

Ofcom's Telephone Numbering Data

Problems and Remedies

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Comments on Ofcom's Telephone Numbering Data

1.1 – The 0191 area code

numplan280710.pdf

Your recent proposal is to activate three new local number ranges within the (0191) area code.

- (0191) 7 Tyneside, in addition to 2, 4 and 6;
- (0191) 8 Sunderland, in addition to 5;
- (0191) 9 Durham, in addition to 3.

First off, it's good to see that geographic significance of number is still considered to be a factor in new allocations.

However, the new allocations would likely be a lot easier to remember if:

- Tyneside uses 2, 4, 6, **8**;
- Sunderland uses 5, **9**;
- Durham uses 3, **7**;

as that gives some sort of “pattern” to the allocations.

It is a shame that the earlier scheme, originally using “2” for “North Tyneside” and “4” for “South Tyneside”, was broken when users in North Tyneside started to be allocated numbers from the South Tyneside “4” blocks. Had that not happened, the scheme could have been expanded such that “2” and “6” were used by North Tyneside, and “4” and “8” were used by South Tyneside.

1.2 – Area code naming errors

sabc.txt / numplan280710.pdf

Regarding the UK **numbering plan**, it is important the information is clearly presented, is as accurate as possible and is kept up-to-date. That said, the current numbering plan contains a number of other significant typos not mentioned so far.

01271	Barnst able		01482	Hull
01284	Bury- St -Edmunds		01559	Llandy ss ul
01286	Caernar v on		01636	Newark
01289	Berwick- on -Tweed		01934	Weston- Super -Mare

In the numbering plan, there are several listed place names containing a spelling mistake or naming error.

The errors shown above are also duplicated in the **sabc.txt** file. The correct spelling for each is detailed in the table below:

01271	Barnst ap le		01482	Kingston-upon-Hull
01284	Bury St Edmunds		01559	Llandysul
01286	Caernar f on		01636	Newark-on-Trent
01289	Berwick- upon -Tweed		01934	Weston- super -Mare

There are several other problems to consider. They are mentioned later in this report.

1.3 – Accuracy of other data

The weekly updates to the number allocation data published by Ofcom are certainly timely, but there are a number of long standing errors, and various inconsistencies and several typos within the data. This would be an ideal time to also review those problems and fix all of them. Some of those errors also reflect back into the Numbering Plan, leading to omission or ambiguity there. These are covered in detail, later in this document.

In the national numbering plan ([numplan280710.pdf](#)) there are details of several important definitions and restrictions.

On page 5:

Definitions and Interpretation

'Local Dialling' means the ability for an End-User to contact a Called Party within the same Geographic Area Code area by dialling only the Local Number;

On page 16:

Part B: Restrictions for the Adoption of Telephone Numbers

Local Dialling

B3.1.3 Geographic Numbers shall not be Adopted or otherwise used other than where End-Users from Geographic Numbers in the same geographic area as the Called Party are able to use only the Subscriber Number.

What this says, is that all local numbers within an area shall be able to be called simply by using the local number part, and omitting the area code part. By definition, “local dialling” always begins with the “**B**” digit in “2+8” number format areas; the “**C**” digit in “3+7” areas; the “**D**” digit in both “4+6” and “4+5” areas; and the “**E**” digit in both “5+5” and “5+4” areas. All digits found before (but not including) the “start digit for local dialling” comprise the “area code”. Where two numbers have identical 0SABCD digits, by definition, those two numbers will always belong to the same area code. *A “5+5” or “5+4” local number begins with the “E” digit and it **cannot** call any other number as a local call, and do so by beginning with the “D” digit.*

However, in the weekly data files produced by Ofcom, i.e. the files listing individual number block allocations, there are several allocations that *appear* to break those rules. On investigation, the result is that those entries are merely typos in the data held by Ofcom. Some of those errors are detailed in the next few sections of this report.

Several sections in this report refer to “5+5” areas. For reference, the twelve “5+5” areas are as follows:

013873	Langholm
015242	Hornby
015394	Hawkshead
015395	Grange-Over-Sands
015396	Sedbergh
016973	Wigton
016974	Raughton Head
016977	Brampton (for 4 and 5 fig. numbers)
017683	Appleby
017684	Pooley Bridge
017687	Keswick
019467	Gosforth

Only eleven of those areas are listed in the current number plan. That error is also covered in a later section of this report.

1.4 – Numbers beginning “(013873) 3X” in the Langholm “5+5” area

s1_code.txt / sabcde2.xls

Most of the allocations in the (013873) Langholm “5+5” area are correctly recorded. This short extract shows a few examples:

1387	32	0	Allocated	Opal Telecom Limited	5+5	08/2007	
1387	32	1	Allocated	Frontier Systems Ltd	5+5	09/2007	
1387	32	2	Allocated	Nationwide Telephone Assistance Ltd	5+5	10/2007	
1387	32	3	Allocated	VoIP-Un Limited	5+5	10/2007	
1387	32	4	Allocated	Timico Limited	5+5	11/2007	
1387	32	5	Allocated	Telephony Services Limited	5+5	01/2008	
1387	32	6	Allocated	Telecom2 Ltd	5+5	09/2009	
1387	32	7	Allocated	Telswitch Limited	5+5	07/2008	
1387	32	8	Allocated	3C Limited	5+5	09/2008	
1387	32	9	Allocated	Voxbone SA	5+5	09/2008	

However, the allocations for “(013873) 3X” numbers are recorded in s1_code.txt incorrectly (as of 2010-08-20) as follows:

1387	33	0	Allocated	Orange Home UK Plc	4+6	01/2007	
1387	33	1	Allocated	Inclarity plc	4+6	06/2006	
1387	33	2	Allocated	Teledesign plc	4+6	09/2006	
1387	33	3	Free		4+6		
1387	33	4	Allocated	T.T.N.C. Limited	4+6	11/2006	
1387	33	5	Allocated	TelNG Limited	4+6	02/2007	
1387	33	6	Allocated	Syntec UK Ltd	4+6	11/2005	
1387	33	7	Allocated	Net Solutions Europe Limited	4+6	04/2006	
1387	33	8	Allocated	Spitfire Network Services Ltd	4+6	08/2006	
1387	33	9	Allocated	Localphone Limited	4+6	05/2007	

The (013873) area code is allocated to “Langholm”. This area has a 5-digit area code and 5-digit local numbers.

The above allocations should therefore be recorded as “5+5”, not “4+6”.

The corrected allocations should be as shown in the following table:

1387	33	0	Allocated	Orange Home UK Plc	5+5	01/2007	
1387	33	1	Allocated	Inclarity plc	5+5	06/2006	
1387	33	2	Allocated	Teledesign plc	5+5	09/2006	
1387	33	3	Allocated	VoiceHost Limited	5+5	08/2010	
1387	33	4	Allocated	T.T.N.C. Limited	5+5	11/2006	
1387	33	5	Allocated	TelNG Limited	5+5	02/2007	
1387	33	6	Allocated	Syntec UK Ltd	5+5	11/2005	
1387	33	7	Allocated	Net Solutions Europe Limited	5+5	04/2006	
1387	33	8	Allocated	Spitfire Network Services Ltd	5+5	08/2006	
1387	33	9	Allocated	Localphone Limited	5+5	05/2007	

T.T.N.C. has a test number at (013873) 34901. It can be reached by dialling the 5-digit number “34901”, without any area code, from any other 5-digit number in the Langholm (013873) area. This is the correct operation.

Where a subscriber's local number begins with the “E” digit, that phone can call any other number having identical “0SABCD” digits by dialling that other number beginning with the “E” digit, or by dialling the entire area code and local number in full. This also shows these numbers are “5+5” and not “4+6” format.

In areas with “mixed” 4 and 5-digit area codes, the “D” digit is the deciding factor as to which area code the number belongs to. This decision cannot, and must not, be made at the “E” digit level. All numbers with same “0SABCD” digits must belong to the same area code. All numbers beginning “013873” have to be “5+5” format, otherwise they break the rules for local dialling mentioned in section 1.3 of this report. It is not permitted for some to be “(013873) X” and others to be “(01387) 3X”.

The above error was fixed by Ofcom on 2010-08-30.

1.5 – Numbers beginning “(016973) 8X” in the Wigton “5+5” area

s1_code.txt / sabcde4.xls

Most of the allocations in the (016973) Wigton “5+5” area are correctly recorded. This short extract shows a few examples:

1697	33		Allocated	BT	5+5	07/1994	
1697	34	0	Protected		5+5		
1697	34	1	Allocated	BT	5+5	07/2009	
1697	34	2	Allocated	BT	5+5	07/2009	
1697	34	3	Allocated	BT	5+5	07/2009	
1697	34	4	Allocated	BT	5+5	07/2009	
1697	34	5	Allocated	BT	5+5	07/2009	
1697	34	6	Protected		5+5		
1697	34	7	Protected		5+5		
1697	34	8	Protected		5+5		
1697	34	9	Allocated	BT	5+5	07/2009	
1697	35		Allocated	BT	5+5	07/1994	

However, the allocations for “(016973) 8X” numbers are recorded in s1_code.txt incorrectly as follows:

1697	38	0	Protected		4+6		
1697	38	1	Protected		4+6		
1697	38	2	Protected		4+6		
1697	38	3	Protected		4+6		
1697	38	4	Protected		4+6		
1697	38	5	Protected		4+6		
1697	38	6	Protected		4+6		
1697	38	7	Protected		4+6		
1697	38	8	Allocated	Cable & Wireless UK	4+6	06/2010	
1697	38	9	Allocated	Cable & Wireless UK	4+6	06/2010	

The (016973) area code is allocated to “Wigton”. This area has a 5-digit area code and 5-digit local numbers.

The above allocations should therefore be recorded as “5+5”, not “4+6”.

The corrected allocations should be as shown in the following table:

1697	38	0	Protected		5+5		
1697	38	1	Protected		5+5		
1697	38	2	Protected		5+5		
1697	38	3	Protected		5+5		
1697	38	4	Protected		5+5		
1697	38	5	Protected		5+5		
1697	38	6	Protected		5+5		
1697	38	7	Protected		5+5		
1697	38	8	Allocated	Cable & Wireless UK	5+5	06/2010	
1697	38	9	Allocated	Cable & Wireless UK	5+5	06/2010	

Cable & Wireless UK has several active subscriber numbers in the range (016973) 89020 to (016973) 89050. Cable & Wireless UK will be able to confirm that these numbers can be reached by dialling the respective 5-digit local number, without any area code, from any other 5-digit number in the Wigton (016973) area.

This will show these numbers are “5+5” and not “4+6”. Indeed, Cable & Wireless UK have mentioned the 016973 Wigton area code in several of their previous responses to Ofcom on at least the topic of “Number Conservation Areas”.

In areas with “mixed” 4 and 5-digit area codes, the “D” digit is the deciding factor as to which area code the number belongs to. This decision cannot, and must not, be made at the “E” digit level. All numbers with same “0SABCD” digits must belong to the same area code. All numbers beginning “016973” have to be “5+5” format, otherwise they break the rules for local dialling mentioned in section 1.3 of this report. It is not permitted for some to be “(016973) X” and others to be “(01697) 3X”.

The above error is almost identical to the recently fixed error for numbers in the (013873) 3X range.

1.6 – Numbers beginning “(016977) X” in the Brampton “5+5 and 5+4” area

s1_code.txt / sabcde4.xls

Current allocations within the (016977) area code are recorded as shown in this table extract:

1697	72		Allocated	BT	5+4	03/2003	
1697	73		Allocated	BT	5+4	03/2003	
1697	74		Allocated	BT	5+5	07/1994	
1697	75		Allocated	BT	4+6	09/1995	
1697	76		Allocated	Your Communications Ltd	4+6	01/1998	
1697	77		Allocated	T.T.N.C. Limited	4+6	10/2006	F-Digit '0,1,2,3,4,5,6,7,8,9'
1697	78		Allocated	Orange Home UK Plc	4+6	11/2006	F-Digit '0'
1697	79		Allocated	Inclarity plc	4+6	05/2006	F-Digit '2'

The (016977) area code covers “Brampton” but this information is missing from the number plan. It's a 5-digit area code.

The (016977) area code has a mix of 4 and 5-digit local numbers, i.e. “(016977) 2xxx”, “(016977) 3xxx”, “(016977) 4xxxx” etc.

The two allocations already recorded as “5+4”, and the one allocation already recorded as “5+5”, are correct.

The remainder of the local numbers in the (016977) 5-digit area code, numbers with initial digit “5” to “9”, should also be recorded as “5+5”, not “4+6”.

The allocations in the s1_code.txt / sabcde4.xls files should be corrected as detailed in the following table:

1697	72		Allocated	BT	5+4	03/2003	
1697	73		Allocated	BT	5+4	03/2003	
1697	74		Allocated	BT	5+5	07/1994	
1697	75		Allocated	BT	5+5	09/1995	
1697	76		Allocated	Your Communications Ltd	5+5	01/1998	
1697	77		Allocated	T.T.N.C. Limited	5+5	10/2006	F-Digit '0,1,2,3,4,5,6,7,8,9'
1697	78		Allocated	Orange Home UK Plc	5+5	11/2006	F-Digit '0'
1697	79	0-8	Allocated	Inclarity plc	5+5	05/2006	F-Digit '2'
1697	79	9	Unusable		N/A	05/2006	

T.T.N.C. has a test number at (016977) 79001. It can be reached by dialling the 5-digit number “79001”, without any area code, from any 5-digit or 4-digit number in the Brampton (016977) area.

Inclarity Plc has a test number at (016977) 90001. It can be reached by dialling the 5-digit number “90001”, without any area code, from any 5-digit or 4-digit number in the Brampton (016977) area.

To be clear, the telephone in the public phone box outside the Post Office in Brampton has the number “Brampton 2823”. This is a “5+4” format number in the “1697 72” range – i.e. “(016977) 2823”. From there, dialling “79001” connects you to the T.T.N.C. test line at (016977) 79001 [in the “1697 77” range], and dialling “90001” connects you to the Inclarity Plc test line at (016977) 90001 [in the “1697 79” range]. This is the correct operation for local numbers in a 5-digit area code.

Where a subscriber's local number begins with the “E” digit, that phone can call any other number having identical “0SABCD” digits by dialling that other number beginning with the “E” digit, or by dialling the entire area code and local number in full.

These test numbers **cannot** be dialled as six figure local numbers from anywhere in Brampton. They are dialled using 5 digits.

These are **NOT** “4+6” format numbers. These are “5+5” numbers.

These local numbers have only 5 digits, and the (016977) area code is a 5-digit area code.

In areas with “mixed” 4 and 5-digit area codes, the “D” digit is the deciding factor as to which area code the number belongs to. This decision cannot, and must not, be made at the “E” digit level. All numbers with same “0SABCD” digits must belong to the same area code. All numbers beginning “016977” have to be “5+5” format, otherwise they break the rules for local dialling mentioned in section 1.3 of this report. It is not permitted for some to be “(016977) X” and others to be “(01697) 7X”.

Brampton may have other numbers with “4+6” format elsewhere in 01697, but for the (016977) range this is a 5-digit area code.

1.7 – Local numbers beginning “99” in all “5+5” areas

s1_code.txt
 sabcde2.xls / sabcde3.xls
 sabcde4.xls / sabcde5.xls

Allocations for local numbers which clash with numbers used for the Emergency Services should be protected.

These numbers should never be “allocated” or “free for allocation”, and the “Number Length” column should record “N/A”.

These are the local numbers beginning “999”; and usually all other numbers beginning “99X” also remain unallocated.

In the case of “5+5” format numbers, these will be the numbers matching “(01xxxx) 99xxx”, for twelve such area codes.

For those 5-digit area codes, this corresponds to the numbers found in the “1xxx x9 9” blocks.

Some of the current “5+5” format allocations for local numbers beginning “99” are incorrectly recorded in the s1_code.txt file as shown in the following table extract:

1387	39	9	Protected		N/A		
1524	29	9	Protected		N/A		
1539	49	9	Protected		5+5		
1539	59	9	Protected		N/A		
1539	69	9	Protected		N/A		
1697	39	9	Protected		5+5		
1697	49		Protected		(0)+10		
1697	79		Allocated	Inclarity plc	4+6	05/2006	F-Digit '2'
1768	39	9	Protected		N/A		
1768	49	9	Protected		N/A		
1768	79	9	Protected		N/A		
1946	79	9	Protected		N/A		

The errors in the “Number Length” column are as follows:

- (015394) 99xxx should be “N/A”, not “5+5”;
- (016973) 99xxx should be “N/A”, not “5+5”;
- (016974) 90xxx to (016974) 98xxx should be “5+5”, not “(0)+10”;
- (016974) 99xxx should be “N/A”, not “(0)+10”;
- (016977) 90xxx to (016977) 98xxx should be “5+5”, not “4+6”;
- (016977) 99xxx should be “N/A”, not “4+6”.

There is one error in each of the “Status” and “Communications Provider” columns too:

- (016977) 99xxx should be “Protected”, and should NOT be allocated for use.

For example, if the number (016977) 99900 were ever to be allocated, then people would attempt to dial it locally as “99900” from other Brampton 016977 area “5+5” and “5+4” numbers.

A corrected version of this part of the table is shown on the next page.

(continued...)

1.7 – Local numbers beginning “99” in all “5+5” areas (cont’d.)

s1_code.txt
 sabcde2.xls / sabcde3.xls
 sabcde4.xls / sabcde5.xls

The allocations should be corrected as detailed below:

1387	39	9	Protected		N/A		
1524	29	9	Protected		N/A		
1539	49	9	Protected		N/A		
1539	59	9	Protected		N/A		
1539	69	9	Protected		N/A		
1697	39	9	Protected		N/A		
1697	49	0-8	Protected	<i>Potentially available for allocation</i>	5+5		<i>i.e. (016974) 9Fxxx</i>
1697	49	9	Protected		N/A		
1697	79	0-1	Free	<i>Available for allocation</i>	5+5		<i>i.e. (016977) 9Fxxx</i>
1697	79	2	Allocated	Inclarity plc	5+5	05/2006	<i>i.e. (016977) 92xxx</i>
1697	79	3-8	Free	<i>Available for allocation</i>	5+5		<i>i.e. (016977) 9Fxxx</i>
1697	79	9	Protected		N/A		
1768	39	9	Protected		N/A		
1768	49	9	Protected		N/A		
1768	79	9	Protected		N/A		
1946	79	9	Protected		N/A		

This also leaves the following allocations available for future use, if required:

- (016974) 90xxx to (016974) 98xxx in Raughton Head;
- (016977) 90xxx to (016977) 91xxx in Brampton;
- (016977) 93xxx to (016977) 98xxx in Brampton.

In the above table, the words in italics are notes for guidance only and are not a part of the numbering plan wording.

1.8 “Protected” vs. “Unusable”

s1_code.txt
 sabcde2.xls / sabcde3.xls
 sabcde4.xls / sabcde5.xls

For local numbers beginning “99”, and especially “999”, the status “Protected” seems inadequate.

These numbers should never be available for use, as these allocations clash with the number used for Emergency Services.

The status “Unusable” would be much more suitable, and that is how these numbers are already recorded in the (01908) area.

This is shown in the following table extract:

1908	99	9	Unusable		N/A		
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It is unclear why only one area code uses that designation for local numbers beginning “99”.

It could, and should, be a lot more widely used.

1.9 – NDO numbers beginning “0” or “1” in “5+5” areas

s1_code.txt
 sabcde2.xls / sabcde3.xls
 sabcde4.xls / sabcde5.xls

National Dialling Only numbers are those where the local number begins with a “0” or a “1”.

These numbers can only be called when both the area code and the local number are dialled in full.

In the case of “5+5” format areas, these will be the numbers matching the pattern “(01xxxx) 0xxxx” or “(01xxxx) 1xxxx”.

For those twelve 5-digit area codes , this corresponds to the numbers found in the “1xxx x0” and “1xxx x1” blocks.

The current NDO allocations are recorded in the **s1_code.txt** file and are as shown in the following table extract:

1387	30		Protected		(0)+10		
1387	31		Protected		(0)+10		
1524	20		Allocated	Known Comms Limited	(0)+10	09/2009	F-Digit '0'
1524	21		Allocated	CFL Comms Limited	(0)+10	09/2009	F-Digit '0'
1539	40		Protected		(0)+10		
1539	41		Protected		(0)+10		
1539	50		Protected		(0)+10		
1539	51		Protected		(0)+10		
1539	60		Protected		(0)+10		
1539	61		Protected		(0)+10		
1697	30		Protected		(0)+10		
1697	31		Protected		(0)+10		
1697	40		Protected		(0)+10		
1697	41		Protected		(0)+10		
1697	70		Allocated	LogicStar Limited	4+6	02/2008	
1697	71		Allocated	Danemere Street Creative	4+6	06/2005	
1768	30		Protected		(0)+10		
1768	31		Protected		(0)+10		
1768	40		Protected		(0)+10		
1768	41		Protected		(0)+10		
1768	70		Protected		(0)+10		
1768	71		Protected		(0)+10		
1946	70		Protected		N/A		
1946	71		Protected		N/A		

The errors found in the table extract above are as follows:

- (016977) 0xxxx should be “(0)+10”, not “4+6”;
- (016977) 1xxxx should be “(0)+10”, not “4+6”;
- (019467) 0xxxx should be “(0)+10”, not “N/A”;
- (019467) 1xxxx should be “(0)+10”, not “N/A”.

I have no idea whether any of these NDO numbers are intended to be allocated to users, but four of the twenty-four ranges have already been allocated and some may now be in use.

In two cases, those number ranges are not actually recorded as being NDO number ranges, even though they most obviously are NDO number ranges.

(continued...)

1.9 – NDO numbers beginning “0” or “1” in “5+5” areas (cont'd.)

s1_code.txt
 sabcde2.xls / sabcde3.xls
 sabcde4.xls / sabcde5.xls

These allocations should be corrected as detailed in the table extract below:

1387	30		Protected		(0)+10		
1387	31		Protected		(0)+10		
1524	20		Allocated	Known Comms Limited	(0)+10	09/2009	F-Digit '0'
1524	21		Allocated	CFL Comms Limited	(0)+10	09/2009	F-Digit '0'
1539	40		Protected		(0)+10		
1539	41		Protected		(0)+10		
1539	50		Protected		(0)+10		
1539	51		Protected		(0)+10		
1539	60		Protected		(0)+10		
1539	61		Protected		(0)+10		
1697	30		Protected		(0)+10		
1697	31		Protected		(0)+10		
1697	40		Protected		(0)+10		
1697	41		Protected		(0)+10		
1697	70		Allocated	LogicStar Limited	(0)+10	02/2008	
1697	71		Allocated	Danemere Street Creative	(0)+10	06/2005	
1768	30		Protected		(0)+10		
1768	31		Protected		(0)+10		
1768	40		Protected		(0)+10		
1768	41		Protected		(0)+10		
1768	70		Protected		(0)+10		
1768	71		Protected		(0)+10		
1946	70		Protected		(0)+10		
1946	71		Protected		(0)+10		

Following the rules for local dialling, the numbers at “(016977) 0xxxx” and “(016977) 1xxxx” **cannot** be dialled as six figure local numbers in Brampton. This is because the other local numbers beginning “016977” in Brampton begin with the “E” digit.

When a local number begins with the “E” digit, it cannot dial out to other local numbers with the exact same “0SABCD” digits and use the “D” digit as the start digit for local dialling. All numbers beginning “016977” must use the “E” digit for the start of local dialling, and therefore all numbers beginning “016977” are in the (016977) area code.

These numbers are **NOT** “(01697) 70xxxx” and “(01697) 71xxxx”. These are **NOT** “4+6” format numbers. Brampton local numbers beginning “016977” have only 4 or 5 digits, and the (016977) area code is a 5-digit area code. Since the local number part therefore begins with a “0” or “1”, these numbers must, in fact, be “(0)+10” format “National Dialling Only” numbers.

There has been a long history of errors in the data for the (016977) Brampton 5-digit area code. Most of the problems started between 1997 and 2002, when a series of typos saw the original Brampton allocation incorrectly noted as a 4-digit area code instead of the correct 5-digit length. Additional errors in 2005 resulted in Brampton's 4-digit local numbers marked as “4+4” instead of “5+4”, and the allocations with 5-digit local numbers marked as “4+6” instead of “5+5”. These errors essentially hid the “016977” area code from view for almost a decade, and it was accidentally omitted from many other area code lists.

Some of these errors had been *partially corrected* in 2002/2003, and then reverted less than a year later. Some other errors were *partially corrected* for a second time at the beginning of 2010, but late in 2010 many of the errors remain.

Likewise, for local numbers beginning 0 or 1 in the (019467) area code, the number length should be recorded as “(0)+10” not “N/A”, whether or not these number blocks are ever allocated to users. These are also “National Dialling Only” numbers.

1.10 – The 016977 Brampton area code

sabc.txt / numplan280710.pdf

In the numbering plan, and in other Ofcom documents, the information for Brampton has been wrong for many years.

The root of the problem originates from errors and omissions made by OfTel in 1997-2002, and carried over in subsequent documents.

Very old area code lists from pre-phONEday times, published elsewhere, show these entries:

Area code		Area code name	Short code from Carlisle
0228	OCA8	Carlisle	--
0541	OLH1	Langholm	98
0697	ONW7	North West i.e. Abbeytown, Aspatria, Brampton (Cumbria), Gilsland, Hallbankgate, Kirkbride (Carlisle), Roadhead, Silloth, Southwaite, Wigton	94
0699	ONW9	North West i.e. Armathwaite, Raughton Head, Caldbeck	93
0965	OWN5	Wigton	92

Most of the above area codes contained at least one extra digit compared to those shown in the list; Gilsland being 06972 for example. Likewise Hallbankgate was 06976, Brampton was 06977, Roadhead was 06978, and Raughton Head was 06996.

Other places list these post-phONEday area codes as being active in 1995 and 1997:

Exchange name	1990s numbering		2010 equiv.
Gilsland	016972	(3 digit numbers)	(016977) 47xxx
Abbeytown	016973		(016973) 6xxxx
Aspatria	016973		(016973) 2xxxx
Kirkbride (Carlisle)	016973		(016973) 5xxxx
Silloth	016973		(016973) 3xxxx
Wigton	016973		(016973) 4xxxx
Southwaite	016974		(016974) 73xxx
Hallbankgate	016976	(3 digit numbers)	(016977) 46xxx
Brampton (Cumbria)	016977		(016977) 2xxx (016977) 3xxx (016977) 45xxx
Gilsland	016977	(5 digit numbers)	(016977) 47xxx
Hallbankgate	016977	(5 digit numbers)	(016977) 46xxx
Roadhead	016978		(016977) 48xxx
Armathwaite	016992		(016974) 72xxx
Raughton Head	016996		(016974) 76xxx
Caldbeck	016998		(016974) 78xxx

Leading up to the “Big Number Change” in 2000, many of these allocations were altered in some way. In particular:

- three digit local numbers changed to five-digit local numbers;
- numbers in the 016992, 016996 and 016998 area codes were moved to the existing (016974) area code;
- numbers in the 016972, 016976 and 016978 area codes were moved to the existing (016977) Brampton area code.

In the late 1990s, there were **no** “4+6” allocations beginning “01697”. All allocated numbers were found only in the (016973), (016974) and (016977) area codes. At this point, all numbers beginning “01697X” were “5+5” or “5+4” format only. Most local numbers were 5-digits long, but the (016977) area code also contained a small number of 4-digit local numbers.

(continued...)

1.10 – The 016977 Brampton area code (cont'd.)

The file **s1_code.txt** in mid-2000 shows the various numbers in the (016973), (016974), and (016977) area codes recorded as:

1697	0	Unusable			
1697	1	Unusable			
1697	2	Unavailable			
1697	3	Allocated	Wigton (Mixed 4/5 Digit Area)	5 Digit Area Code	
1697	4	Allocated	Raughton Head (Mixed 4/5 Digit Area)	5 Digit Area Code	
1697	5	Unavailable			
1697	6	Unavailable			
1697	7	Allocated	Brampton (Mixed 4/5 Digit Area)	4 Digit Area Code	
1697	8	Allocated	Brampton (Mixed 4/5 Digit Area)	4 Digit Area Code	
1697	9	Designated			

At the time, Brampton had some “(016977) 2xxx” and “(016977) 3xxx” numbers using the “5+4” format, and some “(016977) 4xxxx” and “(016977) 5xxxx” numbers using the “5+5” format, but the above entries failed to record that fact. As a “5+5” and “5+4” area, the “1697 7” entry should have said “5 Digit Area Code”. Also, the (016978) area code was no longer in use.

Additionally, Wigton (016973), and Raughton Head (016974), had already been converted to use only “5+5” format.

The file **sns_code.txt** also showed in 2000, the following details:

1697	3		Wigton (Mixed 4/5 Digit Area)	5 Digit Area Code
1697	4		Raughton Head (Mixed 4/5 Digit Area)	5 Digit Area Code
1697	7		Brampton (Mixed 4/5 Digit Area)	4 Digit Area Code
1697	8		Brampton (Mixed 4/5 Digit Area)	4 Digit Area Code

By now, 016978 was no longer in use. Brampton was using only (016977) and had both “5+5” and “5+4” numbers within. As already mentioned, both Wigton (016973) and Raughton Head (016974) were using only “5+5” numbers.

At the same time, in mid-2000, the file **sabc_de.txt** showed these entries:

1697	70		Free	4+6	06/1997	
1697	71		Free	4+6	11/1995	
1697	72		Allocated	BT	4+5	07/1994
1697	73		Allocated	BT	4+5	07/1994
1697	74		Allocated	BT	4+6	07/1994
1697	75		Allocated	BT	4+6	09/1995
1697	76		Allocated	Norweb	4+6	01/1998
1697	77		Designated	BT (Mign)	4+6	02/1997
1697	78		Free		4+6	07/1994
1697	79		Free		4+6	07/1994
1697	80		Designated		4+6	01/2000
1697	81		Free		4+6	07/1994
1697	82		Free		4+6	04/1995
1697	83		Free		4+6	04/1995
1697	84		Free		4+6	04/1995
1697	85		Free		4+6	07/1994
1697	86		Free		4+6	04/1995
1697	87		Free		4+6	07/1994
1697	88		Free		4+6	07/1994
1697	89		Free		4+6	07/1994

The table extract above again fails to record the “5+5” and “5+4” allocations in use in the (016977) area.

(continued...)

1.10 – The 016977 Brampton area code (cont'd.)

In the 2001 document, [ncon0201.pdf](#) “Revising the National Numbering Conventions: Proposals to revise and reissue the United Kingdom’s National Numbering Conventions” there is the following information.

“A2.9 Considerable benefit can be obtained from consistent forms of number presentation. Recommended formats for ten-digit NSNs under the Scheme are as follows:”

Geographic Numbering Ranges:	
(01AB) CDE XXXX	01 range with seven-digit local dialling
(01ABC) DEXXXX	01 range with six-digit local dialling
(01ABCD) EXXXX	01 range with five-digit local dialling
(01ABCDE) XXXX	01 range with four-digit local dialling
(02A) BCDE XXXX	02 range with eight-digit local dialling

In the table above, five different number formats are mentioned.

These are “3+7”, “4+6”, “5+5”, “6+4” and “2+8”; but the “6+4” format isn't even in use in the UK.

However, more importantly, the “4+5” and “5+4” formats which *are* both in use in the UK, were omitted from this recommendation. There was no mention of 9-digit NSNs which, at that time, were in use in almost 50 areas.

In the later 2001 document [nuco1101.pdf](#) “The Third Issue of the Numbering Conventions and the First Issue of the Numbering Code” the information had been revised.

Geographic Numbering Ranges:	
(01AB) CDE FGHI	01 range with seven-digit local dialling
(01ABC) DEFGHI	01 range with six-digit local dialling
(01ABCD) EFGHI	01 range with five-digit local dialling
(02A) BCDE FGHI	02 range with eight-digit local dialling

In the new table, the unused “6+4” format has been deleted, and so it lists just the “3+7”, “4+6”, “5+5” and “2+8” formats.

The “4+5” and “5+4” formats which *are* both in use in the UK, were still omitted from the above table.

In 2001, the file [sabc.txt](#) had been modified again. The information within was still incorrect, as shown below:

1697	0	Designated		Brampton National Dialling	4 Digit Code	
1697	1	Designated		Brampton National Dialling	4 Digit Code	
1697	2	Designated		Brampton Expansion	4 Digit Code	
1697	3	Designated		Wigton	5 Digit Code	
1697	4	Designated		Raughton Head	5 Digit Code	
1697	5	Designated		Brampton Expansion	4 Digit Code	
1697	6	Designated		Brampton Expansion	4 Digit Code	
1697	7	Designated		Brampton	4 Digit Code	
1697	8	Designated		Brampton	4 Digit Code	
1697	9	Designated		Brampton Expansion	4 Digit Code	

Brampton was using only the (016977) area code, but with a mix of “5+5” and “5+4” numbering. The (016978) area code was no longer in use. Numbers in that range had already moved to the “1697 748” range, i.e. (016977) 48xxx.

The entry for “1697 7” therefore should have said “5 Digit Code”. The 5-digit area codes for Wigton and Raughton Head were correctly recorded.

Additionally, marking “(01697) 2”, “(01697) 5”, “(01697) 6”, and “(01697) 9” as “Brampton Expansion” is also an error, analogous to saying that “(01524) 9” is “Hornby Expansion” when in fact the “(01524) 9” range is “Lancaster”.

(continued...)

1.10 – The 016977 Brampton area code (cont'd.)

At the same time, in 2001, the file **sabc_de.txt** also showed the following incorrect information:

1697	70	Free			4+6	06/1997	
1697	71	Protected			4+6	09/2000	
1697	72	Allocated		BT	4+5	07/1994	
1697	73	Allocated		BT	4+5	07/1994	
1697	74	Allocated		BT	4+6	07/1994	
1697	75	Allocated		BT	4+6	09/1995	
1697	76	Allocated		Norweb	4+6	01/1998	
1697	77	Designated		Mign	4+6	08/2000	
1697	78	Free			4+6	07/1994	
1697	79	Protected			4+6	09/2000	

In 2001, Brampton was already using the (016977) area code with “5+5” and “5+4” numbers, not “4+5” and “4+6” shown here.

The 2002 version of the number allocation file **sabc_de.txt** also contained these incorrect entries:

1697	70	Free			4+6	02/2002	
1697	71	Protected			4+6	09/2002	
1697	72	Allocated		BT	4+5	07/1994	
1697	73	Allocated		BT	4+5	07/1994	
1697	74	Allocated		BT	4+6	07/1994	
1697	75	Allocated		BT	4+6	09/1995	
1697	76	Allocated		Your Communications Ltd	4+6	01/1998	
1697	77	Designated		Mign	4+6	08/2000	
1697	78	Allocated		Omne Communications	4+6	02/2002	
1697	79	Protected			4+6	09/2000	

The above information is not correct.

Those Brampton numbers are really a mix of “5+5” and “5+4” format, and not as shown in the table extract above.

“Mixed” Allocations

In the 2001 and 2002 versions of the **readme.txt** file, the following note attempts to explain “mixed” allocations:

“In numbering areas defined as “Mixed” in the Code List, local numbers can be 5 or 6 digit in length, with a 5 or 4 digit Area code respectively. In these areas, the 5 digit numbers start with the E digit, (annotated 5+5) and the 6 digit numbers start with the D digit, (annotated 4+6).”

In reality, the situation is a lot more complex than the note implies. In particular, most areas contain only “4+6” numbers, but some areas contain a mix of “4+6” and “4+5” numbers. Either of those types of area may have a part of the number range (using a specific “D” digit) given over to “5+5” format numbers. In this case, the 5-digit “0SABCD” area code is usually assigned a different geographic name to the 4-digit “0SABC” area code that is using the same 0SABC initial digits.

One complication is that 5-digit local numbers are not exclusively paired with a 5-digit area code; there are also some 5-digit local numbers in 4-digit code areas. That is, not all 5-digit local numbers are “5+5” format, some are “4+5”. Additionally, not all numbers with only 9 digits are “4+5” format. In one area, there are some “5+4” numbers as well as the “5+5” number allocation, but that fact very often seems to be overlooked. Ofcom misclassified Brampton’s “5+4” numbers for almost a decade.

Local numbers start with the “E” digit in a 5-digit code area, and start with the “D” digit in a 4-digit code area. Where a local number begins with the “E” digit, all numbers with the same 0SABCD digits can be called as local calls. Those local calls are dialled beginning with the “E” digit. Where the other number has the same 0SABC digits but the “D” digit differs, that number can only be called by dialling the area code and number in full. This applies to areas using “4+6”, “4+5”, “5+5” and “5+4”.

(continued...)

1.10 – The 016977 Brampton area code (cont'd.)

In the 2002 version of the **readme.txt** file, the following table appears (complete with spelling mistake):

Local Number length	Format: Code+number	Overall length (excuding the 0 escape digit)
10 digit National dialling	(0) +10	10
8 digit (new 02X codes)	2+8	10
7 digit	3+7	10
6 digit	4+6	10
5 digit	4+5	9
5 digit (mixed)	5+5	10
Unusable	Not Applicable	(N/A)

The table, shown immediately above, omits the “5+4” format which is used in the Brampton (016977) area for “(016977) 2xxx” and “(016977) 3xxx” numbers.

However, at the exact same time in 2002, the file **sabc.txt** correctly showed the Brampton 5-digit (016977) area code:

1697	0	Designated	Not in Use		
1697	1	Designated	Not in Use		
1697	2	Designated	Not in Use		
1697	3	Designated	Wigton		5 Digit Code
1697	4	Designated	Raughton Head		5 Digit Code
1697	5	Designated	Not in Use		
1697	6	Designated	Not in Use		
1697	7	Designated	Brampton		5 Digit Code ✓
1697	8	Designated	Not in Use		
1697	9	Designated	Not in Use		

The table extract above is correct. Brampton uses the 5-digit (016977) area code.

In 2002, there were NO “4+6” numbers in use anywhere in the 01697 area.

All numbers in 01697 ranges were either:

- “5+5” format within area codes (016973) and (016974), or
- “5+5” or “5+4” format within the (016977) area code.

The table extract above also correctly shows that the 016978 area code is no longer in use.

In 2003, Oftel published a consultation document **ntnp0303.pdf**, “**Proposal to publish a National Telephone Number Plan**”. In the version dated 2003-03-19, in Appendix A on page 38, the table incorrectly shows the Brampton area code as 01697:

01697	Brampton
016973	Wigton
016974	Raughton Head

The correct code for Brampton is (016977), and it has both 4-digit and 5-digit local numbers, i.e. “5+4” and “5+5”.

Technically, the (01697) area code has no name. In 2003 there were NO numbers beginning 01697 and using “4+6” format.

In older lists from the 1980s, the 0697 code is denoted “0NW7” where NW stands for “North West”, but individual exchanges within that area used area codes which had an additional digit; 06972, 06973, 06974, 06976, 06977 and 06978.

In the late 1990s, numbers previously in the 06972, 06976 and 06978 area codes migrated to the (016977) Brampton area. The 06973 Wigton area code became (016973), and the 06974 Southwaite area code became (016974), Raughton Head.

(continued...)

1.10 – The 016977 Brampton area code (cont'd.)

In their official response to Oftel's 2003 consultation document, BT said:

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

See the comments on page 7 of this document:

www.btplc.com/Thegroup/RegulatoryandPublicaffairs/Consultativeresponses/Oftel/2003/Nationaltelephonenumberingplan/response.pdf.

Oftel seemed to briefly pay attention to this statement made by BT. The Brampton area code errors were *partially* fixed in subsequent versions of *some* Oftel documents (but some were then reverted, less than a year later).

In July 2003, the final version of the **numbering plan** ([ntnp_final_c0703.pdf](#) / [num_plan_0703.pdf](#)) contained this table:

016977	Brampton ✓
016973	Wigton
016974	Raughton Head

The table extract above finally shows the correct (**016977**) area code for **Brampton**.

At this point, Oftel should have fixed the data in [sabcde2.xls](#) / [sabc_de.txt](#) to match this table, but the opportunity was missed.

In 2003, the allocations file [sabcde2.xls](#) / [sabc_de.txt](#) showed some correct and some incorrect data for Brampton:

1697	70	Protected			4+6	03/2003	
1697	71	Protected			4+6	09/2000	
1697	72	Allocated		BT	5+4	03/2003	
1697	73	Allocated		BT	5+4	03/2003	
1697	74	Allocated		BT	4+6	07/1994	
1697	75	Allocated		BT	4+6	09/1995	
1697	76	Allocated		Your Communications Ltd	4+6	01/1998	
1697	77	Protected		Mign	4+6	05/2003	
1697	78	Free			4+6	07/2002	
1697	79	Protected			4+6	09/2000	

In the table extract above, number ranges (with DE="74" to "79") shown as "4+6" format should be recorded as "5+5". Number ranges with DE="70" and "71" are (016977) area code NDO numbers, but that has been entirely overlooked.

Only the two "5+4" allocations are correctly noted. These are the Brampton numbers at "(016977) 2xxx" and "(016977) 3xxx".

In 2003, Oftel's [num_guide.pdf](#) "A user's Guide to Telephone Numbering" document contained the following table:

Area Code length	Local number length (digits)	Example	
		Area Code and Number (National Format Layout)	Code Area
02X	8	(029) XXXX XXXX	Cardiff
01XX	7	(0151) XXX XXXX	Liverpool
01XXX	6	(01865) XXXXXX	Oxford
01XXX	5	(01204) XXXXXX	Bolton (Daubhill)
01XXXX	5	(015396) XXXXXX	Sedburgh
01XXXX	4	(016977) XXXX	Brampton ✓

The table above clearly shows the different length area codes and their respective local number lengths.

The table correctly showed **Brampton** as using "5+4" format numbers. At the same time, Brampton also had some "5+5" format numbers within the (016977) area code; and Brampton still uses both formats in 2010.

(continued...)

1.10 – The 016977 Brampton area code (cont'd.)

The following table shows how the UK area codes are really allocated:

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 (539).
4+6 areas where part of range is assigned as 5+5	10	01387, 01539, 01697
4+6 areas where part of range is assigned as mixed 5+5 and 5+4	10 or 9	01697
4+6 areas where part of range is assigned as 5+4	10 or 9	none
Mixed 4+6 and 4+5 only	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
Mixed 4+6 and 4+5 areas where part of range is assigned as mixed 5+5 and 5+4	10 or 9	none
Mixed 4+6 and 4+5 areas where part of range is assigned as 5+4	10 or 9	none
4+5 only	9	none
4+5 areas where part of range is assigned as 5+5	9 or 10	none
4+5 areas where part of range is assigned as mixed 5+5 and 5+4	9 or 10	none
4+5 areas where part of range is assigned as 5+4	9	none
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
5+4 only	9	none

The table above offers a lot more detail than can be found elsewhere. Feel free to use this data in other publications.

The (016977) area code is missing from Ofcom's lists. The (016977) area code is used by Brampton 4 and 5-digit local numbers.

The 2003 version of the file [num_guide.pdf](#) “**A user's Guide to Telephone Numbering**” contains the following note:

1.7 There are also some area codes that share the first five digits. For example, the digits '01539' are used for several code areas as follows:

- 01539 - Kendal
- 015394 - Hawkshead
- 015395 - Grange over Sands
- 015396 - Sedburgh

1.8 If you are dialling from one of these code areas to another of these code areas, you will need to dial both the code and number to get through. If you do not dial the code you will get a wrong number or get the number unobtainable announcement or tone.

It explains how “mixed” area codes work. However, even though numbers in the Brampton (016977) area work in exactly the same way as those in the Sedburgh (015396) and Keswick (017687) areas, the data for Brampton has been incorrectly recorded.

The correct area code for Brampton is (016977). It has a mix of 4-digit and 5-digit local numbers, noted as “5+4” and “5+5”. All numbers beginning 016977 can call all other numbers beginning 016977 as a local call, dialled beginning with the “E” digit.

(continued...)

1.10 – The 016977 Brampton area code (cont'd.)

By November 2003, **sabc.txt** had already reverted to showing incorrect information again, as detailed in the table below:

1697	0	Designated	Not in Use		
1697	1	Designated	Not in Use		
1697	2	Designated	Not in Use		
1697	3	Designated	Wigton		5 Digit Code
1697	4	Designated	Raughton Head		5 Digit Code
1697	5	Designated	Not in Use		
1697	6	Designated	Not in Use		
1697	7	Designated	Brampton		4 Digit Code
1697	8	Designated	Not in Use		
1697	9	Designated	Not in Use		

In 2002, the file **sabc.txt** had correctly recorded Brampton as having a 5-digit area code.

By the end of 2003, the file **sabc.txt** again incorrectly specified Brampton as having a 4 digit area code at 016977.

Still in 2003, **s1_code.txt** / **sabcde2.xls** continued to correctly record some information, and incorrectly record the rest:

1697	70	Protected			4+6	03/2003	
1697	71	Protected			4+6	09/2000	
1697	72	Allocated		BT	5+4	03/2003	
1697	73	Allocated		BT	5+4	03/2003	
1697	74	Allocated		BT	4+6	07/1994	
1697	75	Allocated		BT	4+6	09/1995	
1697	76	Allocated		Your Communications Ltd	4+6	01/1998	
1697	77	Protected		Mign	4+6	05/2003	
1697	78	Free			4+6	07/2002	
1697	79	Protected			4+6	09/2000	

The table above correctly shows the 4-digit “2xxx” and “3xxx” numbers in the Brampton (016977) area code. **At the same time it fails to correctly record the “5+5” allocations with “4xxxx”, “5xxxx” and “6xxxx” 5-digit local numbers in Brampton.**

Additionally, in late 2003, the **numbering plan** also reverted to showing the following incorrect information:

01697	Brampton
016973	Wigton
016974	Raughton Head

The correct area code for Brampton is (016977), not (01697), since local numbers are of the form (016977) xxxx and xxxxx.

The Of tel / Ofcom handover

Whatever processes were in place at Of tel to update this information, it became very clear they they were not at all “joined up”, with conflicting data in different files. Near the close of 2003, as the files were passed to Ofcom for future maintenance:

- **s1_code.txt** and **sabcde2.xls** correctly recorded the “5+4” numbers in the (016977) range, specifically local numbers “2xxx” and “3xxx”; but failed to correctly record existing “5+5” numbers beginning “4xxxx”, “5xxxx” and “6xxxx”;
- **sabc.txt** had briefly recorded the correct “5 digit code” notation for the (016977) area code earlier in 2002, after being incorrect for several years, but the correct data had then been reverted in the very next edition of the file;
- **num_plan_0703.pdf** had listed the correct (016977) area code for Brampton in mid 2003, after BT had pointed out the error present in the previous version, but this was reverted in the very next edition of the numbering plan in 2004;
- **num_guide.pdf** showed a Brampton number in the (016977) range as a correct example of a “5+4” format number;
- **readme.txt** failed to mention the “5+4” format as being a valid UK number format, even though it was already in use.

(continued...)

1.10 – The 016977 Brampton area code (cont'd.)

In 2004, `s1_code.txt` / `sabcde2.xls` continued to record incorrect information, as shown in the following table extract:

1697	70	Protected			4+6	03/2003	("Free" in <code>sabcde2.xls</code>)
1697	71	Protected			4+6	09/2000	
1697	72	Allocated		BT	5+4	03/2003	
1697	73	Allocated		BT	5+4	03/2003	
1697	74	Allocated		BT	4+6	07/1994	
1697	75	Allocated		BT	4+6	09/1995	
1697	76	Allocated		Your Communications Ltd	4+6	01/1998	
1697	77	Protected		Mign	4+6	05/2003	
1697	78	Free			4+6	07/2002	
1697	79	Protected			4+6	09/2000	

The first two entries in the table extract above should read "(0)+10", and the final six entries should be recorded as "5+5".

In 2004, the file `sabc.txt` continued to record incorrect length for the Brampton area code as shown below:

1697	0	Designated	Not in Use		
1697	1	Designated	Not in Use		
1697	2	Designated	Not in Use		
1697	3	Designated	Wigton		5 Digit Code Area
1697	4	Designated	Raughton Head		5 Digit Code Area
1697	5	Designated	Not in Use		
1697	6	Designated	Not in Use		
1697	7	Designated	Brampton		4 Digit Code Area
1697	8	Designated	Not in Use		
1697	9	Designated	Not in Use		

The Brampton (016977) area code is a "5 Digit Code Area", and not as shown above.

The **numbering plan** continued to show incorrect data, both in 2004 and ever since, as shown below:

01697	Brampton
016973	Wigton
016974	Raughton Head

The Brampton area code is (016977), as BT had already pointed out in 2003.

Only the file `num_guide.pdf` "A user's Guide to Telephone Numbering" contained the correct information:

Area Code length	Local number length (digits)	Example	
		Area Code and Number (National Format Layout)	Code Area
02X	8	(029) XXXX XXXX	Cardiff
01XX	7	(0151) XXX XXXX	Liverpool
01XXX	6	(01865) XXXXXX	Oxford
01XXX	5	(01204) XXXXX	Bolton (Daubhill)
01XXXX	5	(015396) XXXXX	Sedburgh
01XXXX	4	(016977) XXXX	Brampton ✓

At the time, Brampton numbers were using the "5+5" and "5+4" format within the (016977) area code, but most other Ofcom documents failed to record that fact. The table above, as shown in the "user guide", was the only document to get it right.

(continued...)

1.10 – The 016977 Brampton area code (cont'd.)

In 2005, the data in `s1_code.txt` / `sabcde2.xls` became even more corrupted. The table at that time was as shown below:

1697	70	Allocated		Coulomb Ltd	4+6	05/2005	
1697	71	Allocated		Danemere Street Creative	4+6	06/2005	
1697	72	Allocated		BT	4+4 ×	03/2003	
1697	73	Allocated		BT	4+4 ×	03/2003	
1697	74	Allocated		BT	4+6	07/1994	
1697	75	Allocated		BT	4+6	09/1995	
1697	76	Allocated		Your Communications Ltd	4+6	01/1998	
1697	77	Protected			4+6	05/2003	
1697	78	Protected			4+6	08/2004	
1697	79	Protected			4+6	05/2005	

The table extract above shows “4+4” format numbers at “(01697) 72xx” and “(01697) 73xx”, but this is completely false. The UK has not had any “4+4” format numbers at any time since the 1980s/early 1990s. It appears that someone has likely confused the old 1990s Gilsland “(016972) xxx” three-digit local number range [by 2005, already long ago migrated to the “(016977) 47xxx” range and using “5+5” format numbering] and the newer, current, Brampton “(016977) 2xxx” range. The number ranges shown above as “4+4” are really “5+4” format. Those numbers are in the “(016977) 2xxx” and “(016977) 3xxx” ranges.

Of the ten entries above, all are incorrect. The first two entries should have been “(0)+10”, and are still incorrect in 2010. The next two entries should have been recorded as “5+4” format, and it took until early 2010 for those errors to be corrected. The remainder should have been “5+5”, and five of those six are still incorrectly recorded in 2010. One was corrected in 2010.

In 2005, `sabc.txt` continued with similar incorrect information as before. This is detailed in the following table extract:

1697	0	Designated	Not in Use		
1697	1	Designated	Not in Use		
1697	2	Designated	Not in Use		
1697	3	Designated	Wigton		5 Digit Code Area
1697	4	Designated	Raughton Head		5 Digit Code Area
1697	5	Designated	Not in Use		
1697	6	Designated	Not in Use		
1697	7	Designated	Brampton		4 Digit Code Area
1697	8	Designated	Not in Use		
1697	9	Designated	Brampton		

The Brampton (016977) area code continued to be recorded as having only 4-digits. It was, and still is, a 5-digit area code.

Additionally, a new allocation using “4+6” numbering is listed for the “(01697) 9xxxxx” range. This range appears to be called “Brampton”, but Brampton was already using “5+5” and “5+4” number allocations in the (016977) area code.

Brampton is the only area in the UK with a mix of 4, 5 and 6-digit local numbers. Since all UK geographic telephone numbers have a total of either 9 or 10 digits, it is not possible to have all of those local number lengths within a single area code. The only possible formats are “4+6”, “4+5”, “5+5” and “5+4”. The first two are 4-digit area codes and the last two are 5-digit area codes. This means that Brampton now has two area codes: (016977) is used for 4 and 5-digit local numbers, and (01697) is used only for 6-digit local numbers. The alternative “2+8”, “3+7”, “2+7” and “3+6” formats are not relevant here.

The number “Brampton 40000” is (016977) 40000. “Brampton 40000” and “Brampton 90000” can call each other using 5-digit local dialling because both numbers are “5+5” format. Therefore both are located within the same 5-digit (016977) area code.

The number “Brampton 90000” is (016977) 90000. Likewise, “Brampton 900000” is (01697) 900000. To call each other, the respective (016977) or (01697) area code must also be dialled before the local number. This works in exactly the same way that (017687) 80000 and (01768) 800000 can call each other only by also dialling the area code before the local number.

The confusion here is that both (016977) and (01697) are called “Brampton”, and Ofcom has repeatedly omitted (016977) from the official list of area codes. This has further led to some allocations being incorrectly marked as “4+6” when in reality they are “5+5” format. This also set the scene for a number of other incorrect allocations to come into use over the next few years.

(continued...)

1.10 – The 016977 Brampton area code (cont'd.)

The **numbering plan** continued to show only the (01697) area code for Brampton in 2005, and in all versions through to the present. The (016977) area code is missing from every version of the numbering plan published after 2003.

numplan280710.pdf

01697	Brampton
016973	Wigton
016974	Raughton Head

The area code for Brampton was, and still is, (016977). Numbers in the (016977) area code are “5+5” and “5+4” format and local numbers have either 4 or 5 digits. Local dialling begins with the “E” digit. The (016977) area code has a length of 5 digits.

There are some non-BT allocations using the (01697) area code. Those have local numbers beginning “2”, “5”, “6” or “9” only. BT has no “4+6” allocations within the (01697) area code, so technically the (01697) area code has no name. If Ofcom insists that “01697” should also be called Brampton, then it needs to be stated that the “016977” area code is used for 4 and 5-digit Brampton numbers, and that “01697” is used only for 6-digit Brampton numbers.

Should someone attempt to make a call, from elsewhere, to the public telephone box with number “Brampton 2823” by dialling “01697 2823”, as the numbering plan hints you should, the call will fail. The number “Brampton 2823” is (016977) 2823. This is a “5+4” number in the Brampton (016977) area code. That number is NOT “01697 2823”, and it is NOT “01697 72823”.

The **numbering plan** should be amended, as detailed below, to show the correct information:

numplan280710.pdf

01697	Brampton (<i>6-fig. numbers only</i>)
016973	Wigton
016974	Raughton Head
016977	Brampton (<i>4 and 5-fig. numbers</i>)

In the file **readme.txt** the following table supposedly shows the valid UK number formats:

readme.txt

Local Number length	Format: Code+number	Overall length (excluding the 0 escape digit)
10 digit National dialling	(0) +10	10
8 digit (new 02X codes)	2+8	10
7 digit	3+7	10
6 digit	4+6	10
5 digit	4+5	9
5 digit (mixed)	5+5	10
Unusable	Not Applicable	(N/A)

The table above omits the “5+4” format used by numbers in the Brampton (016977) area code.

The following data is suggested as the replacement for that **readme.txt** table (including spelling fix):

readme.txt

Local Number length	Format: Code+number	Overall length (excluding the 0 escape digit)
10 digit National dialling	(0)+10	10
8 digit (02X codes)	2+8	10
7 digit	3+7	10
6 digit	4+6	10
5 digit	4+5	9
5 digit (mixed)	5+5	10
4 digit (mixed)	5+4	9
Unusable	Not Applicable	(N/A)

The “5+4” number format is still in use in Brampton for “(016977) 2xxx” and “(016977) 3xxx” numbers.

(continued...)

1.10 – The 016977 Brampton area code (cont'd.)

s1_code.txt / sabcde4.xls

In 2010, the file s1_code.txt / sabcde4.xls still contains numerous errors in the listings for the Brampton (016977) area:

1697	70		Allocated	LogicStar Limited	4+6	02/2008	
1697	71		Allocated	Danemere Street Creative	4+6	06/2005	
1697	72		Allocated	BT	5+4	03/2003	
1697	73		Allocated	BT	5+4	03/2003	
1697	74		Allocated	BT	5+5	07/1994	
1697	75		Allocated	BT	4+6	09/1995	
1697	76		Allocated	Your Communications Ltd	4+6	01/1998	
1697	77		Allocated	T.T.N.C. Limited	4+6	10/2006	F-Digit '0,1,2,3,4,5,6,7,8,9'
1697	78		Allocated	Orange Home UK Plc	4+6	11/2006	F-Digit '0'
1697	79		Allocated	Inclarity plc	4+6	05/2006	F-Digit '2'

In the table extract above, the first two entries should be “(0)+10”, not “4+6”, as discussed in section 1.9 of this report.

The last five entries should be “5+5”, not “4+6”, as discussed in section 1.6 of this report.

The number range at “1697 79 9” should be recorded as “Unusable” to protect “999” from local dialling.

The following table extract shows how the s1_code.txt / sabcde4.xls allocations in the 016977 range should be corrected:

1697	70		Allocated	LogicStar Limited	(0)+10	02/2008	
1697	71		Allocated	Danemere Street Creative	(0)+10	06/2005	
1697	72		Allocated	BT	5+4	03/2003	
1697	73		Allocated	BT	5+4	03/2003	
1697	74		Allocated	BT	5+5	07/1994	
1697	75		Allocated	BT	5+5	09/1995	
1697	76		Allocated	Your Communications Ltd	5+5	01/1998	
1697	77		Allocated	T.T.N.C. Limited	5+5	10/2006	F-Digit '0,1,2,3,4,5,6,7,8,9'
1697	78		Allocated	Orange Home UK Plc	5+5	11/2006	F-Digit '0'
1697	79	0-8	Allocated	Inclarity plc	5+5	05/2006	F-Digit '2'
1697	79	9	Unusable		N/A	05/2006	

All numbers beginning “016977” are a part of the “5-digit” Brampton “016977” area code.

This has to be so, otherwise the allocations would break the rules for local dialling mentioned in section 1.3 of this report.

Looking at the 2010 versions of the file sabc.txt for Penrith and surrounding area, the table extract shows the following data:

1768	0	Designated	Penrith National Dialling		4 Digit Code Area
1768	1	Designated	Penrith National Dialling		4 Digit Code Area
1768	2	Designated	Penrith		4 Digit Code Area
1768	3	Designated	Appleby		5 Digit Code Area
1768	4	Designated	Pooley Bridge		5 Digit Code Area
1768	5	Designated	Penrith		4 Digit Code Area
1768	6	Designated	Penrith		4 Digit Code Area
1768	7	Designated	Keswick		5 Digit Code Area
1768	8	Designated	Penrith		4 Digit Code Area
1768	9	Designated	Penrith		4 Digit Code Area

The table extract shown immediately above indicates that for numbers beginning 01768, all numbers with “D” digits “2”, “5”, “6”, “8” and “9” belong to the Penrith “01768” area code. It also shows that the “017683” area code is Appleby, while “017684” is Pooley Bridge and “017687” is Keswick. For “D” digits “3”, “4” and “7”, the area code has 5 digits. This is exactly right.

(continued...)

1.10 – The 016977 Brampton area code (cont'd.)

sabc.txt

The 2010 versions of the file **sabc.txt** show Brampton area code lengths as detailed in the table extract below:

1697	0	Designated	Brampton National Dialling		
1697	1	Designated	Brampton National Dialling		
1697	2	Designated	Brampton		
1697	3	Designated	Wigton		5 Digit Code Area
1697	4	Designated	Raughton Head		5 Digit Code Area
1697	5	Designated	Brampton		
1697	6	Designated	Brampton		
1697	7	Designated	Brampton		4 Digit Code Area
1697	8	Designated	Brampton		
1697	9	Designated	Brampton		

The above information is incorrect. The “1697 7” block is really a “5 Digit Code Area”. It is used by the “5+5” and “5+4” numbers in the Brampton 016977 area code, and has been for many years.

Compare the table above to the table (on the previous page) for the Penrith area. The Penrith table shows “017683”, “017684” and “017687” are “5 Digit Code Area” allocations, and the same should be true for “01697D” codes, where “D” is 3, 4, or 7.

The **sabc.txt** table should be corrected as detailed below:

1697	0	Designated	Brampton National Dialling		4 Digit Code Area
1697	1	Designated	Brampton National Dialling		4 Digit Code Area
1697	2	Designated	Brampton (6-fig.)		4 Digit Code Area
1697	3	Designated	Wigton		5 Digit Code Area
1697	4	Designated	Raughton Head		5 Digit Code Area
1697	5	Designated	Brampton (6-fig.)		4 Digit Code Area
1697	6	Designated	Brampton (6-fig.)		4 Digit Code Area
1697	7	Designated	Brampton (4 and 5-fig.)		5 Digit Code Area
1697	8	Designated	Brampton (6-fig.)		4 Digit Code Area
1697	9	Designated	Brampton (6-fig.)		4 Digit Code Area

The corrected table extract (shown directly above) clearly shows that Brampton has TWO area codes.

The (01697) area code has 6-digit local numbers beginning “2”, “5”, “6”, “8” and “9”; but NOT “3”, “4” or “7”.

The (016977) area code has 4-digit local numbers beginning “2” and “3”.

The (016977) area code has 5-digit local numbers beginning “4”, “5”, “6”, “7”, “8” and “9”.

“Brampton 200000” is (01697) 200000, and “Brampton 2000” is (016977) 2000. These numbers can call each other only by dialling the respective area code in front of the number. That is, 01697 and 016977 are *two separate area codes*.

Ofcom lists 01697 as Brampton, but has omitted the (016977) area code. Confusion has been caused by both area codes being referred to as “Brampton” at various times over the years, but with only one or the other code listed at any one time. Both area codes should be listed. Technically, since BT has no “4+6” allocations in the 01697 area, the 01697 area code has no name.

The **numbering plan** should be updated to show the correct information as follows:

numplan280710.pdf

01697	Brampton (6-fig. numbers only)
016973	Wigton
016974	Raughton Head
016977	Brampton (4 and 5-fig. numbers)

In any other part of the country, the (016977) area code would be called Brampton, but **(01697) would have a different name.**

(continued...)

1.10 – The 016977 Brampton area code (cont'd.)

Where a subscriber's local number begins with the “E” digit, that phone can call any other number having identical “OSABCD” digits by dialling that other number beginning with the “E” digit, or by dialling the entire area code and local number in full.

Ofcom's online “Telephone Area Codes” list also currently contains incomplete information:

01695	Skelmersdale
01697	Brampton
016973	Wigton
016974	Raughton Head
01698	Motherwell

This is the list at:

consumers.ofcom.org.uk/2009/09/telephone-area-codes-tool/.

The corrected version of the list should read:

01695	Skelmersdale
01697	Brampton (6 fig. only)
016973	Wigton
016974	Raughton Head
016977	Brampton (4 and 5 fig.)
01698	Motherwell

The above change will instantly solve the problem.

The corrected and complete list of “mixed” area codes is shown in the following table extract:

01387	Dumfries
013873	Langholm
01524	Lancaster
015242	Hornby
01539	Kendal
015394	Hawkshead
015395	Grange-Over-Sands
015396	Sedbergh
01697	Brampton (6-fig. numbers only)
016973	Wigton
016974	Raughton Head
016977	Brampton (4 and 5-fig. numbers)
01768	Penrith
017683	Appleby
017684	Pooley Bridge
017687	Keswick
01946	Whitehaven
019467	Gosforth

numplan280710.pdf

(continued...)

1.10 – The 016977 Brampton area code (cont'd.)

The rules relating number format, area code length, local number length, and the start digit for local dialling are very simple.

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

All digits found before (but not including) the “start digit for local dialling” comprise the “area code”. In “mixed” 4 and 5-digit code areas, the “D” digit is the deciding factor as to which area code the number belongs to. This decision cannot, and must not, be made at the “E” digit level. Where two numbers have identical 0SABCD digits, by definition, these two numbers will always belong to the same area code. With 4-digit area codes, the area code will be the (0SABC) digits, and with 5-digit area codes, the area code will comprise the (0SABCD) digits and all local numbers in that 5-digit area code therefore begin with the “E” digit.

As an example, local dialling within the various (017683), (017684), (017687) and (01768) area codes works as follows:

		CALLING TO							
		(017683) 0xxxx (017683) 1xxxx	(017683) 2xxxx (017683) 3xxxx (017683) 4xxxx (017683) 5xxxx (017683) 6xxxx (017683) 7xxxx (017683) 8xxxx (017683) 9xxxx	(017684) 0xxxx (017684) 1xxxx	(017684) 2xxxx (017684) 3xxxx (017684) 4xxxx (017684) 5xxxx (017684) 6xxxx (017684) 7xxxx (017684) 8xxxx (017684) 9xxxx	(017687) 0xxxx (017687) 1xxxx	(017687) 2xxxx (017687) 3xxxx (017687) 4xxxx (017687) 5xxxx (017687) 6xxxx (017687) 7xxxx (017687) 8xxxx (017687) 9xxxx	(01768) 0xxxxx (01768) 1xxxxx	(01768) 2xxxxx (01768) 3xxxxx (01768) 4xxxxx (01768) 5xxxxx (01768) 6xxxxx (01768) 7xxxxx (01768) 8xxxxx (01768) 9xxxxx
CALLING FROM		Appleby NDO 0+10	Appleby 5+5	Pooley Bridge NDO 0+10	Pooley Bridge 5+5	Keswick NDO 0+10	Keswick 5+5	Penrith NDO 0+10	Penrith 4+6
(017683) 0xxxx (017683) 1xxxx	Appleby 0+10	CODE + NUMBER	LOCAL NUMBER (5 digits)	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER
(017683) 2xxxx (017683) 3xxxx (017683) 4xxxx (017683) 5xxxx (017683) 6xxxx (017683) 7xxxx (017683) 8xxxx (017683) 9xxxx	Appleby 5+5	CODE + NUMBER	LOCAL NUMBER (5 digits)	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER
(017684) 0xxxx (017684) 1xxxx	Pooley Bridge 0+10	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER	LOCAL NUMBER (5 digits)	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER
(017684) 2xxxx (017684) 3xxxx (017684) 4xxxx (017684) 5xxxx (017684) 6xxxx (017684) 7xxxx (017684) 8xxxx (017684) 9xxxx	Pooley Bridge 5+5	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER	LOCAL NUMBER (5 digits)	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER
(017687) 0xxxx (017687) 1xxxx	Keswick 0+10	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER	LOCAL NUMBER (5 digits)	CODE + NUMBER	CODE + NUMBER
(017687) 2xxxx (017687) 3xxxx (017687) 4xxxx (017687) 5xxxx (017687) 6xxxx (017687) 7xxxx (017687) 8xxxx (017687) 9xxxx	Keswick 5+5	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER	LOCAL NUMBER (5 digits)	CODE + NUMBER	CODE + NUMBER
(01768) 0xxxxx (01768) 1xxxxx	Penrith 0+10	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER	LOCAL NUMBER (6 digits)
(01768) 2xxxxx (01768) 3xxxxx (01768) 4xxxxx (01768) 5xxxxx (01768) 6xxxxx (01768) 7xxxxx (01768) 8xxxxx (01768) 9xxxxx	Penrith 4+6	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER	LOCAL NUMBER (6 digits)

The table, above, clearly shows there are FOUR separate area codes within the 01768 and 01768X ranges: (017683) is Appleby, (017684) is Pooley Bridge, (017687) is Keswick, all with 5-digit local numbers, and (01768) is Penrith with 6-digit local numbers beginning 2, 5, 6, 8 and 9 only. To call any number in any of the other groups, the area code is always required.

(continued...)

1.10 – The 016977 Brampton area code (cont'd.)

Local dialling within the various (016973), (016974), (016977) and (01697) area codes works as shown in the following table:

		CALLING TO								
		(016973) 0xxxx (016973) 1xxxx	(016973) 2xxxx (016973) 3xxxx (016973) 4xxxx (016973) 5xxxx (016973) 6xxxx (016973) 7xxxx (016973) 8xxxx (016973) 9xxxx	(016974) 0xxxx (016974) 1xxxx	(016974) 2xxxx (016974) 3xxxx (016974) 4xxxx (016974) 5xxxx (016974) 6xxxx (016974) 7xxxx (016974) 8xxxx (016974) 9xxxx	(016977) 0xxxx (016977) 1xxxx	(016977) 2xxx (016977) 3xxx	(016977) 4xxxx (016977) 5xxxx (016977) 6xxxx (016977) 7xxxx (016977) 8xxxx (016977) 9xxxx	(01697) 0xxxxx (01697) 1xxxxx	(01697) 2xxxxx (01697) 5xxxxx (01697) 6xxxxx (01697) 8xxxxx (01697) 9xxxxx
CALLING FROM		Wigton NDO 0+10	Wigton 5+5	Raughton Head NDO 0+10	Raughton Head 5+5	Brampton "A" NDO 0+10	Brampton "A" 5+4	Brampton "A" 5+5	Brampton "B" NDO 0+10	Brampton "B" 4+6
(016973) 0xxxx (016973) 1xxxx	Wigton 0+10	CODE + NUMBER	LOCAL NUMBER (5 digits)	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER
(016973) 2xxxx (016973) 3xxxx (016973) 4xxxx (016973) 5xxxx (016973) 6xxxx (016973) 7xxxx (016973) 8xxxx (016973) 9xxxx	Wigton 5+5	CODE + NUMBER	LOCAL NUMBER (5 digits)	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER
(016974) 0xxxx (016974) 1xxxx	Raughton Head 0+10	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER	LOCAL NUMBER (5 digits)	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER
(016974) 2xxxx (016974) 3xxxx (016974) 4xxxx (016974) 5xxxx (016974) 6xxxx (016974) 7xxxx (016974) 8xxxx (016974) 9xxxx	Raughton Head 5+5	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER	LOCAL NUMBER (5 digits)	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER
(016977) 0xxxx (016977) 1xxxx	Brampton "A" 0+10	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER	LOCAL NUMBER (4 digits)	LOCAL NUMBER (5 digits)	CODE + NUMBER	CODE + NUMBER
(016977) 2xxx (016977) 3xxx	Brampton "A" 5+4	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER	LOCAL NUMBER (4 digits)	LOCAL NUMBER (5 digits)	CODE + NUMBER	CODE + NUMBER
(016977) 4xxxx (016977) 5xxxx (016977) 6xxxx (016977) 7xxxx (016977) 8xxxx (016977) 9xxxx	Brampton "A" 5+5	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER	LOCAL NUMBER (4 digits)	LOCAL NUMBER (5 digits)	CODE + NUMBER	CODE + NUMBER
(01697) 0xxxxx (01697) 1xxxxx	Brampton "B" 0+10	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER	LOCAL NUMBER (6 digits)
(01697) 2xxxxx (01697) 5xxxxx (01697) 6xxxxx (01697) 8xxxxx (01697) 9xxxxx	Brampton "B" 4+6	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER	CODE + NUMBER	LOCAL NUMBER (6 digits)

The table clearly shows there are now FOUR separate area codes within the 01697 and 01697X ranges: (016973) is Wigton, (016974) is Raughton Head, (016977) is Brampton with 4 and 5-digit local numbers, and (01697) is Brampton with 6-digit local numbers beginning 2, 5, 6, 8 and 9 only. To call any number in any of the other groups, the area code is always required.

Brampton's decade of missed opportunities

Ofcom's data is spread over a number of different files. The information for the Brampton area has been edited and amended multiple times over the last ten years, but there has been no occasion when the data in all of the files agreed with each other.

Numbering Plan – The proposal in 2003 contained incorrect data. After BT pointed out the error, it was corrected in the final version in 2003, but then the data reverted to showing incorrect information in all issues from 2004 until the present day.

sabc.txt – incorrectly showed (016977) as a “4-digit area code” from 2000 to 2002, was briefly corrected in 2002 to show as a “5-digit area code”, and was then changed back to incorrect “4-digit area code” in all versions from 2003 until the present day.

s1_code.txt (formerly **sabc_de.txt**) / **sabcde4.xls** (formerly **sabcde2.xls**) – Data for “1697 72” and “1697 73” was incorrect from 2000 to 2002 and briefly corrected in 2003. It was changed back to incorrect in 2004, changed to totally absurd in 2005, and finally fixed in 2010. The data for “1697 74” was incorrect from 2000 to 2010, and then finally corrected. The data for “1697 70”, “1697 71”, and for “1697 75” to “1697 79” has been incorrect for the last five years and is still incorrect now.

num_guide.pdf – The “number formats” table correctly shows “(016977) XXXX” as an example of a “5+4” Brampton number.

readme.txt – The table of valid formats omits “5+4” from every version of the document from pre-2000 to the present day.

1.11 – Clarification of valid local number ranges

numplan280710.pdf

In certain areas of the country, some area codes listed in the **numbering plan** also come with details of which local number initial digits are matched with which named location. Most of those areas are the so-called “ELNS” areas.

The list includes the following example areas:

01339	Aboyne (2,3,5,8) Ballater (4,6,7,9)	Y
01423	Boroughbridge (3,4,9) Harrogate (2,5,6,7,8)	Y
01430	Market Weighton (6,7,8,9) North Cave (2,3,4,5)	Y
01434	Bellingham (2,4,9) Haltwhistle (3,5) Hexham (6,7,8)	Y

The above usage is very clear and unambiguous. Only certain local number initial digits are matched with each place name.

For telephone numbers where the “SABC” digits are 1387, 1524, 1539, 1697, 1768 or 1946 the number could be within a 4-digit area code, or may be a part of a 5-digit area code. In these cases, the “D” digit is the deciding factor as to which rule applies.

This can be seen in the following **numbering plan** table extract:

numplan280710.pdf

01387	Dumfries	Y
013873	Langholm	Y
01524	Lancaster	Y
015242	Hornby	Y
01539	Kendal	Y
015394	Hawkshead	Y
015395	Grange-Over-Sands	Y
015396	Sedbergh	Y
01697	Brampton <i>(for 6 fig. numbers only)</i>	Y
016973	Wigton	Y
016974	Raughton Head	Y
016977	Brampton <i>(for 4 and 5 fig. numbers)</i>	Y
01768	Penrith	Y
017683	Appleby	Y
017684	Pooley Bridge	Y
017687	Keswick	Y
01946	Whitehaven	Y
019467	Gosforth	Y

019462xxxxx will be (01946) 2xxxxx, Whitehaven; and
019467xxxxx will be (019467) xxxxxx, Gosforth.

Although these rules are straightforward, it seems that many people do not understand them. Many computer systems have been inadvertently programmed such that the 5-digit area codes are ignored; or worse still, such numbers cannot be input without error. However, there is a very simple solution to making the information for these areas more clear.

(continued...)

1.11 – Clarification of valid local number ranges (cont'd.)

For each of the six affected 4-digit area codes, simply list the valid local number initial digits for that area immediately after the area code name.

The following table extract shows the suggested **numbering plan** wording changes:

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

The table extract, above, now very clearly shows that Whitehaven does not have any local numbers with a “7” as the initial digit.

The reason for that is also obvious. Any number beginning with 019467 is in fact designated as being a Gosforth number and uses that separate (019467) area code.

Additionally, this change also clarifies the arrangements in the 01697 and 01697X ranges. It is clear that the (016973) area code is used by Wigton, and the (016974) area code is used by Raughton Head. That has never been in dispute.

What has not been clearly stated in the past, is that the (016977) area code is used both by 4-figure and 5-figure local numbers in Brampton, and that local numbers in the separate (01697) area code cannot begin with a 3, 4 or 7.

The simple changes to the table, as shown above, bring more clarity to the relationship of area codes and local numbers for the small number of places that have both 4-digit and 5-digit area codes sharing the same OSABC initial digits.

This change to the numbering plan merely documents and clarifies existing numbering policy.

*The smaller typeface in the table extract above shows number ranges that are currently “Protected”.
I am not sure if “Protected” ranges would be omitted from, or included in, such a list of valid initial digits.*

Finally, since BT has NO “4+6” allocations in the (01697) area code, technically, the (01697) area code has no name.

In area code lists from the 1980s, the 0697 area code is simply called “North West”, with individual exchanges in that area each using an area code with an extra digit: 06972, 06973, 06974, 06976, 06977 and 06978.

In the late 1990s, numbers in the 06972, 06976, and 06978 area codes were migrated to the single (016977) Brampton area code. At the same time 06973 became (016973), Wigton; and 06974 became (016974), Raughton Head. There is no name for (01697).

1.12 – “Mixed format” numbers in the “(01768) 88” range

s1_code.txt / sabcde4.xls

Current allocations in the “(01768) 88” range are recorded as shown in the following table extract:

1768	88		Allocated	BT	Mixed 4+5 & 4+6	07/1994	
------	----	--	-----------	----	-----------------	---------	--

The (01768) area code is allocated to “Penrith”.

Penrith mostly has 6-digit local numbers, except for the block shown above which is described as “mixed”.

The “1768 88” block is the only geographic number block within the entire UK numbering plan where the local number *length* is governed by the value of the “F” digit. Normally the value of the “D” and “E” digits is the deciding factor.

This can easily be seen in examples such as “(015242) xxxxx” vs. “(01524) 3xxxx” where the “DE” digits are used. See it in “(01606) 72xxxx” vs. “(01606) 74xxx”, and in “(016977) 2xxx” vs. “(016977) 4xxxx” where the “DE” digits are used again.

A computer programmed to accept the correct format for various UK numbers, and reject numbers with an unallocated area code or the wrong number of digits, probably expects a description such as “4+6”, “4+5” or “5+5” for each individual number range in order to work. A computer program cannot cope with “mixed” as a number length; the actual length should be specified.

Fortunately, within the “(01768) 88” range, the way the various local number lengths are implemented by BT is known.

The breakdown for local numbers within the above “88X” local number range of the (01768) area code is as follows:

- local numbers beginning 880, 881, 885, 889 have six digits;
- local numbers beginning 882, 883, 884, 886, and 887 have five digits;
- there is no data for local numbers beginning 888.

The corrected allocations table should look like this, with ten new entries in place of the previous one line of data:

1768	88	0	Allocated	BT	4+6	07/1994	
1768	88	1	Allocated	BT	4+6	07/1994	
1768	88	2	Allocated	BT	4+5	07/1994	
1768	88	3	Allocated	BT	4+5	07/1994	
1768	88	4	Allocated	BT	4+5	07/1994	
1768	88	5	Allocated	BT	4+6	07/1994	
1768	88	6	Allocated	BT	4+5	07/1994	
1768	88	7	Allocated	BT	4+5	07/1994	
1768	88	8	Allocated	BT	?	07/1994	<i>Is this 4+6 or 4+5?</i>
1768	88	9	Allocated	BT	4+6	07/1994	

The format of numbers in the range “(01768) 880” to “(01768) 887” and in the “(01768) 889” block is known.

Only the allocation at “(01768) 888” is of unknown format. Presumably BT could supply the correct data for this range.

If it is not possible to divide the table of allocations as shown above, please at least add a note to the existing entry like this:

1768	88		Allocated	BT	Mixed 4+5 & 4+6	07/1994	F-Digit '0,1,5,9': 4+6 / F-Digit '2,3,4,6,7': 4+5
------	----	--	-----------	----	-----------------	---------	--

The change detailed above will help more people build their systems correctly.

I have already met at least one computer system that read the “Mixed 4+5 & 4+6” assignment, and then allocated a number length of “zero” to all numbers in the “(01768) 88” range. This meant that all telephone numbers in this range that were input to the system were rejected as “invalid – too long”. Additionally, any existing numbers in this range that were already stored in the database, could not be viewed as they were displayed with zero length. One system simply crashed when attempting to print these numbers.

1.13 – Local numbers beginning “99” in “4+6” areas

s1_code.txt
 sabcde2.xls / sabcde3.xls
 sabcde4.xls / sabcde5.xls

Allocations for local numbers which clash with numbers used for the Emergency Services should be protected.

These numbers should never be “allocated” or “free for allocation”, and the “Number Length” column should record “N/A”.

These are the local numbers beginning “999”; and often all other local numbers beginning “99X” should also remain unallocated.

In the case of “4+6” format numbers, these will be the numbers matching the pattern “(01xxx) 99xxxx”.

This corresponds to the numbers found in the “1xxx 99” blocks within every 4-digit area code.

For most of the “4+6” areas, these number ranges are correctly recorded, as shown by the following extracts from the table of allocations:

1470	99		Protected		N/A		
1471	99		Protected		N/A		
1472	99		Protected		N/A		
1473	99		Protected		N/A		
1474	99		Protected		N/A		
1475	99		Protected		N/A		
1476	99		Protected		N/A		
1477	99		Protected		N/A		
1478	99		Protected		N/A		
1479	99		Protected		N/A		
1480	99		Protected		N/A		

However, local numbers beginning “99” in the following “4+6” areas are recorded differently:

1534	99		Protected		4+6		
1624	99		Protected		4+6		
1908	99	9	Unusable		N/A		
1987	99		Protected		4+6		

The allocations at “1534 99”, “1624 99”, and “1987 99” are recorded as having a number length of “4+6” but these should all be recorded as “N/A”.

(continued...)

1.13 – Local numbers beginning “99” in “4+6” areas (cont'd.)

s1_code.txt
 sabcde2.xls / sabcde3.xls
 sabcde4.xls / sabcde5.xls

The allocation at “1908 999” is recorded as “Unusable” and that is a far better description than “Protected”. I'd like to see that repeated for all local number allocations which clash with Emergency Service numbers.

For the number ranges with the number format currently incorrectly recorded as “4+6”, the following table extract shows the respective number length data corrected to “N/A”, as well as showing the preferred “Unusable” designation:

1534	99	9	Unusable		N/A		
1624	99	9	Unusable		N/A		
1908	99	9	Unusable		N/A		
1987	99	9	Unusable		N/A		

The “Unusable” designation should apply to all local numbers beginning “99” (except for the very rare occasions where numbers beginning “99” have been allocated in a small number of areas), and especially to those beginning “999”.

1.14 – Local numbers beginning “99” in the 01481 area

s1_code.txt / sabcde3.xls

It is highly unusual for local numbers beginning “99” to be allocated to users. Local numbers beginning “999” cannot ever be allocated to any user, for obvious reasons.

Where local numbers beginning “990” to “998” are allocated and in use, there is still a danger that a local caller “dials 9 for an outside line” from a phone that does not require this digit to be dialled, followed by the local number beginning “99”, and thereby inadvertently calls the emergency services.

However, such numbers do appear to have been allocated in the (01481) area.

The current allocation within the (01481) area code is recorded as shown in the following table extract:

1481	99		Allocated	Cable and Wireless Guernsey Limited	4+6	07/1994	
------	-----------	--	------------------	-------------------------------------	------------	---------	--

The above allocation for Guernsey is dangerous. Any local number dialled as “999xxx” will call the Emergency Services.

Certainly, for F-Digit “9”, the status should be “Protected” or “Unusable”.

The allocation data should be corrected as shown in the following table extract:

1481	99	0	Allocated	Cable and Wireless Guernsey Limited	4+6	07/1994	
1481	99	1	Allocated	Cable and Wireless Guernsey Limited	4+6	07/1994	
1481	99	2	Allocated	Cable and Wireless Guernsey Limited	4+6	07/1994	
1481	99	3	Allocated	Cable and Wireless Guernsey Limited	4+6	07/1994	
1481	99	4	Allocated	Cable and Wireless Guernsey Limited	4+6	07/1994	
1481	99	5	Allocated	Cable and Wireless Guernsey Limited	4+6	07/1994	
1481	99	6	Allocated	Cable and Wireless Guernsey Limited	4+6	07/1994	
1481	99	7	Allocated	Cable and Wireless Guernsey Limited	4+6	07/1994	
1481	99	8	Allocated	Cable and Wireless Guernsey Limited	4+6	07/1994	
1481	99	9	Unusable		N/A	07/1994	

The “Unusable” status for all local numbers beginning “999” is the key point.

1.15 – Local numbers beginning “99” in the 01908 area

s1_code.txt / sabcde5.xls

It is highly unusual for local numbers beginning “99” to be allocated to users. Local numbers beginning “999” cannot ever be allocated to any user, for obvious reasons.

Where local numbers beginning “990” to “998” are allocated and in use, there is still a danger that a local caller “dials 9 for an outside line” from a phone that does not require this digit to be dialled, followed by a local number beginning “99” and thereby inadvertently calls the emergency services.

However, such numbers do appear to have been allocated in the (01908) area, but the number length is recorded as “N/A”, where “4+6” would reasonably be expected. This allocation is recorded in error. The number length data needs to be corrected.

The allocations are recorded incorrectly, as shown in the following table extract:

1908	99	0	Allocated	Opal Telecom Limited	N/A	02/2010	
1908	99	1	Allocated	BT	N/A	11/2009	
1908	99	2	Allocated	BT	N/A	01/2010	
1908	99	3	Allocated	BT	N/A	01/2010	
1908	99	4	Allocated	BT	N/A	01/2010	
1908	99	5	Allocated	BT	N/A	01/2010	
1908	99	6	Allocated	BT	N/A	01/2010	
1908	99	7	Allocated	BT	N/A	01/2010	
1908	99	8	Allocated	BT	N/A	11/2009	
1908	99	9	Unusable		N/A		

Some computer systems already reject numbers within the above number ranges as “non valid” due to the “N/A” number length.

Presumably, the number allocations should be corrected as shown in the following table extract:

1908	99	0	Allocated	Opal Telecom Limited	4+6	02/2010	
1908	99	1	Allocated	BT	4+6	11/2009	
1908	99	2	Allocated	BT	4+6	01/2010	
1908	99	3	Allocated	BT	4+6	01/2010	
1908	99	4	Allocated	BT	4+6	01/2010	
1908	99	5	Allocated	BT	4+6	01/2010	
1908	99	6	Allocated	BT	4+6	01/2010	
1908	99	7	Allocated	BT	4+6	01/2010	
1908	99	8	Allocated	BT	4+6	11/2009	
1908	99	9	Unusable		N/A		

1.16 – 01507 area code naming

sabc.txt / numplan280710.pdf

01507	Alford (Lincs) (4,8,9) Louth (3,6,7) Spilsby (2,5)	Y
01790	Spilsby	Y

In a previous consultation response, in 2003, BT said:

“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 (from 01507).”

See page 7 of the document found at:

www.btplc.com/Thegroup/RegulatoryandPublicaffairs/Consultativeresponses/Ofiel/2003/Nationaltelephonenumberingplan/response.pdf

In 2010, Spilsby still appears to be listed under both area codes in the numbering plan. Note that some providers have referred to the “(01507) 2” and “(01507) 5” allocations as using the place name “**Horncastle**” in the past.

1.17 – The 01885 and 01886 area codes

sabc.txt / numplan280710.pdf

The **numbering plan** currently contains these two entries:

01885	Pencombe	Y
01886	Bromyard	Y

Using the Phone Book, it appears that businesses in **Bromyard** use the **01885** area code. There appear to be no Bromyard businesses using the 01886 area code. The 01886 area code seems to be used in the rural areas to the east of Bromyard.

BT has previously used “**Knightwick**” for **01886**. In a previous consultation response, in 2003, Cable & Wireless suggested:

“01885 should be named Bromyard. 01886 should be given the name Leigh Sinton.”

See page 18 of the document found at:

www.ofcom.org.uk/static/archive/oftel/publications/responses/2003/ntnp0303/c&w.pdf.

1.18 – Duplicate area codes for Newquay

sabc.txt / numplan280710.pdf

The **numbering plan** currently contains these two entries for Newquay:

01637	Newquay	Y
01841	Newquay	Y

Newquay is listed both as 01637 and as 01841. That cannot be correct. The number “*Newquay 750000*” is ambiguous.

The **Newquay** exchanges use only **01637**. In a previous consultation response, in 2003, Cable & Wireless suggested:

“1841 - Newquay – consider using Padstow.”

See page 17 of the document found at:

www.ofcom.org.uk/static/archive/oftel/publications/responses/2003/ntnp0303/c&w.pdf.

1.19 – Duplicate entry for “1246 – Chesterfield”

sabc.txt

In the **sabc.txt** file, the entry for Chesterfield is duplicated and has been since late 2007.

1246		Designated	Chesterfield		
1246		Designated	Chesterfield	Y	

One of the two entries should be deleted.

1.20 – The “Gosforth (Mixed)” area code

sabc.txt

In the **sabc.txt** file, the entry for “019467 – Gosforth” is followed by the word “*Mixed*”.

1946	7	Designated	Gosforth (Mixed)		5 Digit Code Area
------	---	------------	---------------------------	--	-------------------

There are twelve 5-digit area codes in all (listed in section 1.3). Only the (019467) area has this word “*Mixed*” after the name.

For consistency, please either add the word “*Mixed*” to the other eleven 5-digit areas, or remove it from the Gosforth entry.

Rather than directly appending the word “*Mixed*” to the end of the area code name, perhaps this designation could be placed in the same column as the “*ELNS*” designation used by various number ranges in other area codes.

1.21 – Inconsistent area code naming

sabc.txt / numplan280710.pdf

There are several area codes where the area code name appears to differ between the **numbering plan** and the **sabc.txt** file.

One or other name is obviously in error. These areas are detailed in the table below, with the errors shown in red:

Code	Numbering plan	“sabc.txt” file	Code	Numbering plan	“sabc.txt” file
01491	Henley-on-Thames	Henley on Thames	01889	Rugely	Rugeley
015395	Grange-Over-Sands	Grange over Sands	019467	Gosforth	Gosforth (mixed)
01877	Callandar	Callander	028 90	Belfast	Belfast City

The above names should be consistent in all Ofcom data files. The “015395” area code name should be “Grange-over-Sands”.

1.22 – The 01333 and 01334 area codes

sabc.txt / numplan280710.pdf

The **numbering plan** currently contains these entries for “Peat Inn” and for “St Andrews”:

01333	Peat Inn	Y
01334	St Andrews	Y

The village of **Peat Inn** is actually located within the “01334” area. The main settlement in that part of Fife is **St Andrews**.

Naming the “01333” area code as “Peat Inn” appears to be incorrect.

It is suggested that the 01333 area code use the name “**Leven (Fife)**” instead, as shown in the table extract below:

01333	Leven (Fife)	Y
01334	St Andrews	Y

1.23 – Number length for “03” numbers

s3_code.txt / s3.xls

The “Number Length” column is completely blank in the “s3” file.

These numbers should all be recorded as “(0)+10” format.

For consistency, the “(0)+10” notation is much preferred.

1.24 – Number length for “05” numbers

s5_code.txt / s5.xls

There is no “Number Length” column in the “s5” file.

The number length is actually shown in the “Notes” column.

The “Notes” column should be renamed to “Number Length” and an additional “Notes” column added.

The format for all “05” numbers is shown as “10 Digit Numbers”.

All of these numbers should be recorded as “(0)+10” format.

For consistency, the “(0)+10” notation is much preferred.

1.25 – Number length for “07” numbers

s7_code.txt / s7.xls

There is no “Number Length” column in the “s7” file.

The number length is actually shown in the “Notes” column.

The “Notes” column should be renamed to “Number Length” and an additional “Notes” column added.

Number length isn't shown at all for any of the 074 and 075 numbers.

For the remainder of the “07” numbers, the format is shown as “10 Digit Numbers”.

All of these numbers should be recorded as “(0)+10” format.

For consistency, the “(0)+10” notation is much preferred.

1.26 – Number length for “08” numbers

s8_code.txt / s8.xls

There is no “Number Length” column in the “s8” file.

The number length is actually shown in the “Notes” column.

The “Notes” should be renamed to “Number Length” and an additional “Notes” column added.

The number length isn't shown at all for any of these ranges:

“8088 11”, “8088 12”, “8430”, “8431”, “8432”, “8433”, “8434”, “8435”, “8446”,
“8710 70”, “8710 75”, “8720”, “8721”, “8722”, “8723”, “8724”.

Presumably they are all “(0)+10” format.

For the remainder of the “08” numbers, the format is shown as a mixture of:

“10 Digit Numbers”, “10 digit numbers”, “7 Digit Number”, “7 digit numbers”, “9 Digit Numbers” and “9 digit numbers”.

I assume the singular/plural and the capitalisation, or lack of, is merely down to who entered the details.

For consistency, the “(0)+10”, “(0)+7” and “(0)+9” notation is much preferred.

1.27 – Number length for “09” numbers

s9_code.txt / s9.xls

There is no “Number Length” column in the “s9” file.

The number length is actually shown in the “Notes” column.

The “Notes” column should be renamed to “Number Length” and an additional “Notes” column added.

The number length isn't shown at all for any of these ranges:

“9820”, “9821”, “9822”, “9823”, “9824”, “9825”, “9826”, “9827”, “9828”, “9829”,
“9830”, “9831”, “9832”, “9833”, “9834”, “9835”, “9836”, “9837”, “9838”, “9839”.

Presumably they are all “(0)+10” format.

For the remainder of the “09” numbers, the number format is shown as a mixture of:

“10 Digit Number” (for two ranges), “10 Digit Numbers” and “10 Digit Numbering” (for five ranges).

For consistency, the “(0)+10” notation is much preferred.

1.28 – Five-digit area codes

sabc.txt

In the file **sabc.txt**, one column is used for signalling the area code length, but there is no consistency to this data.

For 5-digit area codes, the entries for 013873, 015242, 015394, 015395, 015396, 016973, 016974, 017683, 017684, 017687 and 019467 are correctly marked as “5 Digit Code Area”.

The 5-digit area code “016977” is allocated to Brampton. This is the entry at “1697”,”7”. The data for this entry should be changed from “4 Digit Code Area” to “5 Digit Code Area”.

That is, numbers beginning “016977xxxxx” are “(016977) xxxxx” and are **not** “(01697) 7xxxxx”.

1.29 – Three-digit area codes

sabc.txt

In the file **sabc.txt**, one column is used for signalling the area code length, but there is no consistency to this data.

For three digit area codes, the entries for 0113, 0114, 0115, 0116, 0117, 0118, 0121 say “3 Digit Area Code”, while the entries for 0141 say “3 Digit Code Area”.

For area codes such as 0131, 0151, 0161 and 0191, there is no such note. The length detail is missing. Please add it.

Please also make the wording consistent; “Area Code” vs. “Code Area”. I don't care which one you use; pick one and use the same word order on all entries.

1.30 – Two-digit area codes

sabc.txt

In the file **sabc.txt**, one column is used for signalling the area code length, but there is no consistency to this data.

For area codes such as 020, 023, 024, 028 and 029, there is no such note. The “2 Digit Code Area” or “2 Digit Area Code” note is missing from all. Please add it.

1.31 – The “Not Designated” designation

sabc.txt

In the file **sabc.txt** there are six thousand lines from “4000” to “9999” repeating “Not Designated” over and over again.

```
"4000",,"Not Designated",,, ""
"4001",,"Not Designated",,, ""
"4002",,"Not Designated",,, ""
"4003",,"Not Designated",,, ""
"4004",,"Not Designated",,, ""
"4005",,"Not Designated",,, ""
"4006",,"Not Designated",,, ""
"4007",,"Not Designated",,, ""
"4008",,"Not Designated",,, ""
"4009",,"Not Designated",,, ""
"4010",,"Not Designated",,, ""
```

...and on and on for a total of 6000 lines.

Strangely, there are no records for any of the codes from “3000” to “3999”.

Should the 6000 lines repeating “Not Designated” over and over, instead be filled in with “National Call”, “Mobile”, “Freephone”, “Premium Rate” and other such designations in place of the current “Not Designated” entries?

1.32 – Is 07624 a “radiopaging” or a “mobile services” allocation?

s7_code.txt / s7.xls

Current “07624” number allocations are recorded as shown in the following table extract:

7624	0	Allocated	Manx Telecom	Radiopaging	10 Digit Numbers	01/2004
7624	1	Allocated	Manx Telecom	Radiopaging	10 Digit Numbers	01/2004
7624	2	Allocated	Cable and Wireless Isle of Man Limited	Radiopaging	10 Digit Numbers	10/2006
7624	3	Allocated	Manx Telecom	Radiopaging	10 Digit Numbers	01/2004
7624	4	Allocated	Manx Telecom	Radiopaging	10 Digit Numbers	01/2004
7624	5	Allocated	Manx Telecom	Radiopaging	10 Digit Numbers	01/2004
7624	6	Allocated	Manx Telecom	Radiopaging	10 Digit Numbers	01/2004
7624	7	Allocated	Manx Telecom	Radiopaging	10 Digit Numbers	01/2004
7624	8	Allocated	Manx Telecom	Radiopaging	10 Digit Numbers	01/2004
7624	9	Allocated	Manx Telecom	Radiopaging	10 Digit Numbers	01/2004

The 076 range is supposedly allocated to radiopaging, but numbers in the 07624 block seem to be occupied by mobile telephones in the Isle of Man. Is this a “local agreement”, and should the table of allocations be amended to reflect this usage?

Based on the “fact” that 076 numbers are used for pagers, some office systems bar calls to 076 numbers and therefore inadvertently block calls to mobile telephones in the Isle of Man.

Please correct the data for the above allocation.

On page 33 of the **numplan280710.pdf** file, there is the following table:

5: Public Telephone Network Numbers not available for Allocation but which can be Adopted where already Allocated	
Numbers beginning	Designation
0500	No charge to Caller
07624	Radiopaging and Mobile Services (Isle of Man Communications Commission)
0800 (plus 6-digits)	Special Services - No charge to caller (except where charges shall be notified to callers at the start of the call)
0908 and 0909	<i>From 9 November 2007</i> Sexual Entertainment Services at a Premium Rate

The table mentions that the “07624” number range is used both for “radiopaging” and “mobile services”. It would be great if the other Ofcom documents were also brought into alignment in confirming that.

1.33 – Missing ranges in “mobile services” allocation file

s7_code.txt / s7.xls

The number ranges “7829 0” to “7829 6” are missing from the list in the “s7” file.

The data for those ranges has been missing for several years.

What is the current status of the above “mobile services” number ranges?

1.34 – Empty “Date” column

s1_code.txt / s3_code.txt
s5_code.txt / s7_code.txt
s8_code.txt / s9_code.txt

In all of the number allocation files, the “Date” column is blank.

What exactly is this column for?

1.35 – Data format in the “sabc.txt” file

sabc.txt

The data in the file **sabc.txt** is not at all easy to use. The file would be much easier to process if:

- the “Notes” column were to be renamed “Area code length”;
- the area code length were to be filled in for all 2, 3, and 5 digit area codes as a minimum;
- a brand new “Notes” column were to be added after the current rightmost column;
- the “ELNS” designations were to be moved to the new “Notes” column;
- for “unassigned” area codes, the details of “former assignments” were to be moved to the new “Notes” column;
- for the twelve “mixed 4 and 5 digit” area code areas, the word “mixed” to be placed in the new “Notes” column.

Additionally, the “D” digit only needs to be specified for “mixed 4 and 5 digit” code areas and for “ELNS” area codes. There is absolutely no need to specify the “D” digit for any of the listings in 2 or 3 digit code areas (it is especially not needed for any of the 011X, 01X1 and 02X area codes) as it leads to massive and unnecessary repetition.

1.36 – Using Ofcom data

Although at first glance, Ofcom's data seems to be very detailed, and the weekly updates seemingly give a sense of being right up-to-date, the data cannot be directly used without a significant amount of further work. The needed fixes include:

- fixing spelling mistakes and other errors in the (01271), (01284), (01286), (01289), (01482), (01559), (01636), and (01934) area code names, in *sabc.txt*;
- fixing area code and number length for the “(013873) 3” range, in *s1_code.txt*;
- fixing area code and number length for the “(016973) 8” range, in *s1_code.txt*;
- fixing area code and number length for (016977) numbers, in *s1_code.txt*;
- adding additional number length detail to the “(01768) 88” range, in *s1_code.txt*;
- adding the Brampton (016977) area code, noting that it applies to both 4-digit and 5-digit local numbers;
- fixing the number length for NDO numbers in (016977) and (019467), in *s1_code.txt*;
- fixing details for the “(01481) 99” range, in *s1_code.txt*;
- fixing number length for numbers in the “(01908) 99” range, in *s1_code.txt*;
- fixing details for numbers beginning “99” in (01534), (01624) and (01987), in *s1_code.txt*;
- fixing area code names within the (01507) area code, in *sabc.txt*;
- renaming the (01841) area code from “Newquay” to “Padstow”, in *sabc.txt*;
- deleting the duplicate entry for “1246 - Chesterfield”, in *sabc.txt*;
- correcting the names for the (01491), (015395) and (019467) area codes, in *sabc.txt*;
- correcting the place name for the “(028) 90” number range, in *sabc.txt*;
- fixing the area code length for the 5-digit (016977) area code, in *sabc.txt*;
- adding area code length to the (0131), (0151), (0161) and (0191) area code entries, in *sabc.txt*;
- adding area code length to the (020), (023), (024), (028) and (029) area code entries, in *sabc.txt*;
- adding missing “(0)+10” number length information in many ranges, in *s3_code.txt* and in *s7_code.txt*, *s8_code.txt* and *s9_code.txt*;
- changing “10 Digit Number”, “10 Digit Numbers”, “10 digit numbers” and “10 Digit Numbering” to consistent “(0)+10” designation, in *s5_code.txt*, *s7_code.txt*, *s8_code.txt* and *s9_code.txt*;
- changing “9 Digit Numbers” and “9 digit numbers” to consistent “(0)+9” designation, in *s8_code.txt*;
- changing “7 Digit Number” and “7 digit numbers” to consistent “(0)+7” designation, in *s8_code.txt*;
- changing (07624) numbers from “radiopaging” to “mobile services”, in *s7_code.txt*;
- adding Brampton (016977) to the area code list;
- tidying the name field for various “unassigned” area codes, in *sabc.txt*;
- and many other fixes.

This work usually takes several hours to complete, and it has to be done before the data can be used. Failure to correct the data, leads to erroneous operation of computer systems.

Thousands of computer systems have already been programmed with erroneous and incomplete data. Indeed, the computer systems of several major UK companies will not accept any 9-digit telephone numbers, or incorrectly format 5-digit area code numbers, or give incorrect results within various other specific number ranges. Many other computer systems also cannot cope with two or three-digit area codes, even though those have been in use for more than ten and fifteen years respectively.

In the more than ten years that the numbering data has been available in one form or another, there has been not a single occasion when the data in all of the various files was in full agreement with each other.

It is hoped that Ofcom can use all of the items listed in this report to build a much more robust data set in the future.

URLs for Oftel and Ofcom Documents

2.1 – 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
- www.ofcom.org.uk/static/archive/oftel/publications/1999/#Numbering
- www.ofcom.org.uk/static/archive/oftel/publications/numbering/

Ofcom's older documents were found via: web.archive.org/ including the documents previously located at:

- www.ofcom.org.uk/telecoms/ioi/numbers/
- www.ofcom.org.uk/telecoms/ioi/numbers/numbers_administered/

Ofcom's current documents can be found at:

- stakeholders.ofcom.org.uk/telecoms/numbering/
- www.ofcom.org.uk/static/numbering/

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