the linkage of numbers to exchanges should be reviewed

2.10 One of the possible conservation techniques that ComReg identifies above is *(7) maintaining the linkage of numbers to locations (minimum numbering area, "MNA").* The current condition provides as follows:

[2] Providing new numbers beginning with 3; providing new numbers beginning with 0 or 1; and prefixing existing numbers.

"Number Portability

Number portability is a facility whereby a customer can change operator and, within the customer's existing MNA, change address, without changing telephone number. Customers wishing to change address can only retain their number if not moving outside their existing numbering area boundary (i.e. MNA) as defined in this document."[3]

2.11 This condition limits the porting of numbers between MNAs for ECS providers on the copper network. Sky considers that this results in the unintended consequence of placing copper based ECS providers at a disadvantage, compared to cable based ECS providers who can offer number porting across MNAs. Sky considers that ComReg should review this condition, to identify potential competitive distortions and to ensure conformity with the principle of technological neutrality. Such a review may also indicate that increased flexibility in number porting across MNAs would help to optimise existing number usage (alleviating the need for more numbers) and therefore, the efficiency of number management. If on reviewing the current condition ComReg concludes that there are no technical reasons that justify its continuance and/or that it militates against number conservation, then it should consider removing or amending the condition.

Sky **31 January 2014**

[3] See *"Geographic Telecommunications Numbering Areas"*, ComReg Document No. 03/147, dated 11 December 2003.

2 BT Communications Ireland Ltd

BT Communications Ireland Ltd ["BT"] Response to

ComReg's Consultation on the Evolution of Geographic Telephone Numbering in Ireland

Issue 1– 30th January 2014

Introduction

We welcome ComReg's initiative to review the evolution of geographic telephone numbering in Ireland particularly in respect of the efficient use of geographic numbers. We agree that having to change customers' existing numbers should be avoided where possible and we welcome initiatives to prevent this situation. However, the initiatives should be reasonable, proportionate and given the menu of potential solutions, co-ordinated.

Though the Consultation is focussed upon geographic numbers, the report of the consultants identifies possible implications from other ranges, specifically that for VOIP. The inference within the consultant's report that the range is not being widely used raises concerns of what is wrong with the VoIP range and that it should be reviewed in the Numbering Advisory Panel (NAP). The NAP has the capacity to be able to provide further analysis of the Consultant's report and to provide guidance to ComReg on a future inclusive and complete numbering strategy, not just geographic numbers.

In considering the possible numbering exhaust in the Dublin region, the strategy for resolving the situation also needs to resolve possible number shortages in other ranges (both geographic and non-geographic). To date the approach for addressing numbering shortages within the national numbering plan has been reactive, taking into account short term measures, and at best medium term measures. The lack of a longer term strategy means the problem will keep re-emerging over time. The Consultant's report looks at measures that are both reactive (seeking to better manage the current resource) and proactive (looking at the nature of a future numbering plan for Dublin), and this represents a comprehensive consideration that should be the basis of future discussion.

Any strategy to address the possible shortage of numbers Dublin should form part of a wider strategy that stakeholders are aware and understand how and when it will be deployed. This would create a transparent view of the future of the national telephone Numbering Plan under clearly stated criteria. Costs associated with such changes could then be identified, and prepared for in a timely manner.

Lastly, we would ask ComReg to check that actual geographic numbers are no longer being used by Eircom for CRNs in LLU, and if they are they should be released and non-dial numbers used as CRNs.

Response to Detailed Questions

Q.1 What are your views on the practicalities, cost and other relevant consequences of each of the techniques listed above? Please set out the reasons for your answer.

A.1 Whilst we agree with the menu of techniques listed in the consultation any deployment needs careful consideration as to their compatibility for optimum deployment. For example, it is not the setting of utilisation targets that are the issue, rather the impact of good number management that operator's should not allocate from other blocks until an utilisation of x% is achieved in current blocks. The determination of x is a combination of additional numbering blocks, time to have new blocks made available and accessible by industry, and the provable run rate for number allocation.

Reducing the sizes of blocks in allocations can be seen to have a greater impact if undertaken as a result of retrieving unused numbers. This needs to be prefaced with a requirement placed upon operators to undertake number management measures that ensure that there is no profligacy with number allocation.

The time that a number might remain in quarantine between cessation and re-use has historically been driven by the publication of a telephone directory. The question to be asked is in the 21st century, with directory enquiry competition, consumer preferences increasingly for omission of the publication of their number, and numbers being made available "on-line", is the current 13 month quarantine period for numbers sustainable? Further, and not answered are the volume of quarantine numbers that would become available should the quarantine period be shortened.

Pooling of telephone numbers brings with it additional costs of administration, implementation and use. These costs have not been identified, and are needed to assess the benefit of this technique. Given that the technique is to be employed only in certain geographic locations, then BT Ireland would have reservations over it being selected without further evidence as to its benefit.

The maintenance of the Minimum Numbering Area (MNA) requires further evidence. The greater use of mobile numbers removing the reliance upon geographic numbers needs to be assessed. The extent to which local dialling (as opposed to local numbers) determines a consumer's understanding of call charges and of location is perhaps more relevant. The impact of removing MNAs to enable greater utilisation of geographic numbers within a geographic code area is not considered. The impact of the combination of setting (or perhaps implementing) effective utilisation targets with removing the concept of MNAs presents an interesting channel to increasing number availability that has not been explored.

As to the concept of removing the distortions in demand due to traffic, it is appropriate that this is not considered further.

Option 3 - Charging for numbering is not trivial for the following reasons:

- Significant administration costs that would ultimately pass to the customer – which would not be desirable.
- Any charging regime should only apply where there is a scarcity, such as areas where the numbers will run out.

- How do you deal with numbers that are ported? For example do you operate a discount to the block holder for every number exported etc.?
- How do you deal with charging for imported numbers?
- How do you deal with products such as WLR where the number remains on one network but the service is provided by another?
- Etc.

Q.2 Do you agree with ComReg's proposal to implement techniques 1, 5 and 6 in consultation with NAP? Please set out the reasons for your answer.

A.2 BT Ireland believes that further dialogue on the utilisation of techniques other than 1, 5 and 6 is required by all stakeholders against criteria of cost, consumer disruption and contribution to avoiding number changes. At this time we consider further consideration is required on achieving an efficient combination to prevent unnecessary costs and processes.

Q.3 Are there other, alternative, techniques available to ComReg to make more numbers available in the Dublin area within the (01) area code? Please provide detailed information on alternative options ComReg should adopt.

A.3. Whilst we believe there are no other techniques that are available, we believe further consideration is required as to how the techniques may interact with each other and the optimum deployment sequence where several techniques are to be applied. For example the pooling of numbers suggests collaboration with other operators hence would utilisation targets be shared or remain as individual. I.e. how will it work? As the saying goes, 'the devil is in the detail', and our long experience of numbering is there is a lot of detail to be processed. Our view is the proposal is high level and further work is needed to determine if and how the combinations will work.

Q.4 What are your views on the practicalities, cost and other relevant consequences of each of the options listed above? Please set out the reasons for your answer.

A.4. There has been insufficient time to undertake a detailed cost analysis of the options. Rather than select a preference for one option over another, BT Ireland believes that criteria should be developed that allows for an assessment of the options and combinations. Such criteria would include impact upon consumer dialling, ease of communicating the change, costs of implementing and effectiveness.

For example providing new numbers beginning 1 or 0 is not as good as providing numbers beginning 3 and neither is as good as prefixing existing numbers. Local numbers beginning 0 and 1 will potentially lead to poor consumer experience and potentially many incomplete calls. Only utilising the digit 3 is to restrict the possible availability of new numbers in the future. Prefixing all numbers in one activity offers the best solution that meets the criteria identified above.

Q.5 Do you agree with ComReg's proposal to initially implement Option 1, and then progressively adopt Options 2, 3 and 4 depending on demand? Please set out the reasons for your answer.

A.5. This has been answered to some extent in Q4. BT Ireland believes that to undertake the various options as proposed is to increase the potential for customer confusion and to incur additional costs associated with communication and implementation. We consider more work is required to evaluate the effectiveness of packages of solution rather than assuming they will work together.

If there is to be a numbering activity that is visible to the consumer, it should be a single activity that is simple to communicate and cost effective to implement.

Option 3 – As per our answer in question 2 charging is not a trivial process to apply to numbering.

The consultant's report implies that a number change would require a period of parallel running. There is sufficient empirical evidence from other numbering changes, such as that in France that suggests that a flash change is more effective to re-enforcing the communication and learning paradigm.

Q.6 Are there other, perhaps better, options available to ComReg to supply more numbers in the Dublin area? Please provide detailed information on alternative options ComReg should adopt.

A.6. We consider the appropriate options have been considered.

Q.7 Do you agree with the consultant's forecast that there will be a low to moderate increase in the demand for new geographic numbers as long as current numbering conventions continue to be applied? Please provide reasons for your view.

A.7. This is difficult to gauge as the demand for numbers (geographic or otherwise) is difficult to predict. However the implication of the consultant's report, that the use of 076 for VoIP and related services would indicate a flaw in the numbering conventions. This issue is worthy of further consideration by NAP. If as implied geographic numbers are being used instead of 076 (see clause 6.8 of the Consultant's report) then the potential for ongoing demand for geographic numbers is likely to increase.

Q.8 Do you agree with the Consultant's view that the provision of two geographic numbers per household and per employee is sufficient to meet demand from residential and business consumers? Please provide reasons for your view.

A.8. We believe this method of prediction is open to question. The demand for geographic numbers will be determined by services yet to appear, rules of assignment and management both by ComReg and by the operators. What happens if consumer's want more numbers, driven by new services? The better indication is the demand by which numbers are requested, in effect the run

rate. ComReg have monitored the run rate over a number of years to help it advise on number exhaustion and we would suggest as a minimum this should continue to inform on potential number shortages.

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End

3 eircom Ltd

eircom Ltd.

Response to ComReg Consultation Reference ComReg 13/121:

The Evolution of Geographic Telephone Numbering in Ireland

23 January 2014

Introduction

eircom welcomes the opportunity to input to ComReg's consultation on the evolution of geographic numbering in Ireland. eircom consider geographic numbering as a vital resource that must be managed and conserved to ensure an ample supply of numbers throughout the state while avoiding unnecessary costs incurred through number changes etc. Demand for geographic numbers has somewhat levelled off following a period of rapid growth that resulted in many number changes throughout the country in the last few years. These number changes though expensive and disruptive were necessary and streamlined and modernised the numbering resource to accommodate that growth into the future. However emerging communications technologies and innovations are driving demand for addressing methodologies including geographic numbering. It is imperative that ComReg are vigilant in their stewardship of this finite resource to ensure that demands for numbering that comply with the National numbering conventions are met in an efficient and economic manner. In this consultation particular emphasis is placed on the 01 (Dublin) ranges where shortages could occur by 2020 without conservation if present trends continue. Almost seven million numbers are available for allocation in the 01 area however five and half million have been allocated to operators for their customers though the population of that area is just under one and a half million. This example shows that though there is ample supply for the population, intervention in the form of conservation techniques as outlined in the consultation is required to avoid number changes. eircom agrees that areas such as Dublin 01 area should be reviewed regularly.

Responses to Consultation Questions

1 Conservation techniques

(1) Setting effective utilisation targets;

(2) Reducing the sizes of blocks in allocations;

(3) Charging for numbers;

(4) Shortening the interval between assignments;

(5) Retrieving unused numbers;

(6) Pooling numbers;

(7) Maintaining the linkage of numbers to locations (minimum numbering area, 'MNA");

(8) Removing the distortions in demand due to tariffs.

Q. 1 What are your views on the practicalities, cost and other relevant consequences of each of the techniques listed above? Please set out the reasons for your answer

(1) setting effective utilisation targets;

eircom agrees with the proposed technique of setting effective utilisation targets. eircom has always had a strict regime in number resource management and would welcome utilisation targets that ensured efficient and maximum utilisation of this resource across the whole of the industry.

(2) reducing the sizes of blocks in allocations;

This technique has been used in the past where STD code areas were facing exhaustion / shortages prior to a number change. It is also used at present to facilitate new entrants who do not need full one thousand blocks in each STD code area. eircom agree that this technique could increase efficiency.

(3) **charging for numbers**;

eircom does not agree with the concept of charging for numbers. Ownership of numbers lies with ComReg, if ComReg charge for numbers that would intimate transfer of ownership and subsequently hinder number management and recovery at a later stage. This concept could also give rise to "number selling" by individuals. There is a danger that CSP's would simply pass on the charges to customers and any perceived efficiencies would be lost.

(4) **shortening the interval between assignments**;

The technique suggested here is to reduce the quarantine period from the existing 13 Month period. This time period was devised to address privacy concerns for example to align with printing of the telephone directory which is printed annually to ensure that an individual having ceased service in one year did not appear in the directory publication the following year. Given the reduced relevance of the printed directory and the real-time nature of on-line directories and directory enquiries, A facility to shorten the quarantine time may have little or no impact on the legacy privacy issue and could release numbers immediately in congested exchanges. This would avoid the need to open new ranges. Therefore eircom agrees that it is a technique that could be used. .

(5) retrieving unused numbers;

eircom agree with the technique of retrieving unused number ranges that have not been allocated to customers. This is a technique that has been utilised in the past. On the suggested recommendations see comments below

1. **the CSPs should withdraw numbers that are assigned to customers but that are not in use and are not required by contractual commitments**

- "Assigned" number ranges "not in use" are usually number ranges that are part of a contiguous block allocated to a large customer e.g. 23400 – 234599 active 234600 – 234999 "Assigned" . Should the customer wish to extend their range in the future they will be able to avail of the remainder. Assignments such as these are usually facilitated in start up situations where the customer wants some contingency for growth and their CPE requires contiguous ranges. Where assigned ranges are not built in the network they can be retrieved easily. eircom agree with this recommendation in the event of shortages in NDC areas...

2. **the CSPs should review their standard contract terms and their working practices to ensure that they do not make commitments to assign numbers in quantities larger than the customers will use**

- Customers should be made aware that the only way to ensure that numbers are available is to activate them and that assigned ranges are only held when there is no demand for them by any other users . eircom agree with this recommendation.

3. **the CSPs should make arrangements to ensure that if geographic numbers that are assigned but not in use are about to be ported they can instead stop being assigned and be made available after quarantine for re-assignment**

- eircom agrees with the proposal that porting could be an additional trigger for the recovery of unused numbers.

4. **the CSPs should make arrangements to ensure that ported geographic numbers that subsequently stop being assigned to customers are returned after quarantine automatically and immediately to the subrange holders for re-assignment**

- Geographic Numbers that have been ported and subsequently ceased are returned to the original block holder. eircom agrees.

5. **ComReg should consider the introduction of a number range that would replace geographic number ranges in providing numbers required only or mainly for internal network purposes,such as soft dial tone and GLUMP identifiers.**

- Soft dial tone numbers are geographic numbers on lines that can be activated electronically and used immediately by a new tenant or customer. It is not practical to retrieve them or change them. They are not just for internal network purposes. Spare Glump ranges could be recovered.

(6) pooling numbers;

It would be unusual for a range to be so sparsely assigned / activated that this scenario would be of any value. The present number portability process could not facilitate this initiative. However eircom agree with NAP that it should be considered before contemplating any decision to increase the subscriber number length to eight digits.

(7) maintaining the linkage of numbers to locations (minimum numbering area, "MNA")

eircom agree with the recommendation to retain the linkage between numbers and locations.

(8) removing the distortions in demand due to tariffs.

eircom does not agree that there are distortions in demand due to tariffs. Based on past experience eircom considers geographic implications to be of far greater significance. The number ranges signals to anyone calling the number or being called from the number (in particular customers) the geographic area. This was evident with the low take up of the 076 voip offering because customers perceived it to be an out of area number rather than a national number.

Q.2 Do you agree with ComReg's proposal to implement techniques 1, 5 and 6 in consultation with NAP? Please set out the reasons for your answer

Yes eircom agrees that effective utilisation targets and retrieval of unused numbers and though unopposed to the pooling of numbers in principle believe that it may be unworkable.

Q.3 Are there other, alternative, techniques available to ComReg to make more numbers available in the Dublin area within the (01) area code? Please provide detailed information on alternative options ComReg should adopt

eircom believes that all the viable techniques/options for the Dublin 01 area have been covered.

2. Provision of additional geographic numbers in the Dublin 01 area

(1) Continuing mainly with current practice;

(2) Providing new numbers beginning with 3;

(3) Providing new numbers beginning with 0 or 1;

(4) Prefixing existing numbers;

(5) Having a new range with some existing numbers;

(6) Having a new range with all new numbers;

(7) Using existing numbers with, at most, national tariffs;

(8) Using new numbers with local tariffs.

Q.4 what are your views on the practicalities, cost and other relevant consequences of each of the options listed above? Please set out the reasons for your answer.

In Dublin at present there are 6811000 numbers available for use to customers. There are also reserved ranges for expansion which with efficient utilisation and conservation should be sufficient to satisfy the needs of the Dublin population into the future. eircom believe that the techniques outlined in the review will ensure that there is efficient use of the resource for the future. It is likely that internal number management processes vary across and their demand for numbering may differ. This must be considered by ComReg when allocating ranges. The size of operators and their range of product offerings is also a factor that should be considered by ComReg when making allocations. When ranges are built in an exchange it is almost impossible to recover them particularly in older ranges where a great degree of churn will have occurred with

numbers having being allocated and quarantined a number of times over the years. Ranges that have been open a long time will generally have a 75% usage with 25% in quarantine or available. While this 25% may not be recoverable or practical for pooling, these numbers are still available for use by that operator. . The options listed are for proposed remedies for the 01 Dublin Area. Ultimately as advised above and eircom believes that with detailed regular audits will be ample supply for the future. .

(1) continuing mainly with current practice;

eircom believe that continuing with the current practices while employing the conservation techniques suggested will provide the most efficient use of the numbering resource for the least cost.

(2) providing new numbers beginning with 3;

This option would release an additional 1 million new numbers into the 01 range bringing the usable allocation up to 7811000 which should satisfy demand for the future. This should only be necessary when current practice is operating efficiently and there has been such growth both in industry and population to justify the expansion.

(3) providing new numbers beginning with 0 or 1;

This option should be used as a third consecutive step following the opening of level 3 in the 01 range. This option would involve closing the 01 number range and would release about two million extra numbers into the range bringing the available numbers to about ten million in the Dublin area alone which eircom believe will be more than sufficient.

(4) **prefixing existing numbers**;

eircom considers it too costly to expand the existing seven digit ranges to 8 digits. In eircom's view for the foreseeable future such a move would be disproportionate.

(5) having a new range with some existing numbers;

eircom considers this too complex for both operators and subscribers. Options 1, 2 and 3 should be employed before this option could be considered.

(6) having a new range with all new numbers;

This option would require closing the existing Dublin number range but would be a clearer method and more acceptable for customers than option 5

Nonetheless for the foreseeable future such a move would also be disproportionate in eircom's view

(7) using existing numbers with, at most, national tariffs;

This option is available to operators and subscribers at present utilising the 076 VOIP range. This option should be pursued prior to the closing of the 01 range. The 076 range did not have the intended take up by subscribers in spite of the lower tariffs when launched initially. This may be due to the close association with NDC and geographic area. However, with an active promotional campaign from ComReg 076 could relieve congestion and satisfy demand and particularly demand that may arise from new technological offerings.

(8) using new numbers with local tariffs.

Option 7 should be employed before this option would prove necessary.

Q.5 Do you agree with ComReg's proposal to initially implement Option 1, and then progressively adopt Options 2, 3 and 4 depending on demand? Please set out the reasons for your answer.

eircom suggest that ComReg consider the suitability of option 7 (076 ranges) to satisfy number range requests in the Dublin area and offer 076 ranges to applicants. This may answer demand that may arise from new technological offerings. This initiative could commence with immediate effect in parallel with option 1 "to continue with current practice". eircom agree with the proposal to progressively adopt options 1,2 and 3, but not 4.

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3 Policy matters

Q.6 Are there other, perhaps better, options available to ComReg to supply more numbers in the Dublin area? Please provide detailed information on alternative options ComReg should adopt.

All the workable options to satisfy the demand for geographic numbers in the 01 area have been covered in the consultation

Q.7 Do you agree with the consultant's forecast that there will be a low to moderate increase in the demand for new geographic numbers as long as current numbering conventions continue to be applied? Please provide reasons for your view.

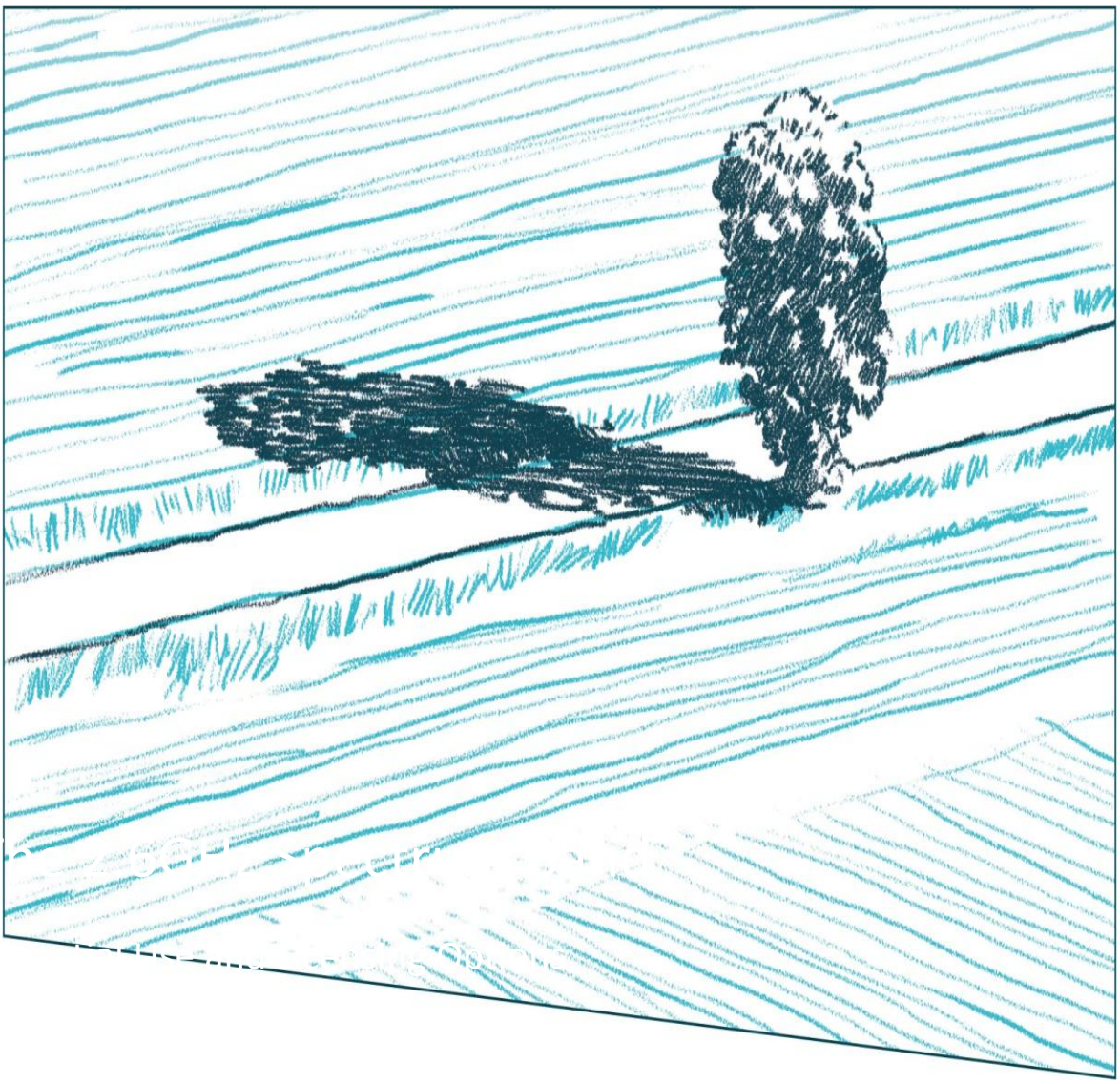
Yes eircom agree that a strict adherence to and enforcement of the numbering conventions should curtail misuse of the geographic numbering resource.

Q.8 Do you agree with the Consultant's view that the provision of two geographic numbers per household and per employee is sufficient to meet demand from residential and business consumers? Please provide reasons for your view.

eircom believe that the provisions of two numbers per household and per employee are more than sufficient to meet demand from residential and business consumers. As outlined in the report for residential customers the number of residential fixed voice subscriptions in Ireland is only 69% of the number of households. Allowing for two numbers per household envisages that demand would treble. However allowing for two numbers per household for the purposes of this report is acceptable where the impact and demand of new technologies such as Machine to Machine numbering are as yet unknown. This should be re-examined prior to commencing any radical techniques such as a number change.

eircom believe that two numbers per employee is also a liberal estimation and should be re-examined prior to triggering any radical techniques such as a number change.

4 Telefonica Ireland Ltd



Evolution of Geographic Numbering

Response to Document 13/121

31st January 2014

Telefónica

General Comments

Introduction

The "ordinary man in the street" probably doesn't spend much time out of his day-to-day life thinking about telephone numbering. People just dial numbers as needed, and expect to get a connection. While numbers convey some service information, and also some geographic information, telephone numbering wouldn't be a high priority for most consumers so long as they are not asked to change their own. To most people, a number change in the greater Dublin area would probably look unnecessary as there seems to be plenty available. On the face of it, this makes sense; after all the 01 numbers are 7-digits long, giving 10 million numbers available to serve about 1.5 million inhabitants. The public might well ask "*What's the problem*?"

The reality is that telephone numbers need to be allocated in a hierarchical structure so that all of the services that use them can deliver communications to the correct terminal. These services must function on legacy networks and new ones alike; the structure used to assign numbers needs to provide enough numbers for new users and new uses, giving all fair treatment; and must also provide for future evolution of the numbering scheme. All of these requirements bring cumulative inefficiencies that mean only a fraction of the available numbers will ever be actively in use unless draconian measures are used to increase the utilisation rate. The maximum utilisation rate will vary depending on individual circumstances, however as discussed later, O2 (Telefonica Ireland Ltd) would estimate that it is not possible to achieve higher than 30% utilisation in the 01 area without introducing material costs.

ComReg cannot afford to be complacent in its management of the numbering scheme. There is a direct requirement in legislation for ComReg to ensure that there is an adequate supply of numbers for new and existing services, however creating new numbers is not easily done without imposing cost and inconvenience on existing users. While numbering might be taken for granted, it should be remembered that an adequate communications infrastructure is a basic requirement for both foreign direct investment, and the growth of indigenous enterprises alike. Dublin has become a preferred location for the European HQ of many multinational corporations. In any decision to locate in Ireland there are basic requirements that must be met before a location will be even considered – basic infrastructure like transport, power, water and communications infrastructure are essential. That the communications infrastructure works is taken as given, and a functioning numbering scheme is part of that.

For the above reasons, O2 welcomes ComReg's consultation document, and takes the opportunity to provide some general comments in addition to the specific questions asked in the consultation.

Long Term Planning

While this consultation concentrates on geographic numbering with a focus on the 01 area, O2 takes the view that any decision should be consistent with overall decisions that must be made to evolve the numbering scheme. For this reason, it would be useful for ComReg to refresh its medium to long term strategy for the overall scheme.

It seems we are about to adopt conservation measures in the 01 area, while also planning for future expansion of capacity; however any plans to amend the overall structure of the scheme should be known now, as they might influence the decision taken in the 01 area. For example, if there was a plan to move to a uniform number length for geographic numbers in future, or to close the overall dialling scheme, then that would certainly influence decisions now in the 01 area.

There are several core principles that should be brought into consideration when planning for the numbering scheme, some of these include:

- A primary requirement to ensure there is an adequate supply of numbers
- That the different service providers and network operators are treated equally, which would imply that there should be no unjustified difference in the quantity or quality of numbers available to different service providers
- That shorter numbers are generally better than longer ones (although this is becoming less relevant with time, as more and more calls are made using auto-diallers and stored contacts)
- That number changes are minimised as they are costly and disruptive to both consumers and service providers
- Where number changes must be made, if possible, they should be all done together and not staggered over months or years

The second-last point above is worth considering a little further because, of course all intervention in the numbering scheme will have some cost implication – whether it be to recycle old numbers; to introduce conservation measures; or to expand the capacity, all come at a cost. It is important to ensure that we don't end up taking multiple measures to maintain supply, and in particular we should avoid multiple number changes. So, ComReg should set out a vision of how the overall numbering scheme will be structured in future, and the choices that might be made to get there. This vision might ultimately be overtaken by technology or market evolution, however it would ensure that for now, any decision that is taken is made for the right reasons at this time.

Structure of the Numbering Scheme

As is the case in almost every other country, the numbering scheme we have today emerged from an original requirement to switch calls to physical copper lines, and it has evolved over time to meet changing requirements. Just as in the case where the old man was asked for directions by a tourist, and his reply was "well if I was you, I wouldn't start from here". If we were to design a numbering scheme from scratch, we wouldn't start with the one we have. However we must start from where we are, and there are legacy conditions that we must work with. There are a few characteristics of the overall numbering scheme that stand-out as worth considering at this time:

- We use an open dialling scheme, allowing "local" dialling within many National Destination Codes (NDCs), although this has been eliminated for mobile
- We have a peculiarity that we use 1XYZ as the access code for some non-geographic services. A clash with current numbers in the 01 area means that these numbers cannot be called from outside of the Irish dialling zone

- We have designated almost 70% of the capacity of our numbering scheme to be used for Geographic service but only a little over 10% for non-geographic services including mobile
- One NDC (01) services the requirement for Geographic numbers for about one third of the population of the country
- There is a vide variation in the National Significant Number length from one NDC to another – varying from 7 to 9 digits for Geographic, or 9 to 10 for Non-geographic
- Within the Geographic areas we have a sub-structure of MNAs that can be used to provide a matrix of charging zones for Geographic calls that is more granular than the NDC areas

If we take a look at the above points they may have some influence on the decisions to be made in the current consultation. First there is the apparent disparity between the portion of the NDC capacity that is designated for Geographic use vs Non-Geographic. We should consider if this makes sense in the long term. According to ComReg's most recent Quarterly Report (Q3/13):

- Some 5.6m connections (74%) are mobile, while 1.6m (26%) are fixed
- 18.4% of voice traffic is fixed to fixed and, and this portion is declining

Given the above, it would seem sensible to ask whether we should be aiming to re-structure the numbering scheme in the long-term to provide for a greater proportion of the NDCs to be designated for non-geographic services. This does not necessarily mean that there would be a reduction of the capacity provided for Geographic services, as it would be possible to expand the number length in some geographic areas over time to achieve a uniform 9-digit National Significant Number length. The answer to this question could have a bearing on whether the NDC "3" is available to use for Geographic numbers, whether it should be used for the Dublin area, and what the length would be.

Also of relevance is whether ComReg want to hold out the option of closing the overall numbering scheme in the long term. While this was examined previously, and a decision was taken not to close the scheme at the present time, nevertheless it was not ruled out for the future. Again this might have some relevance for how the NDC "3" could be used in the Dublin area. Closing the numbering scheme would bring several benefits, including:

- Simplifying the dialling arrangement of international vs national dialling - no need to have the 0 in parenthesis (353 (0) XX . . . .XX)
- Eliminating the clash between Dublin area numbers and Non-Geographic numbers beginning 1XYZ, and allowing incoming international access to Non-Geographic numbers
- Eventually releasing some additional capacity (01, to 09) although it is accepted that it would not be preferred to use these numbers.

The point that emerges from the above is that it would be useful for ComReg to update its vision for the evolution of the overall numbering scheme, and not just Geographic numbers. This would allow all to see how the decisions for Geographic numbering are consistent with the overall long-term vision.

Clear definition and Rules for Geographic Numbering

O2 believes that it would be useful for ComReg to review the definition of a Geographic number as provided in the Numbering Conventions, and clarify exactly under what circumstances a Geographic number can be allocated. The Universal Service Regulations (S.I. No. 337 of 2011) state:

> *"geographic number" means a number from the national numbering scheme where part of its digit structure contains geographic significance used for routing calls to the physical location of the network termination point (NTP);*

This definition is unclear as to whether the network termination point (NTP) must be in any particular geographic location when Geographic numbers are used. ComReg's Numbering Conventions provides some clarity:

> *Note: 'Normal' usage of geographic numbers has until recently implied usage by/for fixed-line networks, in which consumers and originating operators have developed certain historical perceptions regarding their retail and termination costs, respectively. Granting of geographic number rights of use was extended to mobile operators in March 2007 in the expectation that this would not result in violation of such legitimate expectations.*
>
> *Calls to geographic numbers shall be routed to a fixed destination in the appropriate discrete geographical area (an MNA). Calls may also be forwarded to other destinations . . .*
>
> *A geographic number shall only be allocated to an entity whose address, as registered with ComReg or its network operator, is within the designated geographic numbering area for that number. This means that calls to the number concerned must be fully terminated to the end-user within that geographic area.*
>
> *Geographic numbers may be allocated to non-PATS ECS operators in areas where no risk is foreseen of number exhaustion, even allowing for a large build-up of demand during the following 5-10 years.*

While the Antelope/Analysys Mason report doesn't identify OTT service providers as a source of particularly high demand, the fact that the 01 area is now "in conservation" implies that non-PATS service providers will no longer be eligible to receive allocations in this area. It would be useful for ComReg to clarify this point. It could become important if it was the case that use of numbers in the 01 area was inflated by networks that do not physically terminate calls within that area, or by individuals/businesses who do not have a presence in that area. They would, in effect, be pushing cost onto other users of the numbering.

Responsibility for Rights of Use

At present an assigned telephone number (Geographic or Non-Geographic) can be used by OTT service providers and other applications as a means of identification. However the number is allocated to the user by a service provider during the term of the relevant contract. It is unclear what happens when the contract is terminated and the number is recycled by the service provider.

Could this mean that the number remains as an identifier of the original user with some applications and OTT service providers, even though it has been re-assigned by the service provider?

Response to Specific Questions

Q.1 What are your views on the practicalities, cost and other relevant consequences of each of the techniques listed above? Please set out the reasons for your answer.

ComReg's advisors have proposed the introduction of conservation measures for the current 01 geographic area, and have proposed a number of specific measures that should be used:

(1) setting effective utilisation targets;

O2 agrees that there should be a target maximum number of geographic numbers per user. This should be set at the operator/service provider level rather than enforced at an individual customer level. Given that we are dealing with legacy systems however, ComReg should also be open to sensible practical reasons that mean an operator needs to exceed the target in particular cases. In practice, ComReg might be overly-generous in allowing for 2 numbers per employee, and 2 per user in the case of households, however it is simply not possible to achieve 100% utilisation in practice. ComReg should also allow for real-world efficiency of use, which is probably no better than 30%.

(2) reducing the sizes of blocks in allocations;

Reducing the allocation block size can certainly reduce the inefficiency of utilisation, however O2 would question whether the gain would be sufficient to justify the extra workload. This should be considered further.

(3) charging for numbers;

While O2 agrees that there is an element missing from the incentive structure surrounding numbering at the moment – those who are least efficient do not necessarily bear the cost of provision of numbering. While charging for numbering would give a direct incentive for operators and service providers to become more efficient, O2 would caution against rushing to introduce a charge for number allocations – this might simply create an additional overhead in managing the charges. O2 would certainly not agree that a charge for numbering should be a new additional "tax" on the sector – there would need to be a corresponding decrease in the Telecoms Turnover Levy, or some other existing cost on the industry.

(4) shortening the interval between assignments;

At this point, O2 does not see that a significant gain can be made from shortening the interval before re-assignment of numbers, and would caution against it. There are some practical steps that can be taken that ensure number recycling works efficiently, e.g. where a prepaid number has been out of use for a period before cancellation, then this time could be counted as part of the quarantine period. In practice, quarantine is used to avoid mis-directed calls where a new user receives calls intended for a previous user. Given that a growing proportion of numbers are called from stored contacts rather than direct dialled, there is in fact an increasing likelihood that calls will continue to be made to old numbers, if anything requiring longer quarantine periods.

(5) retrieving unused numbers ;

O2 would support the retrieval of unused numbers. Increasing the efficiency of use in this manner could provide a significant quantity of capacity available for assignment.

(6) pooling numbers;

It is unclear whether pooling would provide enough free numbering capacity to justify the process. ComReg should ask the NAP to consider whether a small representative sample of the 01 area could be examined to see what return could be gained.

(7) maintaining the linkage of numbers to locations (minimum numbering area, 'MNA");

O2 is of the view that ComReg needs to clarify the conditions under which Geographic numbers can be used. At present there seems to be some degree of flexibility, which is fine when there is no shortage in capacity, but not in areas of conservation. Geographic numbering originated from the requirement to deliver calls to a location where there was physical infrastructure. Other characteristics of geographic numbering emerged through use, e.g. association with a particular location. It now seems that geographic numbers can be allocated to service providers who may provide no physical infrastructure in the relevant location at all, and might provide service to an end user who is not even in the country.

While it is understandable that some businesses or users might wish to create the illusion of having a local presence, this could come at a cost to all other users if it creates a number shortage or a requirement for a number change. The Numbering Conventions provide that:

> *"Geographic numbers may be allocated to non-PATS ECS operators in areas where no risk is foreseen of number exhaustion, even allowing for a large build-up of demand during the following 5-10 years.*

As we are now facing conservation measures in the O1 area, this would imply that Geographic numbers in this area will no longer be allocated to non-PATS operators. ComReg should clarify this in its consultation response.

(8) removing the distortions in demand due to tariffs.

The Minimum Numbering Areas are a legacy from distance related geographic charging, when there was a significant distinction between the tariff for Local and STD calls. O2 believes this method of charging has all but been eliminated, and where it still exists, there is likely to be little consumer awareness of what rules apply, or which areas are within a local MNA. ComReg should include some questions in one of its market surveys to test for awareness of the MNAs. Unless there is a reasonable awareness of them, and use of them for billing, then they should be simply phased out. If there is a revenue implication for operators this would need to be taken into account in the decision making process, but should be fully explained.

Q.2 Do you agree with ComReg's proposal to implement techniques 1, 5 and 6 in consultation with NAP? Please set out the reasons for your answer.

O2 agrees with the proposal to implement techniques 1 and 5. We believe technique 6 should be examined before being implemented. ComReg should also clarify the position for technique 7 – defining clearly under what circumstances a geographic number can be allocated.

Q.3 Are there other, alternative, techniques available to ComReg to make more numbers available in the Dublin area within the (01) area code? Please provide detailed information on alternative options ComReg should adopt.

As stated above, ComReg should examine the elimination of Minimum Numbering Areas.

Q.4 What are your views on the practicalities, cost and other relevant consequences of each of the options listed above? Please set out the reasons for your answer.

The options presented are:

(1) continuing mainly with current practice;

This approach is adequate in the short term, if the number conservation measures prove to be successful. O2 would not be in favour of moving to a mixed number length in the 01 area – this would likely lead to some confusion and mis-dials. Changing the number length should be considered in the context of the overall future numbering scheme structure.

(2) providing new numbers beginning with 3;

O2 supports this proposal, however would caution that numbers beginning with "33" should not be used – this preserves an option to prefix the entire current 01 area with digit 3, either to provide additional capacity, or as part of a process to close the entire numbering scheme. Presuming this would be for a uniform 9-digit NSN, then it would be possible to overlay Dublin with 01 3 at present, but keeping 33X free so that eventually the 3 could be prefixed to all Dublin numbers to give a uniform NSN of 3XY YYY YYY, where x is the leading digit of current numbers. Any move to prefix Dublin numbers should be as part of an overall change in line with the evolution of the numbering scheme.

(3) providing new numbers beginning with 0 or 1;

O2 supports this proposal for 7 digits, subject to some further examination of the impact is might have on mis-dials and general confusion as to how local dialling applies. It should:

- give some direct efficiency gain
- release ~20% more numbers in Dublin

It is worth taking a quick look at traffic how many calls are locally dialled within 01 area. ComReg's Market Report for Q3/21 shows 18.4% of voice traffic is fixed to fixed and declining. This represents all calls within and between all NDCs. Given that 01 represents approximately 30% of the population, then we can approximate that 6% of calls are to or from a fixed number in the 01 area,

and only a fraction of these would be originated and terminated within the 01 area using local dialling. ComReg should obtain some data on this point from current call records.

On the positive side, a similar process to eliminate local dialling has previously been successfully implemented on mobile networks.

(4) prefixing existing numbers;

This is a solution that should only be considered where other options have been exhausted, and should be considered in the context of the overall future numbering scheme structure.

(5) having a new range with some existing numbers;

This option is not favoured – it does not provide a significant benefit, considering the cost and disruption involved.

(6) having a new range with all new numbers;

ComReg should consider this option further – particularly as we are now facing conservation in the 01 area, and as non-PATS service providers may no longer be eligible to receive 01 number allocations. This would provide a source of Geographic numbers for the Dublin area, although might struggle to be recognised as such.

(7) using existing numbers with, at most, national tariffs;

It is difficult to see how this option is different from existing solutions.

(8) using new numbers with local tariffs.

This is essentially a non-geographic allocation with a tariff restriction. It is difficult to see how it would have much effect given that few most consumers continue to use geographic tariffs.

Q.5 Do you agree with ComReg's proposal to initially implement Option 1, and then progressively adopt Options 2, 3 and 4 depending on demand? Please set out the reasons for your answer.

Subject to the comments above, yes.

Q.6 Are there other, perhaps better, options available to ComReg to supply more numbers in the Dublin area? Please provide detailed information on alternative options ComReg should adopt.

The allocation of Geographic numbering seems to be skewed in favour of a single NDC at present. About 30% of the population currently live and work within what is the 01 numbering area. ComReg could consider "shrinking" the existing 01 area somewhat by removing part of the localities and "repatriating" with the surrounding areas in Wicklow, Kildare, and Meath.

Q.7 Do you agree with the consultant's forecast that there will be a low to moderate increase in the demand for new geographic numbers as long as current numbering conventions continue to be applied? Please provide reasons for your view.

O2 agrees with this view, subject to clarification of the circumstances under which a Geographic number will be allocated, as discussed above.

Q.8 Do you agree with the Consultant's view that the provision of two geographic numbers per household and per employee is sufficient to meet demand from residential and business consumers? Please provide reasons for your view.

Yes, O2 believes this to be adequate if not over-generous. See earlier comments. There wouldn't seem to be any means to avoid multiple operators assigning numbers (2 each) to the same customer.

5 UPC Communications Ireland Ltd

UPC Ireland Response to: ComReg 13/121 The Evolution of Geographic Telephone Numbering in Ireland

Introduction

UPC Communications Ireland Limited ("UPC") welcomes the opportunity to provide its response to ComReg on its Consultation ("the consultation") on the Evolution of Geographic Telephone Numbering in Ireland.

This is a critical issue for UPC Ireland, particularly in Dublin Central which ComReg recognises as the region most likely to experience geographic number shortages in the future, under the current regime.

UPC Ireland also welcomes and supports ComReg's recognition throughout the consultation document that number changes are costly and disruptive and are best avoided. UPC Ireland would add that it is equally important that any processes put in place by ComReg to effectively and efficiently manage geographic numbers in Ireland must not be overly burdensome or result in the imposition of unnecessary administrative effort and cost for operators.

UPC Ireland believes that ComReg's priority for management of geographic should be;

1. Ensuring no shortages of geographic numbers occur. In doing so, ComReg's assessment of the likelihood of a shortage occurring must be based on realistic assumptions of future supply and demand for geographic numbers, particularly in Dublin central.

UPC Ireland believes this is best achieved by;

1. Releasing the existing Dublin number range with the new subscriber numbers beginning with 3 (7 digit option only).
2. Following this release ensuring that the cost of any administrative procedures designed to conserve geographic numbers are kept to the absolute minimum necessary.

UPC's response to specific questions in ComReg 13/121:

Q.1 What are your views on the practicalities, cost and other relevant consequences of each of the techniques listed above? Please set out the reasons for your answer.

UPC Ireland acknowledges that conservation of existing numbers is important. However, UPC Ireland believes that the imposition of additional processes and administrative burden must be kept to the absolute minimum necessary.

The immediate release for use of the existing Dublin number range with the new subscriber numbers beginning with 3 (7 digit option only) would, at a minimum, provide sufficient Dublin central numbers up until 2025[1], and UPC believes many years beyond.

This structural measure (the cost of which is minimal), combined with the minimal conservation measures (described below) to ensure operators are efficient in their use of allocated numbers, should ensure that shortages do not occur.

In addition, a three to five yearly review of the numbering supply status by ComReg would provide an appropriate safety net to ensure that shortages do not occur.

(1) Setting effective utilisation targets

UPC Ireland agrees that it is appropriate for ComReg to issue guidelines on target upper bounds for average quantities of geographic numbers assigned per household in Dublin and per average employee in Dublin of 2.0 and 2.0 respectively.

However, UPC Ireland believes their usefulness is limited and it is essential that ComReg does not apply these upper bounds rigidly. A degree of flexibility is required and a significant variance from these limits for the total amount of geographic numbers allocated to an operator should, at most, be used to indicate a possible need for further investigation. As recognised in the Analysys Mason / Antelope Consulting report: "*business customers might need to be assigned numbers that are not in use initially, to allow for growth; moreover, the customer might prefer the numbers to form a coherent collection, to make the customer dialling plan simple*"[2]. In any case, UPC Ireland questions the practicality of ComReg obtaining sufficiently robust information regarding actual number use from business and consumer surveys to make utilisation targets an effective means of conserving numbers.

UPC Ireland believes that it should be sufficient in conserving numbers for ComReg to require operators to send a standard reconciliation notification, along the following lines as part of their Dublin central numbering applications: for example:

[1] Based on an annual allocation of 200k Dublin central numbers. ((6,811,000-5,600,000)+900,000)/200,000=11years approx. supply.
[2] Section 7.4 The Evolution of Geographic Numbering in Ireland, Consultants Report.

Numbers received to date [by the operator]	**20,000**
Numbers allocated to customers	18,000 (As per operator records)
Numbers in quarantine	2,000
Total	**20,000**
Numbers requested in this application	1,000

Over time, such information enables ComReg to assess the proportionality of operators' applications relative to their customer base and customer base growth, while also monitoring an operator's effectiveness in managing the volumes of numbers in quarantine. ComReg could then carry out audits on this reconciliation on an exceptional basis, where it has reason to suspect that an operator is inefficient in the use of geographic numbers. An alternative approach could be to agree a cycle of industry audits over a 3 year period, i.e. each operator would be audited once in a 3 year period.

(2) Reducing the sizes of blocks in allocations

UPC Ireland does not support reducing the size of blocks in operator allocations to 100. This would place a considerable extra administrative burden on medium and large operators. It would also create a greater and unwarranted risk of operator numbering shortages in that it lowers considerably an operator's contingency to cover provisioning timeframes and any unforeseen delays.

UPC Ireland does not agree with the estimate of extra administrative cost provided in the Analysys Mason / Antelope Consulting report[3]. The financial analysis appears to be nothing more than an educated guess with no supporting material or detailed analysis.

(3) Charging for numbers

UPC Ireland does not support the charging for numbers allocated. Although used in a number of European countries, ostensibly as a means of promoting efficient use of numbers, such a measure is disproportionate and unnecessary, all the more so given the supply of geographic numbers in Ireland and the projections of potential future need by Analysys Mason / Antelope Consulting. The measure as currently outlined, is unrefined and arbitrary in that it imposes a financial cost on operators that use numbers efficiently as well as those that are inefficient in number use.

[3] Section 7.3 The Evolution of Geographic Numbering in Ireland, Consultants Report.

(4) Shortening the interval between assignments

UPC Ireland supports the Analysys Mason / Antelope Consulting recommendations, namely that;

- ComReg should take advantage of any reduction in the opt-out period to reduce the quarantine period for geographic numbers
- Communication Service Providers (CSPs) should ensure that numbers pass rapidly to being in quarantine after cessation of service (for postpaid accounts) or at the end of the inactivity period (for prepaid accounts).

(5) Retrieving unused numbers

While supportive of the principle of retrieving unused numbers, UPC Ireland sees little practical merit or potential effectiveness in most of the proposals made by Analysys Mason / Antelope Consulting in this regard. As outlined earlier, a significant degree of flexibility is required by operators in providing numbers to business customers. As a result, most of the consultants' proposals would be onerous and costly for operators to implement and would not in any event result in meaningful number conservation.

However, UPC Ireland would be supportive of the following Analysys Mason / Antelope Consulting recommendations made under the heading of retrieving unused numbers:

- CSPs should review their standard contract terms and their working practices to ensure that they do not make commitments to assign numbers in quantities larger than the customers will use. Reference to the utilisation guidelines on target upper bounds for average quantities of geographic numbers assigned per household in Dublin and per average employee in Dublin of 2.0 and 2.0 respectively could assist in this regard.

- ComReg should consider the introduction of a number range or other solutions that would replace geographic number ranges in providing numbers required only or mainly for internal network purposes, such as soft dial tone and GLUMP identifiers.

(6) Pooling numbers

UPC Ireland does not support the Analysys Mason / Antelope Consulting recommendations for pooling numbers. The cost estimates provided by ComReg's consultants are based entirely on the expected porting costs and completely ignore administration costs borne by the operator, which UPC Ireland believes would be significant. In addition, there is no clarity on the volume of extra numbers that would be made available through pooling.

(7) Maintaining the linkage of numbers to locations (minimum numbering area, 'MNA")

Analysys Mason / Antelope Consulting state that "*Inspection of the numbering database suggests that about 18,000 Dublin numbers might warrant checks that the holders had suitable addresses*"[4]. Given the small amount of numbers concerned, UPC Ireland does not believe that this conservation option would yield any meaningful volume of extra numbers.

(8) Removing the distortions in demand due to tariffs

UPC Ireland does not support the Analysys Mason / Antelope Consulting recommendation that:

- ComReg, after discussions with the CSPs, should consider whether eliminating tariff distinctions and promoting specialised inexpensive international tariffs would contribute significantly to conserving numbers.

UPC Ireland believes that a ComReg intervention on the level and differential in fixed telephony call charges is unwarranted and would be entirely disproportionate in the context of number conservation.

Q.2 Do you agree with ComReg's proposal to implement techniques 1, 5 and 6 in consultation with NAP? Please set out the reasons for your answer.

UPC Ireland is supportive of ComReg's proposals on technique **1** and **5** along the lines provided in our detailed answers to Question 1, namely;

(1) Setting effective utilisation targets; Once these are set as guidelines only (detailed in answer to Q1 above).

(5) Retrieving unused numbers; UPC Ireland would only be supportive of the following Analysys Mason / Antelope Consulting recommendations made under the heading of retrieving unused numbers;

- the CSPs should review their standard contract terms and their working practices to ensure that they do not make commitments to assign numbers in quantities larger than the customers will use.

[4] Section 7.8 The Evolution of Geographic Numbering in Ireland, Consultants Report.

- ComReg should consider the introduction of a number range or other solutions that would replace geographic number ranges in providing numbers required only or mainly for internal network purposes, such as soft dial tone and GLUMP identifiers.

(6) Pooling numbers

UPC Ireland does not support the Analysys Mason / Antelope Consulting recommendations for pooling numbers. The cost estimates provided by ComReg's consultants are based entirely on the expected porting costs and completely ignore operator administration costs which UPC Ireland believes would be significant. In addition, there is no clarity on the volume of extra numbers that would be made available through pooling.

Q.3 Are there other, alternative, techniques available to ComReg to make more numbers available in the Dublin area within the (01) area code? Please provide detailed information on alternative options ComReg should adopt.

UPC Ireland believes immediate release for use of the existing Dublin number range with the new subscriber numbers beginning with 3 (7 digit option only) should release sufficient numbers for the foreseeable future. This measure alone will at a minimum provide sufficient Dublin central numbers up until 2025 and most likely, far beyond. Coupled with the minimal conservation techniques detailed above, these measures should be sufficient to ensure no geographic number shortages occur in Dublin central.

Q.4 What are your views on the practicalities, cost and other relevant consequences of each of the options listed above? Please set out the reasons for your answer.

(1) Continuing mainly with current practice or as described in the consultant's report, using the existing Dublin number range with existing subscriber numbers.

UPC Ireland agrees with the Analysys Mason / Antelope Consulting' statement that "*This can supply enough Dublin numbers if the demand for them from CSPs does not continue to expand when customers need relatively few*"[5]. UPC Ireland does not foresee any significant overall increase in the rate of demand for Dublin central geographic numbers in the coming years from operators. UPC Ireland also agrees that this option has very low cost implications for the industry.

In addition, releasing the existing Dublin number range with the new subscriber numbers beginning with 3 (7 digit option only) as proposed in option 2 below, combined with the selected number conservation measures outlined in our response to question 1 above, should be sufficient to ensure no number shortages occur in the future.

(2) Providing new numbers beginning with 3 or as described in the consultant's report, using the existing Dublin number range with new subscriber numbers beginning with 3.

UPC Ireland fully supports the implementation of this option. It does not require number changes, it simply makes most subscriber numbers beginning with 3 available for allocation, while keeping some spare to allow for future expansion (at least in the case for those subscriber numbers that have seven digits). The implementation of this option would mean that costs would remain at a minimum. This approach should be the first step in providing extra numbers if this becomes necessary and it **should be implemented prior to any additional conservation techniques being applied i.e. (conservation techniques above and beyond those outlined in our response to Q1, under the heading of utilisation targets).**

This measure alone will at a minimum provide sufficient Dublin central numbers up until 2025 and more likely far beyond.

(3) – (8) All other options presented by ComReg's consultants for providing additional geographic numbers.

UPC Ireland believes that no firm decision should be made on the deployment of options 3 – 8 for providing additional geographic numbers at the present time. UPC believes that;

- Continuing with existing practices while releasing new numbers beginning with 3, option 2 above, combined with,
- The minimal conservation techniques described in answer to question 1 i.e. reconciliation and audit where absolutely necessary,

should be all that is required for the foreseeable future to ensure adequate supply of Dublin central geographic numbers.

[5] Section 6.1 The Evolution of Geographic Numbering in Ireland, Consultants Report.

ComReg should review the overall supply of geographic numbers particularly in critical areas like Dublin central again in 5 years.

Q.5 Do you agree with ComReg's proposal to initially implement Option 1, and then progressively adopt Options 2, 3 and 4 depending on demand? Please set out the reasons for your answer.

UPC Ireland agrees that option 1 should be implemented followed by option 2. These should be implemented **prior to any additional conservation techniques being applied i.e. (conservation techniques above and beyond those outlined in our response to Q1, under the heading of utilisation targets).**

As stated in response to Question 4 above, UPC Ireland believes that no firm decision should be made on the deployment of options 3 – 8 for providing additional geographic numbers at the present time. ComReg should review the overall supply of geographic numbers particularly in critical areas like Dublin central again in 5 years. ComReg should not overly anticipate what might be required from 2025 onwards by the costly introduction of disproportionate and likely unnecessary measures in the interim.

Q.6 Are there other, perhaps better, options available to ComReg to supply more numbers in the Dublin area? Please provide detailed information on alternative options ComReg should adopt.

UPC Ireland believes all that is necessary for the foreseeable future is that option 1 be implemented followed by option 2. These should be implemented prior to any additional conservation techniques being applied i.e. (conservation techniques above and beyond those outlined in our response to Q1, under the heading of utilisation targets).

Q.7 Do you agree with the consultant's forecast that there will be a low to moderate increase in the demand for new geographic numbers as long as current numbering conventions continue to be applied? Please provide reasons for your view.

UPC Ireland agrees with the Analysys Mason / Antelope Consulting forecast that there will be a low to moderate increase in the demand for new geographic numbers as long as current numbering conventions continue to be applied. UPC Ireland does not foresee any significant overall increase in the rate of demand for Dublin central geographic numbers in the coming years from operators.

Q.8 Do you agree with the Consultant's view that the provision of two geographic numbers per household and per employee is sufficient to meet demand from residential and business consumers? Please provide reasons for your view.

UPC Ireland agrees that it is appropriate for ComReg to issue guidelines on target upper bounds for average quantities of geographic numbers assigned per household in Dublin and per average employee in Dublin of 2.0 and 2.0 respectively.

However, UPC Ireland believes the usefulness of utilisation targets is limited and it is essential that ComReg does not apply these upper bounds rigidly. A degree of flexibility is required and a significant variance from these limits for the total amount of geographic numbers allocated to an operator should at most be used to indicate a possible need for further investigation. As recognised in the Analysys Mason / Antelope Consulting report "*business customers might need to be assigned numbers that are not in use initially, to allow for growth; moreover, the customer might prefer the numbers to form a coherent collection, to make the customer dialling plan simple*" . In any case, UPC Ireland questions the practicality of ComReg obtaining sufficiently robust information regarding actual number use from business and consumer surveys to make utilisation targets an effective means of conserving numbers.

6 VON Europe

Comments on ComReg's Consultation on the Evolution of Geographic Telephone Numbering in Ireland

by VON Europe, January 2014

Preliminary Remarks

The Voice on the Net Coalition Europe ('VON') welcomes the opportunity to comment on ComReg's consultation on the evolution of geographic telephone numbering in Ireland (hereafter 'the Consultation').

In the long term, VON encourages ComReg to pursue a holistic approach towards numbering, an approach that fosters future technological and service innovations in further continuation of ComReg's numbering policy. Such a holistic approach could, for example, be achieved by making all numbers countrywide (as opposed to area-wide).

Numbers have been, are, and will remain, a critical resource for a wide range of communication services and applications. A well-designed and forward looking numbering plan is feasible: numbers are not intrinsically scarce; it is rather the way in which they are structured and managed that can artificially cause scarcity. Moreover, moving away from a copper-centric approach will bring consumer benefits and promote competition.

VON hence encourages ComReg to adopt numbering principles and plans that are user-centric (*i.e.* technology- and service neutral) and take into consideration the reality of a switch to an all IP environment. ComReg's approach should enable users to choose any of their number(s), keep any of their number(s) wherever they are and use any of their number(s) on the device(s) and with the services and applications of their choice.

DETAILED RESPONSES

Number conservation

Q.1 What are your views on the practicalities, cost and other relevant consequences of each of the techniques listed above? Please set out the reasons for your answer.

Technique 2: reducing the sizes of blocks in allocations

VON encourages ComReg to pursue the roll-out of 100-number blocks in its number conservation efforts. Especially, as the Report by Analysys Mason and Antelope Consulting ('the Consultants') remarks that the switches of communications service providers (CSPs) are already capable of handling these smaller numbering blocks.[1]

VON also recommends that, if charging for numbers were to be introduced in the future (which we do not support) acquiring a 100-number block should be 10 times less expensive than acquiring a 1 000-number block.

Reducing the sizes of blocks in allocations would have a positive impact towards lowering barriers to entry especially as regards to smaller and innovative communications providers, as well as anyone else legitimately requiring the use of geographic numbers, for any purpose.

Technique 3: charging for numbers

VON would like to emphasize that the introduction of a charging regime could entail more negative effects than positive effects, especially as regards smaller CSPs and new entrants of any kind (not necessarily CSPs), to whom this additional burden will create a barrier to entry with negative effects for competition.

Whilst we acknowledge the reasoning behind the objectives for charging, we believe that it is unnecessary (introduction of fees without increase in the underlying cost basis or without any new advantages for the users), disproportionate (versus the traditional CSPs for whom the numbering charges will be close to negligible) and potentially damaging to specific sections of the industry.

VON would like to emphasize the impact of number charging on smaller and innovative CSPs, and on new entrants of any kind (not necessarily CSPs). Introducing a charging mechanism on numbers may

[1] See, ComReg. (December, 2013). *The Evolution of Geographic Numbering in Ireland – Consultants' Report* [13/122]. Section 7.3. Available at, http://www.comreg.ie/_fileupload/publications/ComReg13122.pdf.

entrench traditional business models, more specifically the cost and revenue structures, and retail charging mechanisms already in place.

In its 2012 consultation on safeguarding the future of geographic numbers Ofcom noted that it expected that *"the costs imposed on CPs as a result of number charging (both the direct number charges and implementation costs) to be passed through to consumers in the form of higher prices"*,[2] without being able to even assess the effectiveness of charging as Ofcom noted that it *"cannot precisely estimate the benefits from introducing number charges at this stage"*.[3]

Technique 8: removing the distortions in demand due to tariffs

Currently, many providers of VoIP-enabled offerings provide the possibility to call for free or at very low flat fee tariffs that are the same regardless of location. In parallel, people divert their fixed phones, or even abandon them to exclusively use mobile phones.

It is therefore becoming increasingly obvious that consumers are no longer truly concerned with location information, but rather with the cost of calling. Consequently, the reason why geographic numbers are used by residential and business customers is because of the retail price transparency.

VON believes that what matters most for citizens is their mobility, and the transparency of the calling party retail tariffs. Citizens travel; their relatives live abroad, and, as consumers, they need to exactly know what they will pay for their communications. For example, in the mobile sector the issue of bill shocks is an important concern, as consumers are not aware of the applicable international (roaming) fees.

VON therefore supports the Consultant's view that *"eliminating distinctions between national and local geographic tariffs might reduce demand from customers for geographic numbers"*. The Electronic Communications Committee (ECC), part of the European Conference of Postal and Telecommunications Administrations (CEPT), already remarked in its 2010 Report on the Evolution of Geographic Numbers that *"to retain tariff transparency the removal of geographic information must*

[2] See, Ofcom. (2012). Geographic Telephone Numbers: Safeguarding the Future of Geogaphic Numbers. p. 42 (4.53). Available at, http://stakeholders.ofcom.org.uk/binaries/consultations/geo-numbers/summary/condoc.pdf.
[3] See, Ofcom. (2012). *Ibid.* p. 42 (4.51).

be preceded by the retail end-user tariff schemes becoming correspondingly distance independent, e.g. the same tariff within a numbering area".[4]

Q.2 Do you agree with ComReg's proposal to implement techniques 1, 5 and 6 in consultation with NAP? Please set out the reasons for your answer.

VON encourages ComReg to implement technique 2, reducing the sizes of blocks in allocation, and technique 8, removing the distortions in demand due to tariffs – see our response to Q1 for more details.

Q.3 Are there other, alternative, techniques available to ComReg to make more numbers available in the Dublin area within the (01) area code? Please provide detailed information on alternative options ComReg should adopt.

The Consultants point out that *"there would be uniformity in closing the numbering plan for the rest of Ireland at the same time as closing that for Dublin"*,[5] therefore VON believes that ComReg should move forward with closing local dialling throughout Ireland in order to ensure the availability of geographic numbers across Ireland.

Options for providing additional geographic numbers

Q.4 What are your views on the practicalities, cost and other relevant consequences of each of the options listed above? Please set out the reasons for your answer.

See our response to questions 1, 2 and 3 which address number conservation techniques 2, 3 and 8.

Q.5 Do you agree with ComReg's proposal to initially implement Option 1, and then progressively adopt Options 2, 3 and 4 depending on demand? Please set out the reasons for your answer.

See our response to question 6 for more details.

Q.6 Are there other, perhaps better, options available to ComReg to supply more numbers in the Dublin area? Please provide detailed information on alternative options ComReg should adopt.

VON considers that ComReg should ensure the ongoing availability of geographic numbers across Ireland and should render Ireland's numbering plan future-proof.

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[4] See ECC. (2010). *Evolution of Geographic Numbers* [ECC REPORT 154]. Luxembourg: CEPT. p. 9. Retrieved at, http://www.erodocdb.dk/Docs/doc98/official/pdf/ECCREP154.PDF.

[5] See, ComReg. (December, 2013). *Ibid*. Section 6.3.

VON encourages ComReg to further explore number conservation technique 8, removing the distortions in demand due to tariffs, in combination with option 8, using new numbers with local tariffs.

In doing so, ComReg should pursue a holistic approach towards numbering, one that fosters future technological and service innovations. Such an approach could for example be achieved with the eradication of the linkage of area code and location by making all numbers nationwide (as opposed to area-wide) (by analogy with the UK 03 range).

Other regulators have already come to the conclusion that only a holistic forward-looking approach could ensure a sustainable policy for numbers.

- The need for such a forward-looking perspective has been acknowledged as early as 2010 by the Swedish regulator PTS in a study on the future organisation of Sweden's numbering plan. In the study's conclusions, PTS stated that substantial changes needed to be made to the approach to numbering and the sooner, the better, as holding off major changes until the need arises to enforce them swiftly can bring along much higher costs than a well-thought out implementation over time.[6]
- The Australian regulator, the ACMA, presented an approach in its 2011 paper[7] on a coherent and inclusive medium to long term vision for numbering that could make Australia a frontrunner in putting in place a well-designed and forward looking numbering plan.

VON strongly encourages ComReg to go down the same path of rethinking its approach to numbering and to take an approach that ensures the fullest possible retail price transparency and that removes the link between location information and geographic numbers.

ComReg should enable users to choose any of their number(s), keep any of their number(s) wherever they are and use any of their number(s) and with the device(s), applications and services of their choice. Such an approach to numbering plans is feasible: numbers are not intrinsically scarce; it is rather the way in which they are structured and managed that can artificially cause scarcity.

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[6] See PTS. (2010). *Behov av en framtidsinriktad telefoninummerplan. 6 olika förändringsalternativ. Det fortsatta arbetet* [Need for a Future-Oriented Telephony Numbering Plan. Six Different Change Options. Next Steps] [PTS-ER-2010:20]. Stockholm: PTS. Retrieved at, http://www.pts.se/upload/Remisser/2010/10-8918-remiss-rapport-100929.pdf. p. 67.

[7] See ACMA. (2011a). *Telephone Numbering: Future Directions Paper*. Retrieved at, http://www.acma.gov.au/webwr/_assets/main/lib100283/numbering-future_directions.pdf.

Moreover, **it will bring consumer benefits and promote competition**: VON observes that in the past decades, people have become more flexible and willing to move and travel at the spur of the moment. Today's consumer is increasingly nomadic. Mobile phones are overtaking fixed phones[8] for voice, and calling your plumber happens more often than not on his mobile phone. In parallel, people divert their fixed phones (*i.e.* call forwarding), or even abandon them to exclusively use their mobile phones.

Today, the relevance of the geographic significance associated to numbers is thus fading.

When looking at the behaviour of Australian consumers, the ACMA has concluded in its Research into consumer behaviours and attitudes towards telecommunications numbering and associated issues to that *"the capacity of a mobile phone to store numbers and then display them as a name had also changed how many participants remember and use numbers"*.[9] It is also being remarked that the *"increasing number of communication gateways available (…) diminished the importance of, and level of dependence on, any particular service and consequently any particular phone number"*.[10] Furthermore, the changing behaviour of consumers regarding numbers and communication identifiers is influenced through advances in applications and services, as well as devices: people are getting more and more accustomed to the use of user names or IDs through the use of online applications and services.[11]

VON therefore urges ComReg to swiftly adopt a vision that goes beyond what the Electronic Communications Committee (ECC), part of the European Conference of Postal and Telecommunications Administrations (CEPT), describes in its 2010 Report on the Evolution of Geographic Numbers (hereafter 'the ECC Report') as: [12]

> *"The design of NGNs* [Next Generation Networks] *implemented today is very much 'PSTN on IP based networks' with the features and restrictions of the PSTN being copied."*

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[8] See for example tables 1.24 (p. 51), 1.25 (p. 52) and figures 1.21 (p. 52), 1.23 (p. 53) in Leckner, S., & Facht, U. (2010). *A Sampler of International Media and Communication Statistics 2010* [Nordic Media Trends 12]. Göteborg: Nordicom. Retrieved at, http://www.nordicom.gu.se/common/publ_pdf/NMT12.pdf

[9] See ACMA. (2011b). *Community Research Into Consumer Behaviours and Attitudes Towards Telecommunications Numbering and Associated Issues*. Retrieved at, http://www.acma.gov.au/webwr/_assets/main/lib312144/numbering_4_research_report.pdf. p. 9.

[10] See ACMA. (2011b). *Ibid*. p. 10.

[11] See ACMA. (2011b). *Ibid*. p. 28.

[12] See ECC. (2010). *Evolution of Geographic Numbers* [ECC REPORT 154]. Luxembourg: CEPT. Retrieved at, http://www.erodocdb.dk/Docs/doc98/official/pdf/ECCREP154.PDF. p. 24.

The ECC Report[13] actually identifies multiple benefits associated to the removal of all constraints regarding geographic information in the numbering plan, namely:

1) It would allow a more innovative use of geographic numbers;
2) It decreases the possible barriers of entry for new parties in the telephony market;
3) It gives consumers the option to keep their number when they are moving; and,
4) It allows a more efficient use of numbering resources.

The ECC Report[14] also remarks that the removal of geographic information could have wider benefits than a mere efficiency increase, as it would also allow the introduction of wider area location portability, a possibility that is very appealing in a society where both businesses and individuals become more and more mobile.

Policy matters

Q.7 Do you agree with the consultant's forecast that there will be a low to moderate increase in the demand for new geographic numbers as long as current numbering conventions continue to be applied? Please provide reasons for your view.

VON considers that imposing restrictions on extra-territorial use of E.164 numbers is inappropriate in this day and age. It would unnecessarily prevent existing and future legitimate use cases, and harm innovation. Moreover, we believe it goes against provisions of the EU Electronic Communications Framework, which look at extra-territorial usage as a part of the fulfillment of the internal market.

Various provisions of the EU framework should be considered:

- Annex, part A, point 4 of the Authorisation Directive 2002/20/EC – as amended by Directive 2009/140/EC of the European Parliament and of the Council of 25 November 2009 – states that conditions for the "**accessibility by end users of numbers from the national numbering plan** (…) and, where technically and economically feasible, **from numbering plans of other Member States** (…)" (our emphasis) may be attached to the general authorizations;
- Article 10 of the Framework Directive 2002/21/EC – as amended by Directive 2009/140/EC of the European Parliament and of the Council of 25 November 2009 – foresees that "(…)

[13] See ECC. (2010). *Ibid.* p. 17-19.
[14] See ECC. (2010). *Ibid*. p. 2 and 10.

Member States **shall ensure that adequate numbers and numbering ranges** are provided **for all publicly available electronic communications services",** and that **"Member States shall support the harmonisation of specific numbers or numbering ranges within the Community where it promotes both the functioning of the internal market and the development of pan-European services"** (our emphasis); and,

- Article 10.2 of the Framework Directive, read in conjunction with Section 7.1 of the European Commission's Information and Consultation Document of 14 June 2004 on the treatment of Voice over Internet Protocol (VoIP) under the EU Regulatory Framework, requires Member States to afford equal treatment of all ECS in the area of numbering, and a possibility for non-ECS entities, including entities self-providing VoIP solutions, to have access to numbering resources to support their activities, without making any references to territoriality within the EU in this context. The European Commission stated very clearly that: *"any undertaking **providing or using** electronic communication networks or services has the right to use numbers (…)"* (our emphasis).

VON also considers that there is a real market demand for geographical E.164 numbers to be used in an extra-territorial manner from a whole range of users: from consumers having relatives abroad to business people wishing to always be reachable on specific geographical numbers, without forgetting companies wishing a local number to be reachable for their local customer basis.

In case end-users are using a geographical E.164 number outside of the geographical boundaries, it is either as secondary numbers for inbound services or for temporary nomadic usage. This is a trend which is stable, despite of the availability today of services and applications making available foreign numbers. These types of services and applications, when offered stand-alone to consumers, are almost exclusively used as a secondary number, *i.e.* a means of communication with relatives at local tariffs or contact number for consumers to a company based in another country. Today people are extremely mobile, either sporadically or permanently, within or outside the geographical and national boundaries, which explains the success of such usage of geographical E.164 numbers outside of the geographical boundaries.

VON believes that allowing the usage of geographical E.164 numbers outside of the geographical boundaries is beneficial to users, as it will ensure they may access services that will allow them to use an E.164 geographical number, either as occasional contact number in another country than the origin country, or as a secondary number for local access. The demand for such services and

applications is present on the market and the incentive of receiving local calls outside of the country of origin at a local call fee is only going to disappear in case tariffs for international calls decrease to reach the same level as the tariff for a local call, which is not going to happen tomorrow.

If ComReg would wish to introduce restrictions to extraterritorial use of numbers, VON suggests to adopt a position in which only strictly primary and strictly permanent use could be restricted, *i.e.* allowing use on a secondary basis (*e.g.* a second number for a citizen, a number for an office abroad, etc.) and use on an occasional basis (*e.g.* in the context of personal and business travel, for persons living or working for a given period abroad, etc.).

Q.8 Do you agree with the Consultant's view that the provision of two geographic numbers per household and per employee is sufficient to meet demand from residential and business consumers? Please provide reasons for your view.

VON considers that numbers have been, are, and will remain, a critical resource for a wide range of communication services and applications. A well-designed and forward looking numbering plan is feasible: numbers are not intrinsically scarce; it is rather the way in which they are structured and managed that can artificially cause scarcity.

***

We thank you in advance for taking consideration of these views. Feel free to contact Herman Rucic, VON Europe, by phone (+32 (0)478 966701) or email (hrucic@voneurope.eu) should you need further information.

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About the VON Coalition Europe

The Voice on the Net (VON) Coalition Europe was launched in December 2007 by leading Internet communications and technology companies, on the cutting edge to create an authoritative voice for the Internet-enabled communications industry. Its current members are Google, Microsoft, Skype, Vonage and Voxbone, and its supporters are Viber.

The VON Coalition Europe notably focuses on educating and informing policymakers in the European Union and abroad in order to promote responsible government policies that enable innovation and the many benefits that Internet voice innovations can deliver.

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Voxbone's response to Commission for Communications Regulation's consultation document "The Evolution of Geographic Telephone Numbering in Ireland"

January 24th 2014

Reference: ComReg 13/121
Date: 19/12/2013

Contents

Summary

Voxbone welcomes the opportunity to contribute to this important review of the ComReg's consultation regarding the evolution of geographic telephone numbering in Ireland.

We believe that this is an important step in order to ensure that the present regulation in the numbering sector remains flexible as to accommodate changes in this highly-demanded area and to encourage innovation and competition in the market.
An out-of-date understanding of the numbering sector can hinder, rather than promote, the development of new numbering management solutions.

Therefore, we appreciate the ambitious proposals expressed in the ComReg's consultation and we welcome the possibility to contribute to its improvement and look forward to engaging further with the ComReg's following its consultation.

* * *

Responses to the Commission's questions

In our responses below, we provide detailed argumentation on the techniques proposed by the ComReg for a better management of geographic numbering and an overview on the key aspects that we believe the ComReg's consultation should address.

As a general point, we would like to stress that "Over the Top" (OTT) service providers, such as VoIP are here to stay. The use of OTT VoIP and telephone over Internet connections have been around for some time now with a number of fixed VoIP line estimated conservatively at around 35 million only in Western Europe. Voxbone is of the strong view that the increased penetration of these new OTT VoIP services has already brought an additional realistic source of competition in the market and that supportive regulatory decisions will increase their recognition as long-term services.

Voxbone strongly supports the ComReg's statement in the introduction paragraph 5:

"ComReg must ensure that there is sufficient supply of fixed and mobile numbers available to meet demand."

Voxbone supports ComReg's view that it's important to have sufficient supply of fixed but also of mobile numbers considering the trends in the usage of numbering resources. Providers of innovative services need access to fix and mobile numbering resources in order to enable them to offer services that can truly and effectively compete with established traditional telecommunications service providers.

Section 3.1: Number conservation

Question 1: What are your views on the practicalities, cost and other relevant consequences of each of the techniques listed (…)?

(1) Setting effective utilisation targets;

Voxbone agrees with the consultants' report view that this technique represents a modest process change, however we strongly believe that it does not necessary represent an effective change for the long-term management of numbering resources. Although we agree with the form as to have a swift process change, we disagree with the content of what these effective targets should be.

Voxbone must point out that, in our view, it is not made clear in the ComReg's consultation document how the proposed target of two geographic numbers per household and two geographic numbers per employee will ensure an efficient long-time management solution. We would like to highlight the difficulty to comply with such target for wholesale communications service providers, which will not be able to control the distribution of numbers to residential customers due to the nature of their business. Implementing new tools which will allow such control may require important costs on the communication service provider side. Moreover, the above mentioned proposed target hinders consumers 'freedom of choice and therefore does not constitute an appropriate balance between a good numbering management and market demand.

Voxbone agrees with the consultants 'report view that applications for allocations of Dublin numbers should be checked by the ComReg in order to verify that the demand could not be met from prior allocations, however we would like to stress out the importance for communications service providers to maintain a provisional numbers. In absence of such provisional numbers, communication service providers may face serious difficulties as to maintain a continuous business and allow for growth in the market. As a consequence, the quality of the service in terms of real-time delivery will be affected.

Furthermore, Voxbone strongly believes that ComReg should also seek to understand whether sub-allocation could represent a more efficient way to manage scarce resources, as it was stated by Ofcom, UK regulatory authority in its public consultation -on Geographic telephone numbers - safeguarding the future of geographic numbers, Annex 1, point 3.59:

"We usually expect service providers to seek sub-allocation of numbers from CPs, and, where they have not sought sub-allocation, to provide justification for seeking a direct allocation of numbers. Sub-allocation of numbers facilitates the sharing of a number block among multiple providers and thereby improves the effective utilisation of a number block."

(2) Reducing the sizes of blocks in allocations;

Voxbone contends that the objective of an improved numbering management is not met by this approach. Reducing the sizes of blocks in allocations from 1000 numbers to 100 numbers would add an important administrative burden on both communications service providers and ComReg, which will result in a slow numbering application process.

Moreover, the fee per number made available proposed in the consultants 'report of EUR 0.6 represents an important cost for communications service providers. To this cost, communications service providers will have to add the internal costs for implementation and update of programmes for network and support systems in order to introduce the subrange holder block size.

Voxbone believes that ComReg should give a proper consideration whether applying a cost for the numbering application, shall have indeed the expected effect of increasing the demand of sub-blocks containing 100 numbers. If the application cost shall be considered by the communications service providers as considerable, we believe that it will be more likely for communications service providers to apply for a block of 1000 numbers as this will allow them to avoid a cost 10 times more expensive and a process which will be 10 times more slower.

Voxbone agrees that a better monitoring of numbering use in respect to primary and secondary allocations may prove efficient; however we believe that reducing the sizes of blocks in allocations will not have this result. As an alternative solution, we consider that requesting a certain percentage of usage of the numbering block to communications service providers if such providers shall apply for another block in the same area could improve the monitoring of the efficiency of use of numbering blocks.

(3) Charging for numbers;

Voxbone strongly believes that implementing an annual charge for each Dublin number allocated would have a negative effect for consumers as the communications service providers will pass this charge through to their consumers, without reaching the desired efficiency in terms of numbering management.

While we agree with the fact that other EU countries have implemented annual charges for geographic numbers, we would strongly question the efficiency of such solution in terms of retrieving numbers.

(4) Shortening the interval between assignments;

Voxbone fully supports this technique and considers that a reduction of the quarantine period for geographic numbers will result in increasing the amount of available numbers in a specific area, as less numbers will be needed overall for communications service providers' stock provision.

We strongly agree with consultants' report view that communications service providers should ensure that numbers are placed in quarantine as soon as the services have ceased or at the end of the inactivity period.

(5) Retrieving unused numbers;

Voxbone supports the aim to have effective use of numbering resources.

We are of the strong view that a balance between available numbers maintained by communications service providers and ComReg's authority to retrieve the numbers which are not in use represents the most appropriate solution towards management of numbering. In this respect, Voxbone suggests to frame this technique as following: ComReg may establish a certain amount of numbers which a communications service provider shall be entitled to maintain as available but not in use in order to ensure growth and stability of their business; if such database shall be maintained for a period longer than what ComReg will establish (e.g. 2 years), unused numbers may be retrieved.

(6) Pooling numbers;

Voxbone strongly disagrees with ComReg's view regarding this technique.

We consider that this proposed solution will increase the risk for communications service providers not to be able to maintain numbers which are not in use, but increase their business opportunities and customers' right to a real-time service.

Voxbone believes that transferring numbers from a communications service provider to another one which has exhausted its current supply of numbers represents a sanction on the provider which has available numbers, without even establishing the criteria upon which the pooling decision shall be taken.

In this respect, Voxbone contends that other proposed techniques prove to be more balanced than the one suggested herein.

(7) Maintaining the linkage of numbers to locations (minimum numbering area, "MNA");

Voxbone supports ComReg's proposed technique; however we strongly believe that this represents only a short-term solution.

We consider that the solution does not meet the consumers' need and demand. In today's world, distances are no longer barriers, therefore while consumers are able to travel long distances in short times, they are also requesting the possibility to maintain their numbers (for example: the possibility for a student to maintain its fixed lines even in case of studies relocation).

(8) Removing the distortions in demand due to tariffs

Voxbone fully supports ComReg's recommendation as to eliminate tariff distinctions and to promote specialised inexpensive international tariffs which will contribute to numbering conservation.

Question 2: Do you agree with ComReg's proposal to implement techniques 1, 5 and 6 in consultation with NAP?

Voxbone agrees with the implementation of technique 1 and 5, providing that the comments made under each of these proposals shall be considered in a future implementation. With regards to technique 5, we would like to stress that if ComReg shall decide to proceed with its implementation, it should be regulated timing in order to consider the amount of numbers which are not in use.

Question 3: Are there other, alternative, techniques available to ComReg to make more numbers available in the Dublin area within the (01) area code?

Voxbone strongly believes that the first technique which ComReg should consider to implement is to remove the geographical zones all together. As a consequence, all numbers shall become national numbers reachable from the entire country at the same local tariff. Unlike geographic phone numbers which are tied to a particular city or region, national phone numbers are not tied to a particular local area. We would like to point out that this technique has already been adopted in several European countries, and most recently in Denmark and already proves to be successful for managing the numbering resources.

Voxbone strongly believes that encouraging sub-allocation of numbers will also allow for an effective use of numbers and reduce scarcity. In this manner, the block of numbers which has been primarily allocated to a communications service provider can be shared with a smaller communications service provider and will allow the smaller provider to have a small amount of numbers in order to provide its services to consumers, instead of applying for 1000 block number and having in use less than half.

Section 3.2: Options for providing additional geographic numbers

Voxbone strongly supports the technique presented in our comment under Section 3.1: Number conservation: Question 3 here above. We encourage ComReg to allow proper consideration to the possibility of eliminating geographic areas and therefore having national numbers at local tariffs.

In respect to Question 5, we support ComReg's proposal to adopt option 1 and if necessary progressively adopt later options 2, 3 and 4 in this order, as well as using a new national number range with local geographic tariffs, as they are likely to be more effective and the costs and complications to implement will be limited.

Section 3.3: Policy matters

On the policy issue, Voxbone notes consultants' statement that:

"emerging communications services are likely to result in a low to moderate increase in the demand for new numbers as long as current numbering conventions continue to be applied".

We would like to highlight that the array of services and technologies offered by OTT VoIP today already is hugely diverse, which enables very different outcomes and behaviours. They represent a range of capabilities, such as: voice, voice and video, text only, some making use of location for presence information, or allowing photo sharing, or permitting calls to fixed or mobile recipients. Nevertheless, this diversity of services has in common two of the main characteristic which should be taken into account by any regulator: firstly, they enable consumers to communicate and secondly, they are independent of the network over which it is accessed or made available, which brings a certain flexibility and simplicity in the traditional communications model.

What Voxbone would like to emphasize is that the innovation and competition brought in the market by OTT VoIP are the key to delivering improvements in the attributes of communications services in general. We consider that new regulations in the numbering conventions should seek to improve VoIP services attributes by not limiting the assignments of fixed or mobile numbers based on the technology used by the communications service provider. This will foster effective competition among market services where it is considered to be lacking, such as mobile.

On the separate issue of the provision of two geographic numbers per household and per employee as a solution to meet demand from residential and business consumers, Voxbone maintains its position expressed herein under our comment to the first proposed technique: setting effective utilisation targets. We consider that with the increase in use of mobile numbers, own individual and geographic numbers are less likely to take-off in terms of demand. We strongly believe that this is the main reason for which a restriction in this respect is not necessary, as the demand will be self-regulated by the trends in the market.

Contact

Should you wish to contact Voxbone regarding this document, you may contact Voxbone's Legal and Regulatory Affairs department by email at: regulatory@voxbone.com