

# Response to Ofcom Consultation

## Geographic Telephone Numbers

Safeguarding the future of geographic numbers

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## The Consultation

This consultation invites your views on changes we are proposing to make to how we manage geographic numbers. The proposals are designed to maintain our ability to meet CPs' future requirements for geographic numbers in all areas of the UK. Importantly, this document does not propose changes to any geographic telephone numbers currently in use. Nor is there a risk that numbers will not be available to meet consumers' needs.

## From the Consultation Document

The fundamental aim of our proposals is to ensure that consumers' choice of CPs will not be restricted when they want new phone services. Competition has driven many of the benefits that users of telecommunication services currently enjoy. Our proposals are designed to ensure that competition is not constrained in future by the availability of geographic numbers. At the same time, we intend to limit the impact on consumers of measures that may be needed to maintain such unrestricted choice. We propose to achieve this by implementing new mechanisms to manage the allocation and use of telephone numbers.

If, subject to this consultation, we go ahead with our proposals, they would mean, that:

- phone users in some areas would need to dial the area code when making local calls from fixed-line phones at some point in the future. This would create more numbers in the areas concerned, by allowing use of numbers in which the first digit after the area code is either '0' or '1';
- CPs would pay, initially in a pilot scheme, for geographic numbers allocated to them in area codes where there are particular concerns about scarcity. The purpose of doing this would be to increase CPs' incentives to use geographic numbers efficiently, and hence to reduce the need to create more numbers in some areas; and
- we would strengthen our administrative procedures for allocating geographic numbers to CPs and for following up on their use.

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## *Section 1: Geographic telephone number allocations in recent decades and in the future.*

### 1.1 Why haven't the three previous changes – in 1990, 1995 and 2000 – fixed the numbering plan?

Ofcom proposes further changes to the National Telephone Numbering Plan with the stated reason that “we're running out of numbers”.

I would guess that it is most peoples understanding that the multiple changes made in 1990, 1995 and 2000 were meant to ensure that this would “never happen again”. But it has.

In many areas, the reason for the shortage does not appear to be due to population growth, nor has it been demand for new numbers by business. Instead, the shortage has mostly been created by wasteful policies adopted by Ofcom in recent years:

- allow hundreds of companies to each stockpile one or more blocks of 1000 or 10 000 numbers, in every geographic area code, even if they have no customers,
- allow geographic numbers to be allocated to VoIP providers so that they can “pretend” to be based in a location that they are not.

There is one new development. Several providers now offer a service where a direct dial geographic number can be assigned to a mobile telephone. This development looks as if it will cause the greatest pressure on geographic numbering space in the future. It already looks like many of the proposals outlined in the consultation will prove to be short term and inadequate.

### 1.2 Confidence in local numbering

There's the expectation that when dialling a local number in the same or an adjacent area code you will get to speak with a local person and not be diverted to a call centre in a distant country. Allocating geographic numbers to VoIP and other companies undermines that confidence.

Allocating local numbers directly to mobile telephones, as some providers now appear to be doing, will exhaust number stock at an even greater rate than before. The UK has set aside almost 8 000 000 000 numbers in the 07 range for mobile telephones, and that is where they should remain.

Combining area codes and adding overlay codes will add even more confusion. Consumer confidence in local numbering will decline if the proposed changes are implemented.

### 1.3 The move from location-based to provider-based number allocations

The numbering plan used to be very logical on a local level. Within each 0SABC area code, local numbers were usually allocated in blocks of 10 000, and each block was identified by the DE digits. Most area codes contained between five and fifteen BT exchanges, and each exchange had their own blocks of numbers, often consecutive.

Local residents could identify the individual locality for local numbers by looking for these DE digits. There were a large number of free blocks in most area codes, with some 780 000 numbers possible within each one (actually closer to 680 000, while local short code dialling was still in effect).

When the market was opened up to alternative operators in the 1990s, all of the prior careful planning went out of the window. Suddenly, cable operators were issued a block of numbers, but they used it across the whole of the area code. When that block ran out, they applied for another one and used that across the whole area too. Suddenly the local significance of the DE digits had begun to be lost. Additionally, some cable operators drew their area code boundaries slightly different to BT's scheme.

## 1.3 The move from location-based to provider-based number allocations (cont'd.)

On further deregulation, there seemed to be a mad rush for numbers. Suddenly dozens of companies each laid claim to a block of numbers in almost every area code. Within a few years the UK was apparently running out of numbers, and yet if you investigate how many of these numbers are actually in use, then the answer is very few. It appears that some companies have reserved blocks of ten (or latterly, one) thousand numbers in every area code, and yet across many dozens of area codes not a single one of those alternative-operator local numbers are actually in service.

Ofcom has applied Number Conservation status to most of the UK number blocks, recently reducing the allocation size to 1000 from 10000. These number blocks are still being reserved at a rapid rate – and yet in the last few years, the number of active landlines in the UK has decreased by several percent. This has happened as people give up their second line, previously used for dial-up internet access and/or for fax machines, and as they switch to broadband. It's also happened as some households switch to mobile-only services.

Most OSABC area codes used to have a maximum of about 60 to 70 “DE” blocks in service, each identifying a locality. Nowadays each OSABC area code has close to 800 “F” blocks allocated, but with no discernible geographic logic as to how they have been issued. Additionally, much of the number space they represent is actually lying dormant and unused.

Take one rural area in northern England as an example. The population is just under 20 000, spread across several towns and very many villages. The extended area is served by at least five named BT exchanges, with close on 6 000 active BT numbers spread over about 25 blocks of 1K size.

However, just short of 50 non-BT operators have laid claim to just over 260 blocks of 1000 numbers (some had already been issued with 10K number blocks a few years ago). So, 260 000 numbers have been “hoarded” in an area where there are only about 6000 lines actually in use. It is clear that the vast amount of this numbering capacity is wasted, many non-BT operators using under 3% of their allocation (estimated) and many using *none of it at all*.

It would make an interesting study for Ofcom to pick several dozen areas of the UK, list all operators with allocated number blocks, and then count how many of the numbers they each hold are actually in service.

## 1.4 Number formats in use in the UK

The table shows the different formats used within the UK and the number availability in each type of area.

Format	Area Code / Number	NSN	Area Code	Code Length	Local Dialling	Local Number	Start Digit	Capacity
2+8	(0SA) BCDE FGHI	10	0SA	2 digits	BCDE FGHI	8 digits	B	79 000 000
3+7	(0SAB) CDE FGHI	10	0SAB	3 digits	CDE FGHI	7 digits	C	7 900 000
4+6	(0SABC) DEFGHI	10	0SABC	4 digits	DEFGHI	6 digits	D	790 000
4+5	(0SABC) DEFGH	9	0SABC	4 digits	DEFGH	5 digits	D	79 000
5+5	(0SABCD) EFGHI	10	0SAB CD	5 digits	EFGHI	5 digits	E	79 000
5+4	(0SABCD) EFGH	9	0SAB CD	5 digits	EFGH	4 digits	E	7 900

The 5+4 format is still in use within part of the Brampton 016977 area code.

With the move to smaller and smaller blocks of number allocation, the database requirements to identify this granularity have risen alarmingly.

In the 1980s there were about 700 area codes each with about 79 DE blocks. A single DE block would be identified as belonging to a particular “exchange”. Life was simple. The six director areas each allowed for up to 790 CDE number blocks to be allocated.

Nowadays, the number formats in use include:

- more than 550 area codes with 4 digits, each having up to 790 possible DEF blocks (1K),
- 12 area codes with 5 digits, each having up to 79 possible DEF blocks (1K),
- twelve area codes with 3 digits, each having up to 790 possible CDE blocks (10K),
- five area codes with 2 digits, each having up to 7900 possible BCDE blocks (10K).

At full capacity, there are more than half a million number blocks available for allocation across the country.

## 1.4 Number formats in use in the UK (cont'd.)

Number format	NSN	Geographic area code
2+8 only	10	020, 023, 024, 028, 029
3+7 only	10	0113, 0114, 0115, 0116, 0117, 0118, 0121, 0131, 0141, 0151, 0161, 0191
4+6 only	10	All 01xxx area codes from 01200 to 01999 not otherwise mentioned
4+6 areas where part of range is assigned as 5+5	10	01387, 01539
4+6 areas where part of range is assigned as mixed 5+5 and 5+4	10 or 9	01697
Mixed 4+6 and 4+5	10 or 9	01204, 01208, 01254, 01276, 01297, 01298, 01363, 01364, 01384, 01386, 01404, 01420, 01460, 01461, 01480, 01488, 01527, 01562, 01566, 01606, 01629, 01635, 01647, 01659, 01695, 01726, 01744, 01750, 01827, 01837, 01884, 01900, 01905, 01935, 01949, 01963, 01995
Mixed 4+6 and 4+5 areas where part of range is assigned as 5+5	10 or 9	01524, 01768, 01946
5+5 only	10	013873, 015242, 015394, 015395, 015396, 016973, 016974, 017683, 017684, 017687, 019467
Mixed 5+5 and 5+4	10 or 9	016977

## 1.5 Introducing a rational national numbering scheme

In the 1990s, a new plan for the UK was introduced. This sought to do away with the previous situation where area codes were jumbled up and it was hard to tell what type of number was being dialled.

Prior to 1995, the area code 0800 was Freephone, 0801 was a geographic code and 0802 was for mobile telephones.

A new scheme was detailed in 1995 and then implemented in several phases between 1995 and 2001. This plan made the digit immediately after the 0 trunk code (the “S” digit) signify the service type.

Prefix	Service type
<b>01</b>	Geographic area codes
<b>02</b>	Geographic area code expansion
<b>03</b>	Geographic area code expansion
<b>04</b>	Reserved
<b>05</b>	Corporate numbering
<b>06</b>	Reserved
<b>07</b>	Personal numbers, Mobile telephones, Pagers
<b>08</b>	Non-geographic numbering
<b>09</b>	Premium Rate services

It seemed clear, back then in 1995, that the 02 and 03 ranges would be used for areas running out of capacity. In the end only some of the 02 range has been brought into use, with the 03 range being diverted for use by “UK Wide” numbers in 2008. The whole of the 04 range is currently unused, as is the 06 range.

London certainly needed to move to 8-digit local numbering, and that scheme seems to have also worked out quite well for Northern Ireland.

For areas running out of 6-digit local numbers, it is logical that they should now move to 7-digit local numbers. The UK *could have* ended up with a very simple numbering system:

- 01 numbers having a 4 digit area code and 6 digit local numbers, in about 500 areas,
- 02 numbers having a 3 digit area code and 7 digit local numbers, in up to 100 areas,
- 03 numbers having a 2 digit area code and 8 digit local numbers, in up to 10 areas (although only London and Northern Ireland initially, perhaps the next place to convert would be Tyneside in a few decades time),

but it seems many of the ideas that OfTel may have originally had, have long since been forgotten.

## 1.5 Introducing a rational national numbering scheme (cont'd.)

The alternative scheme that we *could have* had, is detailed in the table below.

Range	Service Type / Usage	Format	Area Code	Expected Usage
01	Geographic numbering	4+6	01ABC	Over 550 areas already in use.
02	Geographic numbering	3+7	02AB	100 potential 3 digit area codes.
03	Geographic numbering	2+8	03A	London and NI could have been here.
04	Reserved for later use by “UK Wide” numbers			
05	Corporate and VoIP numbering			
06	Reserved			
07	Mobile telephones, personal numbers, pager numbers			
08	Freephone and non-geographic numbering			
09	Premium Rate services			

This would have allowed for 100 areas to adopt the 3+7 format. There are currently 12 areas using the 3+7 format.

Moving 3+7 numbers to the 02 range would have allowed room for an extra 88 more areas to also adopt this format. With 70 areas apparently running out of numbers in the next decade or so, this would have been the ideal solution.

Allocating some 2-digit area codes in part of the 02 range has partially blocked that. The 03 range *could have* been reserved for 2+8 format numbering, but that range has been subsequently allocated to UK-wide numbering.

Instead of using short-term solutions such as issuing local numbers beginning 0 or 1 in areas with 4-digit area codes that are now running out of local numbers, Ofcom should pursue much longer-term solutions. This should include moving 6-digit local numbering in 4-digit area codes over to a 7-digit local number scheme with a 3-digit area code.

The number ranges at (021x), (022x), (025x), (026x) and (027x) remain unused and offer the possibility for having up to 50 potential 3-digit area codes within.

There are also fourteen unused area codes at (0100), (0101), (0102), (0103), (0104), (0105), (0106), (0107), (0108), (0109), (0110), (0111), (0112), (0119). These 64 new 3-digit area codes could solve the number shortage problem.

Alternatively, if the 02 range is going to remain as only 2+8 format, use the 04xx ranges for new 3+7 numbering. The 04 range offers the possibility of 100 new 3-digit area codes, each with 7-digit local numbering.

Areas running out of 6-digit local numbers should move to 7-digit local numbering and to a new 010x, 011x, 02xx or 04xx area code. Removal of local dialling, and issuing numbers beginning 0 or 1, is not a viable option.

## 1.6 Overlay codes

Overlay codes are a crazy idea. In the US, New York has six area codes. There is some degree of confusion as to what to dial for certain calls, and whether the call will be treated as a local call or not.

The following table summarises the US data.

Area code type in US	Local call within area code	Local call outside area code	Toll call within area code	Toll call outside area code
Single code area, with toll alerting	7	7 or 3+7	1+3+7	1+3+7
Single code area, without toll alerting	7	1+3+7	7 or 1+3+7	1+3+7
Overlaid area, with toll alerting	3+7	3+7	1+3+7	1+3+7
Overlaid area, without toll alerting	3+7 or 1+3+7	1+3+7	3+7 or 1+3+7	1+3+7

In the UK, the “0” trunk code is always dialled before the area code. In the US the digit “1” toll code is sometimes, but not always, dialled before the area code. As can be seen from the table, there are a large number of dialling possibilities. In the US, area codes have 3 digits and the local number has 7 digits.



## 1.6 Overlay Codes

In the UK, issuing local numbers beginning 0 or 1 and the removal of local dialling would be a mistake. It is a short term solution that does not properly address the underlying problems.

There is enough unused number space in the UK number plan to allow for 4+6 areas running out of numbers to move to a 3+7 system. People understand this system of number migration. There has been a clear pattern of moving to longer local numbers and shorter area codes, for more than 50 years.

Introducing overlay codes would be confusing to all, and almost an admission that the number plan had been mismanaged, with a failure to properly plan for the future.

## 1.7 Five digit area codes

There are a dozen 5-digit area codes. Ofcom lists only eleven of them, missing the Brampton 016977 area code from the list. The Brampton 016977 area code is unique in having a mix of 5-digit and 4-digit local numbers.

Additionally, the report refers to “Gosforth (Mixed)”, but the correct name for the 019467 area is simply “Gosforth”.

Those areas with mixed 4+6/4+5 and 5+5 numbering are a bit of a mess. Looking at the situation pre-phONEday in the 1990s,

- Grange-over-Sands, now 015395, used to be 0448,
- Langholm, now 013873, used to be 0541,
- Sedburgh, now 015396, used to be 0587,
- Keswick, now 017687, used to be 0596,
- Raughton Head, now 016974, used to be 0699,
- Brough, now part of 017683, used to be 0930,
- Gosforth, now 019467, used to be 0940,
- Wigton, now 016973, used to be 0965,
- Windermere, now 015394, used to be 0966,
- Hornby, now 015242, used to be 0468,
- Brampton, now 016977, used to be 0697,
- Pooley Bridge, now 017684, used to be 0853.

In many cases there was no real need to amalgamate those codes (in the 1980s and 1990s); other than to free up more codes for special and mobile services when unused codes were becoming scarce in the run up to phONEday.

Although many of these area codes now share the same 0SABC digits, they are in fact completely separate area codes and calling between any of them requires both the area code and the local number to be dialled.

For example, to call Dumfries 01387 numbers from the Langholm 013873 area, the Dumfries 01387 area code has to be dialled. To call Langholm 013873 numbers from the Dumfries 01387 area, the Langholm 013873 area code has to be dialled. These are two separate area codes, both numerically and geographically.

Likewise, to call Wigton 016973 numbers from the Brampton 016977 area, the Wigton 016973 area code must be dialled. To call Brampton 016977 numbers from the Wigton 016973 area, the Brampton 016977 area code must be dialled. These are two separate area codes, both numerically and geographically.

In some cases, there is a completely unrelated area code positioned between the two “mixed” areas. In those cases, calls between the two area codes are not classed as a local call.

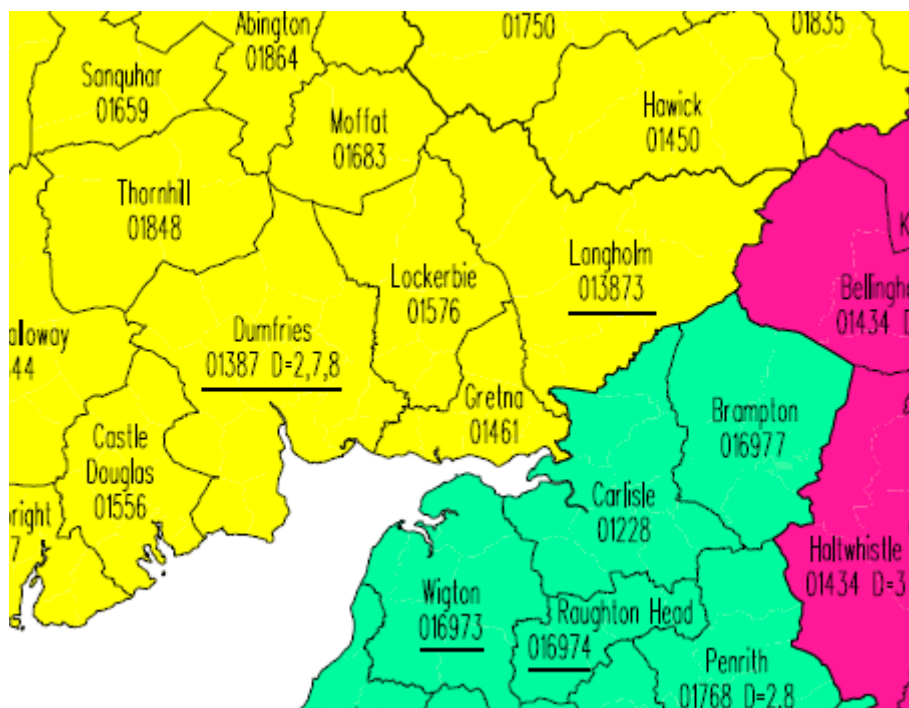
For example, the 01461 Gretna and 01567 Lockerbie area codes are positioned between the 01387 Dumfries and 013873 Langholm area codes.

Likewise the 01228 Carlisle area code is positioned between the 016973 Wigton area code and the 016977 Brampton area code.

A small selection of these area codes are clearly shown in the maps on the following page.

## 1.7 Five digit area codes (cont'd.)

The map shows some of the current 4-digit and 5-digit area codes in “mixed” areas.

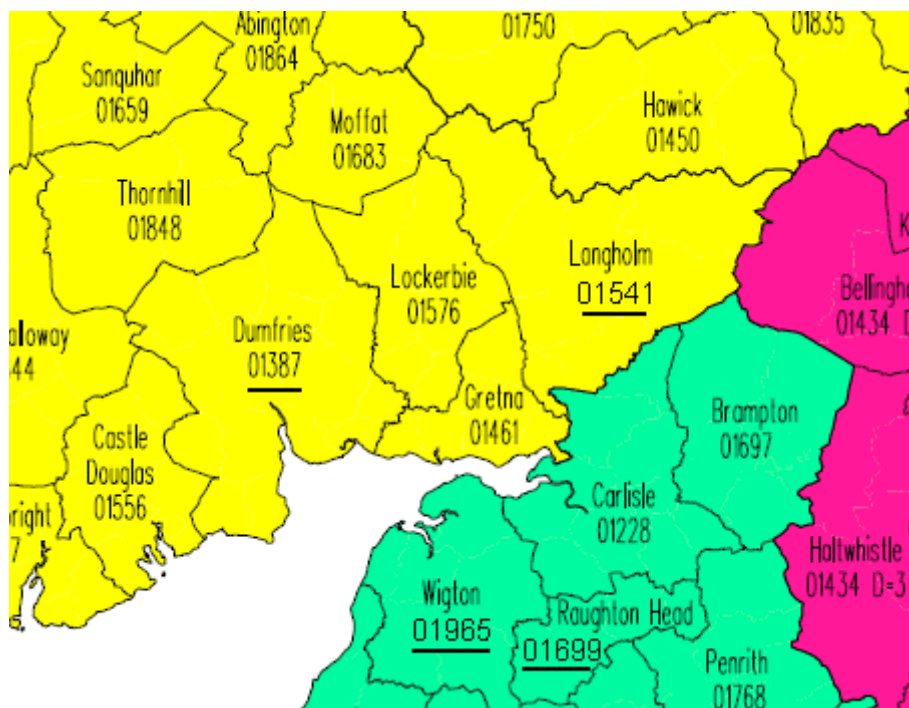


Ofcom proposes combining area codes with the same initial 0SABC digits, but admits this solution will only last a few years. After that it is proposed to use overlay codes. The proposed solutions are overly complex, short-term, and will be confusing to local people.

A far simpler solution would be for the places with 5-digit area codes to revert to using the old 1980s area codes again (albeit with a “1” added, as per the phONEday changes).

For example, Dumfries should continue using 01387. Langholm should change to the 01541 area code.

Wigton should change to the 01965 area code. Raughton Head should change to the 01699 area code, and so on.



The same should apply to all other 5-digit area codes. This is discussed in more detail, later in this response.

## 1.8 Four digit area codes

In many other places (now with 4-digit area codes) where area codes were amalgamated, there are now very few free number ranges left, and an area code change is likely in the next few years. Had those codes not been amalgamated back in the 1980s and 1990s, there would likely be no such pressure.

For example, Bournemouth now uses the 01202 area code. However, in the 1980s, numbers in the Northern and Western extremities of the current 01202 area were using the 0201 area code, with 0202 used only in the central and Eastern end. One solution could be to split the 01202 area, and use 01201 for part of it and 01202 for the rest.

Likewise in Sussex, 0273 was used in Brighton itself and 0791 was used on the outer edges of Brighton. The two areas were combined and used only 0273 from then on. 0273 is nowadays 01273.

It seems no coincidence that many of the places now running out of 6-digit local numbers are those where area codes were combined in the 1980s and 1990s. That combining seems to have been led by the need to free up area codes for use by mobile telephones and other services. There is no such pressure now that they use the 07, 08 and 09 ranges.

Additionally, most of the places now using an 011x area code were also those where several local area codes were amalgamated several decades ago. In many cases they were "ring" areas around the outside of the larger settlement.

If those area codes had not been combined in the 1980s, the change to an 011x code in the 1990s might not have been necessary for places such as Leeds, Sheffield, Leicester, Nottingham and Bristol.

I would like to see the 4+6 areas running out of numbers move to a 3+7 scheme in the 02xx or 04xx range. These areas have seen no significant changes in local numbering (except for adding the "1" in 1995) in more than 20 years.

## 1.9 Three digit area codes

Currently, there are twelve 3-digit area codes in use, as shown in the table below.

Area Code	Area Code Name	Area Code	Area Code Name
		<b>0121</b>	Birmingham
<b>0113</b>	Leeds	<b>0131</b>	Edinburgh
<b>0114</b>	Sheffield	<b>0141</b>	Glasgow
<b>0115</b>	Nottingham	<b>0151</b>	Liverpool
<b>0116</b>	Leicester	<b>0161</b>	Manchester
<b>0117</b>	Bristol		
<b>0118</b>	Reading	<b>0191</b>	Tyne and Wear (2,4,6,8), Sunderland (5,7), Durham (3,9)

Additionally, there are at least 16 such area codes free: 0100, 0101, 0102, 0103, 0104, 0105, 0106, 0107, 0108, 0109, 0110, 0111, 0112, 0119, 0171, 0181. The final two area codes were previously in use for London numbers.

It seems obvious that once an area has run out of 6-digit local numbers, that area would move to using 7-digit local numbers and a shorter area code.

Either the 02 or the 04 range should be used for this. People understand these types of changes, where local numbers gain an extra digit and the area code changes to a shorter one.

There is space for this at 0210 to 0219, 0220 to 0229, 0250 to 0259, 0260 to 0269 and 0270 to 0279, giving 50 such area codes, or at 0400 to 0499 where 100 such area codes are possible.

There are also another 14 such area codes available at 0100 to 0109 and at 0110, 0111, 0112 and 0119.

Additionally, Coventry, Portsmouth and Southampton should have moved to a 3+7 scheme in 2000, not to the absurd 2+8 scheme they now have.

The 2+8 format has been a success in London and Northern Ireland, but not elsewhere. In other places it has merely confused.

## 1.10 Two digit area codes

The changeover to using the 023 area code for Portsmouth and Southampton, and the 024 area code for Coventry makes no sense whatsoever. Those places are not each in need of 79 million local numbers.

Those areas should have moved from a 4+6 scheme to a 3+7 scheme in 2000. Indeed the entire 02 range should have been reserved for 100 such area codes to meet future expansion needs.

On the other hand, the introduction of 8-digit local numbering in London and in Northern Ireland seems to have worked out quite well.

The main problem today is that many Londoners still believe the London area code is 0203, 0207 or 0208 instead of 020. Likewise in Northern Ireland many people believe their code is 028xx and not simply 028.

The 03 range should have been set aside for 8-digit local numbering with 2-digit area codes.

UK Wide numbers should have been assigned in the 04 range.

Now that the 03 range has been assigned to UK Wide numbering, there is less potential to implement a clear numbering plan. However, the large number of unused 02xx area codes should in future be used for 3+7 format numbers. There are at least 50 such areas already available.

Southampton, Portsmouth, Coventry and Cardiff do not need 8-digit local numbering and it should never have been introduced in any of those places. Those places should be on a 3+7 scheme.

In the 1970s and 1980s, Southampton originally used 0421 and 0703, Portsmouth originally used 0701 and 0705, Coventry originally used 0203 and Cardiff originally used 0222 and 0447. Had each of those areas not been combined way back then, it is possible that they would not have needed to change to a new area code in 2000.

## 1.11 Eight digit local numbering

With an 8-digit local number and 2-digit area code, most smaller places would lose all sense of "identity".

The system has been a success in London and a partial success in Northern Ireland, however it has rightly been abandoned in the rest of the UK.

This has left Portsmouth, Southampton, Coventry and Cardiff with a problem. The huge amount of number space is not required, 7-digit numbering is sufficient. They should never have been put into a 2+8 plan in 2000.

In a 2+8 format plan, the idea of "local" numbers becomes meaningless as there is no recognisable "pattern" to the allocations.

A number in the adjacent 1K/10K block might be located more than one hundred km away.

Most people would have to dial more digits for a local call than they do at present.

The pool of numbers is no larger, but it would likely do away with companies reserving millions of numbers which they will never use.

Many current area codes will never run out of numbers so any change for those users would be pointless.

Ofcom should have made more provision for the 4+6 areas running out of numbers to migrate to new 3+7 codes. With the 02 and 03 ranges being reserved for "Geographic Expansion" from 1995 onwards, that was the expected long term outcome.

Additionally, as noted elsewhere in this response, some of the area code amalgamation that happened in the 1990s should not have happened.

## 1.12 Mixed areas

These are areas which contain a mix of 4-digit area codes with 6-digit (and occasionally 5-digit) local numbers, and 5-digit area codes with 5-digit (and occasionally 4-digit) local numbers. Related area codes share the same OSABC digits, and the geographic location is decided by the value of the D digit, which may be the last digit of the area code or the first digit of the local number.

There are 18 such areas around the country, as detailed in the following table.

Code	Name	Con	Format
01387	Dumfries (2,4,5,6,7,8,9)	Y	4+6
013873	Langholm	Y	5+5
01524	Lancaster (3,4,5,6,7,8,9)	Y	4+6/4+5
015242	Hornby	Y	5+5
01539	Kendal (2,3,7,8,9)	Y	4+6
015394	Hawkshead	Y	5+5
015395	Grange-over-Sands	Y	5+5
015396	Sedbergh	Y	5+5
01697	Brampton (6-fig only) (2,5,6,8,9)	Y	4+6
016973	Wigton	Y	5+5
016974	Raughton Head	Y	5+5
016977	Brampton (4 and 5-fig numbers)	Y	5+5/5+4
01768	Penrith (2,5,6,8,9)	Y	4+6/4+5
017683	Appleby	Y	5+5
017684	Pooley Bridge	Y	5+5
017687	Keswick	Y	5+5
01946	Whitehaven (2,3,4,5,6,8,9)	Y	4+6/4+5
019467	Gosforth	Y	5+5

Ofcom refers to “Gosforth (Mixed)” several times in the consultation document. The correct name is simply “Gosforth”. Additionally, the Brampton area code is 016977 when used with 5-digit and 4-digit local numbers.

The consultation mentions that local numbers in the UK are from 5-digits to 8-digits long. It therefore fails to mention that one area (016977 Brampton) still contains some 4-digit local numbers.

There are a number of places with mixed 4-digit and 5-digit area codes. These are each separate codes and calls between all such areas always require the area code to be dialled. In many cases, two areas sharing the same OSABC digits are not actually geographically adjacent.

The table on the following page shows the area codes as they were both in 1985 and in 2010 as well as the name of the geographic area served.

Removal of local dialling, allocating local numbers beginning with 0 or 1, combining area codes, and/or adding overlay codes are all complicated short-term solutions with very little gain.

For example, combining 01387 and 013873 would allow NDO numbers currently at (013873) 0xxxx and at (013873) 1xxxx to be issued in Langholm as (01387) 30xxxx and (01387) 31xxxx. These ranges would be gone in no time. Combining two places that are more than 50 km apart into one 4-digit area code makes no sense at all.

In order to provide a substantial pool of local numbers in both places, areas with a 5-digit area code should instead revert to their 1980s area code assignment (after adding the requisite phONEday “1” of course). In the case of Langholm, this would allow an extra 710 000 numbers to be allocated in the new 01541 area code. Dumfries would also see an extra 100 000 numbers become available in the 01387 area code after a suitable delay following the split.

The table on the following page shows the suggested changes (the 2015 date is arbitrary).

## 1.12 Mixed areas (cont'd.)

1985 Code	2010 Code	2010 Format	2010 Area Code Name	Area Code also covers	2015 Code
0387	<b>01387</b>	4+6	Dumfries (2,4,5,6,7,8,9)	Amisfield, Auldgirth, Carrutherstown, Clarencefield, Collin, Dunscore, Glencaple, Kirkbean, Kirkgunzeon, Lochfoot, Lochmaben, Mouswald, New Abbey, Newbridge, Parkgate and Southwick	<b>01387</b>
0541	<b>013873</b>	5+5	Langholm	Bentpath, Canonbie, Chapelknowe, Eskdalemuir, Liddesdale and Steele Road	<b>01541 3</b>
0524	<b>01524</b>	4+6 4+5	Lancaster (3,4,5,6,7,8,9)	Arnside, Burton, Carnforth, Caton, Forton, Galgate, Halton on Lune, Hest Bank, Heysham, Morecambe and Silverdale	<b>01524</b>
0468	<b>015242</b>	5+5	Hornby	Barbon, Bentham, Clapham, Ingleton and Kirkby Lonsdale	<b>01468 2</b>
0539	<b>01539</b>	4+6	Kendal (2,3,7,8,9)	Grayrigg, Selside and Staveley	<b>01539</b>
0966	<b>015394</b>	5+5	Hawkshead	Ambleside, Coniston, Grasmere, Langdale and Windermere	<b>01966 4</b>
0448	<b>015395</b>	5+5	Grange-over-Sands	Crooklands, Crosthwaite, Flookburgh, Milnthorpe, Newby Bridge, Sedgwick and Witherslack	<b>01448 5</b>
0587	<b>015396</b>	5+5	Sedburgh	Dent, Newbiggin-on-Lune and Orton	<b>01587 6</b>
0697	<b>01697</b>	4+6	Brampton (6-fig only) (2,5,6,8,9)	Gilsland, Hallbankgate and Roadhead	<b>01697</b>
0965	<b>016973</b>	5+5	Wigton	Abbeytown, Aspatria, Kirkbride and Silloth	<b>01965 3</b>
0699	<b>016974</b>	5+5	Raughton Head	Armathwaite, Caldbeck and Southwaite	<b>01699 4</b>
0697	<b>016977</b>	5+5 5+4	Brampton (4 and 5-fig numbers)	Gilsland, Hallbankgate and Roadhead	<b>01697 7</b>
0768	<b>01768</b>	4+6 4+5	Penrith (2,5,6,8,9)	Calthwaite, Croglin, Culgaith, Langwathby and Lazonby	<b>01768</b>
0930	<b>017683</b>	5+5	Appleby	Brough, Kirkby Stephen and Kirkby Thore	<b>01930 3</b>
0853	<b>017684</b>	5+5	Pooley Bridge	Glenridding, Greystoke and Skelton	<b>01853 4</b>
0596	<b>017687</b>	5+5	Keswick	Bassenthwaite Lake, Borrowdale, Braithwaite, Buttermere and Threlkeld	<b>01596 7</b>
0946	<b>01946</b>	4+6 4+5	Whitehaven (2,3,4,5,6,8,9)	Beckermere, Cleator Moor, Egremont, Harrington and Lamplugh	<b>01946</b>
0940	<b>019467</b>	5+5	Gosforth	Eskdale, Holmrook, Seascale and Wasdale	<b>01940 7</b>

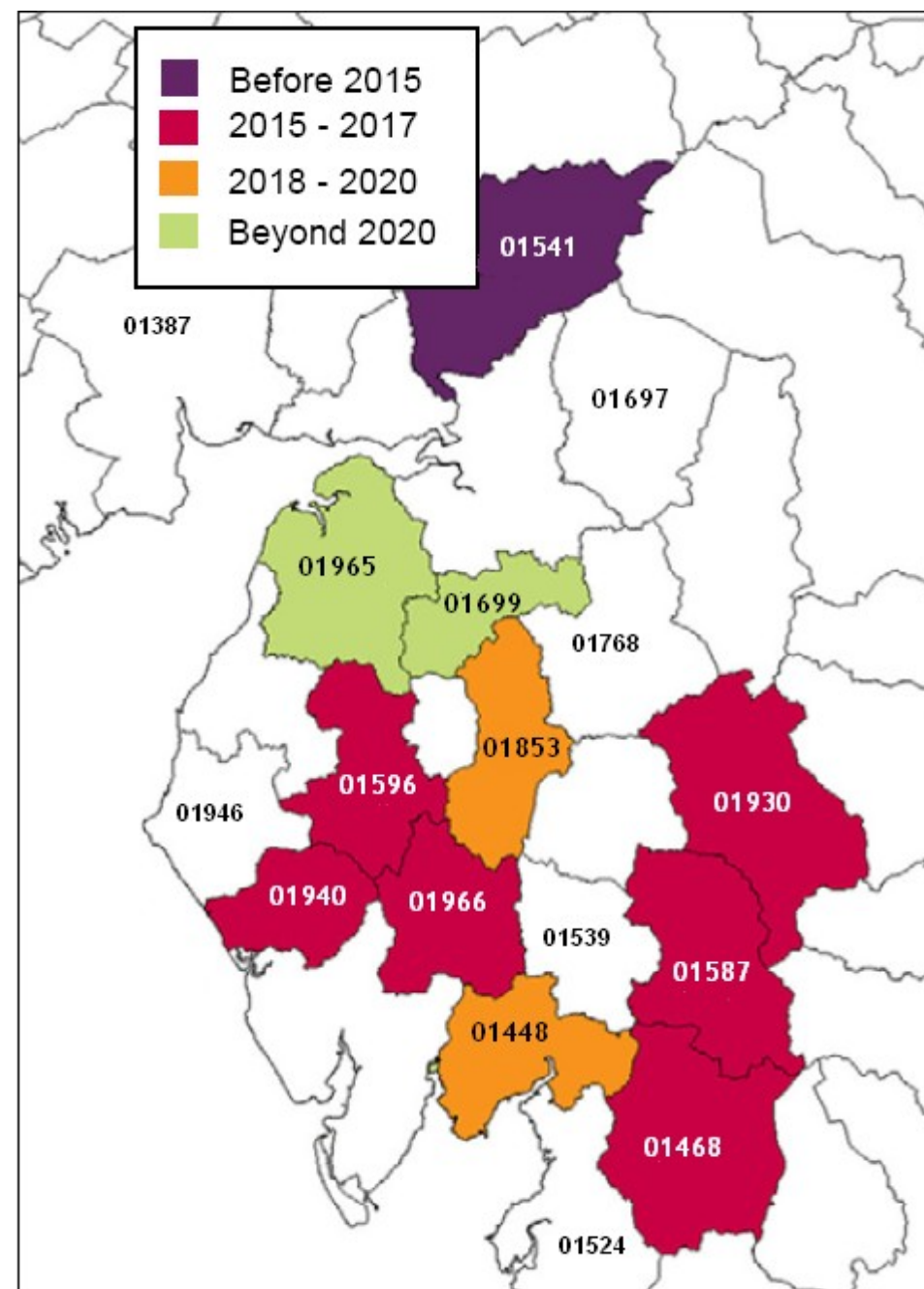
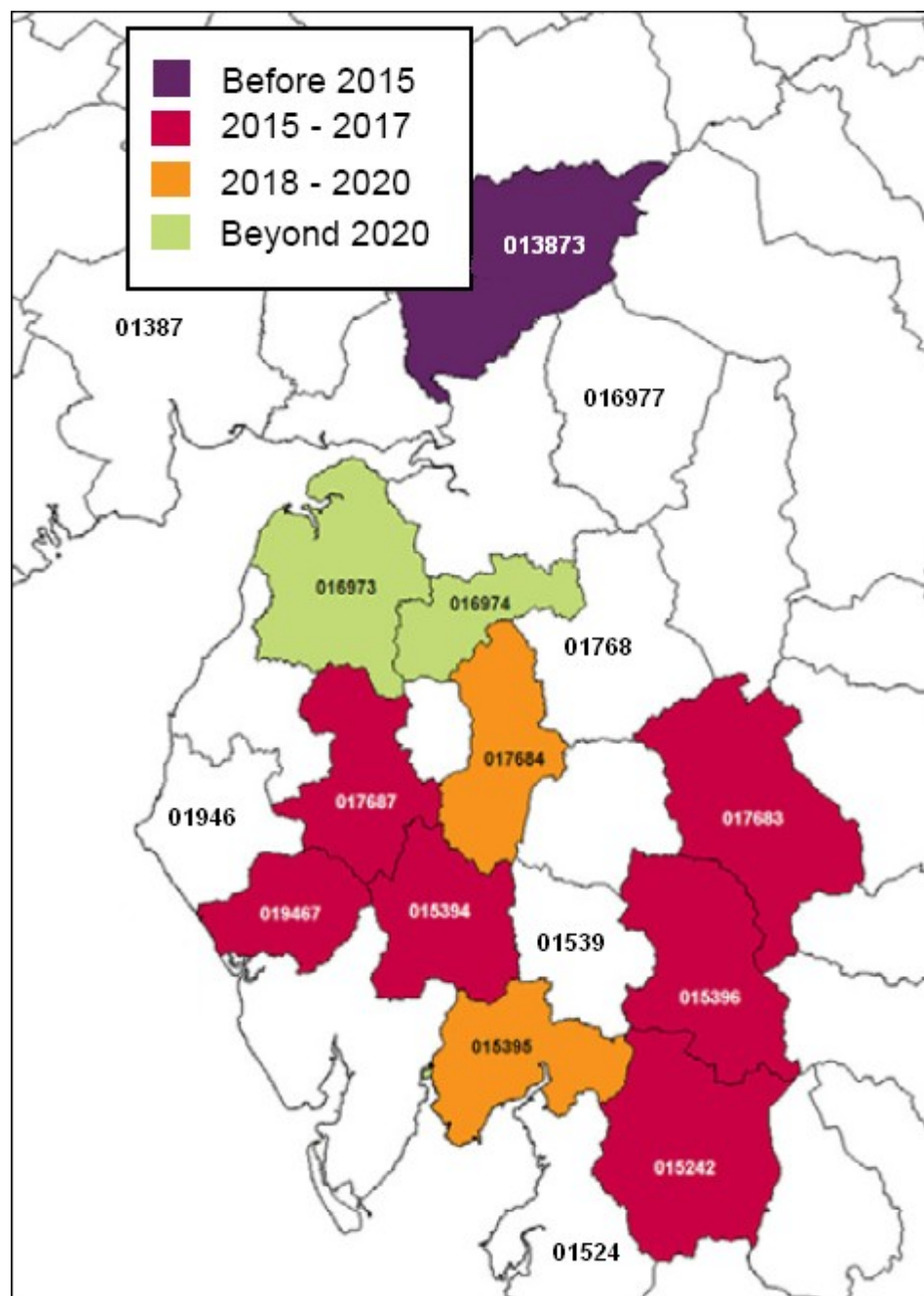
In summary,

- Grange-over-Sands, now 015395, used to be 0448; propose using 01448, giving an extra 711 000 numbers;
- Hornby, now 015242, used to be 0468 ; propose using 01468, giving an extra 711 000 numbers;
- Langholm, now 013873, used to be 0541; propose using 01541, giving an extra 711 000 numbers;
- Sedburgh, now 015396, used to be 0587; propose using 01587, giving an extra 711 000 numbers;
- Keswick, now 017687, used to be 0596; propose using 01596, giving an extra 711 000 numbers;
- Brampton, now 016977, used to be 0697; propose using 01697, giving an extra 711 000 numbers;
- Raughton Head, now 016974, used to be 0699; propose using 01699, giving an extra 711 000 numbers;
- Pooley Bridge, now 017684, used to be 0853; propose using 01853, giving an extra 711 000 numbers;
- Brough, now part of 017683, used to be 0930; propose using 01930, giving an extra 711 000 numbers;
- Gosforth, now 019467, used to be 0940; propose using 01940, giving an extra 711 000 numbers;
- Wigton, now 016973, used to be 0965; propose using 01965, giving an extra 711 000 numbers;
- Windermere, now part of 015394, used to be 0966; propose using 01966, giving an extra 711 000 numbers.

This move would likely mean no further changes would be needed in these areas for very many decades, and this idea should be pursued instead of any idea involving codes merging, overlay codes, and loss of local dialling within these areas.

Some of these allocations are shown on the following page, where the map on the left shows the current situation and the map on the right shows what would happen should these areas be returned to using their pre-phONEday area codes.





### 1.12 Mixed areas (cont'd.)

The following areas should continue using the same area codes as now:

- Dumfries (01387), later gains 100 000 new numbers by re-using (013873) as (01387) 3;
- Lancaster (01524), later gains 100 000 new numbers by re-using (015242) as (01524) 2;
- Kendal (01539), later gains 300 000 new numbers by re-using (015394) as (01539) 4, 015395 as (01539) 5 and (015396) as (01539) 6;
- Brampton (01697), later gains 200 000 new numbers by re-using (016973) as (01697) 3 and (016974) as (01697) 4;
- Penrith (01768), later gains 300 000 new numbers by re-using (017683) as (01768) 3, (017684) as (01768) 4 and (017687) as (01768) 7;
- Whitehaven (01946), later gains 100 000 new numbers by re-using (019467) as (01946) 7.

Ofcom proposes the following scheme:



Merged area code	Geographic areas	Current area code
01387	Dumfries	01387
	Langholm	013873
01524	Lancaster	01524
	Hornby	015242
01539	Kendal	01539
	Hawkshead	015394
	Grange over Sands	015395
	Sedbergh	015396
01697	Brampton	01697
	Wigton	016973
	Raughton Head	016974
01768	Penrith	01768
	Appleby	017683
	Pooley Bridge	017684
	Keswick	017687
01946	Whitehaven	01946
	Gosforth	019467

Ofcom's proposed merger of areas as shown in the diagram above looks simple numerically, but leads to loss of local identity. It should be remembered that each of the current 5-digit area codes is in fact a separately named area and that calls between the various "mixed" areas always require the area code to be dialled.

In the 1980s each of these 18 areas had their own distinct area code with completely separate 0ABC digits. In many cases, these areas were changed to “mixed format” in order to free up some extra area codes for use by mobile and other services.

Now that there is no longer any pressure to free up area codes in the 01 range for other services, the “mixed” areas should return to using their pre-phONEday allocations, e.g. Langholm should now use 01541, while Dumfries should continue to use 01387.

This avoids all of the complexity of merging and overlays, avoids the removal of local dialling, and is the best long term solution. Local dialling will still work within each area. Calls between areas will still require an area code, as at present, albeit a different area code than presently in use. Each of the 5-digit area codes will gain around 711 000 new numbers.

The “mixed” 4-digit area codes will each gain between 100 000 and 300 000 numbers, while continuing to serve exactly the same geographic area as at present, i.e. will serve a much smaller area than the proposed merged areas.



## 1.13 ELNS areas

ELNS areas are those areas which contain several geographic names which share the same area code. The first digit of the local number gives the hint as to which area code name applies.

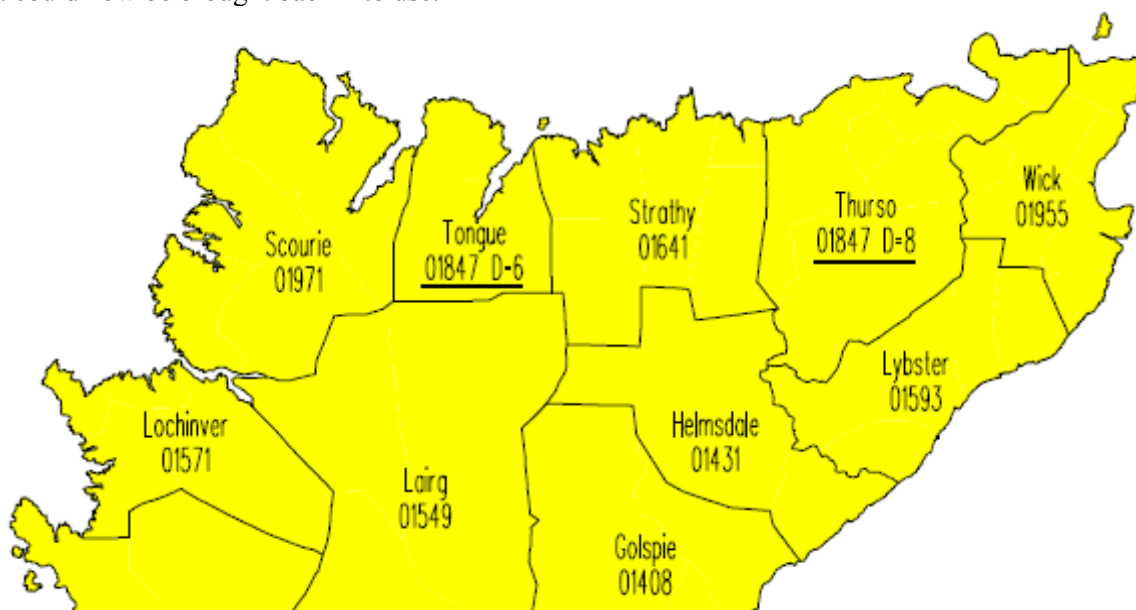
ELNS areas are usually in rural areas, and were formed by combining several area codes in the 1990s when there was pressure to free up some area codes for use by mobile telephones and other services.

The current allocations for 4-digit ELNS area codes are as shown in the table below.

Area code	Number format	Initial digits	Location name	Initial digits	Location name	Initial digits	Location name
<b>01229</b>	4+6	2,4,5,6,8	Barrow-in-Furness	3,7,9	Millom		
<b>01339</b>	4+6	2,3,5,8	Aboyne	4,6,7,9	Ballater		
<b>01388</b>	4+6	3,4,6,7,8,9	Bishop Auckland	2,5	Stanhope		
<b>01423</b>	4+6	3,4,9	Boroughbridge	2,5,6,7,8	Harrogate		
<b>01430</b>	4+6	6,7,8,9	Market Weighton	2,3,4,5	North Cave		
<b>01434</b>	4+6	2,4,9	Bellingham	3,5	Haltwhistle	6,7,8	Hexham
<b>01437</b>	4+6	2,3,4,5	Clynderwen [ <i>Clunderwen</i> ]	6,7,8,9	Haverfordwest		
<b>01507</b>	4+6	4,8,9	Alford (Lincs)	3,6,7	Louth	2,5	Spilsby [ <i>Horncastle</i> ]
<b>01686</b>	4+6	2,3,4,7	Llanidloes	5,6,8,9	Newtown		
<b>01847</b>	4+6	2,3,4,5,8	Thurso	6,7,9	Tongue		
<b>01851</b>	4+6	4,6,9	Great Bernera	2,3,5,7,8	Stornoway		
<b>01890</b>	4+6	5,6,7,9	Ayton	2,3,4,8	Coldstream		
<b>01964</b>	4+6	2,5,8,9	Hornsea	3,4,6,7	Pattingham		
<b>01975</b>	4+6	2,4,5,9	Alford (Aberdeen)	3,6,7,8	Strathdon		

In the 1980s, Tongue used 0800 and Thurso used 0847. As these were low population areas, the two areas were combined, using only 0847 from then on. This was done to free up the 0800 area code for use by other services, as at that time the supply of area codes was running short.

During phONEday in 1995, the 0847 area code changed to 01847. Since that time, the 01800 area code has remained unused. It could now be brought back into use.

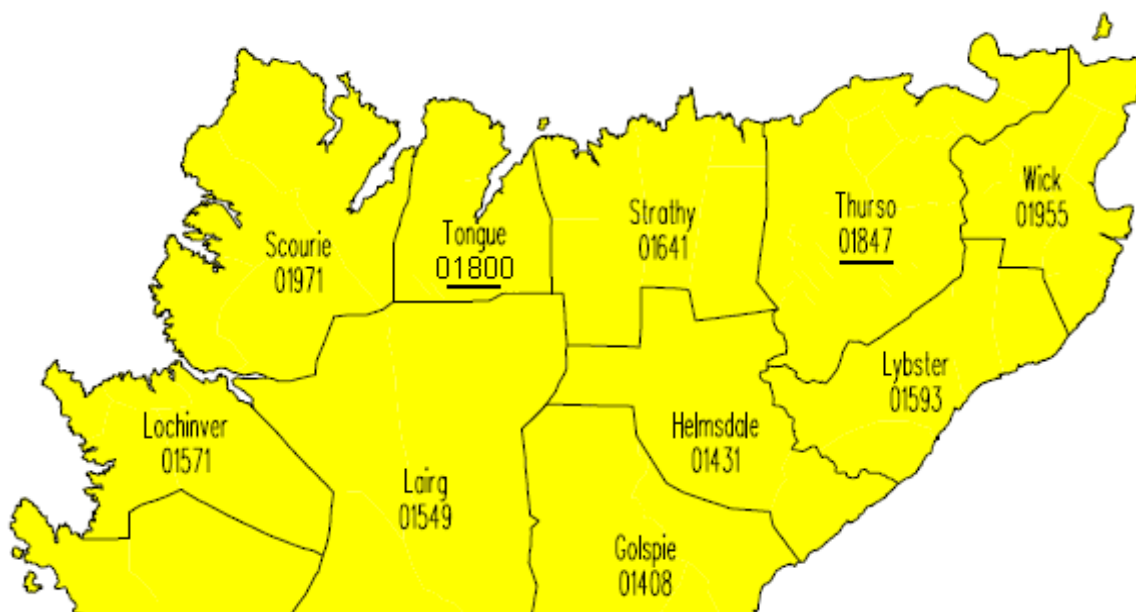


Should any of the ELNS areas run short of numbers in the future, the area code should be split and one part of the area should revert back to using the area code previously in use back in 1985 (but with the phONEday “1” inserted).

Tongue and Thurso both currently use the 01847 area code. However, the two named areas are not adjacent. The Strathly 01641 area code separates Tongue and Thurso, as shown in the map.

When the 01847 area runs short of numbers, Thurso should remain on 01847, and Tongue should change to 01800, Tongue having previously used the 0800 area code in the 1970s and 1980s. This move would double the available numbers in both areas.

### 1.13 ELNS areas (cont'd.)



The map shows the new area code for one such area. All of the other 4-digit area code ELNS areas could also be accommodated in much the same way, as shown in the table below.

All of the 4-digit ELNS area codes should be re-organised as follows (the 2015 date is arbitrary).

1985 Area Code	2010 Area Code	2010 ELNS Area Code Name	2015 Area Code
0229	01229	Barrow-in-Furness (2, 4, 5, 6, 8)	01229
0657	01229	Millom (3, 7, 9)	01657
0339	01339	Aboyne (2, 3, 5, 8)	01339
0338	01339	Ballater (4, 6, 7, 9)	01338
0388	01388	Bishop Auckland (3, 4, 6, 7, 8, 9)	01388
0956	01388	Stanhope (2, 5) [ <i>Weardale</i> ]	01956
0901	01423	Boroughbridge (3, 4, 9)	01901
0423	01423	Harrogate (2, 5, 6, 7, 8)	01423
0696	01430	Market Weighton (6, 7, 8, 9)	01696
0430	01430	North Cave (2, 3, 4, 5)	01430
0660	01434	Bellingham (2, 4, 9)	01660
0498	01434	Haltwhistle (3, 5)	01498
0434	01434	Hexham (6, 7, 8)	01434
0991	01437	Clynderwen (2, 3, 4, 5) [ <i>Clunderwen</i> ]	01991
0437	01437	Haverfordwest (6, 7, 8, 9)	01437
0521	01507	Alford (Lincs) (4, 8, 9)	01521
0507	01507	Louth (3, 6, 7)	01507
0658	01507	Spilsby (2, 5) [ <i>Horncastle</i> ] [ <i>Mareham-le-Fen</i> ]	01658
0551	01686	Llanidloes (2, 3, 4, 7)	01551
0686	01686	Newtown (5, 6, 8, 9)	01686
0847	01847	Thurso (2, 3, 4, 5, 8)	01847
0800	01847	Tongue (6, 7, 9)	01800
0850	01851	Great Bernera (4, 6, 9) [ <i>Callanish</i> ]	01850
0851	01851	Stornoway (2, 3, 5, 7, 8)	01851
0390	01890	Ayton (5, 6, 7, 9) [ <i>Eyemouth</i> ]	01390
0890	01890	Coldstream (2, 3, 4, 8)	01890
0401	01964	Hornsea (2, 5, 8, 9)	01401
0964	01964	Pattingham (3, 4, 6, 7)	01964
0336	01975	Alford (Aberdeen) (2, 4, 5, 9) [ <i>Deeside</i> ]	01336
0975	01975	Strathdon (3, 6, 7, 8)	01975

## 1.13 ELNS areas (cont'd.)

It would be very confusing to leave Tongue and Thurso (for example) both using the 01847 area code and to then overlay another area code in both of those places. It would be much more clear for each named place to have a separate area code. This simple solution would also bring clarity to local numbering in all of these areas.

This solution is possible now that there is no pressure to clear geographic area codes in order to use the number ranges for other services. This is unlike the 1990s when many area codes in rural areas were combined in order to free up space for mobile telephones and other services. Those other services now occupy the 07, 08 and 09 ranges.

This would be a good time to bring some of those older geographic codes back into service. Unused area codes in the 01 range are not a scarce resource. However, wherever codes are brought back into use, they should be allocated to the same geographic place that they were allocated to in the 1980s.

## 1.14 Local dialling

Ofcom should **not** seek to remove local dialling facilities. These have been a well-used feature of the UK telephone system since its inception.

The current 5-digit area codes only came about due to the pressures in the 1980s and 1990s to create more area codes for mobile and other services. With no such issue in the 01 range, local dialling can remain intact if those areas move to their pre-phONEday area code allocations. This will preserve local dialling within each of the 18 “mixed” areas. It will also remove the need for local numbers beginning 0 or 1 and remove the need for overlay codes.

For the past 40 or more years there has been a trend that when an area runs short of numbers, it moves to a new shorter area code and to longer local numbering. This trend should continue, with 4+6 numbering moving to 3+7 numbering and not using overlay codes and especially not using local numbers beginning 0 or 1.

After the move of all geographic numbering to the 01 range during phONEday in 1995, the number plan showed the 02 and 03 ranges as “reserved for geographic expansion”.

It seemed obvious that the 01 range would be used mostly for 4-digit area codes, and that in future the 02 range would be used for 3-digit area codes with 7-digit local numbers, and the 03 range would be used for 2-digit area codes with 8-digit local numbers. Such an arrangement would likely last several centuries.

The move to 8-digit local numbering in London and Northern Ireland has been a success.

In Portsmouth and Southampton, many residents are completely confused by the fact that the same area code covers two places. It was a mistake to implement this. Both places should be on a 3+7 scheme. Likewise for Cardiff and Coventry, 8-digit local numbering is completely unnecessary. They should both be using a 3+7 numbering scheme.

At some point in the past it looked like Bournemouth and Brighton might be changed to use 2+8 format numbering. It is now clear that residents of both places would have been somewhat confused as to why they had the same area code as each other and as Portsmouth and Southampton.

Current 4-digit area codes that are running out of numbers should move to a 3+7 scheme. There are many suitable unused area codes in the 01, 02 and 04 number ranges to implement just such a scheme.

Ofcom seems to have developed an aversion to changing area codes and/or numbers, and that is a shame. In re-organising the number scheme “by type” in 1995 to 2001, reserving 02 and 03 for geographic expansion, Oftel laid a solid foundation for future numbering schemes. Today's situation is that a small number of area codes are running short of numbers. Introducing complicated schemes that remove local dialling and introduce overlay codes throws away all the foresight implemented a decade ago. Moving existing numbers to a new shorter area code is a short term inconvenience but with substantial long term gains over any other scheme.

## 1.15 Changes since 1990

The table on the following page shows changes in the UK numbering plan since 1990, compared to an ideal.

Year	Oftel/Ofcom-led changes 1990 onwards	How things could have been
1990	London split from 01 ( <i>1+7 format</i> ) to 071 and 081 ( <i>2+7 format</i> ) to double the capacity within London and to free up the 01 range for future geographic numbering.	Split London from 01 ( <i>1+7 format</i> ) into 071 ( <i>2+7 format</i> ) and 081 ( <i>2+7 format</i> ) to double the capacity within London and free up the 01 range for future geographic numbering.
1995	Move 0xxx ( <i>3+6 and 3+5 format</i> ) geographic area codes to 01xxx ( <i>4+6 and 4+5 format</i> ) to free up many 02xx to 09xx area codes for other types of numbering: mobile, non-geographic and premium rate in the future.	Move most of the 0xxx ( <i>3+6 and 3+5 format</i> ) geographic area codes to 01xxx ( <i>4+6 and 4+5 format</i> ) to free up many 02xx to 09xx area codes for other types of numbering: geographic expansion, mobile, non-geographic and premium.
1995	Move Birmingham (021), Edinburgh (031), Glasgow (041), Liverpool (051), Manchester (061) and Tyneside (091) numbers ( <i>all 2+7</i> ) to new (01x1) area codes ( <i>3+7</i> ).	Leave Birmingham (021), Edinburgh (031), Glasgow (041), Liverpool (051), Manchester (061) and Tyneside (091) numbers ( <i>all 2+7 format</i> ) on the old area codes for now.
1995	Change Leeds (0532), Sheffield (0742), Nottingham (0602), Leicester (0533), Bristol (0272) numbers ( <i>all 3+6 format</i> ) to use new (011x) area codes ( <i>3+7 format</i> ).	Leave Leeds (0532), Sheffield (0742), Nottingham (0602), Leicester (0533), Bristol (0272) numbers ( <i>all 3+6 format</i> ), on their old area codes for now.
1995	London changed from 071 ( <i>2+7 format</i> ) to 0171 ( <i>3+7 format</i> ) & from 081 ( <i>2+7 format</i> ) to 0181 ( <i>3+7 format</i> ).	Leave London (071) and London (081) numbers ( <i>2+7 format</i> ) on their old area codes for now.
1995	Reading 0734 ( <i>3+6 format</i> ) changed to 01734 ( <i>4+6</i> ).	Leave Reading on the (0734) area code ( <i>3+6 format</i> ) for now.
1998	Reading changed from 01734 ( <i>4+6 format</i> ) to 0118 ( <i>3+7 format</i> ) area code.	Reading 0734 ( <i>3+6 format</i> ) changes to 0273 ( <i>3+7 format</i> ). <i>From now on all 3+7 format numbers will use 02xx codes.</i>
1998 or 2000	–	Birmingham 021 ( <i>2+7 format</i> ) changes to 0221 ( <i>3+7 format</i> ), Edinburgh 031 ( <i>2+7 format</i> ) changes to 0231 ( <i>3+7 format</i> ), Glasgow 041 ( <i>2+7 format</i> ) changes to 0241 ( <i>3+7 format</i> ), Liverpool 051 ( <i>2+7 format</i> ) changes to 0251 ( <i>3+7 format</i> ), Manchester 061 ( <i>2+7 format</i> ) changes to 0261 ( <i>3+7 format</i> ), Tyneside 091 ( <i>2+7 format</i> ) changes to 0291 ( <i>3+7 format</i> ).
1998 or 2000	–	Leeds 0532 ( <i>3+6 format</i> ) changes to 0252 ( <i>3+7 format</i> ), Sheffield 0742 ( <i>3+6 format</i> ) changes to 0274 ( <i>3+7 format</i> ), Nottingham 0602 ( <i>3+6 format</i> ) changes to 0260 ( <i>3+7 format</i> ) Leicester 0533 ( <i>3+6 format</i> ) changes to 0253 ( <i>3+7 format</i> ), Bristol 0272 ( <i>3+6 format</i> ) changes to 0227 ( <i>3+7 format</i> ) or remains on 0272 while changing to <i>3+7 format</i> .
2000	London changed from 0171 and 0181 ( <i>3+7 format</i> ) to 020 ( <i>2+8 format</i> ) giving a five-fold increase in numbers.	London 071 ( <i>2+7 format</i> ) changes to 030 ( <i>2+8 format</i> ), London 081 ( <i>2+7 format</i> ) changes to 030 ( <i>2+8 format</i> ).
2000	Cardiff 01222 ( <i>4+6 format</i> ) changed to 029 ( <i>2+8 format</i> ) Coventry 01203 ( <i>4+6 format</i> ) changed to 024 ( <i>2+8 format</i> ) Portsmouth 01705 ( <i>4+6 format</i> ) changed to 023 ( <i>2+8</i> ), Southampton 01703 ( <i>4+6 format</i> ) changed to 023 ( <i>2+8</i> )	Cardiff 01222 ( <i>4+6 format</i> ) changes to 0222 ( <i>3+7 format</i> ), Coventry 01203 ( <i>4+6 format</i> ) changes to 0220 ( <i>3+7 format</i> ), Portsmouth 01705 ( <i>4+6 format</i> ) changes to 0205 ( <i>3+7 format</i> ), Southampton 01703 ( <i>4+6 format</i> ) changes to 0203 ( <i>3+7 format</i> )
2000	Northern Ireland 01xxx ( <i>various 4+6 and 4+5 format numbers</i> ) changed to 028 ( <i>2+8 format</i> ).	Northern Ireland 01xxx ( <i>various 4+6 and 4+5 format numbers</i> ) changes to 038 ( <i>2+8 format</i> ).
2001	Mobile telephone numbers moved to 07 range.	Move mobile telephone numbers to 07 range.
2001	NGN and Freephone moved to 08 range.	Move NGN and Freephone to 08 range.
2001	Premium Rate moved to 09 range.	Move Premium Rate to 09 range.
2003	Multiple areas renamed by Oftel, but with errors.	Multiple geographic areas renamed, one area code per name.
2005	(020) 3 number expansion in London.	(030) 3 number expansion in London.
2008	New (01987) area code for Ebbsfleet.	New (01987) area code for Ebbsfleet.
2015	Merging of 5-digit and 4-digit area codes.	01xxxx area codes ( <i>5+5</i> ) re-adopt their 1980s code ( <i>4+6</i> ).
2015	Loss of local dialling, overlay codes, confusion.	Some 01xxx area codes ( <i>4+6</i> ) move to 02xx ( <i>3+7 format</i> ).
2020	More overlay codes, more confusion.	More 01xxx area codes ( <i>4+6</i> ) move to 02xx ( <i>3+7 format</i> ).
2040	Tyneside or another 3+7 area runs out of numbers.	0191 area code ( <i>3+7</i> ) moves to 039 area code ( <i>2+8 format</i> ).

## 1.15 Changes since 1990 (cont'd.)

Looking at the rightmost column of the table on the previous page, we *could have* ended up with a very simple system for the UK, as summarised in the table below.

Range	Service Type / Usage	Format	Area Code	Expected Usage
01	Geographic numbering	4+6	01ABC	Over 550 areas already in use.
02	Geographic numbering	3+7	02AB	100 potential 3-digit area codes.
03	Geographic numbering	2+8	03A	London and NI could have been here.
04	UK Wide numbering			
05	Corporate and VoIP numbering			
06	Reserved			
07	Mobile telephones, personal numbers, pager numbers			
08	Freephone and non-geographic numbering			
09	Premium Rate services			

UK wide numbering could have used the 04 range.

Ofcom should consider using the 010x range, unused 02xx ranges and/or the 04xx range for 3+7 format geographic numbering for all 4+6 areas running out of capacity from this point on. Other than the addition of the phONEday “1” to the area code in 1995, most 4+6 areas have seen no significant changes to local numbering in more than 20 years.

## 1.16 Suggestions for a small sample of area codes

The table below summarises some of the suggestions made in other sections of this response.

Area Code	Area Code Name	Previous Allocation(s)	Suggested move
01253	Blackpool	0253 and 0391	Should move to a 3+7 plan in the 010x or 02xx range.
01202	Bournemouth	0201 and 0202	Should move to a 3+7 plan in the 010x or 02xx range.
01274	Bradford	0274 and 0976	Should move to a 3+7 plan in the 010x or 02xx range.
01273	Brighton	0273 and 0791	Should move to a 3+7 plan in the 010x or 02xx range.
01332	Derby	0331 and 0332	Should move to a 3+7 plan in the 010x or 02xx range.
01642	Middlesbrough	0642 and 0649	Should move to a 3+7 plan in the 010x or 02xx range.
01224	Aberdeen	0224	Should move to a 3+7 plan in the 010x or 02xx range.
01226	Barnsley	0226	Should move to a 3+7 plan in the 010x or 02xx range.
01268	Basildon	0268 and 0374	Should move to a 3+7 plan in the 010x or 02xx range.
01234	Bedford	0230 and 0234	Should move to a 3+7 plan in the 010x or 02xx range.
01279	Bishops Stortford	0279	Should move to a 3+7 plan in the 010x or 02xx range.
01276	Camberley	0276	Should move to a 3+7 plan in the 010x or 02xx range.
01245	Chelmsford	0245	Should move to a 3+7 plan in the 010x or 02xx range.
01242	Cheltenham	0242	Should move to a 3+7 plan in the 010x or 02xx range.
013873	Langholm	0541	Should move to new 01541 area code.
017683	Appleby	0930	Should move to new 01930 area code.
019467	Gosforth	0940	Should move to new 01940 area code.
015394	Hawkshead	0966	Should move to new 01966 area code.
015242	Hornby	0468	Should move to new 01468 area code.
017687	Keswick	0596	Should move to new 01596 area code.
015396	Sedbergh	0587	Should move to new 01587 area code.

In particular, Ofcom's proposal to merge the 4-digit and 5-digit “mixed” area codes, and the associated loss of the local sense of numbering that would bring, makes no sense. It would be akin to deciding to allocate (023) 4 numbers in both Portsmouth and Southampton at the same time.

The above table mentions only a few of the affected area codes. The remainder of the allocations should follow the same pattern established in the table.

## Section 2: Answers to Ofcom's questions.

### Introduction

**Question 1: Do you have any comments on the objectives and approach to this review of geographic number management? Do you agree with the policy principles that we consider should inform the review?**

It is clear that “something needs to be done”, but I am not convinced the current proposals are the best way to tackle the number shortage. They seem to box future long-term options into an even tighter corner than before.

### Providing new supplies of geographic numbers

**Question 2: Do you agree that we should not consider further at this stage options that would change existing numbers?**

No. There has been a clear movement from 3, 4 and 5-digit local numbering to 6-digit local numbering and a move from 6-digit local numbering to 7-digit local numbering throughout the 1980s and 1990s. More recently London and Northern Ireland also successfully moved to a new system of using longer numbers and a shorter area code. This trend should continue as it provides the best long-term solution to numbering problems.

We *could have* had this simple system for geographic numbering:

Range	Service Type / Usage	Format	Area Code	Expected Usage
01	Geographic numbering	4+6	01ABC	Over 550 areas already in use.
02	Geographic numbering	3+7	02AB	100 potential 3-digit area codes available here.
03	Geographic numbering	2+8	03A	London and NI could have been here.

Number ranges at 010x, 0110, 0111, 0112, 0119, 021x, 022x, 025x, 026x and 027x are at present unused and could easily be utilised for 3+7 format numbering. Alternatively there is the whole of the 04xx range sat unused.

Additionally, areas with 5-digit area codes should be moved back to use their 1980s area code, albeit now with a extra “1” inserted immediately after the 0 trunk code. This preserves local dialling in all such areas, and gives the largest number of new numbers within those areas. This is the simplest and most long-term solution.

**Question 3: Do you agree that local solutions are appropriate based on our current forecasts of anticipated requirement of more numbers?**

Each area code should be assessed on its merit, but the usage of 0 and 1 as the initial digit of local numbers should **not** go ahead. There are far-reaching consequences in software systems. Removing local dialling will inconvenience and confuse large numbers of people. Additionally, the pool of numbers released by such a move is so small, that other options will have to be considered in a matter of years. Ofcom should be more bold and go for more longer term options, especially moving from 4+6 to 3+7 format in those areas which merit it.

**Question 4: Do you agree with our assessment of the options for providing new supplies of numbers in four-digit code areas, as presented in Section 4 and in Annex 3?**

In part, yes. It is clear that these places are running short of available numbers, but the proposed loss of local dialling and the use of overlay codes is confusing and not wanted. Ofcom should be more bold and go for more longer term options, especially moving from 4+6 to 3+7 format in those areas which merit it.

A change of format provides a very long-term solution to the problems.



**Question 5: Do you agree that closing local dialling followed, if necessary, by the introduction of an overlay code should be the preferred option for providing new supplies of numbers in four-digit areas that may need them? Please give reasons for your answers, and provide evidence where possible.**

No. There are plenty of other available options, options that will release a far greater number of local numbers within each area code.

The 5-digit area codes should be migrated back to their 1980s area codes. With the 5-digit codes migrated, the pressure is released from the associated 4-digit area codes within those “mixed” areas.

Other 4-digit areas such as Brighton and Bournemouth should move to a 3+7 number scheme in the 010x, 02xx or 04xx range.

**Question 6: Are there any other number supply measures that we should consider for four-digit areas?**

Yes. Moving to 3+7 formatting is a sensible option. Provision was made for this when the number ranges were reorganised in 1995. The 02 and 03 ranges were reserved for “future geographic expansion”. This move would give a ten-fold increase in the available numbers within each area, without loss of local dialling, and without resorting to overlay codes.

**Question 7: Do you agree that we should merge five-digit codes with four-digit codes to create new supplies in five-digit code areas that need them? Do you have any comment on our assessment of the impacts of the options we have considered? If so, please provide relevant evidence where possible.**

No. The supply so released is very small. Move the 5-digit area codes back to their 1980s codes. This will release a far bigger pool of numbers within each area code, and will preserve local dialling within each area code.

At present, the area code is always dialled when calling between these areas. This would continue, albeit with a new area code for each such area.

I think that local residents would have expected to move from 5-digit local numbering to 6-digit local numbering at some point in the future. When that happens, it would be an ideal time to also change the area code and release a large number of local numbers in all of those areas.

**Question 8: Are there any other numbers supply measures that we should consider for five-digit areas?**

Move the 5-digit area codes back to their 1980s allocations, Langholm changing from 013873 to 01541 for example. For all such affected areas, only the ABC digits need to change. The D digit of the new number could and should remain unchanged, (013873) 56789 becoming (015413) 56789 or (01541) 356789 for example.

**Question 9: Do you agree with our considerations and preliminary conclusions on how new supplies of numbers should be provided where they are required?**

No comment.

Question 10: Do you have any comments on how the implementation of number supply measures should be planned?

No comment.

Question 11: How long do you consider that CPs would need to plan the implementation of the preferred options for four- and five-digit areas?

No comment.

Question 12: If you are a CP, what costs do you consider that your company would incur if the preferred options for four- and five-digit areas were implemented?

Not applicable.

## Reducing the need for new supplies of geographic numbers

Question 13: Do you think that we should reserve a limited amount of numbers for allocation in blocks of 100 numbers in area codes where it is feasible to do so?

One factor not mentioned at all is that mobile operators are now offering direct-dial geographic telephone numbers to be allocated to a mobile telephone. This will see a large spike in demand for geographic numbers, and may well expose flaws in Ofcom's projected figures and reasoning.

Limiting supplies to 100 numbers at a time will multiply ten-fold Ofcom's work in allocating these number blocks, as well as pushing the allocations database size through the roof. Taken to its logical conclusion, there would be about five million such number blocks in the number plan.

A previous consultation proposed to move from 10K to 1K allocation blocks. At the time, C&W warned not to slice every 10K block up a long time ahead of the numbers within actually being issued to providers.

*“However, introducing conservation measures in these locations is a one-way step, meaning that the numbering scheme will be forever contaminated with these 1k allocations. Therefore, there has to be a very good reason for taking this step.”*

*“A 10k range should be set aside that will be used exclusively for 1k assignments. 1k assignments should not be made from other 10k ranges until such a time that this initial 10k range has exhausted.”*

See the comments on page 4 of this document:

[stakeholders.ofcom.org.uk/binaries/consultations/geo/responses/cw.pdf](https://stakeholders.ofcom.org.uk/binaries/consultations/geo/responses/cw.pdf)

However, that is exactly what has happened. The size of the s1\_code file has ballooned out of control, with thousands upon thousands of unallocated blocks listed. This has massively increased processing time for the data within this file.

Question 14: What criteria, if any, in addition to a ‘first-come first-served’ basis should be used for allocating such blocks of 100 numbers to providers?

No comment.



Question 15: Should the geographic extent of such allocations be limited to the seven areas likely to run out of numbers for allocation before 2015? (i.e. Blackpool (01253); Bournemouth (01202); Bradford (01274); Brighton (01273); Derby (01332); Langholm (013873) and Middlesbrough (01642))?

These areas should be moving to a 3+7 numbering scheme. Such a move would increase the number supply ten-fold. Allocating numbers in blocks of 100 increases Ofcom workload while sending the size of the numbering database sky-high. At the same time it is a short-term solution from which there is no going back. It should be avoided.

Question 16: Do you consider that there are any technical obstacles currently to the effective sharing of number blocks by CPs and to sub-allocation? How could we usefully address those obstacles?

No comment.

Question 17: What are your views on the concept, practicalities and implications of introducing a reservation system for geographic numbers?

No comment.

Question 18: Do you have any comments on our proposed scope of additional audits?

No comment.

## Charging for geographic numbers

Question 19: Do you agree with the high level objectives proposed for the charging regime?

No comment, other than it's another increase in Ofcom's already-stretched workload.

Question 20: Do you envisage that sub-allocation would increase if number charging is introduced? Do you have any comments on our analysis of barriers to successful use of sub-allocation?

No comment.

Question 21: Do you agree with our view on how charges could be set? If not, please propose an alternative approach with supporting evidence.

No comment.

Question 22: Do you agree with our preferred option for charging for geographic numbers? (i.e. Option 2 Pilot scheme: Charge a flat rate of 10p per number per annum in area codes with 100 or fewer blocks of 1,000 numbers (no charge for other areas). If not, please state your reasoned preference.

No comment.

Question 23: Do you agree that the threshold for including an area code within the pilot scheme should be 100 or fewer 1,000-number blocks remaining to allocate? If not, please state your preferred threshold and reasons.

No comment.

Question 24: Do you agree with the proposed level of the charge (i.e. 10p per number per annum)?

No comment.

Question 25: Are there any other incremental administrative costs likely to be incurred by CPs in relation to number charging? Can you estimate the magnitude of any such costs?

No comment.

Question 26: Do you agree that we should not pursue a policy of charging for golden geographic numbers? If you do not agree, please provide your reasoning.

No comment.

Cost recovery for number charges when the CP using the number is different from the range holder

Question 27: Do you have any views on the principles for cost recovery? Do you have any views on the cost recovery mechanism? Do you agree with the preferred approach?

No comment.

## Appendix A: The Brampton 016977 area code.

It's now almost eight years since BT first pointed out that “Brampton is 016977, not 01697” in their response to the Of tel 2003 consultation document containing the implementation details for a new National Telephone Number Plan. However, Ofcom's data has still not been properly amended to reflect that fact.

*“01697 – Brampton should be 016977; not 01697.”*

See the comments on page 7 of this document:

[www.btcl.com/Thegroup/RegulatoryandPublicaffairs/Consultativeresponses/Of tel/2003/Nationaltelephonenumberingplan/response.pdf](http://www.btcl.com/Thegroup/RegulatoryandPublicaffairs/Consultativeresponses/Of tel/2003/Nationaltelephonenumberingplan/response.pdf)

Some of the information in Ofcom's file was correct in 2003-2004, but all of it was incorrect from 2004 to 2010. In 2011, half of it is correct, and half is not, as shown in the following table.

Correct allocation details					Of tel “sabc_de.txt”				Ofcom “s1_code.txt”									
SABC	DE	Netw	Form	Number Range	2000	2001	2002	2003	2003	2004	2005	2006	2007	2008	2009	2010	2010	2011
1697	70	NDO	0+10	016977 0xxxx										4+6	4+6	4+6	4+6	0+10
1697	71	DSC	0+10	016977 1xxxx								4+6	4+6	4+6	4+6	4+6	4+6	4+6
1697	72	BT	5+4	(016977) 2xxx	4+5	4+5	4+5	5+4	5+4	5+4	4+4	4+4	4+4	4+4	4+4	4+4	5+4	5+4
1697	73	BT	5+4	(016977) 3xxx	4+5	4+5	4+5	5+4	5+4	5+4	4+4	4+4	4+4	4+4	4+4	4+4	5+4	5+4
1697	74	BT	5+5	(016977) 4xxxx	4+6	4+6	4+6	4+6	4+6	4+6	4+6	4+6	4+6	4+6	4+6	4+6	5+5	5+5
1697	75	BT	5+5	(016977) 5xxxx	4+6	4+6	4+6	4+6	4+6	4+6	4+6	4+6	4+6	4+6	4+6	4+6	4+6	5+5
1697	76	YCL	5+5	(016977) 6xxxx						4+6	4+6	4+6	4+6	4+6	4+6	4+6	4+6	4+6
1697	77	TTNC	5+5	(016977) 7xxxx								4+6	4+6	4+6	4+6	4+6	4+6	4+6
1697	78	Oran	5+5	(016977) 8xxxx								4+6	4+6	4+6	4+6	4+6	4+6	4+6
1697	79	Inclar	5+5	(016977) 9xxxx								4+6	4+6	4+6	4+6	4+6	4+6	4+6

Brampton has two area codes: 016977 for 5-digit and 4-digit numbers and 01697 for 6-digit numbers beginning 2, 5, 6, 8, and 9.

## Appendix B: Improperly documented changes since 2003.

Before Ofcom starts making further changes to the numbering plan, it would be especially handy if changes made in preceding years were properly and accurately documented. In particular, there are many differences between the NTNP PDF file and the SABC CSV file. In the NTNP PDF file these are mostly spelling mistakes for numerous place names. In the SABC CSV file these include spelling mistakes, and other errors.

Additionally, there are several area codes listed with the same name, leading to confusion. BT and/or C&W advised of alternative naming in 2003, but their suggestions were not implemented.

Many of the changes proposed and made by Of tel in 2003 are still not correctly documented in the NTNP PDF file or in the SABC CSV file (or both).

The multi-page table below shows a summary of all of the changes proposed by Of tel in 2003, the detailed responses from BT and C&W, and the details of all changes made to both NTNP and SABC since that time. It also lists the many errors still present in this data.

Ofcom currently believe the following area code names were changed in 2003:

1248, 1268, 1275, 1276, 1291, 1293, 1306, 1322, 1327, 1334, 1344, 1354, 1356, 1375, 1384, 1394, 1425, 1438, 1442, 1451, 1454, 1461, 1470, 1471, 1477, 1478, 1485, 1488, 1489, 1491, 1543, 1561, 1562, 1582, 1588, 1598, 1661, 1668, 1675, 1680, 1681, 1684, 1688, 1689, 1695, 1707, 1720, 1727, 1737, 1744, 1753, 1770, 1784, 1806, 1821, 1856, 1870, 1877, 1883, 1885, 1889, 1895, 1908, 1920, 1922, 1926, 1928, 1932, 1952, 1953, 1963, 1980, 1983, 1984, 1992.

The list of supposed changes was found at [www.ofcom.org.uk/static/numbering/readme.txt](http://www.ofcom.org.uk/static/numbering/readme.txt) but that list is not correct.

The names for several of the above codes were not altered in 2003. Additionally, the names for several other area codes were altered in the Of tel 2003 numbering review but are not mentioned in the above list.

The table on the following six pages correctly lists what has happened in the time period from 2003 to 2011.

Code	SABC March 2003 <sup>[1]</sup>	Oftel 2003 Proposal <sup>[2]</sup>	BT 2003 comments <sup>[3]</sup>	C&W 2003 comments <sup>[4]</sup>	NTNP edits 2003 onwards	SABC edits 2003 onwards	Status 2011
117	Bristol (Inner - See also 1275)	Bristol	No comment.	No comment.	Bristol	Bristol	OK
1233	Ashford	Ashford	No comment.	Could cause confusion. Suggest Ashford (Kent).	Ashford (Kent)	Ashford (2003- ). Should be Ashford (Kent).	NTNP OK. Error in SABC. Should be Ashford (Kent).
1248	Bangor (N Wales)	Bangor	Suggest using Bangor (Wales).	Clashes with 28 91. Suggest Bangor (Wales).	Bangor (Gwynedd)	Bangor (Gwynedd)	OK
1260	Congleton (See also 1477)	Congleton	No comment.	No comment.	Congleton	Congleton	OK
1268	Stanford-le-Hope [See also 1375]	Canvey Island	Suggest using Basildon.	Consider using Basildon.	Basildon	Basildon	OK (using BT and C&W suggested name).
1271	Barnstable[sic]	Barnstable[sic]	No comment.	No comment.	Barnstable (2003- ). Should be Barnstaple.	Barnstable (2003-2010) then corrected to Barnstaple in 2010.	Error in NTNP. SABC now OK. Should be Barnstaple.
1275	Bristol (Outer – See also 117)	Clevedon	Clevedon. No comment.	Clevedon. Agree.	Clevedon	Clevedon	OK
1276	Ascot (See also 1344)	Camberley	Camberley. No comment.	Camberley. Agree.	Camberley	Camberley	OK
1284	Bury-St-Edmunds[sic]	Bury-St-Edmunds[sic]	No comment.	No comment.	Bury-St-Edmunds (2003- ). Should be Bury St Edmunds.	Bury-St-Edmunds (2003-2010) then corrected to Bury St Edmunds in 2010.	Error in NTNP. SABC now OK. Should be Bury St Edmunds.
1286	Caernarvon[sic]	Caernarvon[sic]	No comment.	No comment.	Caernarvon (2003- ). Should be Caernarfon.	Caernarvon (2003-2010) then corrected to Caernarfon in 2010.	Error in NTNP. SABC now OK. Should be Caernarfon.
1289	Berwick-on-Tweed[sic]	Berwick-on-Tweed[sic]	No comment.	No comment.	Berwick-on-Tweed (2003- ). Should be Berwick-upon-Tweed.	Berwick-on-Tweed (2003-2010) then corrected to Berwick-upon-Tweed in 2010.	Error in NTNP. SABC now OK. Should be Berwick-upon-Tweed.
1291	Shirenewton	Chepstow	Chepstow. No comment.	Chepstow. Agree.	Chepstow	Chepstow	OK
1293	Newdigate (See also 1306)	Crawley	Crawley. No comment.	Crawley. Agree.	Crawley	Crawley	OK
1294	Ardrossan	Ardrossan	Ardrossan. No comment.	Consider using Irvine.	Ardrossan	Ardrossan	OK
1306	Newdigate (See also 1293)	Dorking	Dorking. No comment.	Dorking. Agree.	Dorking	Dorking	OK
1322	Swanley (See also 1959 & 1689)	Dartford	Dartford. No comment.	Dartford. Agree.	Dartford	Dartford	OK
1327	Weedon	Daventry	Daventry. No comment.	Daventry. Agree.	Daventry	Daventry	OK
1329	Fareham (See also 1489)	Fareham	No comment.	No comment.	Fareham	Fareham	OK
1333	Peat Inn (See also 1334)	Peat Inn	Peat Inn. No comment.	Peat Inn. Agree.	Peat Inn (2003- )	Peat Inn (2003- )	Leven (Fife) would be a better name for 1333. Peat Inn is in 1334.
1334	Peat Inn [See also 1333]	St Andrews	St Andrews. No comment.	St Andrews. Agree.	St Andrews (2003- )	St Andrews (2003- )	In renaming 1334 Ofcom renamed the wrong area.
1340	Craigellachie	Craigellachie	No comment.	No comment.	Craigellachie	Craigellachie	OK (Aberlour may be a better name, no exchange in Craigellachie).
1344	Ascot (See also 1276)	Bracknell	Bracknell. No comment.	Bracknell. Agree.	Bracknell	Bracknell	OK
1354	Doddington	Chatteris	Chatteris. No comment.	Chatteris. Agree.	Chatteris	Chatteris	OK

Code	SABC March 2003 <sup>[1]</sup>	Ofel 2003 Proposal <sup>[2]</sup>	BT 2003 comments <sup>[3]</sup>	C&W 2003 comments <sup>[4]</sup>	NTNP edits 2003 onwards	SABC edits 2003 onwards	Status 2011
1355	East Kilbride (See also 1357)	Kilbride	Consider East Kilbride for both.	Suggest using East Kilbride.	East Kilbride	East Kilbride	OK
1356	Brechin	Brechin	No comment.	No comment.	Brechin	Brechin	OK. Listed by Ofcom as changing name in 2003 but name not actually changed.
1357	East Kilbride (See also 1355)	East Kilbride	Consider East Kilbride for both.	Suggest using Strathaven.	Strathaven	Strathaven	OK (using C&W suggested name).
1375	Stanford-le-Hope [See also 1268]	Stanford-le-Hope	Suggest using Grays Thurrock instead of Stanford Le Hope[sic].	Suggest using Grays Thurrock.	Grays Thurrock	Grays Thurrock	OK (using BT and C&W suggested name).
1384	Stourbridge (See also 1562)	Dudley	Dudley. No comment.	Dudley. Agree.	Dudley	Stourbridge (2003-2007) then corrected to Dudley in 2007.	NTNP OK. SABC now OK.
1388 5	Stanhope (5) and Bishop Auckland	Stanhope (4) and Bishop Auckland	01388 contains two separate charge groups: 01388 and 01388 5. Stanhope sub-reference needs correcting: (5) not (4).	No comment.	Stanhope (5)	1388 5 Stanhope	OK (The Stanhope exchange is located in Eastgate).
1394	Shottisham	Felixstowe	Felixstowe. No comment.	Felixstowe. Agree.	Felixstowe	Felixstowe	OK
1425	Burley	Ringwood	Ringwood. No comment.	Ringwood. Agree.	Ringwood	Ringwood	OK
1437 2,3,4,5	Clynderwen	Clynderwen	No comment.	No comment.	Clynderwen	Clynderwen	OK (The correct Welsh spelling is Clunderwen).
1438	Knebworth (See also 1920)	Knebworth	Suggest using Stevenage.	Suggest using Stevenage.	Stevenage	Stevenage	OK (using BT and C&W suggested name).
1442	Markyate (See also 1582)	Hemel Hempstead	Hemel Hempstead. No comment.	Hemel Hempstead. Agree.	Hemel Hempstead	Hemel Hempstead	OK
1451	Bourton-on-the-Water	Stow-on-the-Wold	Stow-on-the-Wold. No comment.	Stow-on-the-Wold. Agree.	Stow-on-the-Wold	Stow-on-the-Wold	OK
1454	Rangeworthy	Chipping Sodbury	Chipping Sodbury. No comment.	Chipping Sodbury. Agree.	Chipping Sodbury	Chipping Sodbury	OK
1461	Annan	Gretna	Gretna. No comment.	Gretna. Agree.	Gretna	Gretna	OK
1470	Edinbane	Isle of Skye – Edinbane	Isle of Skye – Edinbane. No comment.	Isle of Skye - Edinbane. Agree.	Isle of Skye – Edinbane	Isle of Skye - Edinbane	OK
1471	Broadford	Isle of Skye - Broadford	Isle of Skye – Broadford. No comment.	Isle of Skye - Broadford. Agree.	Isle of Skye – Broadford	Isle of Skye - Broadford	OK
1477	Congleton (See also 1260)	Holmes Chapel	Holmes Chapel. No comment.	Holmes Chapel. Agree.	Holmes Chapel	Holmes Chappel (2003-2007) then corrected to Holmes Chapel in 2007.	NTNP OK. SABC now OK.
1478	Portree	Isle of Skye - Portree	Isle of Skye – Portree. No comment.	Isle of Skye - Portree. Agree.	Isle of Skye - Portree	Isle of Skye - Portree	OK
1482	Hull	Hull	No comment.	No comment.	Hull	Hull	Kingston-upon-Hull would be a better name.
1485	Docking	Hunstanton	Hunstanton. No comment.	Hunstanton. Agree.	Hunstanton	Hunstanton	OK
1488	Great Shefford	Hungerford	Hungerford. No comment.	Hungerford. Agree.	Hungerford	Hungerford	OK
1489	Fareham (See also 1329)	Bishops Waltham	Bishops Waltham. No comment.	Bishops Waltham. Agree.	Bishops Waltham	Bishops Waltham	OK
1491	Nettlebed	Henley-on-Thames	Henley-on-Thames. No comment.	Henley-on-Thames. Agree.	Henley-on-Thames	Henley on Thames (2003-2010) then corrected to Henley-on-Thames in 2010.	NTNP OK. SABC now OK.

Code	SABC March 2003 <sup>[1]</sup>	Oftel 2003 Proposal <sup>[2]</sup>	BT 2003 comments <sup>[3]</sup>	C&W 2003 comments <sup>[4]</sup>	NTNP edits 2003 onwards	SABC edits 2003 onwards	Status 2011
1507 4	Alford (Lincs)	Alford	No comment.	Clashes with 1975. Suggest Alford (Lincs).	Alford (Lincolnshire) (2003) then corrected to Alford (Lincs) later in 2003.	Alford (Lincs)	NTNP now OK. SABC OK.
1507 5	Spilsby	Spilsby	01507 - contains two rather than three charge groups. 01507 5, like the rest of the range bar Alford, is Louth, and not Spilsby - Spilsby is 01790. The reference to Spilsby should be deleted.	No comment.	Spilsby removed (2003-2005) then added again in 2005.	Spilsby (2003- )	Horncastle would be a better name for 1507 2 and 1507 5. Spilsby is 1790.
15395	Grange over Sands[sic]	Grange-Over-Sands[sic]	No comment.	Grange-over-sands. No comment.	Grange-Over-Sands (2003- ). Should be Grange-over-Sands.	Grange over Sands (2003-2010) then corrected to Grange-over-Sands in 2010.	Error in NTNP. SABC now OK. Should be Grange-over-Sands.
1543	Burntwood	Cannock	Cannock. No comment.	Cannock. Agree.	Cannock	Cannock	OK
1559	Llandyssul[sic]	Llandyssul[sic]	No comment.	No comment.	Llandyssul (2003- ). Should be Llandysul.	Llandyssul (2003-2010) then corrected to Llandysul in 2010.	Error in NTNP. SABC now OK. Should be Llandysul.
1561	Fordoun	Laurencekirk	Laurencekirk. No comment.	Laurencekirk. Agree.	Laurencekirk	Laurencekirk	OK
1562	Stourbridge (See also 1384)	Stourbridge	Stourbridge. No comment.	Consider using Kidderminster.	Kidderminster	Kidderminster	OK (using C&W suggested name).
1582	Markyate (See also 1442)	Luton	Luton. No comment.	Luton. Agree.	Luton	Luton	OK
1588	Craven Arms	Bishops Castle	Bishops Castle. No comment.	Bishops Castle. Agree.	Bishops Castle	Bishops Castle	OK
1594	Lydney	Lydney	Lydney. No comment.	Consider using Dean.	Lydney	Lydney	OK
1598	Brayford	Lynton	Lynton. No comment.	Consider using Barnstable[sic] [Bad idea].	Lynton	Lynton	OK
1603	Norwich_	Norwich	No comment.	No comment.	Norwich	Norwich_ (2000- ). Should be Norwich.	NTNP OK. Trailing space in SABC still not removed after more than a decade!
1636	Newark	Newark	No comment.	No comment.	Newark	Newark	Newark-on-Trent would be a better name.
1637	Newquay [See also 1841]	Newquay	No comment.	No comment.	Newquay	Newquay	OK
1661	Wylam	Prudhoe	Prudhoe. No comment.	Prudhoe. Agree.	Prudhoe	Prudhoe	OK
1668	Belford	Bamburgh	Bamburgh. No comment.	Consider using Wooler.	Bamburgh	Bamburgh	OK
1675	Meriden (See also 1676)	Coleshill	Coleshill. No comment.	Coleshill. Agree.	Coleshill	Coleshill	OK
1676	Meriden (See also 1675)	Meriden	Meriden. No comment.	Meriden. Agree.	Meriden	Meriden	OK
1680	Craignure	Isle of Mull – Craignure	Isle of Mull – Craignure. No comment.	Isle of Mull – Craignure. Agree.	Isle of Mull – Craignure	Isle of Mull - Craignure	OK
1681	Fionnphort	Isle of Mull – Fionnphort	Isle of Mull – Fionnphort. No comment.	Isle of Mull – Fionnphort. Agree.	Isle of Mull – Fionnphort	Isle of Mull - Fionnphort	OK
1684	Hanley Swan	Hanley Swan	Suggest using Tewkesbury.	Suggest using Malvern.	Malvern	Malvern	OK (using C&W suggested name).
1686 4	Llanidloes	Llandiloes[sic]	No comment.	Spelling error. Use Llanidloes.	Llanidloes	Llanidloes	OK. Spelling error fixed in 2003.

Code	SABC March 2003 <sup>[1]</sup>	Oftel 2003 Proposal <sup>[2]</sup>	BT 2003 comments <sup>[3]</sup>	C&W 2003 comments <sup>[4]</sup>	NTNP edits 2003 onwards	SABC edits 2003 onwards	Status 2011
1688	Tobermory	Isle of Mull – Tobermory	Isle of Mull – Tobermory. No comment.	Isle of Mull – Tobermory. Agree.	Isle of Mull – Tobermory	Isle of Mull - Tobermory	OK
1689	Swanley (See also 1322 & 1959)	Orpington	Orpington. No comment.	Orpington. Agree.	Orpington	Orpington	OK
1695	Skelmersdale (Rainford) [See also 1744]	Skelmersdale	Skelmersdale. No comment.	Skelmersdale. Agree.	Skelmersdale	Skelmersdale	OK
1697	Brampton	Brampton	Brampton should be 016977, not 01697.	No comment.	Correctly listed as 016977 (2003-2004) then incorrectly listed as 01697 (2005- ). Should be 016977.	Correctly listed as 16977 (2001-2002) then incorrectly listed as 1697 (2003- ). Should be 16977.	16977 is a five-digit area code. 16977 uses 5+4 and 5+5 format numbering.
1707	Colney Heath (See also 1727)	Welwyn Garden City	Suggest using Potters Bar.	Consider using Potters Bar.	Welwyn Garden City	Welwyn Garden City	OK (BT and C&W suggested Potters Bar).
1720	Scillonias	Isles of Scilly	Isles of Scilly. No comment.	Isles of Scilly. Agree.	Isles of Scilly	Isles of Scilly	OK
1727	Colney Heath (See also 1707)	St Albans	St Albans. No comment.	St Albans. Agree.	St Albans	St Albans	OK
1737	Merstham (See also 1883)	Redhill	Redhill. No comment.	Redhill. Agree.	Redhill	Redhill	OK
1744	Rainford (See also 1695)	St Helens	St Helens. No comment.	St Helens. Agree.	St Helens	St Helens	OK
1753	Iver (See also 1895 & 1784)	Slough	Slough. No comment.	Slough. Agree.	Slough	Slough	OK
1770	Brodict	Isle of Arran	Isle of Arran. No comment.	Isle of Arran. Agree.	Isle of Arran	Isle of Arran	OK
1784	Iver (See also 1895 & 1753)	Staines	Staines. No comment.	Staines. Agree.	Staines	Staines	OK
1790	Spilsby (See also 1507)	Spilsby	Spilsby. No comment.	Spilsby. Agree.	Spilsby	Spilsby	OK
1806	Voe	Shetland	Shetland. No comment.	Shetland. Agree.	Shetland	Shetland	OK
1807	Ballindalloch	Ballindalloch	No comment.	No comment.	Ballindalloch	Ballindalloch	OK
1821	Coupar Angus (See also 1828)	Kinross	Consider using Kinrossie or Errol. Kinross is 01577 and many miles away.	Kinross[sic]. Agree [See BT comments].	Kinrossie	Kinrossie	OK (using BT suggested name).
1828	Coupar Angus (See also 1821)	Coupar Angus	Coupar Angus. No comment.	Coupar Angus. Agree.	Coupar Angus	Coupar Angus	OK
1832	Clopton	Clopton	Clopton. No comment.	Suggest using Oundle.	Clopton	Clopton	OK
1841	Newquay [See also 1637]	Newquay	No comment.	Consider using Padstow.	Newquay (2003- )	Newquay (2003- )	Clashes with 1637. C&W suggested Padstow in 2003.
1843	Thanet	Thanet	No comment.	No comment.	Thanet	Thanet	OK (Thanet is a region not a town).
1847	Thurso / Tongue	Thurso / Tongue	01847 would be better shown in the same way as 01339. Use 01847 Thurso (8) and Tongue (6) as these are non-adjacent charge groups.	No comment.	Thurso [5,8] / Tongue (6) (2003-2005) then changed to Thurso (2,3,4,5,8) / Tongue (6,7,9) in 2005.	Thurso (8) / Tongue (6) (2002) then Thurso (5,8) / Tongue (6) (2003) then Thurso (2,3,4,5,8) / Tongue (6,7,9) 2004 onwards.	OK
1851 7,8	Stornoway	Stornaway[sic]	No comment.	Spelling error. Use Stornoway.	Stornoway	Stornoway	OK. Spelling error fixed in 2003.

Code	SABC March 2003 <sup>[1]</sup>	Ofel 2003 Proposal <sup>[2]</sup>	BT 2003 comments <sup>[3]</sup>	C&W 2003 comments <sup>[4]</sup>	NTNP edits 2003 onwards	SABC edits 2003 onwards	Status 2011
1856	Kirkwall	Orkney	Orkney. No comment.	Orkney. Agree.	Orkney	Orkney	OK
1864	Abington	Abington	No comment.	No comment.	Abington	Abington	OK (The Abington exchange is located in Crawford).
1870	Benbecula	Isle of Benbecula	Isle of Benbecula. No comment.	Isle of Benbecula. Agree.	Isle of Benbecula	Isle of Benbecula	OK
1877	Trossachs	Callandar[sic]	No comment.	Callandar[sic]. Agree.	Callandar (2003- ). Should be Callander.	Callander	Error in NTNP. SABC OK. Should be Callander.
1878	Lohboisdale[sic]	Lochboisdale	Lochboisdale. No comment.	Lochboisdale. Agree.	Lochboisdale	Lohboisdale (2003-2005) then corrected to Lochboisdale in 2005.	NTNP OK. SABC now OK.
1883	Merstham (See also 1737)	Caterham	Caterham. No comment.	Caterham. Agree.	Caterham	Caterham	OK
1885	Bromyard (See also 1886)	Pencombe	No comment.	Suggest using Bromyard.	Pencombe (2003- )	Pencombe (2003- )	In renaming 1885 Ofcom renamed the wrong area.
1886	Bromyard (See also 1885)	Bromyard	No comment.	Suggest using Leigh Sinton.	Bromyard (2003- )	Bromyard (2003- )	Knightwick or Leigh Sinton would be a better name for 1886. Bromyard businesses use 1885.
1889	Dapple Heath	Rugely[sic]	No comment.	Rugely[sic]. Agree.	Rugely (2003- ). Should be Rugeley.	Rugeley	Error in NTNP. SABC OK. Should be Rugeley.
1890 6	n/a	n/a	No comment.	No comment.	Ayton (7) (2003-2004) then changed to Ayton (5,6,7,9) in 2005.	Coldstream (2003-2005) then corrected to Ayton in 2005.	NTNP OK. SABC now OK.
1895	Iver (See also 1753 & 1784)	Uxbridge	Uxbridge. No comment.	Uxbridge Agree.	Uxbridge	Uxbridge	OK
1902	Wolverhampton (See also 1922)	Wolverhampton	No comment.	No comment.	Wolverhampton	Wolverhampton	OK
1908	Wolverton	Milton Keynes	Milton Keynes. No comment.	Milton Keynes. Agree.	Milton Keynes	Milton Keynes	OK
191 2,4,6,8	Tyneside	Tyneside	No comment.	No comment.	Tyneside	Tyneside	Newcastle-upon-Tyne would be a better name.
191 5	Wearside	Sunderland	Sunderland. No comment.	Sunderland. Agree.	Sunderland	Wearside (2003-2007) then corrected to Sunderland in 2007.	NTNP OK. SABC now OK.
1920	Knebworth (See also 1438)	Ware	Ware. No comment.	Ware. No comment.	Ware	Ware	OK
1922	Wolverhampton (See also 1902)	Walsall	Walsall. No comment.	Walsall. No comment.	Walsall	Walsall	OK
1926	Leamington Spa	Warwick	Warwick. No comment.	Suggest Leamington Spa.	Warwick	Warwick	OK
1928	Frodsham	Runcorn	No comment.	Runcorn. Agree.	Runcorn	Runcorn	OK
1931	Shap	Bampton	Suggest continuing to use Shap.	Suggest Shap.	Shap	Shap	OK (using BT and C&W suggested name).
1932	Esher (See also 1372)	Esher	No comment.	Clashes with 1372. Suggest Weybridge.	Weybridge	Weybridge	OK (using C&W suggested name).
1934	Weston-Super-Mare[sic]	Weston-Super-Mare[sic]	No comment.	No comment.	Weston-Super-Mare (2003- ). Should be Weston-super-Mare.	Weston-Super-Mare (2003- ). Should be Weston-super-Mare.	Error in NTNP. Error in SABC. Should be Weston-super-Mare.
19467	Gosforth (Mixed)	Gosforth	No comment.	Gosforth. Agree.	Gosforth	Gosforth (Mixed) (2003- ). Should be Gosforth.	NTNP OK. Error in SABC. Should be Gosforth.



Code	SABC March 2003 <sup>[1]</sup>	Ofel 2003 Proposal <sup>[2]</sup>	BT 2003 comments <sup>[3]</sup>	C&W 2003 comments <sup>[4]</sup>	NTNP edits 2003 onwards	SABC edits 2003 onwards	Status 2011
1952	Wellington	Telford	Telford. No comment.	Telford. No comment.	Telford	Telford	OK
1953	Attleborough	Wymondham	Wymondham. No comment.	Wymondham. No comment.	Wymondham	Wymondham	OK
1959	Swanley (See also 1322 & 1689)	Westerham	Westerham. No comment.	Consider Swanley or Biggin Hill.	Westerham	Swanley (2003-2007) then corrected to Westerham in 2007.	NTNP OK. SABC now OK.
1963	Templecombe	Wincanton	Wincanton. No comment.	Wincanton. Agree.	Wincanton	Wincanton	OK
1975 5	Alford (Aberdeen)	Alford	No comment.	Clashes with 1507. Suggest Alford (Scotland).	Alford (Aberdeenshire) (2003-2005) then corrected to Alford (Aberdeen) in 2005.	Alford (Aberdeen)	NTNP now OK. SABC OK.
1980	Bulford Camp	Amesbury	Amesbury. No comment.	Amesbury. Agree.	Amesbury	Amesbury	OK
1983	Ryde	Isle of Wight	Isle of Wight. No comment.	Isle of Wight. Agree.	Isle of Wight	Isle of Wight	OK
1984	Stogumber	Watchet	Watchet. No comment.	Watchet. Agree.	Watchet	Watchet	OK (The Watchet exchange is located in Williton).
1987	n/a	n/a	No comment.	No comment.	Ebbsfleet	Ebbsfleet	OK. New area code introduced in 2008.
1992	Hoddesdon	Lea Valley	Suggest continuing to use Hoddesden.	Consider Waltham Cross.	Lea Valley	Lea Valley	OK (BT and C&W each suggested a different name).
1994	St Clears	Whitland	Suggest continuing to use St Clears.	Suggest using St Clears.	St Clears	St Clears	OK (using BT and C&W suggested name).
28 10,11	Nothern[sic] Ireland National Dialling	n/a	No comment.	No comment.	n/a	Nothern Ireland National Dialling (2003-2010) then corrected to Northern Ireland National Dialling in 2010.	SABC now OK.
28 40	Banbridge	Bambridge[sic]	Spelling error. Use Banbridge.	Spelling error. Use Banbridge.	Banbridge	Banbridge	OK. Spelling error fixed in 2003.
28 43	Newcastle	Newcastle	No comment.	Could cause confusion. Suggest Newcastle (Co Down).	Newcastle (Co. Down)	Newcastle (2003-2010) then corrected to Newcastle (Co. Down) in 2010.	NTNP OK. SABC now OK (using BT suggested name).
28 66	Enniskillen	Enniskilen[sic]	Spelling error. Use Enniskillen.	Spelling error. Use Enniskillen.	Enniskillen	Enniskillen	OK. Spelling error fixed in 2003.
28 81	Newtownstewart	Newtonstewart[sic]	Spelling error. Use Newtownstewart.	Spelling error. Use Newtownstewart.	Newtownstewart	Newtownstewart	OK. Spelling error fixed in 2003.
28 90	Belfast City	Belfast	Belfast. No comment.	Belfast. Agree.	Belfast	Belfast City (2003- ). Should be Belfast.	NTNP OK. Error in SABC. Should be Belfast.
28 91	Bangor	Bangor	No comment.	Clashes with 1248. Suggest Bangor (Co Down).	Bangor (Co. Down)	Bangor (2003-2010) then corrected to Bangor (Co. Down) in 2010.	NTNP OK. SABC now OK.

URLs for documents cited within the column headings in the above table:

[1] [www.ofcom.org.uk/static/archive/ofel/ind\\_info/numbering/download.htm](http://www.ofcom.org.uk/static/archive/ofel/ind_info/numbering/download.htm)

[2] [www.ofcom.org.uk/static/archive/ofel/publications/numbering/2003/ntnp0303.pdf](http://www.ofcom.org.uk/static/archive/ofel/publications/numbering/2003/ntnp0303.pdf)

[3] [www.ofcom.org.uk/static/archive/ofel/publications/responses/2003/ntnp0303/bt.pdf](http://www.ofcom.org.uk/static/archive/ofel/publications/responses/2003/ntnp0303/bt.pdf)

[4] [www.ofcom.org.uk/static/archive/ofel/publications/responses/2003/ntnp0303/c&w.pdf](http://www.ofcom.org.uk/static/archive/ofel/publications/responses/2003/ntnp0303/c&w.pdf)

## Appendix C: Errata.

### C.1 URLs for Oftel and Ofcom Documents

Oftel's archived documents can be found at:

- [www.ofcom.org.uk/static/archive/oftel/publications/1995\\_98/#Numbering](http://www.ofcom.org.uk/static/archive/oftel/publications/1995_98/#Numbering)
- [www.ofcom.org.uk/static/archive/oftel/publications/1999/#Numbering](http://www.ofcom.org.uk/static/archive/oftel/publications/1999/#Numbering)
- [www.ofcom.org.uk/static/archive/oftel/publications/numbering/](http://www.ofcom.org.uk/static/archive/oftel/publications/numbering/)

Ofcom's older documents were found via: [web.archive.org/](http://web.archive.org/) including the documents previously located at:

- [www.ofcom.org.uk/telecoms/ioi/numbers/](http://www.ofcom.org.uk/telecoms/ioi/numbers/)
- [www.ofcom.org.uk/telecoms/ioi/numbers/numbers\\_administered/](http://www.ofcom.org.uk/telecoms/ioi/numbers/numbers_administered/)

Ofcom's current documents can be found at:

- [stakeholders.ofcom.org.uk/telecoms/numbering/](http://stakeholders.ofcom.org.uk/telecoms/numbering/)
- [www.ofcom.org.uk/static/numbering/](http://www.ofcom.org.uk/static/numbering/)

### C.2 Acknowledgements

Map extracts used by kind permission of the *BT Regulatory Affairs* department.

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Date Printed : 28 / 10 / 10	
Revision Date : 22 / 07 / 05	
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