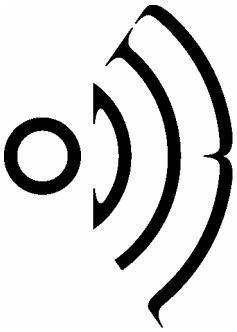

Office of the Director of
Telecommunications
Regulation

Review of the National Numbering Scheme for Telephony in Ireland

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Decision Notice D11/01R

Document No. ODTR 01/58R **May 2009**

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FOREWORD

Since the liberalisation of the telecommunications market in December 1998, there has been a heavy demand for additional telephone numbers including numbers for the start up requirements for newly licensed operators. This demand, which has been fuelled by the high growth in the Irish economy, has put pressure on the telephone numbering infrastructure. Some areas will reach number exhaustion within the next few years and will require a change to longer subscriber numbers in order to ensure continuity of number supply.

In December 2000, I issued a Consultation Paper that reviewed the National Numbering Scheme for telephony in Ireland for the period 2001 to 2005. This paper set out proposals for the further development of the scheme, having particular regard to:

- the need to make the plan as user-friendly as possible;
- the requirement to ensure an adequate supply of numbers and codes;
- the need to minimise disruption to users from number changes;
- efficient allocation and use of numbers.

The ODTR received a good response to the consultation process and would like to thank everybody who contributed. On certain issues there was broad consensus, but on other issues, in particular changes to the geographic numbering scheme, there was a wide spectrum of views. Some respondents felt that the proposals went too far and others felt they did not go far enough.

Since the receipt of responses to the consultation, the ODTR has completed a very extensive audit of geographic numbers to determine the current utilisation of allocated number blocks. This has more precisely identified STD Code Areas that are likely to reach number exhaustion. I would like to thank all the network operators for their co-operation in providing audit returns. A summary of the results for each Minimum Numbering Area is included in this document.

In this response to the consultation, we have set out a revised framework for the development of the National Numbering Scheme over the five-year period 2001 to 2005 and beyond, based on the Consultation Paper and the responses received. Future number changes, including capacity driven number changes will be implemented in compliance with the framework plan.

In order to ensure that adequate quantities of numbers are available for allocation over the next four years, preliminary notice of certain geographic number changes is set out in this document. Some of the number changes to be implemented will incorporate measures to simplify and clarify the numbering scheme, including reducing the number of STD code areas. In addition, the number of Minimum Numbering Areas will be reduced from 126 to 106. None of these changes will lead to instances where calls, which have been local rate calls, become more expensive. For each area where a number or code change is required, the ODTR will issue a detailed change plan that will provide telephone users with information on the changes and facilitate preparatory work by network operators.

A number of issues will require further consultation with the telecommunications industry in order to more clearly identify what is required and resolve any technical aspects. These issues are identified in this document.

Etain Doyle
Director of Telecommunications Regulation

1 INTRODUCTION

In December 2000, the ODTR issued a Consultation Paper(ODTR 00/97) that reviewed the National Numbering Scheme for telephony in Ireland covering the period 2001 to 2005. This paper set out proposals for the further development of the scheme having particular regard to:

- the need to make the plan as user-friendly as possible;
- the requirement to ensure an adequate supply of numbers and codes;
- the need to minimise disruption to users from number changes;
- efficient allocation and use of numbers.

The ODTR received a good response to the consultation process (see Figure 1.1) and would like to thank everybody who contributed. On certain issues there was broad consensus, but on other issues, in particular changes to the geographic numbering scheme, there was a wide spectrum of views. Some respondents felt that the proposals went too far, while others felt they did not go far enough.

Figure 1.1 – Respondents to the Consultation Paper

Respondent	Category
A.L.T.O.	Network Operator Association
Cable and Wireless Limited	Network Operator
Chorus Limited	Network Operator
Conduit	Directory Information Service Provider
David Walsh	Consumer
Dr. Garry Stack	Consumer
Eircell Limited	Network Operator
eircom plc	Network Operator
E. McCarthy	Consumer
Esat Digifone Limited	Network Operator
Esat Telecommunications Ltd. & Ocean Communications Ltd.	Network Operator
Golden Pages Limited	Directory Information Service Provider
H. A. Toland	Consumer
Jimmy Carney	Consumer
Killarney Chamber of Commerce	Users Representative
Paul and Mary Fitzgerald	Consumer
Richard Barry	Consumer

In this document, the views of the respondents to each proposal in the Consultation Paper are summarised, followed by the position of the Director. The sequence of topics in the document follows the same order as presented in the Consultation Paper.

This document contains decisions on the framework for the development of the National Numbering Scheme for telephony over the five-year period 2001 to 2005, and beyond. Future number changes, including capacity driven number changes will be implemented in compliance with the framework plan, subject to any revisions.

The Directors position on measures for improving the number allocation process and utilisation efficiency is set out in section 6.

A number of issues will require further consultation with the telecommunications industry in order to more clearly identify what is required and resolve any technical aspects. These issues are identified throughout this document.

Key Points

Based on analysis of both the consultation responses and the results of the audit of secondary allocations by operators, the key points coming from the Numbering Review are:-

Geographic Numbering

- The overall approach going forward will be evolutionary rather than a big bang step-change.
- The audit identified that some operators were holding excessive spare capacity. This reduces the urgency for capacity driven number changes in some areas.
- The overall number growth forecast of 74% for 2001-2005 is reasonable for initial planning purposes but provision has been made for demand up to 2004 only using 55% growth. The position will be reviewed in 2002 to decide if further changes are required in 2004.
- The number changes take account of the broader framework plan set out in this Decision Notice.
- Local dialling should be retained for the current planning period.
- Variable number lengths of 7 to 10 digits (excluding trunk prefix 0) will prevail for the current planning period with a gradual evolution towards 9 digits.
- All numbers should be the same length within an STD area.
- Capacity driven changes provide scope for coincident rationalisation, i.e:
  - replacing 4 digit STD Codes with 3 digit Codes;
  - merging STD Code Areas;
  - recovery of Codes for re-use;

- The number of MNAs will be reduced from 128 to 106. – This will not require number changes[1].
- Merging MNAs or STD Code Areas may impact on a small number of local charge relationships but no mergers must result in increased call charges.
- The 3X range of codes will be released for reuse for new services as required.
- The total recovery of the 7X range will not be proceeded with at this time.
- The ODTR will publish change plans setting out number change details and timing which will be co-ordinated with the industry.
- If a Dublin number change is required in the future, all subscriber numbers will be changed from 7 to 8 digits. In 2002, the number of Dublin MNAs will be reduced from 5 to 3 and this will improve number utilisation and extend the effective life of the existing 7 digit numbering capacity.

Non Geographic Numbering and Short Codes

- There are adequate spare non-geographic numbers available to meet demand.
- The current regime of non-geographic number lengths/formats should be retained
- International access to 118XX and some non-geographic ranges should be facilitated.
- The use of short codes for Operator Assistance services will be reviewed by the industry working group. This may lead to some changes in the use of short codes.

Numbering Administration

- 10 k block allocations will be discontinued.
- Number pooling and individual allocation will be discussed with the industry.

Important Considerations for Geographic Numbering Recommendations.

While the consultation covered a broad range of numbering issues, the major issue for respondents was geographic numbering. It is therefore useful to examine the key considerations in recommending a way forward for geographic numbering.

The Audit

Since the receipt of responses to the consultation, the ODTR has completed a very extensive audit of geographic numbers to determine the current utilisation of allocated number blocks. This has more precisely identified STD Code Areas that are likely to reach number exhaustion. A summary of the results for each Minimum Numbering Area is included in this Decision Notice. Total customer allocations demonstrate a 2:1 ratio of numbers to channels[2].

[1] MNA mergers may result in changes in some call charge relationships from trunk to local. These call charge relationships are published in the introduction to telephone directories. Accordingly, it is proposed to make these changes co-incident with the publication of 2002 directories.

[2] Channels mean "equivalent voice circuits" provided using PSTN, Basic Rate ISDN or Primary Rate ISDN telephony.

The following key results emerged from the audit:

- The total count of numbers allocated *to users* was **3,582,661**[3];
- The total count for the Dublin (01) Area was **1,888,237 (52.7%);**
- The total count for the Provincial Areas was **1,694,424 (47.3%).**

The audit confirmed that some operators are holding very large quantities of spare numbers, grossly in excess of that which is reasonable for the efficient provision of service to new customers. The ODTR will initiate a project to recover such excessive spare capacity. This means that not all of the change proposals included in the Consultation Paper will be necessary during the period 2001 to 2005.

Basis for number changes

The consultation paper had put forward an evolutionary change plan. To an extent, we have already embarked on this evolutionary path given the changes already implemented since 1998[4] There appears to be no sufficiently major economic, competitive or technical benefits at this time to justify the cost and disruption associated with a major nationwide change to the numbering scheme (e.g. closing the scheme).

It is proposed therefore to make changes to the scheme driven primarily by localised number exhaustion. However, such changes, when viewed in the context of an overall framework, will provide scope to co-incidentally simplify the existing scheme. This was at the core of the proposal in the consultation document.

Evaluating what localised geographic number changes may be required in the future depends on two main factors: -

- annual growth in number utilisation in each area; and
- maximum achievable number utilisation efficiency attainable by network operators.

The forecast model used in the consultation paper provided for near-linear annual growth of around 15% (74% over 5 years). This represents a high growth scenario. Alternatively, a pessimistic forecast with a reducing growth trend resulting from market saturation and mobile substitution effects would result in reduced additional demand for numbers.

It is proposed to have regard to a possible low growth scenario during the current planning period, by making provision for high growth demand for 4 years only (up to 2004) using 55% rather than 74% growth with number changes in 2003. The position will be reviewed in 2002 to decide if further changes are required in 2004. In any event, the number changes signalled in the Decision Notice to be implemented in 2003 will have to ensure sufficient number capacity until 2004.

Following discussions with *eircom*, it is proposed to set an improved target ceiling of 70% number utilisation efficiency[5] - which is considered reasonable and achievable.

3 The quantity of numbers in use exceeds the number of telephone lines. This currently arises from allocations for ISDN lines and Direct Dialling inwards.

4 Arising from Decision Notice D2/98 – Numbering in Ireland for the 21st Century.

5 When considering efficiency, we have to be aware that operators will never manage to use 100% of the numbers given to them because of inefficiencies caused by network topology, the service provision logistics chain, customer churn and other factors.

Using 55% growth over 4 years combined with an improved utilisation efficiency of 70% results in raising the cut-off point for deciding number changes from 36.49% to 45.16% overall fill (at audit). This has the effect of reducing the number of STD Code Areas at risk of number exhaustion to 7, namely Navan, Letterkenny, Kilkenny, Sligo, Castlebar, Athlone and Carlow. This represents a considerable reduction in the scale of number changes without a significant increase in risk.

The Areas requiring number changes

Changes in these areas as well as some neighbouring areas should proceed, based on the framework established as a result of the consultation exercise. The timeframe for the changes will be as follows:

- Announcement of Changes- July 2001
- Commencement of parallel working- Not later than the issue of 2002 Directories
- Old numbers routed to announcements- Co-incident with issue of 2003 Directories

While most of the number changes will be capacity driven, number changes will also be made in some STD Code Areas which adjoin those requiring changes to avoid number exhaustion. The benefits of including neighbouring STD Code Areas in these capacity driven number changes will be to:

- simplify the geographic numbering regime to make it more user-friendly;
- ensure future capacity and avoid future number changes in the wider geographic areas;
- promote the enlargement of local call catchment areas;
- avoid the neighbouring areas being placed at a disadvantage with regard to their ability to provide numbers for Direct Dialling Inwards (DDI) for businesses[6];
- avoid any perception (arising from short number lengths) of the neighbouring areas being relatively under-developed.

The affected areas are:

Navan + Enfield
Letterkenny + Buncrana, Dungloe and Donegal
Kilkenny
Sligo + Manorhamilton, Carrick-on Shannon and Boyle
Castlebar + Ballinrobe and Castlerea
Athlone + Ballinasloe, Roscommon and Portumna (Part 0509)
Carlow + Athy and Baltinglass

The number changes will impact on the allocated numbers as follows:

- Changes to provide additional capacity will affect **227,578[7] numbers (6.4%);**
- Changes arising from rationalisation measures will affect **114,946[8] numbers (3.2%).**

[6] Short 5 digit numbers do not easily facilitate the provision of DDI numbers incorporating the 4 digit extension number.

[7] Based on 2001 Audit

[8] Based on 2001 Audit

If unforeseen growth from as yet undefined sources does materialise, number changes can be managed within the overall framework plan resulting from the consultation.

The next few years should provide further trend data – perhaps verifying the approach of saturation or substitution as a major trends. Within this period, we will also see whether new requirements for geographic numbering are likely to emerge. These currently centre on how VoIP is likely to be implemented, whether distinctive ringing[9] shows significant uptake and whether DDI penetrates significantly into the SME market.

Most of the geographic number changes notified in this document are consistent with specific proposals in the Consultation Paper. But three changes that have been modified should be noted:

- The Sligo (071), Manorhamilton (072), Carrick on Shannon (078) and Boyle (079) STD Code Areas will be grouped into one new STD Code Area – Sligo/Leitrim, using STD Code 071;
- The Letterkenny (074), Donegal (073), Dungloe (075) and Buncrana (077) STD Code Areas will be grouped into one new STD Code Area – Donegal, using STD Code 074.
- The Athlone (0902), Roscommon (0903), Ballinasloe (0905) and Portumna (Part 0509) STD Code Areas will be grouped into one new STD Code Area – Athlone, using STD Code 090[10].

The ODTR will have discussions with network operators on the implementation of the number changes to confirm the format of the new numbers for each Minimum Numbering Area[11] and the start date for parallel working[12], This information will be available to the public later this year.

[9] With distinctive ringing, a single line will have two or more numbers, each of which has a distinctive ringing cadence.

[10] The ODTR is satisfied that there are sufficient spare expansion digits to effect this change.

[11] Existing 5 digit numbers will be prefixed with an additional 2 digits to become7 digit numbers.

[12] During the parallel working period, a call can be made using either the existing number or the new number.

2 FORECASTING FUTURE DEMAND

In section 2 of the Consultation Paper, the ODTR set out its position regarding forecasting future demand for numbers over the five year period 2001 to 2005, for Geographic and Non-Geographic[13] numbers.

2.1 Demand for Geographic Numbers

An ODTR forecast model for geographic numbers was set out in section 2.2 of the Consultation Paper. It yielded the following annual percentage growth[14] forecasts for E.164 numbers (in equivalent lines), which were then used as the basis for forecasting demand and developing proposals for each geographic Minimum Numbering Area (MNA).

Figure 2.1: Forecast percentage growth in demand for E.164 Geographic numbers (equivalent lines)

Year	**2001**	**2002**	**2003**	**2004**	**2005**
Annual % growth in equivalent lines (non compounded)	11%	12%	15%	17%	19%
Cumulative % growth in equivalent lines	11%	23%	38%	55%	74%

The forecast model presented for Geographic numbers included growth provisions for both existing and potential new demands, in order to ensure that sufficient numbers will be available over the planning period. The forecast model also included provisions for both demand driven and incentive driven growth. The ODTR believes that an increasingly competitive environment coupled with deployment of new technologies will result in a shift from demand-driven to market-incentive-driven growth where competing operators will offer incentivised service packages to users.

No provisions were included to cater for:

- potential improvements in number allocation efficiency[15];
- non-uniform growth throughout the country;

In addition, while no explicit provision was made for additional numbering capacity to cover the introduction of distinctive ringing services and greater use of DDI, an increase in the use of such services is likely to be offset by a reduction in the growth in new lines (channels).

The percentage growth forecasts were used to estimate the demand for primary number block capacity over the planning period. A proposed approach for the development of the National Numbering Scheme was then developed based on these number block demands.

13 A separate section dealt with Personal numbers.

14 Non compounded

15 Measures to obtain improvements in number allocation efficiency are considered separately in section 6 – Number Administration.

Views of the Respondents

The following comments were made by respondents with regard to the forecast model for geographic numbers:

- it is logical to build a model based around services that will require numbers over the forecast period;
- "New access methods" are alternative access technologies which in the most part will not give rise to a requirement for extra numbers;
- VOIP will not have a large impact on the National Numbering Space as this will be addressed using an International Numbering Space in order to address the issue of PC mobility;
- the model employed by the ODTR is not sufficiently robust and by no means thorough enough for the purpose of amending the national numbering scheme as proposed in the consultation;
- the ODTR itself raises some serious and valid concerns with the forecast model which is a strong indicator that a more stringent and robust study is required in addition to the study thus far undertaken;
- a cost benefit analysis should be carried out as the requirement for an accurate forecast is paramount;
- the forecast mechanism should only be based on expected customer demand. The breakdown using access mechanism and technology is unnecessary;
- it is better to over estimate rather than under estimate future numbering demand;
- far more substitution will take place between technologies than has been allowed for by the ODTR and therefore the growth of geographic numbers is overstated as there is exclusion of the substitution effect of fixed lines for mobile lines;
- agree with ODTR forecast model for geographic numbers.

The following comments were made by respondents with regard to the overall growth rate of 74% proposed by the ODTR up to the end of 2005 for equivalent lines.

- the exclusion of the substitution effect of fixed lines by mobile lines means that growth estimates are overstated;
- the ESRI growth figure of 35% might even be too-high if there is general a slow down in the economy and the introduction of 3G services impacts on demands for fixed line services;
- a realistic overall growth figure can only be established by examining relevant past data on number allocation across all the number ranges and projecting this information onto current number availability to determine future number demand.
- the same percentage blanket growth being used for all areas throughout Ireland should not be used. Considerations such as concentration of businesses and population as well as areas identified for business initiatives should be taken into account;
- any expected use of numbers should provide sufficient flexibility to allow for innovation, rather than the expectation of precise linear uptake of numbering resources;
- the ODTR projections should provide sufficient geographic numbering capacity to the end of 2005;
- agree with ODTR overall growth forecast of 74%.

Position of the Director

None of the respondents proposed that the forecast model for geographic numbers and the overall growth of 74% during the period to the end of 2005 under-estimated the potential demand. Furthermore, none of the network operators indicated that they intended to introduce distinctive ringing services that could result in a significant additional demand for numbers.[16] The Director is therefore satisfied that the growth factor of 74% and the component annual growth forecasts (55% to 2004 etc) represent reasonably safe ceiling figures for geographic numbers. The Director has noted the comment from one operator that it is better to over estimate rather than under estimate future numbering demand and expects that the ODTR projections should provide sufficient geographic numbering capacity over the planning period.

The Director has noted that two of the respondents believe that an explicit provision should have been included for the substitution effect of fixed lines for mobile lines. It has also noted comments regarding the impact of a general slow-down in the economy and the growth factors attributed to "New access methods" and "Voice over Internet Protocol". The Director accepts that significant mobile substitution, reduced growth and reduced contribution from new access methods and VoIP would result in a reduction in growth in demand. But while one should expect that the actual growth for some elements in the model may out-turn below forecast, it is possible that the growth for other elements may exceed the forecast.

The Director is not convinced that a more elaborate forecast model, as suggested by two of the respondents, would provide more certainty in determining the contributing factors that drive demand for numbers in Ireland. In particular, the projection of allocation data from recent years, which covers a typical period of market liberalisation, would not provide a reliable forecast.

The Director believes that the above forecast model is credible for the five year planning period. However, she understands that the growth percentages inserted for each element in the model are sensitive to the underlying national economic growth and in particular to the response of network operators to increasing competition, and to their ability to successfully deploy investments in new technology. Discontinuities in the expected growth patterns may occur and new factors may emerge to impact on demand.

The Director has noted the valid concern that the same percentage growth factors are being used for all areas throughout Ireland and the suggestion that considerations such as concentration of businesses and population as well as areas identified for business initiatives should be taken into account.

Overall, the Director is satisfied that the growth of 74% and the component annual growth forecasts (55% to 2004 etc) are reasonable growth factors to be used to project demand for geographic numbers over the planning period.

2.2 Demand for Non-Geographic Numbers

In the Consultation Paper, the ODTR was reasonably satisfied that there are adequate spare numbers to meet demands during the planning period for:

[16] No provision was made for distinctive ringing services in the forecast model.

- Universal Access and Paging Services;
- Freephone and Part-Pay services;
- Premium Rate Services

For mobile telephony numbering capacity, a separate Consultation Paper and Decision Notice – "Mobile Numbering and Mobile Number Portability in Ireland" have recently been published[17], setting out estimates for growth in demand and options for dealing with mobile numbering exhaustion.

Views of the Respondents

All six respondents to this section of the consultation agreed that there are adequate spare numbers to meet demands for these non-geographic services during the planning period.

One respondent commented that these services were not mass-market services and therefore capacity requirements would be significantly less than for services using geographic and mobile numbers. Another respondent advocated that capacity planning should also allow for sufficient flexibility for innovation.

One respondent commented that provision had not been made for the possibility of Premium SMS. This respondent also proposed that the Numbering Plan for Paging Services should be updated.

One respondent raised the issue of access to non-geographic numbers that have been allocated but are not in service and felt that this was a more important issue than capacity. It further submitted that an individual number allocation facility might be appropriate but would require further discussion and consultation.

Position of the Director

Having taken account of the responses received, the Director is satisfied that there are adequate spare numbers to meet demands during the planning period (2001 to 2005) for:

- Universal Access and Paging Services;
- Freephone and Part-Pay Services;
- Premium Rate Services.

The Director will include updating of the Numbering Plan for Paging Services on the ODTR work programme. The Director will include the consideration of Premium SMS in any future consultations with the telecommunications industry on numbering arrangements to facilitate access to new emerging services. The Director's position on the allocation process for non-geographic numbers is included in section 6.

[17] ODTR Docs. 00/86 and 01/03

2.3 Demand for Personal Numbers

In the Consultation Paper, the ODTR indicated that while the current amount of Personal numbers allocated to users was low, this situation could change, as users may increasingly need to manage the delivery of incoming calls. The current available supply of 0.9 M numbers will cater for a demographic penetration of about 13.5%[18], which is unlikely to be sufficient if demand for Personal Numbering services become popular.

A safe upper supply limit (in the event of the service achieving mass popularity) would be 7 M numbers, corresponding to 105% penetration. Proposals were included in section 5.1 of the Consultation Paper to ensure an adequate supply of Personal Numbers.

Views of the Respondents

The views of respondents varied as to what should be a reasonable demographic penetration level to be used for forecasting future demand for Personal Numbers and included:

- demand for Personal numbers will be driven by the growth in penetration of fixed and mobile lines, a reasonable penetration level (before churn) would be to match the forecast penetration levels with mobile telephony;
- only commercial drivers such as but not limited to consumer demand should determine the forecasts;
- the enormous uptake in mobile telephony services, and associated diversion services, will mean that the uptake in Personal numbers is unlikely to significantly expand;
- reasonable take-up of service in the coming months is expected;
- analysis of the Personal numbering market must be the starting point;
- it is difficult to forecast due to the lack of a definite and clear model for Personal numbering, more clarity in the Numbering Conventions is needed;
- based on experience in the UK market, uptake is not likely to extend beyond 2.5% (62,500);
- 7 M is a safe upper limit for Personal numbers.

The audit returns received from licensees who have been allocated Personal numbers showed that out of a total of 150,000 numbers, which have been allocated by the ODTR to 9 licensees, less than 10,000 numbers have been allocated to users.

[18] Based on 60% utilisation efficiency and a population of 4 M.

Position of the Director

The audit returns received from licensees who have been allocated Personal numbers confirms that the overall take-up so far has been modest. Taking account of the responses as well as the audit returns, the Director is reasonably satisfied that the current available supply of 9-digit numbers (0700 XXX XXX - 0.9M) will cater for demand for the foreseeable future. The Director will make a tentative provision to enable additional 9-digit capacity (070X XXX XXX - up to 9M in total) to be made available if required. The retention of this tentative provision will be subject to review.

3 USER-FRIENDLY NUMBERING

3.1 General

A user-friendly numbering scheme should be easy to understand and use, with simple and uniform dialling procedures. It should be designed to minimise as far as practicable the time taken to establish a call and the risk of misdialing. In addition, numbers should convey information to the caller on the price and the type of service called and, in the case of geographic numbers, the area in which the party to be called is located.

The National Numbering Scheme must continue to evolve in order to accommodate new services and provide sufficient capacity for existing services in a way that maintains an acceptable level of user friendliness.

In section 3 of the Consultation Paper, the ODTR reviewed the factors which impact on user friendliness and invited responses to questions on key issues.

3.2 The dialling procedure

The current dialling procedure in Ireland was explained in the Consultation Paper and a survey of European Numbering Schemes was included which showed which countries had closed their numbering schemes and do not provide for local dialling.

The ODTR set out its position with regard to local dialling. It considered that the case for retaining local dialling procedures in Ireland is diminishing due to:

- widespread use of push button tone signalling;
- availability of memory dialling;
- growth in proportion of calls from/to mobile phones;
- increasing use of mobile terminals;
- migration to closed dialling procedures in Europe.

Notwithstanding the diminishing case for retaining the local dialling procedure, the ODTR proposed to retain the procedure in the fixed network for the present so that callers can rely on the procedure to indicate local call tariff[19]. Respondents were asked if they agreed or disagreed with this position.

Views of the Respondents

Four respondents strongly favoured the retention of local dialling and their supporting reasons included the following:

- local dialling is liked and well used by customers and assists in their understanding of the call type and the applicable charge;

[19] There is still a significant differential (ratio) between tariff rates for local and national calls, particularly during weekday off-peak periods. For calls that are handled by *eircom* (including the majority of local calls), the local call rate applies to calls within each STD code area and to calls between certain MNAs in neighbouring STD code areas in accordance with the prevailing tariff scheme.

- provides for shorter number lengths and ease of use;
- facilitates directory layout and size with regard to readability of numbers, column widths and entries per page.

One of the respondents advocated that full national dialling should only be introduced where there is a need to create additional capacity and there are no other options available.

On the issue of local call charges, two other respondents (consumers) while agreeing with specific changes to rationalise the scheme emphasised that such changes should not lead to increased charges or instances where calls, which have been local, become more expensive.

Two respondents disagreed with the ODTR's proposal to retain local dialling and advocated moving to a closed numbering scheme with full national dialling and standard number length. Their supporting reasons for moving to full national dialling included the following:

- facilitates the simplification and clarification of the current numbering scheme co-incident with capacity driven number changes;
- facilitates the provision of additional numbering capacity;
- facilitates moving towards fixed number length which, inter alia, reduces call set-up times particularly for inbound international calls.

One respondent stated that that they do not require a charge indication facility as they offer a single national call charge and they would like the ODTR to specify under what circumstances and in what timescales moving to full national dialling could take place.

Position of the Director

Taking account of the responses, and in particular the customer-centric reasons put forward, the Director has decided to retain the local dialling procedure in the fixed network for the present planning period. The Director will review the position from time to time to see if circumstances have changed, such that it is no longer in the consumers' interest to retain local dialling.

Decision 3.1

3.3 International access to Ireland

The current dialling procedure is limiting in so far as non-geographic numbers with the dialling formats 15XX XXX XXX and 18XX XXX XXX and short codes such as 118XX cannot be accessed from outside Ireland. This is because first digit "1" in the Nationally Significant Number is the NDC Code for Dublin. The ODTR decided not to include any proposal in the consultation to make provision in the National Numbering Scheme for global access. But in the Consultation Paper, respondents were asked if they thought there was a justifiable requirements at this time to make provision for global access to non-geographic numbers and if so, the case for such requirements, the basis for commercial agreements and the preferred access options.

Views of the Respondents

Two respondents were in favour of providing for global access to non-geographic numbers. One respondent feels strongly that the Dublin NDC "1" constitutes a barrier to accessing non-geographic numbers from abroad and will inhibit the development of international service offerings. They took the view that it is for operators and industry to address the commercial aspects. They advocated that the Dublin NDC should be changed from "1" to "3" co-incident with capacity driven number changes, and that international access to non-geographic numbers be available behind the country code +353. A second respondent echoed the above position. Another respondent while proposing that existing Dublin numbers be prefixed by "33" did not express a view on global access.

Four respondents believed that there was not a justifiable requirement at this time to make provision for global access to non-geographic numbers[20]. Their supporting reasons included the following:

- international freephone and PRS services are a better alternative;
- commercial agreements would be complex and difficult to agree and almost impossible to manage;
- international termination of specific national non-geographic numbers can be implemented on switches;
- potential for fraud on an international scale.

Two respondents (including one of the above) were in favour of international access to directory information services using +353 118XX.

From the ODTR's perspective, changing the Dublin NDC from "1" to "3", per se, has considerable downside, namely:

- changing the capital city from the long standing and internationally typical code "1" to the atypical code "3";
- foregoing the use of code "3" for alternative uses such as additional geographic or non-geographic codes.

Position of the Director

Taking account of the responses and the considerable downside to changing the Dublin code, the Director is not persuaded that a case has been made for providing access to "1XXX XXX XXX" non-geographic services[21] by changing the Dublin code. But the Director is persuaded that there is a case for opening international access to directory information services.

[20] One of these respondents was in favour of global access to 118XX directory services.

[21] In particular, freephone, part-pay and premium rate services. From a numbering perspective global access has always been possible for +353 7……and +353 8…… non-geographic services.

The Director has decided that:

- the Dublin STD Code will not be changed from "01" to "03" coincident with any Dublin subscriber number change from 7 to 8 digits. (See section 4.3.3), and
- the "3X" range of codes will be released for alternative use.

However, following any Dublin number change, the Director will not allocate Dublin numbers out of the ranges:

+353 1 0……..

+353 1 1……..

+353 1 8……..

At present numbers are not allocated from the ranges 353 1 0…, 353 1 1…, and 353 1 800…

Decision 3.2

The Director is open to considering appropriate measures to facilitate international access to certain non-geographic services using the access digits +353 1(0, 1 and 8), including access to directory information services. The ODTR will consult with the telecommunications industry on this matter with a view to identifying industry needs and resolving any technical issues such as number length analysis. Account will also be taken of any requirements at a European level to provide such access.

3.4 Number lengths and number formats

At present the National Significant Number length varies from 7 to 10 digits, e.g.

Mallow	22 XXXXX	7 digits
Dublin	1 XXXX XXX	8 digits
Cork	21 XXXX XXX	9 digits
Mobile Mailbox	8X 5XXX XXXX	10 digits

Some countries have decided on one fixed nationally significant number length to apply to all services, excluding those services that are accessed by national short codes. Fixing the number length has some merit in terms of providing a simple user-friendly format.[22]

In the Consultation Paper, the ODTR concluded that it remained to be convinced that such an absolute approach (i.e. the same fixed number length everywhere) is the most appropriate for Ireland. The ODTR considers that a variable number length approach is the most suitable at this time but that the range of format variations should be reduced whenever the opportunity to

[22] From a technical perspective, the number length can be simply set in national and international switches and potential call establishment delays associated with variable number lengths can be avoided.

do so arises e.g. coincident with a capacity initiated number change. This gives the best balance between minimising disruption to users, maximising user-friendliness, and ensuring an adequate supply of numbers. Respondents were asked if they agreed with this position.

Views of the Respondents

Five respondents favoured the ODTR's variable number length approach and three of these qualified their response as follows:

- there should not be variable number lengths within an STD area as this may give rise to confusion and quality of service problems;
- changes should provide for the maximum requirement to limit the possibility of further changes;
- where possible, existing number lengths should be left as they are, but in the longer term, move towards fewer number length variations within the numbering scheme.

The five respondents who favoured the ODTR's variable number length approach agreed that 7 to 10 digits are adequate for future requirements.

Another respondent made the point that multiple STD codes within a County[23] can cause confusion and it may be better if a County was served by one STD code. He also proposed that where more than one STD code exists, one should not have similar numbers within the County prefixed by different codes. Another respondent echoed this view.

One respondent had a preference for the establishment of a uniform national number length and believed that it would yield significant efficiencies in terms of routing and billing implementation and also benefit users by establishing a common and simple framework across all areas of the country.

Two respondents advocated moving to a closed numbering scheme with full national dialling and standard number length.

One respondent raised specific issues with regard to the impact of 8 digit numbers in Dublin on the provision of directory information products.

Position of the Director

Taking account of the responses, the Director considers that a variable number length approach is the most suitable at this time but that there should an orderly migration towards a more uniform national number length regime by changing to standard formats whenever the opportunity to do so arises e.g. coincident with a capacity initiated number change. But when making number length changes, the ODTR will have regard to:

- the avoidance of variable number lengths within individual STD area;
- the uniformity of number lengths within Counties where practicable;

[23] In Ireland, the local statutory administrative area in most cases corresponds with the County boundaries.

- the impact of increased number lengths on the provision of directories information products;

The Director believes that this will give the best balance between minimising disruption to users, maximising user-friendliness, and ensuring an adequate supply of numbers. The Director has concluded that for the foreseeable future, a variable Nationally Significant Number length of 7 to 10 digits is likely to prevail and that the disruption and cost of a major national number change just to fix the NSNL at 10 digits cannot be justified on the basis of improved user-friendliness.

3.5 Number Lengths – The way forward

In section 3.3.4 of the consultation paper, the ODTR set out a proposed way forward for number lengths for each category of numbers and respondents were asked if the agreed with the proposals.

3.5.1 Geographic Numbers

For geographic numbers, the ODTR proposed that each decision to increase number lengths will be primarily driven by the need to expand capacity in an area. The change plan may also incorporate rationalisation or code recovery measures. When developing the change plan for an area, a number of adjoining STD Code Areas may be grouped and considered together as one area. Any existing anomalies will also be taken into account.

Views of the Respondents

Three respondents made proposals to ensure that existing number resources were being used efficiently before determining that number exhaustion status had been reached. These proposals included:

- auditing the use of existing number ranges by operators
- recovering unused numbers (blocks);
- improving efficiency in terms of how numbers are allocated to operators;
- evaluating the impact of MNAs on allocation efficiency/ abandoning the existing MNA system.

In addition, respondents who supported the variable number length approach made suggestions that included the following:

- different number lengths in the same geographic area cause confusion to customers who become used to an expected length for local numbers;
- it is accepted that certain codes should be recovered to allow for future changes if justified;
- the implementation of changes in number lengths that are permanent ones and are limited in their disruption to the users;
- for STD code areas with number shortages, the number length within each area only should be increased;

- five digit numbers should be increased to six digits rather than seven digits to minimise extent of change.

Two respondents suggested that it would be better if their counties had only one STD code, and one further suggested that if this were not possible, the same number should not be allocated to two or more subscribers with different STD codes within the County. As stated earlier, three respondents had a preference for the establishment of a uniform national number length and one of these respondents while agreeing that the ODTR proposals were a great improvement on the current system, considered that they were not optimal.

Position of the Director

> Taking account of the responses, the Director has concluded that the decision to increase geographic subscriber number lengths should be primarily driven by the need to expand capacity in an area. The Director has further concluded that the consequential change plans should, where appropriate, take account of the adjoining STD Code Areas and include them in the change, and should also include rationalisation or code change measures where appropriate. Any existing anomalies should also be taken into account. Each change plan should, as far as practicable, ensure the avoidance of further number changes within a geographic community.
>
> *Decision 3.3*

The Director agrees that within each STD Code Area, all subscribers should have the same number length format in order to avoid any confusion and to facilitate presentation in directories. The Director does not support:

- changing 5 digit subscriber numbers to 6 digits rather than 7 ;
- introducing 10 digit national significant numbers for geographic services.

The proposed change plan for number lengths and formats for geographic numbers is set out in Figure 3.1.

While the existence of multiple Minimum Numbering Areas within an STD Code Area may impact on when number exhaustion occurs, their main purpose is to provide geographic identification. The issues raised by respondents with regard the impact of multiple MNAs are considered in section 3.7 – Location Information.

Figure 3.1 – Proposed Change Plan for national significant number lengths and formats for geographic numbers				
Call Case	**Existing**		**Proposed**	
	Number length	**Number format**	**Number length**	**Number format**
Dublin	1+7=8	0-1 XXX XXXX	1+8=9	0-1 XXXX XXXX
Provincial	2+7=9	0-XX XXX XXXX	2+7=9	No change
	2+6=8	0-XX XXX XXX	2+7=9	0-XX XXX XXXX
	2+5=7	0-XX XXXXX	2+7=9	
	3+5=8	0-XXX XXXXX	2+7=9	

3.5.2 Non-Geographic Numbers

The ODTR set out a proposed way forward in the consultation paper with regard to the number lengths to be used for each category of non-geographic number. In summary, no number length changes were proposed with the exception of Personal Numbers, where it was proposed to make provision for increasing the upper limit from 9 to 10-digits[NSNL] to ensure sufficient future capacity.[24]

Views of the Respondents

Four respondents felt that there was no need to introduce any number length changes change for non-geographic numbers while another respondent could accept the 10 digit[NSNL] format for Personal Numbers. One of these respondents proposed that additional capacity for Personal Numbers could be provided by opening up the 070X XXX XXX range.

One respondent made the point[25] that some subscribers request matching allocations for different non-geographic services, e.g., Personal and Universal Access. This supported the view that the existing standard *X+6* digit number length formats should be retained.

One respondent who favoured a 9 digit closed numbering scheme advocated that mobile voicemail number lengths should be decreased from 10 to 9 digits[NSNL] in the longer term.

No specific responses were received regarding the ODTR proposal to withdraw the 2 digit[NAO] short code ”10” and make code “110” available as a replacement, if necessary.

[24] NSNL – National Significant Number Length, NAO – National Access Only.

[25] In response to Q5.3.

Position of the Director

Taking account of the responses, the Director has concluded that for non-geographic numbers, the current regime of number lengths and formats for each respective category should be retained subject to the following:

- If required, additional capacity for Personal Numbers will be provided by opening up the range 070A XXX XXX (for requirements up to 1 M numbers, A=0);
- The ODTR will consult with the telecommunications industry, including operators using the short code "10" for National Operator Assistance, with a view to the possible withdrawal of code "10" and making code "110" available if required as a replacement. The ODTR will also have regard to any requirements for international access to these services and to developments in directory information services. As stated earlier in section 3.5, the Director is open to considering appropriate measures to facilitate international access to certain non-geographic services using the access digits +353 1(0, 1 and 8), including access to directory information services.

• *Decision 3.4*

A summary of number lengths and formats for non-geographic numbers that takes account of the provisions in this document is set out in Figure 3.2.

Figure 3.2 – Summary of number lengths and formats for non-geographic numbers

Call Case	Nationally significant number length NDC code + subscriber number	Number format
Mobile Subscribers	2+7=9	0-8X XXX XXXX
Mobile Mailbox	2+8=10	0-8X 5XXX XXXX
Paging	3+6=9	0-82X XXX XXX
Personal	3+6=9	0-70A XXX XXX, A=0[26]
Universal Access	3+6=9	0-818 XXX XXX
Premium Rate	4+6=10 (National access only)	15XX XXX XXX
Freephone	4+6=10 (National access only)	1800 XXX XXX
Shared Cost	4+6=10 (National access only)	1850 XXX XXX
Local Flat Rate Access	4+6=10 (National access only)	1890 XXX XXX
Internet Access (Hybrid model)	4+6=10 (National access only)	1891 ABC ABC
Internet Access (Pay-as-you-go)	4+6=10 (National access only)	1892 ABC ABC
Internet Access (Partial/Full Flat Rate)	4+6=10 (National access only)	1893 ABC ABC
eircom Eirpac, Charged Access	4+6=10 (National access only)	1511 XXXX
eircom Eirpac, Free Access	4+6=10 (National access only)	1801 XXXX
Short Codes, Operator Assistance	3 (National access only)	Under review– 110 propose
Directory Information Services	5 (National access only/Under Review)	118XX
Short Codes (Others)	3 to 5 (National access only)	Various

[26] Tentative provision to enable additional 9-digit capacity to be made available if required.

3.6 Service and charge information

The National Numbering Scheme and in particular dialled numbers should provide consumers with a clear understanding of the type of service they are dialling and the likely cost. The main elements of the existing regime, which is reasonably well understood by the public was set out in the consultation paper[27].

Views of the Respondents

The responses did not include any specific comments on this section.

Position of the Director

In general, the ODTR will continue to adhere to the existing regime with regard to indication of service and charge information when proposing changes to the current National Numbering Scheme. An updated listing taking account of the provisions in this document is set out in Figure 3.3.

Figure 3.3 – Service and charge information

00 X------X	Number formats indicate international calls and tariffs.
0 1 AXXX XXXX, A≠0,1,8	Numbers for trunk calls to Dublin (after any Dublin number change)
0(2X, 4X, 5X, 6X, 7X, 9X) X------X **0(40X, 50X, 90X) X------X**	Numbers for trunk calls to provincial areas (before recovery/reuse of any 07X and 0X0X codes).
03X XXX XXXX	Available for additional geographic or non-geographic services.
048 X------X	Number format indicates calls to Northern Ireland.
070A XXX XXX, A=0	Numbers for Personal Numbering services.
08(1, 2, 5, 6, 7, 8) X------X	Numbers for Universal Access, Paging and Mobile services.
1520, 1530, 1540, 1550, 1560, 1570, 1580 + XXX XXX	Numbers provide for Premium Services and, generally speaking, the tariff rate will increase incrementally from 1520 (the lowest) to 1580 (the highest). The lowest rate would in general be higher than the local tariff rate.
1559 XXX XXX	Numbers provided for adult type services.
1800 XXX XXX **1850 XXX XXX** **1890 XXX XXX**	Numbers provide for the called party to be reached at no charge to the caller. Numbers provide for the calling party to be charged a fixed fee, independent of the duration of the call and based on the local tariff rate. Numbers provide for the calling party to be charged at the local tariff rate
1891 ABC ABC **1892 ABC ABC** **1893 ABC ABC**	Internet Access (Original/Hybrid) Internet Access (Pay-as-you-go) Internet Access (Partial/Full Flat Rate)
1X……	Short codes to access various services, which may be free or charged.
2 to 9 X------X	Numbers for local calls (except 999)
1X……	Short codes to access various services, which may be free or charged.

[27] Figure 3.6

3.7 Location information

For geographic numbering, Ireland is divided into NDC Areas, more commonly referred to as STD Code[28] Areas. Each such area is in turn divided into one or more Minimum Numbering Areas (MNAs). There are currently 66 STD Code Areas and 128[29] Minimum Numbering Areas. Refer to Annex 2, which shows the existing STD Code Areas.

Geographic numbers may only be used within their designated MNA. With regard to Number Portability (NP), the Director decided to restrict the scope of location NP for geographic numbers to portability within the MNA for which they were issued and in some cases allow *eircom* to offer more restricted location NP[30].

The STD Code and the leading digits of the Subscriber Number identify the MNA in which the called party is located. In the consultation paper, the ODTR considered that this feature was helpful to users and was well worth preserving. But the existing set of STD Code Areas show wide variations in geographic size and number blocks allocated. Also, while the 3 digit STD codes are in general logically distributed, memorable and user friendly, the 4 digits STD codes are considerably less so[31].

In the consultation paper, the ODTR proposed to simplify and clarify the current geographic numbering area regime co-incident with capacity driven number changes by:

- reducing the number of STD areas;
- withdrawing STD codes with formats 040X, 050X and 09X;
- improving the leading digits indication for certain Minimum Numbering Areas*;*
- merging some MNAs into adjoining larger MNAs;
- removing some anomalies from the current scheme.

Respondents were asked if they agreed with the ODTR's five point approach. The ODTR also welcomed any proposals for improving the distinctive naming of STD Code Areas and Minimum Numbering Areas.

Views of the Respondents

Some respondents strongly disagreed with the ODTR's approach either because it went too far or not far enough.

One respondent disagreed with the proposal *"as there is no simplification or clarity for the following reasons:*

- *Reducing the number of STD Codes and withdrawing some STD Codes will lead to customer dissatisfaction and reduce the capacity to make numbers available;*
- *Reducing the number of MNAs will cause problems to the existing geographic number portability process which is all based around the existing 128 MNAs."*

[28] The STD Code is the Trunk Prefix "0" + the NDC Code

[29] Including Banagher North MNA and Banagher South MNA

[30] Introducing Number Portability in Ireland, page 9 – Decision Notice D1/99 – Doc. No. 99/24

[31] For example, the code for Portumna is "0509" while the code for neighbouring Ballinasloe is "0905".

Another respondent *"believes that the ODTR's assumptions are fundamentally flawed in so far as it would seem to have based all numbering issues and resolutions thereof on MNAs and thus what is essentially the dominant operator's network architecture. In* its *opinion, it is not legitimate for the entire telecommunications market to be constrained by the network architecture of the incumbent, which is effectively what the ODTR is proposing by the 5 point approach. The ODTR's consideration of MNAs has a direct impact on perceived utilisation of numbers. This further supports* its *assertion that an extensive cost benefit analysis is required to establish the true situation concerning number exhaustion/utilisation as* it *believes that MNAs are, at present, the sole contributor to the numbering shortage in Ireland, and that improving the leading digit indications in certain MNAs offers little or no benefit. However, should the ODTR ignore* its *advice and decide to keep the MNAs, then, as stated above,* it *is firmly of the opinion that the cost of numbering changes should be borne by eircom alone.*

The above points relating to MNAs were also echoed by two other respondents:

"The ODTR would appear to have based much of its analysis as regards numbering exhaustion on the MNA system……..the continuing reliance on the MNA system is wholly inappropriate and should therefore be abandoned. MNAs are a direct product of eircom's historical monopoly and thus further reliance on this system fails to recognise the multi-operator environment that currently exists in Ireland. As the ODTR is aware, the MNA structure is based solely around eircom's network design and thus the ODTR's continuation of that system only serves to further strengthen eircom's dominant position in the market. It is clear from the ODTR proposals that much of the alleged number exhaustion is directly attributable to the MNA system and thus disruption of the kind proposed by the numbering changes detailed is simply unacceptable.

"The underlying assumption made is that the existing complex MNA structure is the right one for the industry going forward. We would question this assumption. Our view is that the MNA structure was developed within the incumbent's network in a monopoly environment and for historic reasons. The ODTR and the industry must now pose fundamental questions about the appropriateness of this structure for a competitive marketplace."

Responses received from the public and a directory information service provider conveyed very different advice to the ODTR proposals:

Re Mayo Area – *"I am writing to you as a private citizen about your proposal to change telephone numbers in the Mayo area from the present 5 digit structure to 7 digits. I read about this in the local press (Western People) and the substance of the article was that eircom were opposing the proposed change on the grounds (inter alia) that there is adequate capacity there already. I have seen how the telephone numbering has developed higgildy piggily in recent years and I would urge you to go ahead with the proposed changes for the following reasons:-*

- *It will facilitate future development especially DDI. Where DDI is in operation, the entire extension rather than part of it can be incorporated into the DDI number if local numbers consist of 7 digits.*
- *It will bring some uniformity to the numbering for each area which is now lacking - eg at the moment Castlebar town numbers start with the digits 21 to 29,35,42 and more if all the DDI numbers in use were included. All other towns in the 094 area have a similar but*

smaller batch of start digits.Result – it is no longer clear from the start digits of a phone number where that number is located.

- *An increase to 7 digits will be required at some stage in the future anyway. Why shelve it for this area?*
- *In the longer term you should consider moving towards 7 digit numbers throughout the entire country accompanied with a drastic reduction in the number of area codes and the standardisation of area codes to 3 digits. County Mayo at present has 6 area codes - this should be reduced to one….. Changing numbers is not a problem if dual running is allowed for a reasonable period. The changes for counties Cavan Louth Clare and Kerry went through without much problems and I urge you again to do the same for this area."*

Re Wicklow, Arklow , Gorey Areas – *"I live in Arklow, Co. Wicklow. We would be affected by your proposal to group us into one STD area with code 055 and increase the telephone number lengths. We have no problem with the* proposal……..May *we suggest that the implementation of whatever changes are deemed necessary for the development of the telecommunications network in the South Wicklow/North Wexford area does not lead to increased charges for customers or lead to instances where calls which have been local calls for many years become more expensive."*

Re Wicklow, Arklow , Gorey Areas – *"I have no real problem with the proposal except that with current sub-codes e.g. 0404, subscribers in say, neighbouring Greystones (01-287nnnn) get adjacent 0404 numbers as local calls. The same practice applies to many exchanges in neighbouring STD* areas……..I *would expect the same charges to apply in the new system.……Otherwise, the rationalisation of the system seems very logical, especially if it allows more numbers."*

Re Wicklow, Arklow , Gorey Areas – "*……these proposed changes are customer centric. Wicklow, Arklow and Gorey are associated with the sunny south east, yet subscriber numbers are scoped with Dundalk, Monaghan etc."*

Re Kerry Area – "*It is our view that whatever changes are introduced should serve to simplify and streamline the system rather than add confusion. Having three STD codes for County Kerry does provide for a certain level of confusion. It would obviously be better if the County had only one STD code. We understand that this may not be possible at this stage. However, we would hope that all current five digit numbers in Killarney and Rathmore would be retained with only the minimum necessary amount of additional digits.……Also we would propose that numbers in the existing STD codes should not be similar, i.e., that you could not have a similar number prefixed by 064, 066 or 068."*

Other respondents made the following points regarding the ODTRs proposals:

- the best way to implement a set of required code and number changes is through a well organised, well publicised set of changes. It is also important to show that each phase is only part of a longer term strategy, so further phases are not seen by consumers as yet another number change;

- if a change is being made to a local dialling area it makes sense to make all changes relating to that area at the same time. Where a significant number change can be avoided this should be the preference of the ODTR.

As stated earlier, two respondents advocated moving to a closed numbering scheme with full national dialling and standard number length, and one of these respondents while agreeing that the ODTR proposals were a great improvement on the current system, considered that they were not optimal.

With regard to proposals for improving the distinctive naming of STD Code Areas and Minimum Numbering Areas, one respondent advised that consistent usage would be helpful. The ODTR proposes to adopt the convention *Cork (021)* for STD Code Area and *Cork*for Minimum Numbering Areas.

Position of the Director

From the Director's perspective, there was a considerable conflict of advice in the responses received to question 3.6 with regard to location information. But the Director must reach some conclusions, which will have a significant impact on the outcome of the consultation. Five important issues were raised in the responses:

- The existing STD Code and Minimum Numbering Areas should be retained.

The Director is not persuaded that reducing the number of STD Code Areas will lead to customer dissatisfaction, in fact the responses received from the public support the view that some members of the public support sensible rationalisation and simplification measures. The Director believes that the introduction of 7 digit numbering in provincial areas facing exhaustion will guarantee sufficient number capacity for the foreseeable future despite co-incident reductions in the number of STD Code Areas.

Reducing the number of MNAs will not cause problems for number portability, in fact it will improve the scope of portability for consumers by enlarging some of the areas within which geographic numbers may be ported.

- Maintaining the MNA structure is inappropriate.

The Director disagrees with the contention that the MNA structure is the sole contributor to shortages in number capacity. She believes that the main reason for number shortages on the primary supply side is the very short 5 digit number lengths used in many provincial areas and that the introduction of 7 digit numbers will remove this weakness. The Director agrees that for STD Code Areas with 3 or more MNAs[32] and 5 digit numbers, exhaustion of capacity is accelerated. But only 7[33] of the 65 Provincial STD Code Areas fall into this category.

The Director considers that the principal purpose of providing MNAs within an STD Code Area is to provide user information on the geographic location by means of the leading digits of the subscriber number. While some rationalisation of MNAs is desirable, the ODTR believes that the abandonment of the MNA system (as suggested by one respondent) could not

[32] The partition of numbering blocks in STD Code Areas with 2 MNAs can be easily arranged to optimise utilisation.

[33] Castlebar, Clonmel, Kilkenny, Letterkenny, Mullingar, Navan and Portumna (5 digit).

be reasonably justified. It would lead to a very significant loss of local area identity which, in the Director's opinion, would not be accepted by the public.

- The integrity of the (*eircom*) local call regime should be maintained

Some responses from the public, while agreeing that rationalisation is desirable, advocate that the implementation of whatever changes are deemed necessary for the development of the telecommunications network do not lead to instances where calls which have been local calls become more expensive. The Director agrees with this position.

Furthermore, taking account of the considerable reduction in retail trunk call tariffs and wholesale termination rates since the previous review in 1998, the Director believes that the current *eircom* local call charging regime that relies on 128 MNAs is now excessively granular relative to what is reasonably necessary, i.e. the total number of catchment areas necessary to provide local rate calling nationwide is too many. She believes that the balance of disadvantage arising from this granularity is borne by those who have to fit in with this regime. She believes that the enlargement of local call areas arising from the reduction in the number of MNAs from 128 to 106 will have a marginal impact only on overall call revenues. But it may give rise to cost savings arising from simplification and rationalisation of the scheme and may stimulate local call traffic volumes. The number of STD Code Areas should be reduced having regard to County boundaries.

While preparing the proposals for the future development of the scheme for geographic numbers as set out in the consultation paper, the ODTR did have regard to County boundaries as well as the existing numbering area regime. For each area where a number or code change is required, the ODTR will issue a detailed change plan that will provide telephone users with information on the changes. Change plans may include options for further consolidation of STD Code Areas and Minimum Numbering Areas within Counties (See section 3.8).

- The numbering scheme should be closed with full national dialling and standard number length.

The Director has decided to retain the local dialling procedure in the fixed network for the present. Also, the Director has concluded that a variable Nationally Significant Number length of 7 to 10 digitswill continue during the planning period.

For the current planning period (2001 to 2005), it is unlikely that a case could be made whereby closing the numbering scheme[34] would yield customer centric benefits that would justify the considerable disruption and costs involved.

3.8 Location information – the way forward

Position of the Director

Taking account of the responses, the Director has set out a framework plan (Refer to section 4.4) for the development of the National Numbering Scheme for Geographic Numbers.

[34] With full national dialling, standard number length and the trunk prefix "0" dropped.

Future number changes including capacity driven number changes will be implemented in compliance with the framework plan. The framework plan will be subject to review.

Changes in accordance with the framework plan will not lead to instances where calls, which have been local rate calls, become more expensive.

Decision 3.5

The framework plan includes measures to simplify and clarify the current geographic numbering area regime by:

- reducing the number of STD areas;
- withdrawing STD codes with formats 040X, 050X and 09X;
- improving the leading digits indication for certain Minimum Numbering Areas;
- merging some MNAs into adjoining larger MNAs;
- removing some anomalies from the current scheme.

Additional factors have now been taken into account when developing the plan:

- the release of the "3X" range of codes for alternative use;
- retention of STD codes "071" and "074" for geographic use;
- the use of code "090" to facilitate the rationalisation of Athlone and neighbouring areas.

Since the receipt of responses to the consultation, the ODTR has carried out a very extensive audit of geographic numbers[35] to determine the current utilisation of allocated number blocks. This has more precisely identified STD code areas that are likely to reach number exhaustion before the end of the 5-year planning period. The initial programme of number changes, set out in section 4, will provide for capacity relief in these areas.

3.9 The use of short codes, access codes, prefixes and routing codes

Designated codes commencing with digits 1X are used as short codes to access certain frequently used services and as prefix and routing codes to assist in the establishment of certain calls. In addition, access codes[36] with format 15XX and 18XX are used with certain non-geographic numbers. These codes are widely used and make a significant contribution to the user-friendliness of the National Numbering Scheme. The most widely used codes have become memorable codes and this further contributes to their user-friendliness.

In the consultation paper, a listing of short codes, access codes, prefixes and routing codes currently in use was set out[37] and respondents were asked to indicate any errors or omissions.

[35] In section 6.3.2 of the consultation paper, the ODTR confirmed its intention to carry out an audit in the 1st Quarter of 2001.

[36] Cannot be accessed from outside Ireland

[37] Figure 3.7 in consultation paper.

A revised listing is set out in Figure 3.4 including two additional codes with format 1808X as indicated by *eircom* in their response and two new Internet Access codes. This listing includes all codes currently in use and authorised by the ODTR or its predecessors.

Figure 3.4 - National Numbering Scheme – Current short codes, access codes, prefixes and routing codes

Call Case	Customer dials/Network inserts
Calls to non-geographic numbers (excluding Mobile and Personal)	Premium Rate – 15XX XXX XXX Freephone – 1800 XXX XXX Shared Cost – 1850 XXX XXX Local Flat Rate Access – 1890 XXX XXX Internet Access (Original/Hybrid) – 1891 ABC ABC Internet Access (Pay-as-you-go) - 1892 ABC ABC Internet Access (Partial/Full Flat Rate) - 1893 ABC ABC *eircom* Eirpac Charged Access – 1511 XXXX *eircom* Eirpac, Free Access – 1801 XXXX *eircom* Charge Card & VPN – 1808 1
Calls to Emergency Services	999 or 112
Calls to other services – network unique	Various – 172, 173, 174X
Calls to other services	National Operator Assistance – 10 International Operator Assistance – 114 Directory enquiries – 118XX Speaking clock – 1191 Mobile Voicemail – 171[38] *eircom* Charge Card – 1808 1 *eircom* International VPN – 1808 2 *eircom* National VPN – 1808 5 Customer service – 190X Telemessage – 196 Network Engineering Tests - 199
Prefix Codes	Subscriber Trunk Dialling Prefix – 0+ International Direct Dialling Prefix – 00+ Carrier Access/Selection – 13X+ (May be inserted by router, PABX, etc.) Calling Line Identification Restrict – 141+ Calling Line Identification Present – 142+ Caller return - 1471
Network Routing Codes	Carrier Pre-Selection Network Routing Codes – 139XX Number Portability Intra-Network Routing Code – 1750 Number Portability Non-Geographic Network Routing Codes – 1751XXX (one per operator) Number Portability Geographic Network Routing Codes – 1752 XXX to 1759 XXX (one per switch / max 128 per operator)
These codes are allocated and used in accordance with the *National Numbering Conventions*[39], sections 6 and 11 respectively and also in compliance with specific documents issued by the Director from time to time. Only callers in Ireland can use these codes.	

Views of the Respondents

One respondent made the point that customers may wish to use certain short codes irrespective of the operator that is being used, recognising that customers have knowledge of and use such codes.

[38] Eircell will complete the changeover of mobile mailbox access from 121 to 171 before the end of 2001

[39] National Numbering Conventions – ODTR Doc. No. 00/10

Position of the Director

The ODTR will continue to treat short codes as a scarce resource and to require network operators to use them in a co-ordinated way. Furthermore, the ODTR will consult with the telecommunications industry with a view to encouraging more widespread use of existing short codes, in particular those codes that are widely known by the public.

3.9.1 Short access codes for Operator Assistance and other Services

A number of short access codes for Operator Assistance and other services[40], were identified in the consultation paper. These codes include:

- National Operator Assistance – 10
- International Operator Assistance – 114
- Telemessage (previously Telegrams) – 196
- *eircom* Charge Card – 1808 1
- *eircom* International VPN - 1808 2
- *eircom* National VPN - 1808 3
- *eircom* Eirpac Charged Access – 1511 XXXX
- *eircom* Eirpac, Free Access – 1801 XXXX.

The ODTR suggested that some of these codes may no longer be serving the purposes for which they were originally intended and that most of these codes are now little used by the public and represent poor utilisation of the National Numbering Resource, in particular Code "10". There may be some overlap with the new Directory Information Services (with call completion).

Respondents were asked did they provide a service using the above respective access codes, and if so to provide a summary description and the average number of effective calls per day. Summary descriptions were provided by one respondent, and no respondent provided call volumes.

Views of the Respondents

One respondent stated that *"the resources identified are predominately allocated, for historic reasons to one operator (eircom) and ODTR should be seeking to ensure that these same resources are stripped of their exclusivity and made available to other operators should the demand exist. Short codes are an extremely scarce resource and* it *would insist that the ODTR revisit the historic allocation of all codes to eircom as it is inappropriate and unacceptable for short codes to be kept for sole utilisation by the incumbent for specific types of services such as the 1808XXXXXX, 1511XXXXXX, and 1801XXXXXX. In a competitive market, such numbers should relate to general industry uses and thus should relate to generic services as opposed to operator specific services."* This view was echoed by another respondent: *"In relation to the use of short codes …. for Operator Assistance and other services,* it *does not provide any of*

[40] Some of these codes have been in use for a considerable period of time

these services as they are all, in our view, eircom services. It is very unsatisfactory that one operator should have exclusive, or near-exclusive, use of very valuable short codes. The ODTR should initiate a review of the allocation of these codes and the related services with a view to establishing a more equal and fair distribution of them amongst all market operators."

The ODTR must point out that the existing Numbering Conventions make provision for the allocation of short codes on a non-discriminatory basis.

Respondents were also asked if they had any proposals to develop or more effectively provide each of the services listed[41] and related services.

One respondent (*eircom*) stated that they were currently reviewing the level of continued demand for services offered via the 10, 11, and 196 codes with a view to the continued demand for them. Another respondent, who did not indicate any development proposals, felt that the Numbering Conventions should include procedures for the effective processing of numbering applications to support the introduction of new services.

Respondents were also asked to identify any gaps in the current set of Operator Services offered to the public, for example access codes for:

- Special operator services for disabled people;
- Special operator services for foreign visitors;
- Transport information/assistance.

The responses did not include any indication of gaps in the current set of Operator Services.

Position of the Director

Most respondents did not provide answers to this section of the consultation regarding short access codes for Operator Assistance and other services. Two of the three respondents who did, focused on *eircom*'s perceived dominant position and the allocation process rather than new thinking on the development of these services. This reinforces the Director's belief that it is now timely to review these long standing short code allocations, in consultation with the telecommunications industry and decide on the framework for future allocations and the appropriate allocation process.

As already indicated in sections 3.3 and 3.5.2, the ODTR will consult with the telecommunications industry, including operators using the short code "10" for National Operator Assistance, with a view to the possible withdrawal of code "10" and making code "110" available if required as a replacement. The ODTR will also have regard to any requirements for international access to these services and to developments in directory information services. As stated earlier in section 3.5, the Director is open to considering appropriate measures to facilitate international access to certain non-geographic services using the access digits +353 1(0, 1 and 8), including access to directory information services**.**

[41] In question 3.8.

3.9.2 Network unique short codes

Twelve short codes, namely 171 (Voice Mail), 172, 173, and 1740 to 1749, have been designated[42] as Network Unique Short Codes. Network operators are able to use these codes for varying applications on their own networks. These codes are intended to be used for the provision of easy access to service support features such as fault reporting, voice mail set-up and account enquiries. They should preferably be free to users or otherwise be in compliance with the maximum tariff conditions set out in the Numbering Conventions (section 11). They are not intended for use to access information services, games, lotteries or other revenue enhancing services.

Respondents were asked if they agreed that there is was not a justified case for expanding the number of network unique short codes at this time, and that such an initiative could diminish the overall user-friendliness of such codes.

Views of the Respondents

Most respondents either had no strong views or agreed with the ODTR that there was not a justified case for expanding the number of network unique short codes at this time. Their comments included the following:

- the ODTR should consider current utilisation of such codes to determine whether some services currently using short codes could be offered more appropriately via freephone numbers;
- these codes should not be used for revenue enhancement.

But one respondent strongly favours increasing the number of available network unique short codes and has applied for a further allocation. They believe that, for mobile telephony, there will be a significant increase in information based services, and making some of these services available by a short code would make them easier to dial, which would benefit the user.

Position of the Director

Taking account of the responses, the Director is not persuaded that there is a justified case for expanding the number of network unique short codes at this time, and continues to believe that such an initiative could diminish the overall user-friendliness of such codes.

But the Director is open to considering appropriate measures to facilitate access to emerging information based services and will consult with the telecommunications industry on this matter.

[42] Decision Notice D2/98

3.10 Presentation of numbers and alphanumeric keypads

Consistent presentation of telephone numbers in compliance with a recommended format helps to avoid dialling errors and contributes to user friendliness. The recommended formats are set out in the National Numbering Conventions[43], section 12.2. In the consultation paper, the ODTR proposed to amend section 2.2 of the Numbering Conventions by including a recommended presentation for 8-digit telephone numbers as follows:

Subscriber number length	National numbers	International numbers
8 digits	(0+NDC[9]) 1234 5678[44]	+353 NDC 1234 5678

Views of the Respondents

Golden Pages Ltd, expressed a strong preference for the "1234 5678" nine character format rather than the "12 34 56 78" eleven character format. The eleven character format may necessitate the use of different column sizes and/or different typeface in different directories. This could impact on the readability of the directory, or an increase in the paper required as well as an increase in the cost of printing and distribution. But some flexibility may be required to meet requests from customers for specific layouts in display advertisements. Two other respondents also expressed an explicit preference for the nine character format.

One respondent indicated that the subscriber number should be structured to meet the user requirements that will be determined by the numbers themselves, so that a run of digits or a repeat pattern of digits may offer a better opportunity of conveying a memorable number.

Position of the Director

The Director agrees with the respondents who favour a nine character format and will adopt this format for 8 digit subscriber numbers subject to the caveat that some flexibility may be required to meet requests from customers for specific layouts in display advertisements particularly in classified directories.

Reference was also made in the consultation paper to the consistent presentation of characters on terminal equipment which also contributes to user friendliness. The use of a standardised set of alpha-numeric characters for keypads based on ITU Recommendation E.161 Option A has been strongly recommended by the Director. Details of the recommended standard are set out in the National Numbering Conventions, section 12.1.

3.11 International harmonisation

A brief summary of harmonisations provisions in the current National Numbering Scheme which help to align the scheme with international and European norms and to facilitate user friendliness were summarised in the consultation paper, including:

- International Direct Dialling (IDD) prefix "00" ;

[43] National Numbering Conventions – Doc No. 00/10

[44] This format was incorrectly shown in the consultation paper.

- European Directory Information prefix “118”;
- Access code 1-800 for freephone services;
- European Emergency Code “112”;
- Dedicated STD code“048” to facilitate easy cross-border access to N. Ireland;
- Use of a standardised set of alpha-numeric characters for keypads on terminal equipment, based on ITU Recommendation E.161 Option A;
- Standard formats for the presentation of telephone numbers, based on ITU Recommendation E.123.

The ITU has introduced international freephone and international premium rate services numbers. It has also allocated the Country Code 3883 for use as a European Telephony Numbering Space (ETNS), available for use for pan-European services. These numbers and their usage are not part of the National Numbering Scheme.

Respondents were invited to indicate any other harmonisation measures that should be considered by the Director.

Views of the Respondents

Four respondents indicated potential new service requirements which the ODTR should have regard to when developing the national numbering scheme:

- The ODTR needs to take cognisance of the relationship between numbering resources for TETRA networks, where TETRA technology is used to provide a public telecommunications service, and therefore may require to support roaming between TETRA and other technologies.
- The emerging European Telecommunications Numbering Space (ETNS) needs to be provided for in the scheme.
- The 028 Code should be recovered in Phase 1 and used to replace the Northern Ireland Access Code 028. This would be of immense benefit to customers calling NI and will avoid the need for advertising with both codes, particularly in border regions.
- The ranges 8X…… should be cleared (in the medium term) for use as the Northern Ireland prefix.

Position of the Director

In the event of licences being issued for the provision of TETRA services, the Director will make the necessary numbering capacity available. Currently the preference would be to provide this capacity from the 08…… range.

Network Operators should put in place the necessary call routing, billing and settlement arrangements[45] to facilitate the opening of the following ranges for European Telephony Numbering Space (ETNS) services:

[45] Some network operators may have already done so.

00 3883 1 X-----X for Public Service Numbers
00 3883 3 X-----X for Customer Service Numbers
00 3883 5 X-----X for Corporate Network Numbers
00 3883 7 X-----X for Personal Numbers

There has been no support from telephone users in the Bantry and Skibbereen areas for the proposal to group these adjoining MNAs into one STD Code Area and to recover STD Code 028. The Director therefore does not intend to proceed with this proposal in the immediate future. In the event of code 028 being recovered at some future date, the Director would give serious consideration to the proposal to use Access Code 028 for the Northern Ireland.

The Director considers that the extensive number changes required to clear the 8X…… ranges (including all mobile and paging numbers) could not be justified in order to provide a new Northern Ireland prefix.

The Director will continue to monitor developments at international level but does not at present have any further firm proposals to introduce additional harmonisation measures into the National Numbering Scheme.

4 DEVELOPMENT OF THE NATIONAL NUMBERING SCHEME FOR GEOGRAPHIC NUMBERS

4.1 General

In section 4 of the Consultation Paper, the ODTR set out proposals for the development of the National Numbering Scheme for Geographic numbers. Actions and provisions proposed for each STD Code Area were set out in Annex 1 of the Consultation Paper. These proposals are summarised in Annex 1 of this document.

4.2 Demand for Geographic Numbers

A detailed survey of primary allocations[46] of geographic numbers confirmed that, since liberalisation in December 1998, there has been a significant demand for the allocation of additional number blocks, including a once off step demand for initial block allocations from newly licensed operators. As a result, some Minimum Numbering Areas are reaching "number block" exhaustion based on their existing Subscriber Number lengths. The survey showed that:

- 5 MNAs exceed 95% primary fill;
- 12 MNAs exceed 90% primary fill including Dublin MNA;
- 21 MNAs exceed 80% primary fill;
- 49 MNAs exceed 60% primary fill including Limerick and Galway MNAs.

In addition to new demands, other factors have contributed to the deterioration in the supply position including:

- allocations in 10k blocks rather than 1k blocks;
- the use of short number lengths, in particular 5-digit Subscriber Numbers;
- excessive numbers of MNAs to be supported within certain STD Code Areas;
- provisions set aside for expansion and rationalisation.

A detailed table (Figure 4.1) was included in the consultation paper that provided the following data for each Minimum Numbering Area[47]:

- the STD Code Area;
- the percentage of number blocks allocated at present from the available capacity;
- the forecast demand for years 2001 to 2005 shown as a percentage of available block capacity.

[46] Allocations by the ODTR to network operators.

[47] Areas where the present block allocation was under 57% were not included.

The forecast demand was calculated using the following annual growth forecasts based on a forecast model set out in the Consultation Paper:

End Year 2000	100%	End Year 2003	138%
2001	111%	2004	155%
2002	123%	2005	174%
Refer to section 2.1 regarding responses[48] to assessment of forecast demand for geographic numbers.			

Views of the Respondents

Most respondents referred to their responses to questions 2.1 and 2.2, which are considered in section 2.1.

Two respondents raised the issue of the extent to which numbers allocated to network operators are in use and the potential impact on number exhaustion. One of these respondents called for an audit of all allocated geographic number ranges be carried out.

Position of the Director

Since the receipt of responses to the consultation, the ODTR has carried out a very extensive audit of geographic numbers[49] to determine the current secondary allocations[50] for each allocated number block. The summary results of the audit are set out in Figure 4.1, which includes the % primary, secondary and overall fills for each MNA. The audit confirmed that some operators are holding very large quantities of spare numbers grossly in excess of that which is reasonable for the efficient provision of service to new customers.

For the purpose of determining a reasonable ceiling for maximum secondary fill[51] in a MNA, the ODTR first considered the audit results, noting that the mean % of the four highest fills obtained in the audit is 63.5%.[52] The ODTR considers that this figure leaves some margin for improvement and has therefore set a target ceiling of 70% for number utilisation efficiency, which it considers reasonable and achievable.

As stated in section 2, the Director is satisfied that a growth of 74% and the component annual growth forecasts (55% to 2004 etc) are reasonable growth factors to be used to project demand for geographic numbers over the planning period. This represents a high growth scenario. Alternatively, a pessimistic forecast with a reduced growth trend resulting from market saturation effects, mobile substitution, economic downturn or other factors would result in reduced additional demand for numbers.

It is proposed to have regard to a possible low growth scenario by making provision for high growth demand for 4 years only (up to 2004) using 55% rather than 74% growth with number

[48] Including responses to question 4.1

[49] In section 6.3.2 of the consultation paper, the ODTR confirmed its intention to carry out an audit in the 1st Quarter of 2001.

[50] Allocations by network operators to customers.

[51] It is not possible to achieve 100% fill due to various factors such as sub-allocation to subscriber equipment units, numbers in channel for new customers, recovered numbers in quarantine, etc.

[52] Kilkenny 67%, Letterkenny 66%, Navan 62%, Sligo 59% - Mean = 63.5

changes in 2003. The position will be reviewed in 2002 to decide if further changes are required in 2004. In any event, the number changes signalled in this Decision Notice to be implemented in 2003 will have to ensure sufficient number capacity until 2004.

It follows that MNAs that now have overall fills[53] in excess of 45.16%will be at risk of number exhaustion before the end of 2004 (based on an overall growth of 55% and 70% utilisation efficiency). A listing of these MNAs is included in Figure 4.1A.

The Director has decided that all MNA with overall number fills currently in excess of 45.16% should have number length increases, in order to avoid the risk of number exhaustion within the next 4 years.

The ODTR will initiate a project to recover excessive spare capacity held by certain network operators.

Decision 4.1

Figure 4.1A: Analysis of Allocations in minimum Numbering Areas

STD Code Area	STD Code	MNA	Blocks Available 1K	Primary Block Allocations 1K	Secondary Allocations	Primary Fill %	Secondary Fill %	Overall Fill %	Effective Overall Fill %
Navan	046	Navan	30	30	18699	100%	63%	**63%**	96%
Letterkenny	074	Letterkenny	33	30	19880	91%	67%	**61%**	88%
Kilkenny	056	Kilkenny	54	46	30879	86%	68%	**59%**	85%
Sligo	071	Sligo	60	58	33981	97%	59%	**58%**	83%
Castlebar	094	Castlebar	30	27	15050	90%	56%	**51%**	73%
Athlone	0902	Athlone	57	52	28093	92%	55%	**51%**	73%
Navan	046	Kells	15	15	7372	100%	50%	**50%**	72%
Letterkenny	074	Ramelton	19	19	9250	100%	49%	**49%**	70%
Navan	046	Trim	15	14	7073	94%	51%	**48%**	69%
Carlow	0503	Carlow	43	38	20029	89%	53%	**48%**	69%
Mullingar	044	Mullingar	33	33	14672	100%	45%	45%	65%
Portlaoise	0502	Portlaoise	50	41	21521	82%	53%	44%	63%
Dublin	01	Dublin	4570	4330	1805647	95%	42%	40%	58%
Wexford	053	Wexford	70	54	27493	78%	51%	40%	58%
Letterkenny	074	Lifford	18	17	6794	95%	40%	38%	55%
Castlebar	094	Swinford	14	12	5264	86%	44%	38%	55%
Mullingar	044	Killucan	7	7	2467	100%	36%	36%	52%
Thurles	0504	Thurles	29	20	10161	69%	51%	36%	52%
Castlebar	094	Claremorris	26	22	8683	85%	40%	34%	49%
Carlow	0503	Muine Bheag	18	16	5943	89%	38%	34%	49%
Totals			5,192	4,882	2,098,951				

[53] Overall fill = (%Primary Fill * % Secondary Fill)

Figure 4.1B: Analysis of Allocations in minimum Numbering Areas

STD Code Area	STD Code	MNA	Blocks Available 1K	Primary Block Allocations 1K	Secondary Allocations	Primary Fill %	Secondary Fill %	Overall Fill %	Effective Overall Fill %
Charleville	063	Charleville	29	25	9311	87%	38%	34%	49%
Kilkenny	056	Freshford	13	11	4174	85%	38%	33%	48%
Limerick	061	Limerick	322	252	101103	79%	41%	33%	48%
Carrick-on-Shannon	078	Carrick-on-Shannon	30	24	9231	80%	39%	32%	46%
Portlaoise	0502	Abbeyleix	20	17	6073	85%	36%	31%	45%
Tullamore	0506	Clara	10	8	2963	80%	38%	31%	45%
Limerick	061	ShannonAirport	120	99	34543	83%	35%	30%	43%
Galway	091	Galway	360	250	103096	70%	42%	30%	43%
Kilkenny	056	Castlecomer	9	6	2511	67%	42%	29%	42%
Killarney	064	Killarney	58	40	16087	69%	41%	29%	42%
Longford	043	Longford	40	26	11036	65%	43%	28%	40%
Monaghan	047	Monaghan	40	24	10918	60%	46%	28%	40%
Mullingar	044	Castlepollard	10	8	2724	80%	35%	28%	40%
Limerick	061	Killaloe	20	20	5450	100%	28%	28%	40%
Mullingar	044	Tyrellspass	10	7	2596	70%	38%	27%	39%
Nenagh	067	Nenagh	49	28	12359	58%	45%	27%	39%
Clonmel	052	Killenaule	10	7	2565	70%	37%	26%	38%
Clonmel	052	Cahir	20	12	4926	60%	42%	26%	38%
Enniscorthy	054	Enniscorthy	39	22	9840	57%	45%	26%	38%
Bandon	023	Bandon	70	33	16575	48%	51%	25%	36%
Totals			1,280	920	368,081				

Figure 4.1C: Analysis of Allocations in minimum Numbering Areas

STD Code Area	STD Code	MNA	Blocks Available 1K	Primary Block Allocations 1K	Secondary Allocations	Primary Fill %	Secondary Fill %	Overall Fill %	Effective Overall Fill %
Waterford	051	Waterford	270	175	61864	65%	36%	24%	35%
Portumna	0509	Banagher Sth	5	5	1168	100%	24%	24%	35%
Thurles	0504	Templemore	20	13	4570	65%	36%	24%	35%
Ballinasloe	0905	Ballinasloe	50	29	11540	58%	40%	24%	35%
Ballina	096	Ballina	70	38	15752	55%	42%	24%	35%
Carrick-on-Shannon	078	Drumshambo	20	14	4647	70%	34%	24%	35%
Portumna	0509	Birr	29	23	6533	80%	29%	24%	35%
Tullamore	0506	Tullamore	60	24	13581	40%	57%	23%	33%
Mallow	022	Mallow	70	38	15389	55%	41%	23%	33%
Navan	046	Nobber	10	7	2192	70%	32%	23%	33%
Clonmel	052	Clonmel	40	37	8699	93%	24%	23%	33%
Athlone	0902	Banagher Nth	7	7	1515	100%	22%	22%	32%
Listowel	068	Listowel	70	32	14590	46%	46%	22%	32%
Castlerea	0907	Castlerea	40	31	8134	78%	27%	22%	32%
Navan	0405	Edenderry	21	12	4115	58%	35%	21%	30%
Limerick	061	Adare	38	31	7684	82%	25%	21%	30%
Tipperary	062	Cashel	29	14	5590	49%	40%	20%	29%
Buncrana	077	Buncrana	70	30	13347	43%	45%	20%	29%
Dungarvan	058	Dungarvan	70	28	13155	40%	47%	19%	28%
Fermoy	025	Fermoy	70	27	12822	39%	48%	19%	28%
Totals			1,060	616	226,887				

Figure 4.1D: Analysis of Allocations in minimum Numbering Areas

STD Code Area	STD Code	MNA	Blocks Available 1K	Primary Block Allocations 1K	Secondary Allocations	Primary Fill %	Secondary Fill %	Overall Fill %	Effective Overall Fill %
Wicklow	0404	Wicklow	69	30	12506	44%	42%	19%	28%
Wicklow	0402	Arklow	69	28	12111	41%	44%	19%	28%
Tuam	093	Tuam	70	30	12452	43%	42%	19%	28%
Westport	098	Westport	70	28	11790	40%	43%	18%	26%
Tipperary	062	Tipperary	48	22	7917	46%	36%	17%	25%
Dublin	01	Greystones	110	80	16968	73%	22%	17%	25%
Nenagh	0505	Roscrea	49	20	7616	41%	39%	16%	23%
Ballinrobe	092	Ballinrobe	30	15	4635	50%	31%	16%	23%
Skibbereen	028	Skibbereen	70	26	10544	38%	41%	16%	23%
Enniscorthy	054	Ferns	30	14	4594	47%	33%	16%	23%
Killarney	064	Rathmore	19	10	2907	53%	30%	16%	23%
Boyle	079	Boyle	20	10	3108	50%	32%	16%	23%
Longford	043	Granard	30	15	4471	50%	30%	15%	22%
Newcastle West	069	Newcastle West	70	26	9955	38%	39%	15%	22%
Portumna	0509	Portumna	21	11	2872	53%	27%	15%	22%
Roscommon	0903	Roscommon	60	22	8043	37%	37%	14%	20%
Dublin	01	Dunboyne	130	80	16412	62%	21%	14%	20%
Bantry	027	Bantry	70	26	9117	38%	36%	14%	20%
Mullingar	044	Moyvore	10	6	1330	60%	23%	14%	20%
Navan	0405	Enfield	49	23	6361	47%	28%	14%	20%
Totals			1,095	523	165,709				

Figure 4.1E: Analysis of Allocations in minimum Numbering Areas

STD Code Area	STD Code	MNA	Blocks Available 1K	Primary Block Allocations 1K	Secondary Allocations	Primary Fill %	Secondary Fill %	Overall Fill %	Effective Overall Fill %
Athy	0507	Athy	50	18	6675	36%	38%	14%	20%
Dungloe	075	Dungloe	70	26	8846	38%	35%	14%	20%
Donegal	073	Donegal	70	23	9323	33%	41%	14%	20%
Dublin	01	Balbriggan	130	90	16144	70%	18%	13%	19%
Cork	021	Midleton	104	74	12152	72%	17%	13%	19%
Kanturk	029	Kanturk	70	24	8411	35%	36%	13%	19%
Naas	045	Curragh	160	90	19545	57%	22%	13%	19%
Monaghan	047	Clones	28	12	3365	43%	29%	13%	19%
Youghal	024	Youghal	69	18	7960	27%	45%	13%	19%
Limerick	061	Cappamore	40	30	4687	75%	16%	12%	18%
Castlerea	0907	Ballagha-derreen	30	25	3372	84%	14%	12%	18%
Naas	045	Naas	290	130	32328	45%	25%	12%	18%
Wicklow	055	Gorey	69	19	7948	28%	42%	12%	18%
Belmullet	097	Belmullet	30	14	3376	47%	25%	12%	18%
Manor-hamilton	072	Manorhamilton	70	20	7866	29%	40%	12%	18%
Macroom	026	Macroom	70	18	6386	26%	36%	10%	15%
Waterford	051	Wellingt Br.	30	21	2435	70%	12%	9%	13%
Galway	091	Loughrea	100	80	8295	80%	11%	9%	13%
Galway	095	Clifden	70	21	5437	30%	26%	8%	12%
Waterford	051	Carrick-on-Suir	90	33	6541	37%	20%	8%	12%
Totals			1,641	787	181,092				

Figure 4.1F: Analysis of Allocations in minimum Numbering Areas

STD Code Area	STD Code	MNA	Blocks Available 1K	Primary Block Allocations 1K	Secondary Allocations	Primary Fill %	Secondary Fill %	Overall Fill %	Effective Overall Fill %
Waterford	051	New Ross	100	33	6919	33%	21%	7%	10%
Dublin	01	Celbridge	540	120	33066	23%	28%	7%	10%
Cork	021	Cork	4960	470	255535	10%	55%	6%	9%
Naas	045	Kildare	160	80	8317	50%	11%	6%	9%
Baltinglass	0508	Baltinglass	52	9	2831	18%	32%	6%	9%
Dundalk	042	Carrickmacross	200	28	9733	14%	35%	5%	8%
Dundalk	042	Castleblaney	200	26	8003	13%	31%	5%	8%
Galway	091	Gort	140	70	4901	50%	8%	4%	6%
Cork	021	Kinsale	300	33	8666	11%	27%	3%	5%
Waterford	051	Kilmacthomas	90	21	2148	24%	11%	3%	5%
Tralee	066	Killorglin	300	31	7215	11%	24%	3%	5%
Limerick	061	Scarriff	160	50	2497	32%	5%	2%	3%
Sligo	071	Ballymote	10	4	196[54]	40%	5%	2%	3%
Tralee	066	Cahirciveen	300	21	4410	7%	21%	2%	3%
Tralee	066	Dingle	300	21	4137	7%	20%	2%	3%
Galway	099	Kilronan	70	11	802	16%	8%	2%	3%
Dundalk	042	Dundalk	4500	66	38021	2%	58%	2%	3%
Cork	021	Coachford	900	60	7426	7%	13%	1%	2%
Drogheda	041	Ardee	900	60	7246	7%	13%	1%	2%
Ennis	065	Kilrush	700	43	6013	7%	14%	1%	2%
Totals			14,883	1,258	418,082				

Figure 4.1G: Analysis of Allocations in minimum Numbering Areas

STD Code Area	STD Code	MNA	Blocks Available 1K	Primary Block Allocations 1K	Secondary Allocations	Primary Fill %	Secondary Fill %	Overall Fill %	Effective Overall Fill %
Ennis	065	Ennistymon	900	60	6786	7%	12%	1%	2%
Cavan	049	Oldcastle	900	40	5775	5%	15%	1%	2%
Drogheda	041	Drogheda	5400	139	35019	3%	26%	1%	2%
Ennis	065	Ennis	4500	90	24737	2%	28%	1%	2%
Tralee	066	Tralee	4500	64	29930	2%	47%	1%	2%
Cavan	049	Cavan	2700	45	16128	2%	36%	1%	2%
Cavan	049	Belturbet	1800	40	3391	3%	9%	1%	2%
Cavan	049	Cootehill	1800	31	2093	2%	7%	1%	2%
Totals			22,501	510	123,859				
Totals – Dublin MNAs			5480	4,700	1,888,237				
Totals – Provincial MNAs			42,172	4,796	1,694,424				
Totals – All MNAs			47,652	9,496	3,582,661				

[54] The low number of allocations for Ballymote is due to some *eircom* subscribers in the Ballymote MNA being allocated numbers proper to Sligo MNA.

4.3 Proposed approach to development of the National Numbering Scheme for geographic numbers

The ODTR set out its proposed approach for the development of the National Numbering Scheme for geographic numbers in the Consultation Paper:

For Provincial STD Code Areas:

- with 5-digit Subscriber Numbers facing exhaustion;
- the Limerick STD Code Area with 6-digit Subscriber Numbers;
- the Galway STD Code Area with 6-digit Subscriber Numbers;

the development framework made provision for the introduction of 7-digit numbers for new subscribers and for changing existing subscriber numbers to 7 digits.

For the Dublin MNA with 7-digit Subscriber Numbers, the development framework made provision for the introduction of mixed number lengths. Eight-digit numbers using leading digit "9" would be introduced and would provide for an additional 400 10k blocks immediately. If further capacity is required, a number change would then be necessary.

The ODTR also proposed to incorporate rationalisation provisions where practical in the capacity expansion plan for each STD Code Area, including:

- reducing the overall number of STD Code Areas;
- withdrawing STD codes with formats 040X, 050X and 090X;
- improving the leading digits indication for certain Minimum Numbering Areas;
- merging some MNAs into adjoining larger MNAs;
- removing some anomalies from the current scheme.

Views of the Respondents

One respondent believes that the shortage of any numbering capacity can be handled by an increase in subscriber number length and not a change in STD codes. He does not agree with the ODTR's proposal to simplify and clarify the current geographic numbering area regime. He believes that reducing the number of STD codes will lead to customer dissatisfaction and less capacity, and reducing MNAs will cause problems to the existing geographic number portability process.

Another respondent believes that MNAs are, at present, the sole contributor to the numbering shortage in Ireland and that improving the leading digit indications in certain MNAs offers little or no benefit. He submits that where it can be proven that a number change is prompted by true number exhaustion (not linked to MNAs), then the ODTR should move to a full 8 digit solution so as to ensure that the likelihood of subsequent further numbering changes in the same area are limited.

Two respondents advocated moving to a closed numbering scheme with full national dialling and standard number length. One of these commented that he agrees with the ODTR objective to simplify and clarify the current numbering plan co-incident with capacity driven number

changes but that while the implementation plan is a great improvement on the current scheme, it is not optimal.

Other respondents who commented on this section of the consultation made the following points:

- proposed approach for these areas is far more preferable to a move to variable number lengths in the same geographic area;
- changes such as these if managed well and well advertised have minimum disruption;
- the respondent has a strong preference for a uniform national number length (this would support the withdrawl of 4 digit STD codes);
- if a change is being made to a local dialling area it makes sense to make all changes relating to that area at the same time.

Some respondents who are consumers of telecommunications services provided responses to specific proposals in the consultation and these are included in section 4.3.6. They were all supportive of the ODTR's proposed approach.

One respondent believes that this consultation should constitute the first step in what must now be an industry process of evaluation of the Irish Numbering Scheme. It called on the ODTR to immediately convene a meeting of the Number Advisory Panel so that the important issues identified by the ODTR can be addressed by the industry as a whole, together with relevant consumer groups.

Position of the Director

Taking account of the responses together with the conclusion from section 3.8 (Location information – the way forward), the Director has set out a framework plan (Refer to section 4.4) for the development of the National Numbering Scheme for Geographic Numbers. Future number changes including capacity driven number changes will be implemented in compliance with this framework plan. The framework plan will be subject to review.

The framework plan includes measures to simplify and clarify the current geographic numbering area regime by:

- reducing the number of STD areas;
- withdrawing STD codes with formats 040X, 050X and 09X;
- improving the leading digits indication for certain Minimum Numbering Areas*;*
- merging some MNAs into adjoining larger MNAs;
- removing some anomalies from the current scheme.

Additional factors have now been taken into account when developing the plan:

- the release of the "3X" range of codes for alternative use;
- retention of STD codes "071" and "074" for geographic use.

Changes in accordance with the framework plan will not lead to instances where calls which have been local rate calls become more expensive (See section 4.3.1).

Since the receipt of responses to the consultation, the ODTR has carried out a very extensive audit of geographic numbers[55] to determine the current utilisation of allocated number blocks[56]. This has more precisely identified STD code areas that are at risk of reaching number exhaustion.

Figure 4.2: Minimum Numbering Areas facing exhaustion
Analysis of Allocations

STD Code Area	STD Code	MNA	Blocks Available 1K	Primary Block Allocations 1K	Secondary Block Allocations 1K	Primary Fill %	Secondary Fill %	Overall Fill %	Effective Overall Fill %
Navan	046	Navan	30	30	18699	100%	63%	**63%**	96%
Letterkenny	074	Letterkenny	33	30	19880	91%	67%	**61%**	88%
Kilkenny	056	Kilkenny	54	46	30879	86%	68%	**59%**	85%
Sligo	071	Sligo	60	58	33981	97%	59%	**58%**	83%
Castlebar	094	Castlebar	30	27	15050	90%	56%	**51%**	73%
Athlone	0902	Athlone	57	52	28093	92%	55%	**51%**	73%
Navan	046	Kells	15	15	7372	100%	50%	**50%**	72%
Letterkenny	074	Ramelton	19	19	9250	100%	49%	**49%**	70%
Navan	046	Trim	15	14	7073	94%	51%	**48%**	69%
Carlow	0503	Carlow	43	38	20029	89%	53%	**48%**	69%

For the purpose of determining a reasonable ceiling for maximum secondary fill, the ODTR has set a target ceiling of 70% for number utilisation efficiency, which is considered reasonable and achievable.

As stated in the previous section, the Director has decided that all MNAs with overall number fills currently in excess of 45.16% should have number length increases, in order to avoid the risk of number exhaustion within the next 4 years. The MNAs in this category are listed in Figure 4.2. The programme of number changes, set out in section 4.3.5, will provide for capacity relief in these areas as well as measures to simplify and clarify the current geographic numbering area regime.

4.3.1 Local Call Charging Arrangements

The majority of local calls made in Ireland are currently carried by *eircom*. Calls made within each STD Code Area and between most adjacent MNAs in different STD Code Areas are local. For each MNA, a schedule of local charge relationships specifies the terminating MNAs to which calls are local. The number varies widely between 3 and 10.

There is a high number of MNAs (128) in the numbering scheme and the geographic area covered by each MNA is similar. It follows that the number of allocations within an MNA varies widely from under 1K to over 1M. *eircom* utilises the granularity of the current scheme to a high degree to minimise the geographic size of local call catchment areas. But the current regime presents some anomalous charge cases, e.g. calls from Balbriggan to Dublin (a distance of 52Km) are local but calls from Carrick-on-Shannon to Manorhamilton (a distance of 40 km) are trunk[57].

[55] In section 6.3.2 of the consultation paper, the ODTR confirmed its intention to carry out an audit in the 1st Quarter of 2001.

[56] The audit has confirmed that some operators are holding very large quantities of spare numbers grossly in excess of that which is reasonable for the efficient provision of service to new customers.

[57] County Dublin has the highest population and County Leitrim has the lowest population in Ireland.

The reduction in the number of MNAs from 128 to 106 will mean that it will no longer be possible to differentiate certain trunk charge cases with respect to local charge cases using MNAs as the reference areas. These cases are indicated in the framework plan in section 4.4.

Position of the Director

As the Consultation Paper addressed numbering issues, the impact on call charging issues was not reviewed. A number of respondents had strong views on the underlying local charging issues and their impact on other network operators.

As stated earlier, the Director considers that the principle purpose of providing MNAs within an STD Code Area is to provide user information on the geographic location by means of the leading digits of the subscriber number. While some rationalisation of MNAs is desirable, the ODTR believes that the abandonment of the MNA system (as suggested by one respondent) could not be reasonably justified. It would lead to a very significant loss of local area identity that, in the Director's opinion, would not be accepted by the public.

However, taking account of the considerable reduction in retail trunk call tariffs and wholesale termination rates since the previous review in 1998, the Director believes that the current *eircom* local call charging regime that relies on 128 MNAs is now excessively granular relative to what is reasonably necessary, i.e. some local call catchment areas are too small and the total number of catchment areas necessary to provide local rate calling nationwide is too many. She believes that the balance of disadvantage arising from this granularity is borne by those who have to fit in with this regime. She believes that the enlargement of local call areas arising from the reduction in the reduction in the number of MNAs from 128 to 106 will have a marginal impact only on overall call revenues. But it may give rise to cost savings arising from simplification and rationalisation of the scheme and may stimulate local call traffic volumes

Changes arising from measures to improve the geographic numbering scheme must not result in cases where calls, which have been local rate calls, become more expensive. Some local call catchment areas may have to be enlarged to retain existing local charge relationships and to continue to make local calls available to all numbers within each STD Code Area are local.

4.3.2 Minimum Numbering Areas

During the detailed survey of geographic numbers, it was also observed that:

- some MNAs are no longer clearly identifiable from the leading digits of their Subscriber Numbers;
- some STD Code Areas have a relatively excessive number of MNAs;
- the quantity of block allocations made for some MNAs is relatively low;
- decreasing the number of MNAs in an STD Code area can improve number utilisation efficiency and identification of the remaining MNAs.

Taking these factors into account, it was proposed in the consultation paper to merge 21 existing provincial MNAs into adjoining larger MNAs and reduce the number of Dublin

MNAs from 5 to 3. This would reduce the number of MNAs from 128[58] to 106. These mergers, *per se*, will not give rise to number changes and can be implemented subject to reasonable notice and co-incident with publication of directories.

Views of the respondents

One respondent disagree with all the merger proposals (except Banagher North and Banagher South) because it reduces the options in terms of charging granularity and reduces the number of identifiable areas.

Another respondent whilst not disagreeing in principle with the ODTR's attempt at rationalisation of MNAs, regrets that the ODTR has not taken the opportunity to fundamentally review the role and impact of MNAs themselves on the national numbering scheme. He makes the following points:

- MNAs have little significance for operators who operate a single national tariff policy and utilise an entirely different form of network architecture when compared to *eircom*;
- any review of the Irish numbering scheme must in his opinion begin with a proposal to abolish the system of MNA's which are used solely by the incumbent dominant operator for its own network topology and associated billing of consumers and operators;
- he believes that to date *eircom*'s use of MNAs constrains new entrant's ability to use the best and most appropriate and cost effective technology in their networks.

One respondent contends that the ODTR would appear to have based much of its analysis as regards numbering exhaustion on the MNA system. He contends that the MNA structure is based solely around *eircom*'s network design and thus the ODTR's continuation of that system only serves to further strengthen *eircom*'s dominant position in the market. He submits that continuing reliance on the MNA system is wholly inappropriate and urges the ODTR to remove the MNA system from the Irish Numbering Scheme.

Two other respondents agree/accept the ODTR's proposals for the merger of MNAs and another respondent makes the point that where a change is being made to a local dialling area it makes sense to make all changes relating to that area at the same time.

Position of the Director

> Taking account of the responses the Director has decided to reduce the number of existing MNAs from 128 to 106. This will include merging 20 existing provincial MNAs into adjoining larger MNA and reducing the number of Dublin MNAs from 5 to 3.
>
> The introduction of these merges will coincide with the publication of the 2002 directories to take account of any consequential revisions in local charge cases.
>
> *Decision 4.2*

The MNA mergers correspond to those proposed in the Consultation Paper with the exception of Scarriff. The inclusion of Scarriff in the merger of MNA's in the Limerick 061 STD Area

[58] Including Banagher North MNA and Banagher South MNA

would have given rise to some new local charge cases, which would have significantly exceeded the typical distance range for local calls in the Mid-West.These mergers, per se, will not give rise to number changes but may result in a small number of existing trunk charge cases becoming local to ensure that all existing local charge cases remain local.

The introduction of these merges will coincide with the publication of the 2002 directories to take account of any MNA changes and consequential revisions in local charge cases.A listing of the MNAs to be merged is set out in Figure 4.3 together with the reasons. For example, the reduction in the number of Dublin MNAs to three facilitates a simple changeover to 8 digit subscriber numbers *when required* – Dublin Central[59] numbers are prefixed with digit "9", Dublin North numbers are prefixed with digit "3" and Dublin South numbers are prefixed with digit "5".

Figure 4.3: Mergers of Minimum Numbering Areas

Existing STD Area (Code)	MNA Mergers	Reasons
Dublin (01)	Merge Balbriggan and Dunboyne to form Dublin North	Simplifies identification, facilitates number change and improves allocation efficiency.
Dublin (01)	Merge Celbridge and Greystones to form Dublin South	Simplifies identification, facilitates number change and improves allocation efficiency.
Cork (021)	Merge Midleton into Cork	No longer clearly identifiable from the leading digits of Subscriber Numbers.
Mullingar (044)	Merge Killucan and Myvore into Mullingar	Improved identification on remaining MNAs . Low number of allocations – Moyvore (1330), Killucan (2467).
Navan (046)	Merge Nobber into Navan	Reduced no. of MNAs will facilitate area rationalisation. Low number of allocations (2192).
Waterford (051)	Merge Wellington Br. into Waterford	No longer clearly identifiable from the leading digits of Subscriber Numbers. Low number of allocations (2435)
Tullamore (0506)	Merge Clara into Tullamore	Reduced no. of MNAs will facilitate area rationalisation. Low number of allocations (2963).
Portumna (0509)	Merge Bannagher (S) into Birr	Remove anomaly Low number of allocations (1168).
Limerick (061)	Merge Adare, Cappamore, Killaloe, and Shannon Airport into Limerick[60]	No longer clearly identifiable from the leading digits of Subscriber Numbers.
Thurles (0504)	Merge Templemore into Thurles	Reduced no. of MNAs will facilitate area rationalisation
Castlebar (094)	Merge Swinford into Castlebar	Reduced no. of MNAs will facilitate area rationalisation
Castlerea (0907)	Merge Ballaghaderreen into Castlerea	Reduced no. of MNAs will facilitate area rationalisation Low number of allocations (3372).
Athlone (0902)	Merge Bannagher (N) into Athlone	Remove anomaly. Low number of allocations (1168)
Sligo (071)	Merge Ballymote into Sligo	Reduced no. of MNAs will facilitate area rationalisation Low number of 1K block allocations (XXXX).
Carrick on Shannon (078)	Merge Drumshambo into Carrick on Shannon	Reduced no. of MNAs will facilitate area rationalisation
Carrick on Shannon (078)	Merge Boyle into Carrick on Shannon (co-incident with number change)	Reduced no. of MNAs will facilitate area rationalisation Low number of allocations (3108)
Letterkenny (074)	Merge Lifford and Ramelton into Letterkenny	Reduced no. of MNAs will facilitate area rationalisation

[59] It is proposed to rename Dublin MNA as Dublin Central MNA.

[60] The proposal to include Scarriff in the Limerick mergers has been dropped.

4.3.3 Development of the Dublin STD Code Area

In the consultation paper, the ODTR proposed to adopt the following approach for the development of the Dublin STD Area:

- for Dublin Central MNA, retain existing 7-digit number ranges for the present;
- for Dublin Central MNA, introduce 8-digit numbers using leading digit "9";
- combine Balbriggan and Dunboyne MNAs to form Dublin North MNA;
- combine Celbridge and Greystones MNAs to form Dublin South MNA;
- for Dublin North and South MNAs, introduce 8-digit numbers, simultaneously with their introduction in the Dublin Central MNA, using leading digits "3" and "5" respectively;
- change all 7-digit numbers in the Dublin STD Code Area to 8 digits[61] in sufficient time to avoid a shortage of number capacity in the Dublin MNA;
- review the issues relating to any decision to change the Dublin STD Code from "01" to "03" before initiating the 7 to 8-digit number change and decide if the STD Code should be changed co-incident with the Subscriber Numbers.

Views of the Respondents

Five respondents disagree with the ODTR's proposal to introduce variable number lengths with 7 and 8 digit Subscriber Numbers in Dublin. They favoured changing all existing Dublin numbers to 8 digits co-incident with the introduction of new 8 digit number allocations. Their reasons included:

- providing sufficient capacity to provide for future growth as well as immediate demands;
- ensuring that the changes are symmetrical and limiting the potential for further number changes in the future;
- avoiding the risk of customer confusion;
- avoiding quality of service problems arising from mixed number lengths;
- a mixed number length regime would favour *eircom*;
- it makes sense to make all changes relating to the Dublin area at the same time;
- a mixed number length regime is not consistent with a uniform national number length.

One of these respondents further advocates that Dublin, as well as the rest of Ireland, should undergo only one number change.

Two respondents, who advocated moving to a closed numbering scheme with full national dialling and standard number length proposed alternative solution for Dublin with formats 91+existing number and 33+ existing number respectively.

[61] For Dublin Central MNA, existing 7-digit numbers will be prefixed with digit "9"
For Dublin North MNA (Balbriggan & Dunboyne), existing 7-digit numbers will be prefixed with digit "3"
For Dublin South MNA (Celbridge and Greystones), existing 7-digit numbers will be prefixed with digit "5".

Three respondents commented on the Dublin NDC code:

- the ODTR would seem to have arbitrarily discounted the need to change the Dublin NDC despite the fact that the 01 NDC constitutes an effective bar to international access services based on Irish non-geographic numbers. The ODTR is urged to reconsider its position on this important issue;
- the potential change to the Dublin STD Code from 01 to 03 needs to be further discussed;
- any proposed changes for Dublin must not prohibit the introduction of international non geographic services.

Two respondents commented on the importance of number change management:

- any proposed numbering changes, once agreed, must be easy to communicate and easy to implement in a time frame that permits customers to prepare for the changes.
- Careful management of the number change is required to minimise the impact.

One respondent (Golden Pages) while neutral on the changes advised that they will need to modify their current systems to handle 8 digit numbers in Dublin and request that no numbers exceeding 7 digits are issued before 1st June 2002 for publication in 2003 directories.

Position of the Director

In section 3.3, the issue of international access to Ireland was considered and the Director decided that:

- the Dublin STD Code will not be changed from "01" to "03" coincident with any planned Dublin subscriber number change from 7 to 8 digits, and
- the "3X" range of codes will be released for alternative use.

But, following a Dublin number change, the Director will not allocate Dublin numbers out of the ranges:

+353 1 0……..

+353 1 1……..

+353 1 8……..

Based on the detailed audit of geographic numbers, the current overall fill for the Dublin Central MNA is 42%. Applying the ODTR's annual growth forecast of 55% up to 2004 will result in the overall fill reaching 66%. This falls short of the 70% set for number utilisation efficiency, which corresponds to the onset of number exhausting.

Taking account of the results of the audit, it will not be necessary to change numbers in Dublin in 2003, but the position will be reviewed annually.

In the event of a number change becoming necessary in the future, all telephone numbers in the Dublin STD Code Area will be changed from 7 to 8 digits co-incident with the issue of the directories. Existing 7 digit subscriber numbers will be prefixed by the following digits to form the new 8 digit numbers:

- Dublin Central MNA – leading digit **3** + existing number;
- Dublin North MNA – leading digit **3** + existing number;
- Dublin South MNA – leading digit **3** + existing number.

Revised** Decision 4.3***

*** At the 30th meeting of the Numbering Advisory Panel on 11th November 2008 a unanimous decision was taken to revise this plan and instead prefix all Dublin Numbers with the digit "3".**

These changes will simplify MNA identification and will also facilitate the communication of the changes to the public. They will also facilitate the release of 900 1K blocks, which are currently reserved for 7 to 8 digit expansion, for additional allocations[62].

The Director has decided to reduce the number of existing MNAs in Dublin from 5 to 3.

The Balbriggan and Dunboyne MNAs will be combined to form Dublin North MNA and the Celbridge and Greystones MNAs will be combined to form Dublin South MNA.

The introduction of these merges will coincide with the publication of the 2002 directories to take account of any consequential revisions in local charge cases.

Decision 4.4

4.3.4 Recovery of the 07X STD Codes

In 1998, strong agreement was reported[63] for the position that the "08X" range was, on its own, inadequate to provide a sufficient future supply of distinctive NDC Codes for numbering non-geographic services. Most respondents strongly favoured the use of the "07X" range. In the Consultation Paper, provision was made for the recovery of the "07X" codes. A pre-requisite to recovery was the availability of Codes "095" (currently Clifden) and "097" (currently Belmullet). Respondents were asked if they agreed with the recovery of these codes so as to make them available for non-geographic services in the future.

Views of the Respondents

Most of the respondents to the consultation either did not comment on or were neutral on the proposal to recover the 07X STD Codes for reuse for non-geographic services in the future.

[62] This will reduce the overall fill from 40% to 34%.

[63] Page 11 of Decision Notice D2/98 – Numbering in Ireland for the 21st Century

One respondent disagreed with the recovery of 07X STD codes as well as Codes "095" (currently Clifden) and "097" (currently Belmullet). Another respondent agrees with the ODTR proposals but would go further and recover both 07X and 09X codes.

One respondent considers that to date there has not been a requirement to make the 07X STD Codes available for non-geographic services. He advocated that the ODTR should undertake further work to quantify the long-term demand for non-geographic codes before a recovery programme for the 07X STD Codes is put in place. Another respondent considers that, until the ODTR can provide valid justification that there is a clear future demand for non-geographic services over 07X……. numbers, the extensive changes proposed would seem to be inappropriate. One respondent does not agree with the manner in which the ODTR proposes to recover STD Codes 095 and 097 (Phase 1) and reuse them in different geographic areas (Phase 3). This could lead to consumer confusion.

Position of the Director

Taking account of the responses as well as being mindful of the need to ensure an adequate supply of codes for future services, the Director has decided to recover the "07X" STD Codes with the exception of "071" and "074", which will be retained for geographic use.

Decision 4.5

Co-incident with the changes, which are required in the Sligo STD Code Area to avoid number exhaustion, number changes will also be carried out in the neighbouring Manorhamilton (072), Carrick on Shannon (078) and Boyle (079) areas. The STD Codes "072", "078" and "079" will be recovered by grouping the MNAs[64] into one new STD Code Area – Sligo/Leitrim - using STD Code 071.

Co-incident with the changes which are required in the Letterkenny STD Code Area to avoid number exhaustion, number changes will also be carried out in the neighbouring Donegal (073), Dungloe (075) and Buncrana (077) areas. The STD Codes "073", "075" and "077" will be recovered by grouping the MNAs[65] into one new STD Code Area – Donegal - using STD Code 074.

The availability of Codes "095" (currently Clifden) and "097" (currently Belmullet) will not now be required to effect the changes.

4.3.5 Development of provincial STD Code Areas

Proposals for the development of provincial STD Code Areas were set out in section 4.3.2 of the Consultation Paper. The expansion/rationalisation provisions for each STD Code Area, under 5 phases, were elaborated in Annex 1 of the Consultation Paper. These proposals are summarised in Annex 1 of this document.

[64] Manorhamilton, Sligo incorporating Ballymote, Carrick on Shannon incorporating Drumshambo and Boyle.

[65] Letterkenny incorporating Lifford and Ramelton, Buncrana, Dungloe and Donegal.

Respondents were asked if they agreed with the overall thrust and extent of the proposals in general and on each phase in particular.

Views of the Respondents

The responses from network operators[66] with regard to the proposed STD Code Area changes varied considerably from just "No" to qualified acceptance.

One respondent did not agree with the proposed Provincial STD Code Area changes in general, as the case for such changes was not proven. He also did not agree with the ODTR's specific development proposals for each area (Phases 1 to 5) and proposed that:

- an audit of all allocated number ranges be carried out;
- ranges not in use be returned to the ODTR;
- local area number changes only be carried out where absolutely necessary;
- the removal of STD codes is unnecessary and without reason;
- replacement of 4 digit STD codes with 3 digit codes is unnecessary;
- re-use of existing codes will cause confusion;
- recover the 07X STD codes is unnecessary and the disruption would have devastating effects on the affected area;
- removal of the Wicklow and Arklow STD codes will be a disruption to the economy in the areas affected;
- the proposed Bantry and Skibbereen changes are unwarranted.

One respondent cannot agree to the proposed changes because of the limited nature of the information provided in the consultation and the requirement for further analysis. He believes that further time is required to assess the technical impact of the proposed changes and that the ODTR should not use the responses as a basis for actual changes. On this basis, he includes the following specific points:

- the impact of MNAs together with an assessment of numbers in use for the Mullingar STD Code Area should be undertaken to determine number availability;
- further time/information is required to assess the impact of the proposed changes in certain areas including Portlaoise, Tipperary, Galway, Castlebar, Ballinrobe and Castlerea;
- the provision for interim 7 digit block allocations in the Athlone area is not clear;
- the Wicklow, Arklow, Gorey changes should all be made at the same time to limit disruption for consumers;
- no problem with the development proposal for the Bantry/Skibbereen area.

One respondent is in general agreement with the ODTR's specific development proposals to rationalise and expand the capacity in the areas described (Phases 1 to 5) subject to the following provisions and exceptions:

- number lengths should be increased in such a way that different number lengths are avoided within the same area (including Dublin);

[66] Including ALTO

- further consideration needs to be given to the implementation timescales. It should be possible to complete the implementation of the Phase 1 changes within 2 years of any announcement.
- neutral on the re-use of 07 for future non-geographic services but agree with the measures to rationalise and expand the capacity as proposed for the North West.
- the Wicklow/Arklow/Gorey area should remain unchanged until a number change is required to ensure adequate capacity or the changes should be made concurrently with phase 1.
- the Bantry/Skibbereen changes may be unnecessary as consumers become accustomed to the correct dialling procedure for Northern Ireland.

One respondent while not commenting on the specific proposals has a preference for a uniform national number length. This would, inter alia, require the withdrawal of 4 digit STD codes.

One respondent, while not commenting on the specific proposals, contends that the ODTR would appear to have based much of its analysis as regards numbering exhaustion on the MNA system. He contends that the MNA structure is based solely around *eircom*'s network design and thus the ODTR's continuation of that system only serves to further strengthen *eircom*'s dominant position in the market. He submits that continuing reliance on the MNA system is wholly inappropriate and urges the ODTR to remove the MNA system from the Irish Numbering Scheme.

One respondent does not foresee any technical problems with STD Code changes from a routing perspective. But changes must be properly communicated to customers and the requisite periods of parallel running must be put in place.

The responses from the public[67] mainly focused on change proposals for particular areas of the country and all supported the ODTR's approach.

Three respondents commented on the proposed change plan for Wicklow/Arklow/Gorey:

- I have no real problem with the proposal for Wicklow/Arklow/Gorey provided that the existing local charge cases remain local. Otherwise the rationalising of the system seems very logical especially if it allows more numbers;
- We have no problems with the proposal, but propose that the implementation of whatever changes are deemed necessary for the development of the telecommunications network in the South Wicklow/North Wexford area does not lead to increased charges for customers or to cases where calls which have been local for many years become more expensive.
- these proposed changes are customer centric. Wicklow, Arklow and Gorey are areas associated with the sunny south east, yet subscriber numbers are grouped in a directory with Dundalk, Monaghan, etc.

One respondent commented on the Kerry area where it is proposed to change numbers in the Killarney STD Code Area from 5 to 7 digits:

[67] Including Killarney Chamber of Commerce and Golden Pages.

- changes should serve to simplify and streamline the system rather than add confusion. Having three STD codes for Kerry does provide for a certain level of confusion – it would be better if the county had only one STD Code. If multiple STD codes are retained, the same numbers should not exist behind different codes in County Kerry.

One respondent commented on the proposed changes in the Mayo area:

- the telephone numbering has developed higgledy-piggledy in recent years and I would urge you to go ahead with the proposed changes;
- it will facilitate future development especially DDI. Where DDI is in operation, the entire extension rather than part of it can be incorporated into the DDI number if local numbers consist of 7 digits;
- It will bring some uniformity to the numbering for each area which is now lacking - eg at the moment Castlebar town numbers start with the digits 21 to 29,35,42 and more if all the DDI numbers in use were included. All other towns in the 094 area have a similar but smaller batch of start digits. It is no longer clear from the start digits of a phone number where that number is located;
- An increase to 7 digits will be required at some stage in the future anyway. Why shelve it for this area?

The respondent also advocates that in the longer term the ODTR should consider moving towards 7 digit numbers throughout the entire country accompanied with a drastic reduction in the number of area codes and the standardisation of area codes to 3 digits. County Mayo at present has 6 area codes - this should be reduced to one. Changing numbers is not a problem if dual running is allowed for a reasonable period.

One respondent commented on the proposed changes in the Bantry/Skibbereen area:

- The proposed changes for Skibbereen and Bantry should be brought forward to phase 1 so that the 028 code could be recovered and re-used for NI access in place of 028. This would be of immense benefit to customers calling NI and for NI businesses advertising in the Republic. At present, NI based numbers have to be displayed with two access codes in border regions.

One respondent made the comment that he agrees with ODTR objective to simplify and clarify the current numbering plan co-incident with capacity driven number changes. Although a great improvement on the current scheme, the ODTR plan was not considered optimal. He sets out an alternative implementation plan that provides for a greater degree of alignment between STD Code areas and Counties.

One respondent proposed an alternative implementation plan that required moving to a standard number length of 10 digits with full national dialling by inserting “0” digits after each STD Code except Dublin. Later, Dublin would be prefixed with digits “33” and the leading “0” for provincial numbers would be dropped.

One respondent (Golden Pages) while neutral on the changes advised that, in order to accommodate the proposed changes, it will be necessary to re-scope three directories. They further advise that the timing of the changes should coincides with the publication of the re-scoped directories and suggest the 2003 directories. In addition, they recommend that

subscribers are notified of pending changes twelve months in advance and offer to assist in this process by providing advanced information in the 2002 directories. Publication of directories commences in mid April for the Dublin 01directories and finishes in October with the 07/09 directories.

Position of the Director

As stated earlier, since the receipt of responses to the consultation, the ODTR has carried out a very extensive audit of geographic numbers[68] to determine the current utilisation of allocated number blocks[69]. This has more precisely identified MNAs that are at risk of number exhaustion before the end of 2004 (based on an overall growth of 55% and 70% utilisation efficiency). The MNAs in this category are listed in Figure 4.4 together with the year when the exhaustion threshold of 70% will be reached.

Figure 4.4: Provincial Minimum Numbering Areas facing exhaustion
Analysis of Allocations

STD Code Area	STD Code	MNA	Blocks Available 1K	Primary Block Allocations 1K	Secondary Block Allocations 1K	Primary Fill %	Secondary Fill %	Overall Fill %	Capacity Full Year
Navan	046	Navan	30	30	18699	100%	63%	**63%**	2002
Letterkenny	074	Letterkenny	33	30	19880	91%	67%	**61%**	2002
Kilkenny	056	Kilkenny	54	46	30879	86%	68%	**59%**	2002
Sligo	071	Sligo	60	58	33981	97%	59%	**58%**	2002
Castlebar	094	Castlebar	30	27	15050	90%	56%	**51%**	2003
Athlone	0902	Athlone	57	52	28093	92%	55%	**51%**	2003
Navan	046	Kells	15	15	7372	100%	50%	**50%**	2004
Letterkenny	074	Ramelton	19	19	9250	100%	49%	**49%**	2004
Navan	046	Trim	15	14	7073	94%	51%	**48%**	2004
Carlow	0503	Carlow	43	38	20029	89%	53%	**48%**	2004

For the purpose of determining a reasonable ceiling for maximum secondary fill, the ODTR has set a target ceiling of 70% for number utilisation efficiency, which is considered reasonable and achievable.

Following on from the position indicated in section 4.2, the Director has decided that all subscriber numbers in STD Code Areas, with one or more MNAs at risk of number exhaustion before the end of 2004, will be changed from 5 to 7 digits co-incident with the issue of the 2003 directories.

Preliminary notice of the number changes (as well as the MNA changes) will be published in the 2002 directories. After a period of parallel running during which both old and new numbers may be used, calls to the old numbers will be diverted to recorded announcements coincident with the publication of the 2003 directories.

Decision 4.6

[68] In section 6.3.2 of the consultation paper, the ODTR confirmed its intention to carry out an audit in the 1st Quarter of 2001.

[69] The audit has confirmed that some operators are holding very large quantities of spare numbers grossly in excess of that which is reasonable for the efficient provision of service to new customers.

The changes will also include subscriber number and STD Code changes in neighbouring STD Code Areas in accordance with the Framework Plan set out in section 4.4. The likely benefits of including neighbouring STD Code Areas in these capacity driven number changes will be to:

- simplify the geographic numbering regime to make it more user-friendly;
- ensure future capacity and avoid future number changes within the wider geographic areas;
- promote the enlargement of local call catchment areas;
- avoid the neighbouring areas being at a disadvantage with regard to being able to provide numbers for Direct Dialling Inwards (DDI) for businesses[70];
- avoid any perception (arising from short number lengths) of the neighbouring areas being relatively under-developed.

The above changes are summarised in Figure 4.5.

In the Consultation Paper, provision was made to group Wicklow, Arklow and Gorey MNAs into one STD Code Area (Phase 4). This would require changing Wicklow and Arklow STD Codes from "0404" and "0402" to "055" and changing all Subscriber Numbers (including Gorey) to 7 digits. There was some support for this proposal. The Director will publish a detailed change plan proposal for the Wicklow, Arklow and Gorey areas and invite responses from the public. Taking account of the responses, a decision will be made as to whether this proposal should be implemented or whether it should be deferred until the existing number capacity requires expansion.

In the Consultation Paper, it was proposed to group the adjoining Bantry and Skibbereen MNAs into one STD Code Area and recover Code "028" (Phase 5). This was in response to representations made to the ODTR regarding wrong numbers intended for Northern Ireland being received by subscribers in the Skibbereen STD Code Area (028). The Director does not intend to proceed with this proposal as no support for it was received from the Bantry area.

One respondent has pointed out that the Edenderry MNA is in County Offaly and should be grouped with the Portlaoise STD Code Area . In the framework plan, Edenderry MNA together with Enfield MNA is grouped with the Navan STD Code Area. On balance[71], it was decided to keep Edenderry MNA in the same STD Code Area as Enfield.

For each area where a number or code change is required, the ODTR will issue a detailed change plan that will provide telephone users with information on the changes and facilitate preparatory work by network operators.

The ODTR will have discussions with network operators on the implementation of the number changes to confirm the format of the new numbers for each Minimum Numbering Area[72] and the start date for parallel working[73]. This information will be available to the public later this year.

[70] Short 5 digit numbers do not easily facilitate the provision of DDI numbers incorporating the 4 digit extension number.

[71] Callers will continue to diall the local number only for calls between Enfield and Edenderry MNAs

[72] Existing 5 digit numbers will be prefixed with an additional 2 digits to become 7 digit numbers.

[73] During the parallel working period, a call can be made using either the existing number or the new number.

Figure 4.5: Summary Change Plan for Subscriber Nos. and STD Codes – 2002/2003 Provincial Areas

STD Code Area after changes	Minimum Numbering Area	Existing STD Code	STD Code Change	Reason for 5 to 7 digit Number Change	Total Number Allocations affected	
					Capacity Changes	Rationalisation Changes
Athlone	Athlone	0902	0902 -> 031	Capacity	28093	0
	Banagher (North)*		0902 -> 031	Capacity	1515	0
	Ballinasloe	0905	0905 -> 031	Rationalisation	0	11540
	Roscommon	0903	0903 -> 031	Rationalisation	0	8043
	Portumna	Part 0509	0509 -> 031	Rationalisation	0	2872
Navan	Navan	046	None	Capacity	18699	0
	Nobber*		None	Capacity	2192	0
	Kells		None	Capacity	7372	0
	Trim		None	Capacity	7073	0
	Enfield	0405	0405 -> 046	Rationalisation	0	6361
	Edenderry		0405 -> 046	Rationalisation	0	4115
Kilkenny	Kilkenny	056	None	Capacity	30879	0
	Castlecomer		None	Capacity	2511	0
	Freshford		None	Capacity	4174	0
Carlow	Carlow	0503	0503 -> 059	Capacity	20029	0
	Muine Bheag		0503 -> 059	Capacity	5943	0
	Athy	0507	0507 -> 059	Rationalisation	0	6675
	Baltinglass	0509	0508 -> 059	Rationalisation	0	2831
Donegal	Letterkenny	074	None	Capacity	19880	0
	Lifford*		None	Capacity	6794	0
	Ramelton*		None	Capacity	9250	0
	Buncrana	077	077 -> 094	Rationalisation	0	13347
	Dungloe	075	075 -> 094	Rationalisation	0	8846
	Donegal^	073	073 -> 094	Rationalisation	0	9323
Sligo/Leitrim	Sligo	071	None	Capacity	33981	0
	Ballymote*		None	Capacity	196	0
	Manorhamilton	072	072 -> 071	Rationalisation	0	7866
	Carrick-on-Shannon	078	078 -> 071	Rationalisation	0	9231
	Drumshambo*		078 -> 071	Rationalisation	0	4647
	Boyle*	079	079 -> 071	Rationalisation	0	3108
Castlebar	Castlebar^	094	None	Capacity	15050	0
	Swinford*		None	Capacity	5264	0
	Claremorris		None	Capacity	8683	0
	Ballinrobe	092	092 -> 094	Rationalisation	0	4635
	Castlerea	0907	0907 -> 094	Rationalisation	0	8134
	Ballaghaderreen*		0907 -> 094	Rationalisation	0	3372
Totals					**227578**	**114946**

* Indicates that MNA is being merged into neighbouring MNA.

4.4 Framework for development of the National Numbering Scheme for Geographic Numbers

In this section, an overall Framework Plan for the future development of each area is set out. The areas are listed in Figure 4.6. The existing profile for each STD Code Area, including recent audit information, is presented. The planned STD Code and Subscriber Number changes presented for each area include those planned for implementation coincident with the issue of the 2003 directories and other possible changes for which no implementation decision has yet been taken.

The MNA changes are also presented and it is planned to co-ordinate all these MNA changes with the issue of the 2002 directories.

The reduction in the number of MNAs from 128 to 106 in 2002, as well as STD Code Area mergers planned for 2003, will mean that it will no longer be possible to differentiate certain trunk charge cases with respect to local charge cases using MNA/STD areas as a reference. These cases are indicated for each area, and are with reference to the current scheme operated by *eircom*.

The geographic numbering resource will be carefully managed by the ODTR in order to ensure that the necessary "expansion digits" are reserved in order to be in a position to implement any part of the Framework Plan.

Figure 4.6: Framework plan - Listing of Areas

Region	Area	Section
North	Donegal	4.4.1
	Cavan	4.4.2
	Louth/Monaghan	4.4.3
West	Sligo/Leitrim/North Roscommon	4.4.4
	Mayo	4.4.5
	Galway	4.4.6
	Roscommon/East Galway/West Westmeath	4.4.7
East	Westmeath	4.4.8
	Longford	4.4.9
	Meath/North Offaly	4.4.10
	Laois/Offaly	4.4.11
	Kildare	4.4.12
	Dublin	4.4.13
	Wicklow/North Wexford	4.4.14
	Carlow/West Wicklow	4.4.15
	Kilkenny	4.4.16
	Wexford	4.4.17
South	Clare	4.4.18
	Limerick	4.4.19
	Tipperary	4.4.20
	Kerry	4.4.21
	Cork City	4.4.22
	Cork County	4.4.23
	Waterford	4.4.24

4.4.1 Donegal Area

Donegal Area Existing Profile of STD Code Areas						
STD Code Areas	**Buncrana 077**	**Letterkenny 074**			**Dungloe 075**	**Donegal 073**
MNAs	Buncrana	Letterkenny	Lifford	Ramelton	Dungloe	Donegal
Number Length	5	5	5	5	5	5
Primary Fill	43%	91%	95%	100%	38%	33%
Secondary Fill	45%	67%	40%	49%	35%	41%
Net Fill (numbers)	20% (13,347)	61% (19,880)	38% (6,794)	49% (9,250)	14% (8,846)	14% (9,323)

STD Code Changes It is planned to group the 4 existing STD Code Areas (Buncrana, Letterkenny, Dungloe and Donegal) into one new STD Code Area (Donegal) using STD Code "074" (currently Letterkenny)[74]. The existing STD Codes 077, 075 and 073 will be recovered.

MNA Changes It is planned to merge Lifford and Ramelton into Letterkenny MNA.

Number Changes It is planned to change all Subscriber Numbers from 5 to 7 digits co-incident with the STD Code changes.

Change Programme It is planned to co-ordinate the change programme with the publication of the 2002/2003 telephone directories.

Call Charges Differentiation of the following trunk charge cases with respect to local charge cases, using MNA/STD areas as reference, will no longer be supported after the changes are implemented, co-incident with the issue of the 2002 directories.

Buncrana to Letterkenny, Dungloe and Donegal;
Letterkenny to Buncrana;
Lifford to Dungloe and Donegal;
Ramelton to Dungloe and Donegal;
Dungloe to Buncrana, Lifford and Ramelton ;
Donegal to Buncrana, Lifford and Ramelton.

[74] In the Numbering Review it was proposed to use STD Code 097.

4.4.2 Cavan Area

Cavan Area Existing Profile of STD Code Area				
STD Code Area	**Cavan 049**			
MNAs	Cavan	Cootehill	Oldcastle	Belturbet
Number Length	7	7	7	7
Primary Fill	2%	2%	5%	3%
Secondary Fill	36%	7%	15%	9%
Net Fill (numbers)	1% (16,128)	1% (2,093)	1% (5,775)	1% (3,391)

STD Code Changes None planned

MNA Changes None planned

Number Changes None planned

Call Charges Differentiation of the following trunk charge cases with respect to local charge cases, using MNA/STD areas as reference, will no longer be supported after the issue of the 2002 directories.

Belturbet to Carrick on Shannon.

4.4.3 Louth/Monaghan Area

Louth/Monaghan Area Existing Profile of STD Code Areas							
STD Code Area	**Drogheda 041**		**Dundalk 042**			**Monaghan 047**	
MNAs	Drogheda	Ardee	Dundalk	Carrickmacross	Castleblaney	Monaghan	Clones
Number Length	7	7	7	7	7	5	5
Primary Fill	3%	7%	2%	14%	13%	60%	43%
Secondary Fill	26%	13%	58%	35%	31%	46%	29%
Net Fill (numbers)	1% (35,019)	1% (7,246)	2% (38,021)	5% (9,733)	5% (8,003)	28% (10,918)	13% (3,365)

STD Code Changes None planned

MNA Changes None planned

Number Changes None planned, but consideration may be given to changing all Subscriber Numbers in the Monaghan STD Code Area from 5 to 7 digits to align with other numbers in the Louth/Monaghan Area.

Call Charges Differentiation of the following trunk charge cases with respect to local charge cases, using MNA/STD areas as reference, will no longer be supported after the issue of the 2002 directories.

Carrickmacross to Navan.

4.4.4 Sligo/ Leitrim/ North Roscommon Area

Sligo/ Leitrim/ North Roscommon Area Existing Profile of STD Code Areas						
STD Code Areas	**Sligo 071**		**Manorhamilton 072**	**Carrick on Shannon 078**		**Boyle 079**
MNAs	Sligo	Ballymote	Manorhamilton	Carrick on Shannon	Dromshambo	Boyle
Number Length	5	5	5	5	5	5
Primary Fill	97%	40%	29%	80%	70%	50%
Secondary Fill	59%	5%	40%	39%	34%	32%
Net Fill (numbers)	58% (33,981)	2% (196)	12% (7,866)	32% (9,231)	24% (4,647)	16% (3,108)

STD Code Changes It is planned to group the 4 existing STD Code Areas (Sligo, Manorhamilton, Carrick-on Shannon and Boyle) into one new STD Code Area (Sligo/Leitrim) using STD Code "071" (currently Sligo)[75]. The existing STD Codes 072, 078 and 079 will be recovered.

MNA Changes It is planned to merge Balymote into Sligo MNA and Boyle and Drumshambo into Carrick on Shanon MNA.

Number Changes It is proposed to change all Subscriber Numbers from 5 to 7 digits co-incident with the STD Code changes.

Change Programme It is proposed to co-ordinate the change programme with the publication of the 2002/2003 telephone directories.

Call Charges Differentiation of the following trunk charge cases with respect to local charge cases, using MNA/STD areas as reference, will no longer be supported after the issue of the 2002 directories.

Sligo to Carrick on Shannon, Ballaghaderreen, Castlerea, Swinford and Castlebar;
Ballymote to Manorhamilton, Carrick on Shannon, Drumshambo, Castlerea and Castlebar;
Manorhamilton to Ballymote, Carrick-on Shannon and Boyle;
Carrick on Shannon to Sligo, Ballymote, Manorhamilton, Ballaghaderreen and Belturbet;
Drumshambo to Ballymote, Ballaghaderreen, Castlerea, Longford and Roscommon;
Boyle to Manorhamilton, Cavan, Longford, Roscommon and Belturbet.

[75] In the Numbering Review it was proposed to use STD Code 095.

4.4.5 Mayo Area

Mayo Area Existing Profile of STD Code Areas									
STD Code Areas	**Ballinrobe 092**	**Castlebar 094**			**Castlerea 0907**		**Ballina 096**	**Belmullet 097**	**Westport 098**
MNAs	Ballinrobe	Castlebar	Swinford	Claremorris	Castlerea	Ballaghaderreen	Ballina	Belmullet	Westport
Number Length	5	5	5	5	5	5	5	5	5
Primary Fill	50%	90%	86%	85%	78%	84%	55%	47%	40%
Secondary Fill	31%	56%	44%	40%	27%	14%	42%	25%	43%
Net Fill (numbers)	16% (4,635)	51% (15050)	38% (5,264)	34% (8,683)	22% (8,134)	12% (3,372)	24% (15,752)	12% (3,376)	18% (11,790)

STD Code Changes

It is planned to group the 3 existing STD Code Areas (Castlebar, Ballinrobe and Castlerea) into one new STD Code Area (Castlebar) using STD Code 094 (currently Castlebar). The existing STD Codes 092 and 0907 will be recovered.

Provision has been made to group the 2 existing STD Code Areas (Ballina and Belmullet) into one new STD Code Area (Ballina) using STD Code "096" (currently Ballina). The existing STD Code 097 will be recovered.

MNA Changes

It is planned to merge Swinford into Castlebar MNA and Ballaghaderreen into Castlerea MNA.

Number Changes

It is planned to change all Subscriber Numbers in the Castlebar, Ballinrobe and Castlerea STD Code Areas from 5 to 7 digits co-incident with the STD changes.

Provision has been made to change all Subscriber Numbers in the Ballina and Belmullet STD Code Areas from 5 to. Consideration may be given to changing all Subscriber Numbers in the Westport STD Code Area from 5 to 7 digits to align with other numbers in the Mayo Area.

Change Programme

It is proposed to co-ordinate the change programme for the Castlebar, Ballinrobe and Castlerea STD Code Areas with the publication of the 2002/2003 telephone directories.

No date has been decided for the STD Code and Subscriber Number changes for the Ballina and Belmullet STD Code Areas.

Call Charges

Differentiation of the following trunk charge cases with respect to local charge cases, using MNA/STD areas as reference, will no longer be supported after the issue of the 2002 directories.

Ballinrobe to Swinford, Castlrea, Ballaghaderreen;
Castlebar to Castlrea, Ballaghaderreen, Ballymote, Sligo;
Swinford to Ballinrobe, Castlerea, Westport, Sligo;
Castlerea to Ballinrobe, Castlebar, Swinford, Ballymote, Sligo, Drumshambo;
Ballaghaderreen to Ballinrobe, Castlebar, Tuam, Sligo, Ballinasloe, Carrick on Shannon, Drumshambo, Roscommon;
Westport to Swinford.

4.4.6 Galway Area

Galway Area Existing Profile of STD Code Areas						
STD Code Areas	**Galway 091**			**Clifden 095**	**Kilronan 099**	**Tuam 093**
MNAs	Galway	Gort	Loughrea	Clifden	Kilronan	Tuam
Number Length	6	6	6	5	5	5
Primary Fill	70%	50%	80%	30%	16%	43%
Secondary Fill	42%	8%	11%	26%	8%	42%
Net Fill (numbers)	30% (103,096)	4% (4,901)	9% (8,295)	8% (5,437)	2% (802)	19% (12,452)

STD Code Changes Provision has been made to group the 3 existing STD Code Areas (Galway, Clifden and Kilronan) into one new STD Code Area (Galway) using STD Code "091" (currently Galway). The existing STD Codes 095 and 099 will be recovered.

MNA Changes None planned.

Number Changes Provision has been made to change all Subscriber Numbers from 5/6 digits to 7 digits in the Galway, Clifden and Kilronan STD Code Areas co-incident with the STD Code changes. Consideration may be given to changing all Subscriber Numbers in the Tuam STD Code Area from 5 to 7 digits to align with other numbers in the Galway Area.

Change Programme No date has been decided for the planned STD Code and Subscriber Number changes.

Call Charges Differentiation of the following trunk charge cases with respect to local charge cases, using MNA/STD areas as reference, will no longer be supported after the issue of the 2002 directories.

Tuam to Ballagharerreen.

4.4.7 Roscommon/ East Galway/ West Westmeath Area

Roscommon/ East Galway/ West Westmeath Area Existing Profile of STD Code Areas							
STD Code Areas	**Athlone 0902**		**Roscommon 0903**	**Ballinasloe 0905**	**Portumna 0509**		
MNAs	Athlone	Banagher North	Roscommon	Ballinasloe	Portumna	Birr	Banagher South
Number Length	5	5	5	5	5	5	5
Primary Fill	92%	100%	37%	58%	53%	80%	100%
Secondary Fill	55%	22%	37%	40%	27%	29%	24%
Net Fill (numbers)	51% (28,093)	22% (1,515)	14% (8,043)	24% (11,540)	15% (2,872)	24% (6,533)	24% (1,168)

STD Code Changes It is planned to group the 3 existing STD Code Areas (Athlone, Roscommon and Ballinasloe) as well as Portumna MNA into one new STD Code Area (Athlone) using STD Code "090"[76]0902, 0903, 0905 and 0509[77] .

MNA Changes It is planned to merge Banagher North into Athlone MNA.

Number Changes It is planned to change all Subscriber Numbers from 5 to 7 digits co-incident with the STD Code and MNA changes.

Change Programme It is planned to co-ordinate the change programme with the publication of the 2002/2003 telephone directories.

Call Charges Differentiation of the following trunk charge cases with respect to local charge cases, using MNA/STD areas as reference, will no longer be supported after the issue of the 2002 directories.

Athlone to Portumna, Mullingar, Killucan, Birr and Tullamore;
Banagher North to Roscommon, Mullingar, Killucan, Myvore and Longford;
Roscommon to Banagher North, Portumna, Ballaghaderreen, Drumshambo and Boyle;
Ballinasloe to Birr and Ballaghaderreen;
Portumna to Athlone and Roscommon

[76] In the Numbering Review it was proposed to use STD Codee 092

4.4.8 Westmeath Area

Westmeath Area Existing Profile of STD Code Area					
STD Code Area	**Mullingar 044**				
MNAs	Mullingar	Killucan	Moyvore	Castlepollard	Tyrellspass
Number Length	5	5	5	5	5
Primary Fill	100%	100%	60%	80%%	70%
Secondary Fill	45%	36%	23%	35%	38%
Net Fill (numbers)	45% (14,672)	36% (2,467)	14% (1,330)	28% (2,724)	27% (2,596)

STD Code Changes None planned.

MNA Changes It is planned to merge Killucan and Moyvore into Mullingar MNA.

Number Changes Provision has been made to change all Subscriber Numbers in the Mullingar STD Code Area from 5 to 7 digits.

Change Programme No date has been decided for the planned Subscriber Number changes.

Call Charges Differentiation of the following trunk charge cases with respect to local charge cases, using MNA/STD areas as reference, will no longer be supported after the issue of the 2002 directories.

Mullingar to Athlone, Bannagher North, Tullamore, Longford, Enfield and Edenderry;
Killucan to Athlone, Bannagher North, Clara, Tullamore, Longford, Granard;
Moyvore to Banagher North, Tullamore, Enfield and Edenderry.

4.4.9 Longford Area

Longford Area Existing Profile of STD Code Area		
STD Code Area	**Longford 043**	
MNAs	Longford	Granard
Number Length	5	5
Primary Fill	65%	50%
Secondary Fill	43%	30%
Net Fill (numbers)	28% (11,036)	15% (4,471)

STD Code Changes None planned

MNA Changes None planned

Number Changes Provision has been made to change all Subscriber Numbers in the Longford STD Code Area from 5 to 7 digits.

Change Programme No date has been decided for the planned Subscriber Number changes.

Call Charges Differentiation of the following trunk charge cases with respect to local charge cases, using MNA/STD areas as reference, will no longer be supported after the issue of the 2002 directories.

Longford to Banagher North, Killucan, Mullingar, Drumshambo and Boyle;
Granard to Killucan.

4.4.10 Meath/North Offaly Area

Meath/ North Offaly Area Existing Profile of STD Code Areas						
STD Code Areas	**Navan 046**				**Enfield 0405**	
MNAs	Navan	Nobber	Kells	Trim	Enfield	Edenderry
Number Length	5	5	5	5	5	5
Primary Fill	100%	70%	100%	94%	47%	58%
Secondary Fill	63%	32%	50%	51%	28%	35%
Net Fill (numbers)	63% (18,699)	23% (2,192)	50% (7,372)	48% (7,073)	14% (6,361)	21% (4,115)

STD Code Changes It is planned to group the existing Navan and Enfield STD Code Areas into one new STD Code Area (Navan) using STD Code "046" (currently Navan). The existing STD Code 0405 will be recovered[78].

MNA Changes It is planned to merge Nobber into Navan MNA.

Number Changes It is planned to change all Subscriber Numbers from 5 to 7 digits co-incident with the STD Code changes.

Change Programme It is proposed to co-ordinate the change programme with the publication of the 2002/2003 telephone directories.

Call Charges Differentiation of the following trunk charge cases with respect to local charge cases, using MNA/STD areas as reference, will no longer be supported after the issue of the 2002 directories.

Navan to Enfield, Edenderry, Balbriggan, Carrickmacross;
Nobber to Enfield, Edenderry, Dunboyne, Balbriggan;
Kells to Enfield, Edenderry;
Trim to Edenderry;
Enfield to Navan, Nobber, Kells;
Edenderry to Navan, Nobber, Kells, Trim.

[78] Refer to section 4.3.5 re Edenderry MNA

4.4.11 Laois/Offaly Area

Laois/Offaly Area Existing Profile of STD Code Areas							
STD Code Areas	**Portlaoise 0502**		**Tullamore 0506**		**Portumna 0509**		
MNAs	Portlaoise	Abbeyleix	Tullamore	Clara	Birr	Banagher South	Portumna
Number Length	5	5	5	5	5	5	5
Primary Fill	82%	85%	40%	80%	80%	100%	53%
Secondary Fill	53%	36%	57%	38%	29%	24%	27%
Net Fill (numbers)	44% (21,521)	31% (6,073)	23% (13,581)	31% (2,963)	24% (6,533)	24% (1,168)	15% (2,872)

STD Code Changes Provision has been made to group the Portlaoise an Tullamore STD Code Areas as well as Birr and Banagher South MNAs into one new STD Code Area (Portlaoise) using STD Code "057" (currently free). The existing STD Codes 0502, 0506 and 0509[79] will be recovered.

MNA Changes It is planned to merge Banagher South into Birr MNA and to merge Clara into Tullamore MNA.

Number Changes Provision has been made to change all Subscriber Numbers from 5 to 7 digits co-incident with the STD Code changes.

Change Programme No date has been decided for the STD Code and Subscriber Number changes.

Call Charges Differentiation of the following trunk charge cases with respect to local charge cases, using MNA/STD areas as reference, will no longer be supported after the issue of the 2002 directories.

Portlaoise to Clara, Banagher South;
Abbeyleix to Tullamore, Clara, Banagher South;
Tullamore to Abbeyleix, Athlone, Mullingar, Myvore, Killucan.
Clara to Portlaoise, Abbeyleix, Birr, Edenderry, Killucan;
Birr to Clara, Athlone, Ballinasloe;
Banagher South to Portlaoise, Abbeyleix, Roscrea, Nenagh.

[79] See also section 4.4.7

4.4.12 Kildare Area

Kildare Area Existing Profile of STD Code Area			
STD Code Area	**Naas 045**		
MNAs	Kildare	Naas	Curragh
Number Length	6	6	6
Primary Fill	50%	45%	57%
Secondary Fill	11%	25%	22%
Net Fill (numbers)	6% (8,317)	12% (32,328)	13% (19,545)

STD Code Changes None planned

MNA Changes None planned

Number Changes None planned

Call Charges No impact

4.4.13 Dublin Area

Dublin Area Existing Profile of STD Code Area					
STD Code Area	**Dublin 01**				
MNAs	Dublin Central	Balbriggan	Dunboyne	Celbridge	Greystones
Number Length	7	7	7	7	7
Primary Fill	97%	70%	62%	23%	73%
Secondary Fill	42%	18%	21%	28%	22%
Net Fill (numbers)	41% (1,805,647)	13% (16,144)	14% (16,412)	7% (33,066)	17% (16,968)

STD Code Changes None planned

MNA Changes It is planned to combine Balbriggan and Dunboyne to form Dublin North MNA and to combine Celbridge and Greystones to form Dublin South MNA.

Number Changes Provision has been made to change all Subscriber Numbers from 7 to 8 digits.

Change Programme No date has been decided for the planned Subscriber Number changes.

Call Charges Differentiation of the following trunk charge cases with respect to local charge cases, using MNA/STD areas as reference, will no longer be supported after the issue of the 2002 directories.

Balbriggan to Enfield, Navan, Nobber;
Dunboyne to Nobber;
Greystones to Enfield;
Celbridge to Wicklow.

4.4.14 Wicklow/North Wexford Area

Wicklow/North Wexford Area Existing Profile of STD Code Areas			
STD Code Areas	**Wicklow 0404**	**Arklow 0402**	**Gorey 055**
MNAs	Wicklow	Arklow	Gorey
Number Length	5	5	5
Primary Fill	44%	41%	28%
Secondary Fill	42%	44%	42%
Net Fill (numbers)	19% (12,506)	19% (12,111)	12% (7,948)

STD Code Changes Provision has been made to group the Wicklow, Arklow and Gorey STD Code Areas into one new STD Code Area (Wicklow) using STD Code "055" (currently Gorey). The existing STD Codes 0402 and 0404 will be recovered.

MNA Changes None

Number Changes It is planned to change all Subscriber Numbers from 5 to 7 digits co-incident with the STD Code changes.

Change Programme No date has been decided for the planned STD Code and Subscriber Number changes. There was some support for this proposal. The Director will publish a detailed change plan for the Wicklow, Arklow and Gorey areas and invite responses from the public. Taking account of the responses, a decision will be made as to whether this proposal should be implemented.

Call Charges Differentiation of the following trunk charge cases with respect to local charge cases, using MNA/STD areas as reference, will no longer be supported after the issue of the 2002 directories.

Wicklow to Celbridge;

Differentiation of the following trunk charge cases with respect to local charge cases will no longer be supported after the STD Code and number changes are implemented.

Wicklow to Gorey;
Gorey to Wicklow.

4.4.15 Carlow/West Wicklow Area

Carlow/West Wicklow Area Existing profile of STD Code Areas				
STD Code Areas	**Carlow 0503**		**Athy 0507**	**Baltinglass 0508**
MNAs	Carlow	Muine Bheag	Athy	Baltinglass
Number Length	5	5	5	5
Primary Fill	89%	89%	36%	18%
Secondary Fill	53%	38%	38%	32%
Net Fill (numbers)	48% (20,029)	34% (5,943)	14% (6,675)	6% (2,831)

STD Code Changes It is planned to group the Carlow, Athy and Baltinglass STD Code Areas into one new STD Code Area (Carlow) using STD Code "059" (currently free). The existing STD Codes 0503, 0507 and 0508 will be recovered.

MNA Changes None planned.

Number Changes It is planned to change all Subscriber Numbers from 5 to 7 digits co-incident with the STD Code changes.

Change Programme It is planned to co-ordinate the change programme with the publication of the 2002/2003 telephone directories.

Call Charges Differentiation of the following trunk charge cases with respect to local charge cases, using MNA/STD areas as reference, will no longer be supported after the issue of the 2002 directories.

Muine Bheag to Athy and Baltinglass;
Athy to Muine Bheag;
Baltinglass to Muine Bheag.

4.4.16 Kilkenny Area

Kilkenny Area Existing Profile of STD Code Area			
STD Code Area	**Kilkenny 056**		
MNAs	Kilkenny	Castlecomer	Freshford
Number Length	5	5	5
Primary Fill	86%	67%	85%
Secondary Fill	68%	42%	38%
Net Fill (numbers)	59% (30,879)	29% (2,511)	33% (4,174)

STD Code Changes None planned

MNA Changes None planned

Number Changes It is planned to change all Subscriber Numbers in the Kilkenny STD Code Area from 5 to 7 digits.

Change Programme It is planned to co-ordinate the change programme with the publication of the 2002/2003 telephone directories.

Call Charges Differentiation of the following trunk charge cases with respect to local charge cases, using MNA/STD areas as reference, will no longer be supported after the issue of the 2002 directories.

Kilkenny to Wellington Bridge.

4.4.17 Wexford Area

Wexford Area Existing Profile of STD Code Areas			
STD Code Areas	**Wexford 053**	**Enniscorthy 054**	
MNAs	Wexford	Enniscorthy	Ferns
Number Length	5	5	5
Primary Fill	78%	57%	47%
Secondary Fill	51%	45%	33%
Net Fill (numbers)	40% (27,493)	26% (9,840)	16% (4,594)

STD Code Changes None planned

MNA Changes None planned

Number Changes Provision has been made to change all Subscriber Numbers in the Wexford STD Code Area from 5 to 7 digits.

Change Programme No date has been decided for the planned Subscriber Number changes.

Call Charges Differentiation of the following trunk charge cases with respect to local charge cases, using MNA/STD areas as reference, will no longer be supported after the issue of the 2002 directories.

Wexford to Waterford;
Enniscorthy to Waterford.

4.4.18 Clare Area

Clare Area Existing Profile of STD Code Area			
STD Code Area	**Ennis 065**		
MNAs	Ennis	Ennistymon	Kilrush
Number Length	7	7	7
Primary Fill	2%	7%	7%
Secondary Fill	28%	12%	14%
Net Fill (numbers)	1% (24,737)	1% (6,786)	1% (6,013)

STD Code Changes None planned

MNA Changes None planned

Call Charges Differentiation of the following trunk charge cases with respect to local charge cases, using MNA/STD areas as reference, will no longer be supported after the issue of the 2002 directories.

Ennis to Limerick, Adare, Cappamore, Killaloe.

4.4.19 Limerick Area

Limerick Area Existing Profile of STD Code Areas								
STD Code Areas	**Limerick 061**						**Newcastle W. 069**	**Rathluirc 063**
MNAs	Limerick	Adare	Cappamore	Killaloe	Shannon Airport	Scarriff	Newcastle West	Rathluirc
Number Length	6	6	6	6	6	6	5	5
Primary Fill	79%	82%	75%	100%	83%	32%	38%	87%
Secondary Fill	41%	25%	16%	28%	35%	5%	39%	38%
Net Fill (numbers)	33% (101,103)	21% (7,684)	12% (4,687)	28% (5,450)	30% (34,543)	2% (2,497)	15% (9,955)	34% (9,311)

STD Code Changes None planned.

MNA Changes It is planned to merge Adare, Cappamore, Killaloe and Shannon Airport into Limerick MNA.[80]

Number Changes Provision has been made to change all Subscriber Numbers in the Limerick STD Code Area from 6 to 7 digits. Consideration may be given to changing all Subscriber Numbers in the Newcastle West and Rathluirc STD Code Areas from 5 to 7 digits to align with other numbers in the Limerick Area.

Change Programme

No date has been decided for the planned STD Code and Subscriber Number changes for the Limerick STD Code Area.

Call Charges Differentiation of the following trunk charge cases with respect to local charge cases, using MNA/STD areas as reference, will no longer be supported after the issue of the 2002 directories.

Limerick to Newcastle West, Rathluirc, Ennis, Cashel, Tipperary and Nenagh;
Adare to Ennis, Cashel, Tipperary and Nenagh;
Shannon Airport to Newcastle West, Rathluirc, Cashel, Tipperary and Nenagh;
Cappamore to Newcastle West, Ennis and Nenagh;
Killaloe to Newcastle West, Rathluirc, Ennis and Tipperary;
Newcastle West to Limerick, Shannon Airport, Cappamore and Killaloe;
Rathluirc to Limerick, Shannon Airport and Killaloe.

[80] In the Numbering Review it was also proposed to merge Scarriff into Limerick MNA.

4.4.20 Tipperary Area

Tipperary Area Existing Profile of STD Code Areas									
STD Code Areas	**Nenagh 067**	**Roscrea 0505**	**Thurles 0504**		**Tipperary 062**		**Clonmel 052**		
MNAs	Nenagh	Roscrea	Thurles	Templemore	Tipperary	Cashel	Clonmel	Cahir	Killenaule
Number Length	5	5	5	5	5	5	5	5	5
Primary Fill	58%	41%	69%	65%	46%	49%	93%	60%	70%
Secondary Fill	45%	39%	51%	36%	36%	40%	24%	42%	37%
Net Fill (numbers)	27% (12,359)	16% (7,616)	36% (10,161)	24% (4,570)	17% (7,917)	20% (5,590)	23% (8,699)	26% (4,926)	26% (2,565)

STD Code Changes Provision has been made to group the Nenagh, Roscrea and Thurles STD Code Areas into one new STD Code Area (Tipperary North) using STD Code "067" (currently Nenagh). Provision has also been made to group the Tipperary and Clonmel STD Code Areas into one new STD Code Area (Tipperary South) using STD Code "062" (currently Tipperary). The existing STD Codes 0504, 0505 and 052 will be recovered.

MNA Changes It is proposed to merge Templemore into Thurles MNA.

Number Changes Provision has been made to change all Subscriber Numbers from 5 to 7 digits co-incident with the STD Code changes.

Change Programme It is proposed to co-ordinate the planned MNA change with the publication of the 2003 telephone directories.

No date has been decided for the planned STD Code and Subscriber Number changes for the Nenagh, Roscrea, Thurles, Tipperary and Clonmel STD Code Areas.

Call Charges Differentiation of the following trunk charge cases with respect to local charge cases, using MNA/STD areas as reference, will no longer be supported after the issue of the 2002 directories.

Nenagh to Thurles Bannagher South, Limerick, Adare, Cappamore and Shannon Airport;
Roscrea to Thurles and Bannagher South;
Thurles to Nenagh and Roscrea;
Templemore to Kilenaule;
Cashel to Limerick, Adare, Cappamore and Shannon Airport;
Killenaule to Templemore.

4.4.21 Kerry Area

Kerry Area Existing Profile of STD Code Areas							
STD Code Areas	**Tralee 066**				**Killarney 064**		**Listowel 068**
MNAs	Tralee	Dingle	Killorglin	Cahirciveen	Killarney	Rathmore	Listowel
Number Length	7	7	7	7	5	5	5
Primary Fill	2%	7%	11%	7%	69%	53%	46%
Secondary Fill	47%	20%	24%	21%	41%	30%	46%
Net Fill (numbers)	1% (29,930)	2% (4,137)	3% (7,215)	2% (4,410)	29% (16,087)	16% (2,907)	22% (14,590)

STD Code Changes None planned

MNA Changes None planned

Number Changes Provision has been made to change all Subscriber Numbers in the Killarney STD Code Area from 5 to 7 digits. Consideration may be given to changing all Subscriber Numbers in the Listowel STD Code Area from 5 to 7 digits to align with other numbers in the Kerry Area.

Change Programme No date has been decided for the planned Subscriber Number changes.

Call Charges No impact

4.4.22 Cork City Area

Cork City Area Existing Profile of STD Code Area				
STD Code Area	**Cork 021**			
MNAs	Cork	Midleton	Kinsale	Coachford
Number Length	7	7	7	7
Primary Fill	10%	72%	11%	7%
Secondary Fill	55%	17%	27%	13%
Net Fill (numbers)	6% (255,535)	13% (12,152)	3% (8,666)	1% (7,426)

STD Code Changes None planned

MNA Changes It is planned to merge Midleton into Cork MNA.

Number Changes None planned

Change Programme It is planned to co-ordinate the MNA change with the publication of the 2002 telephone directories.

Call Charges Differentiation of the following trunk charge cases with respect to local charge cases, using MNA/STD areas as reference, will no longer be supported after the issue of the 2002 directories.

Cork to Dungarvan and Youghal;
Midleton to Bandon, Macroom and Mallow.

4.4.23 Cork County Area

Cork County Area Existing Profile of STD Code Areas								
STD Code Areas	**Mallow 022**	**Bandon 023**	**Youghal 024**	**Fermoy 025**	**Macroom 026**	**Bantry 027**	**Skibbereen 028**	**Kanturk 029**
MNAs	Mallow	Bandon	Youghal	Fermoy	Macroom	Bantry	Skibbereen	Kanturk
Number Length	5	5	5	5	5	5	5	5
Primary Fill	55%	48%	27%	39%	26%	38%	38%	35%
Secondary Fill	41%	51%	45%	48%	36%	36%	41%	36%
Net Fill (numbers)	23% (15,389)	25% (16,575)	13% (7,960)	19% (12,822)	10% (6,386)	14% (9,117)	16% (10,544)	13% (8,411)

STD Code Changes None planned. There was no local support for the ODTR proposal to group the adjoining Bantry and Skibbereen areas into one STD Code Area.

MNA Changes None planned

Number Changes None planned

Call Charges Differentiation of the following trunk charge cases with respect to local charge cases, using MNA/STD areas as reference, will no longer be supported after the issue of the 2002 directories.

Mallow to Midleton;
Bandon to Midleton;
Youghal to Cork;
Macroom to Midleton.

4.4.24 Waterford Area

Waterford Area Existing Profile of STD Code Areas						
STD Code Areas	**Waterford 051**					**Dungarvan 058**
MNAs	Waterford	Wellington Br.	Carrick on Suir	Kilmacthomas	New Ross	Dungarvan
Number Length	6	6	6	6	6	5
Primary Fill	65%	70%	37%	24%	33%	40%
Secondary Fill	36%	12%	20%	11%	21%	47%
Net Fill (numbers)	24% (61,864)	9% (2,435)	8% (6,541)	3% (2,148)	7% (6,919)	19% (13,155)

STD Code Changes None planned

MNA Changes It is planned to merge Wellington Bridge into Waterford MNA.

Number Changes None planned

Call Charges Differentiation of the following trunk charge cases with respect to local charge cases, using MNA/STD areas as reference, will no longer be supported after the issue of the 2002 directories.

Waterford to Enniscorthy and Wexford;
Wellington Br. to Kilkenny
Dungarvan to Cork.

5 DEVELOPMENT OF THE NATIONAL NUMBERING SCHEME FOR MOBILE, PERSONAL AND NON-GEOGRAPHIC NUMBERS

5.1 Mobile & Personal Numbers

In the Consultation Paper, the ODTR indicated that while the current amount of Personal numbers allocated to users was low, this situation could change, as users may increasingly need to manage the delivery of incoming calls. The current available supply of 0.9 M numbers will cater for a demographic penetration of about 13.5%[81], which is unlikely to be sufficient if demand for Personal Numbering services become popular. A safe upper supply limit (in the event of the service achieving mass popularity) would be 7M numbers, corresponding to 105% penetration. Proposals were included in section 5.1 of the Consultation Paper to ensure an adequate supply of Personal Numbers. This entailed making provision for introducing 10-digit numbers and perhaps changing existing 9 digit numbers to 10 digit.

A Paging Numbering Scheme[82] was published in March 1999. The demand for additional number blocks for paging services since the publication of the plan has been modest and was expected to remain so. No further development of the scheme for paging services was proposed in the Consultation Paper.

For Universal Access services, the current number allocations to users represent a very small proportion of available numbers. The ODTR is reasonably satisfied that there are adequate spare numbers available for Universal Access services. No further development of the scheme for Universal Access services was proposed in the Consultation Paper.

For mobile telephony numbering capacity, a separate Consultation Paper and Decision Notice – "Mobile Numbering and Mobile Number Portability in Ireland" have recently been published[83], setting out estimates for growth in demand and options for dealing with mobile numbering exhaustion.

Views of the Respondents

The following comments were made by respondents with regard to the ODTR's proposed allocation scheme for Personal Numbers:

- The respondent agrees with the proposed allocation scheme for personal numbers at this high level should the expansion plan be implemented.
- There was insufficient information to prepare a response.
- The enormous uptake in mobile telephony services, and associated diversion services, will mean that the uptake in Personal Numbering is unlikely to expand significantly.
- The analysis of the Personal numbering market must be the starting point.

[81] Based on 60% utilisation efficiency and a population of 4 M.

[82] Paging Numbering Scheme – ODTR Doc. No. 99/22

[83] ODTR Docs. 00/86 and 01/03

- A major take-up of Personal numbers is not anticipated in the foreseeable future.
- There is no need to increase capacity, given that the uptake for these services in the Irish market has been extremely limited.
- The respondent does not agree with ODTR's proposal. Personal numbers should remain at 9 digits.

The following comments were made by respondents with regard to changing existing 9-digit Personal numbers to 10-digit:

- The respondent has no objection in principle, but if 10-digit Personal numbers are introduces, then expansion of all non-geographic number ranges should be considered to avoid the introduction of non-standard numbering for non-geographic services.
- There was insufficient information to prepare a response, but the method proposed would seem appropriate, should there be sufficient demand for such numbers.
- The proposed change is not required because the uptake in Personal numbering is unlikely to expand significantly, but if the change were required, it should be made as soon as possible to minimise impact on customers.
- The respondent has no preference, but a move to 10 digits will increase available numbers which may be beneficial if there is eventual take-up of Personal numbers.
- No, given that the uptake for these services in the Irish market has been extremely limited.
- The existing 9 digit Personal numbers should not be changed to 10 digits. Personal numbers should remain 9 digits, but in the format 070X XXX XXX, thereby providing capacity for 9M numbers. This will remain compliant with a nine digit number length in the national numbering plan.

The majority of responses supported the view that further development of the numbering scheme to provide for Paging and Universal Access services is not necessary at this time. In addition, respondents made the following comments:

- Some customers require the allocations for Universal Access and Personal numbering services to be matched so any plans for range expansion should be considered in tandem.
- There was insufficient information to prepare a response on paging.
- The current utilisation of UANs is constrained by the Numbering Conventions. Should new and innovative UAN services be permitted the current demand expectations may be understated.
- There is some scope for further development of the numbering scheme for Paging. A thorough review of Paging services in the near future is recommended.

Position of the Director

The audit returns received from licensees who have been allocated Personal numbers confirms that the overall take-up so far has been modest. Taking account of the responses as well as the

audit returns, the Director is reasonably satisfied that the current available supply of 9-digit numbers (0700 XXX XXX - 0.9M) will cater for demand for the foreseeable future

> The Director will make a tentative provision to provide for additional 9-digit capacity for Personal Numbers. If required, additional capacity will be provided by opening up the range 070A XXX XXX (for requirements up to 1 M numbers, A=0). The retention of this tentative provision will be subject to review.
>
> *Decision 5.1*

Having taken account of the responses received, the Director is satisfied that there are adequate spare numbers for Universal Access and Paging Services to meet demands during the planning period (2001 to 2005). The Director will include updating of the Numbering Plan for Paging Services on the ODTR work programme.

The numbering conventions applicable to UAN services will be considered with reference to the responses to the recent Consultation on the Numbering Conventions.

5.2 Other Non-Geographic numbers

In the Consultation Paper, the ODTR was reasonably satisfied that there was adequate spare numbers to meet demands during the planning period for other non-geographic services, including:

- Freephone and Part-Pay services;
- Premium Rate services.

In the previous review in 1998[84] there was a significant majority against retaining 15XX XXX XXX Premium Rate numbering and in favour of using the 090X flag for which there was a strong preference internationally. The ODTR had incorporated provisions for withdrawing STD codes with format 090X in the capacity expansion plans for geographic numbering, but it would be at least 4 years before all "090X" codes could be available for re-use. In the event of a decision to recover all "090X" codes, the ODTR proposed to issue a Consultation Paper addressing the options for future numbering of Premium Rate services, including the option to use the 090X flag.

But for the present, no further development of the scheme for Freephone, Part-Pay and Premium Rate services was proposed in the Consultation Paper.

Views of the Respondents

The following comments were made by respondents with regard to further developments of the numbering scheme for Freephone/Part-Pay and Premium Rate services:

[84] Numbering in Ireland for the 21st Century – ODTR Doc. Nos. 98/09 and 98/22.

- One respondent commented that there was no need for additional numbers to be created over the period of the plan. All non-geographic numbering should be dealt with as a single service group and not piecemeal, as some customers to these services have the same number behind multiple codes.
- One respondent commented that, with regard to Freephone/Part-Pay services, the primary issue is the allocation rather than the availability of numbers.
- Three other respondents agreed that further development of the numbering scheme to provide for Freephone/Part-Pay and Premium Rate services was not necessary at this time.

The following comments were made by respondents with regard to the ODTR's proposal to issue a consultation paper to address the options for future numbering of Premium Rate services, including the option to use the 090X flag, in the event of a decision to recover all "090X" STD codes:

- Yes, but include all non-geographic number ranges/services and include international bench marking for non-geographic numbering demand per service. With regard to the consultation paper, any discussion that would increase the service received by customers and PRS users would be welcomed.
- The same range 090…. should not be used for Premium Rate services in Ireland as is used in the UK. Should there be a demonstrable need for further codes to support Premium Rate Services other than 090X, the ODTR should consult with industry numbering experts to identify options and publish a Consultation Paper.
- The respondent supports the ODTR proposal The proposal should incorporate all non-geographic number ranges/services and include international benchmarking of non geographic numbering demand per service.
- Where the ODTR anticipates capacity problems or believe there is a need to make additional types of Premium Rate Numbers available, they should hold a consultation.

Position of the Director

Having taken account of the responses received, the Director is satisfied that there are adequate spare numbers for Freephone, Part-Pay and Premium Rate Services to meet demands during the planning period (2001 to 2005). The current regime of number lengths and formats for these services will be retained.

As part of the framework plan for geographic numbers, the Director has decided to make available code "090" for the rationalisation of the Athlone[85], Ballinasloe, Roscommon and Portumna Areas. There appears to be no strong support for replacing the 15XX flag with the 090X flag for Premium Rate Services. The Director will include the consideration of Premium SMS in any future consultations with the telecommunications industry on numbering arrangements to facilitate access to new emerging services. The Director's position on the allocation process for non-geographic numbers is included in section 6.

[85] Athlone is at risk of reaching number exhaustion in 2003.

6 NUMBERING ADMINISTRATION

6.1 The Present Allocation Process

The present allocation process was put in place to meet the market needs for voice telephony services after liberalisation in December 1998. Allocations have been made in accordance with the National Numbering Conventions and have varied according to number type:

- For geographic numbers, the ODTR has allocated in blocks of 1,000 or 10,000 numbers to operators, subject to justified demand. The operators then allocate individual numbers to subscribers and request new blocks when existing blocks are about to be used up.
- For mobile numbers, the ODTR have allocated paired blocks of 100,000 numbers.
- For non-geographic numbers, such as for Freephone and premium rate services (excluding mobile), the ODTR have made allocations in blocks of 1,000 numbers, except for numbers for "bursty" services which have been allocated in blocks of 100 numbers.
- For short codes, appropriate allocation processes have been put in place as required.

In the Consultation Paper, the ODTR proposed to make certain improvements in the allocation process for geographic numbers so that number ranges will not become prematurely exhausted due to inefficient utilisation of numbers. This in turn would help to avoid premature number changes. The proposed measures being considered included:

- discontinuing 10k block allocations;
- introducing audits;
- number block pooling;
- charging for numbers.

6.2 Discontinuing 10k block allocations for Geographic Numbers

One of the factors that has contributed to the deterioration in the primary supply position, is the allocation of 10k rather than 1k blocks. In the Consultation Paper, the ODTR signalled its intention to discontinue the allocation of geographic numbers in 10k blocks. In future the block allocation size would be 1k for all MNAs[86]. In certain cases, e.g. for the Dublin MNA, multiple allocations of 1k blocks may be made in response to a single application if justified. In such cases the allocated 1k blocks may not be contiguous.

Views of the Respondents

All but one network operator agreed with the ODTR's intention to discontinue allocations of geographic numbers in 10k blocks subject to the following qualifying comments:

- fast turnaround of applications by ODTR is required;
- fast implementation of datafill by *eircom* of OLO number blocks is required;

[86] For most MNAs, the current block allocation size is already 1k.

- process must be flexible to allow for multiple 1K allocations;
- a single large customer may request a quantity of contiguous numbers in excess of 1K.

One network operator proposed that number allocations be made in blocks of 100K in order to simplify digit analysis in switches.

Two respondents advocated that the number administration process should include procedures for the retrieval or return of unused number blocks.

Position of the Director

> In future the block allocation size will be 1k for all MNAs. In certain cases, e.g. for the Dublin Central MNA, multiple allocations of 1k blocks may be made in response to a single application if justified. In such cases, the allocated 1k blocks may not be contiguous.
>
> In the routing analysis in the network operator's switches, all allocated 1k blocks must be individually identifiable for routing purposes. The ODTR will monitor the turnaround times by the ODTR (for applications) and network operators (for databuild) to ensure that they are efficient in the context of 1K block allocations.
>
> *Decision 6.1*

As already stated in section 4.2, the ODTR will initiate a project to recover excessive spare capacity held by certain network operators. In addition, number administration procedures will be put in place for the retrieval or return of unused number blocks.

6.3 Audit of Geographic Numbers Usage

In the Consultation Paper, the ODTR signalled its intention to carry out an audit of the status of allocated geographic numbers in the 1St Quarter of 2001. Section 9 of the Numbering Conventions provides the framework for such an audit. Since the receipt of responses to the consultation, the ODTR has completed a very extensive audit of geographic numbers.

Views of the Respondents

The views of the respondents as well as further feedback from some network operators was taken into account when arranging the audit.

Position of the Director

Since the receipt of responses to the consultation, the ODTR has completed a very extensive audit of geographic numbers to determine the current utilisation of allocated number blocks. A summary of the results for each Minimum Numbering Area is included in Figure 4.1 in section 4.2 of this document.

The audit confirmed that some operators are holding very large quantities of spare numbers grossly in excess of that which is reasonable for the efficient provision of service to new customers. As already stated, the ODTR will initiate a project to recover excessive spare capacity held by certain network operators. Recovery of spare capacity will mean that not all of the change proposals included in Consultation Paper will be necessary during the period (2001 to 2005).

The following key results emerged from the audit:

- The total count of numbers allocated to users was 3,582,661[87];
- The total count for the Dublin (01) Area was 1,888,237 (52.7%);
- The total count for the Provincial Areas was 1,694,424 (47.3).

The results of the audit have helped to more precisely identify STD Code Areas that are likely to reach number exhaustion. The subscriber number and code changes are set out in section 4 and will impact on the allocated numbers as follows:

- Number changes to provide additional capacity will affect 227,578 numbers (6.4%);
- Number changes arising from rationalisation measures will affect 114,946 numbers (3.2%).

> The Director will carry out further audits at least once every year and more frequently if necessary.
>
> *Decision 6.2*

6.4 Number Pooling

Number pooling has been effectively used in other countries to improve the utilisation efficiency of geographic number blocks. Pooling allows an operator's relatively unused blocks to be reallocated to more needy operators by leveraging the number portability process.

In the Consultation Paper, the ODTR proposed to introduce selective number pooling in the 2nd Quarter of 2001, focussing initially on MNAs where number block exhaustion is imminent. An outline of how the pooling process could work was set out in the Consultation Paper. The ODTR considered that the overall process should be relatively straightforward, since it would simply use a combination of existing industry processes in a particular sequence. The ODTR does not have a definite threshold value in mind to trigger porting but believes that there are a significant number of allocated blocks where the current utilisation level is less than 1%.

Views of the Respondents

All of the responses were from network operators who did not support the ODTR proposal to introduce number pooling. They expressed a number of concerns including the following:

[87] The quantity of numbers in use exceeds the number of telephone lines. This arises from allocations for ISDN lines and Direct Dialling inwards.

- The current Geographic Number Portability process/system will not have the transaction capacity required for number pooling;
- The audit should be completed first;
- Considerable industry discussion is required on this proposal;
- The process is not yet sufficiently robust;
- Before putting such measures in place, the ODTR would need to bottom out exactly how this process would work in practice;
- The proposal on number pooling may impose significant resource burdens on network operators.

Position of the Director

The audit has confirmed that in Provincial MNAs, with the exception of those MNAs serving the larger centres of population, the allocations made by most (and in some cases all) of the network operators excluding *eircom* are less than 1% of the respective block allocations. This confirms the ODTR's belief that there is a basis for further considering the introduction of number pooling.

The Director acknowledges the concerns of network operators but believes that they do not amount to insurmountable obstacles to the introduction of pooling.

The ODTR will consult with the telecommunications industry to consider the practical implementation of number pooling.

6.5 Charging for Numbers

The majority of Regulatory Authorities in Europe now charge fees for primary number allocations to network operators. The ODTR understands that more efficient use of resources has resulted in countries that have introduced charges for numbers, since charges encourage operators not to retain large quantities of unallocated numbers. The Director indicated in the Consultation Paper that she was hopeful that the proposed measures (i.e. 1k block allocations combined with Number Pooling), would lead to improvements in the utilisation of numbers but that she intended to review the position later in 2001 and decide if further measures such as charging for numbers is required.

As stated earlier, the recent audit of geographic numbers confirmed that some operators are holding very large quantities of spare numbers grossly in excess of that which is reasonable for the efficient provision of service to new customers.

Views of the Respondents

One network operator considered that charging for number blocks would lead to a significant additional cost burden to be borne by the industry. A more efficient allocation and return process would offer a more satisfactory and sustainable solution in the longer term.

Another network operator while noting the Director's comments on charging for number blocks would expect that any such initiative would be consistent with the provisions of the licensing directive and with the principles of economic efficiency. Charging would need to be considered in relation to the cost of alternative measures.

Position of the Director

As already stated, the ODTR will initiate a project to recover excessive spare capacity held by certain network operators. The Director will review the position later in 2001 and decide if further measures such as charging for numbers are required.

6.6 The allocation process for non-geographic numbers

For non-geographic numbers, such as for Freephone and premium rate services (excluding mobile), the ODTR allocates in blocks of 1,000 numbers, except for numbers for "bursty" services which are allocated in blocks of 100 numbers.

If there is strong support from within the industry to make all spare numbers available for allocation to users, the ODTR proposed in the Consultation Paper that this could be facilitated by the introduction of individual allocations for certain non-geographic numbers. The set-up cost for any central database and the ongoing administrative costs associated with individual allocations and other transactions would be directly or indirectly borne by the industry.

Views of the Respondents

Three network operators were of the view that this proposal needs further examination at industry level. Two were in favour of the establishment of a central database listing all unallocated numbers from which operators can offer numbers to their customers.

Two other network operators also commented on this proposal. One supported individual allocations using a central database and the other had unspecified grave concerns with the proposal.

Position of the Director

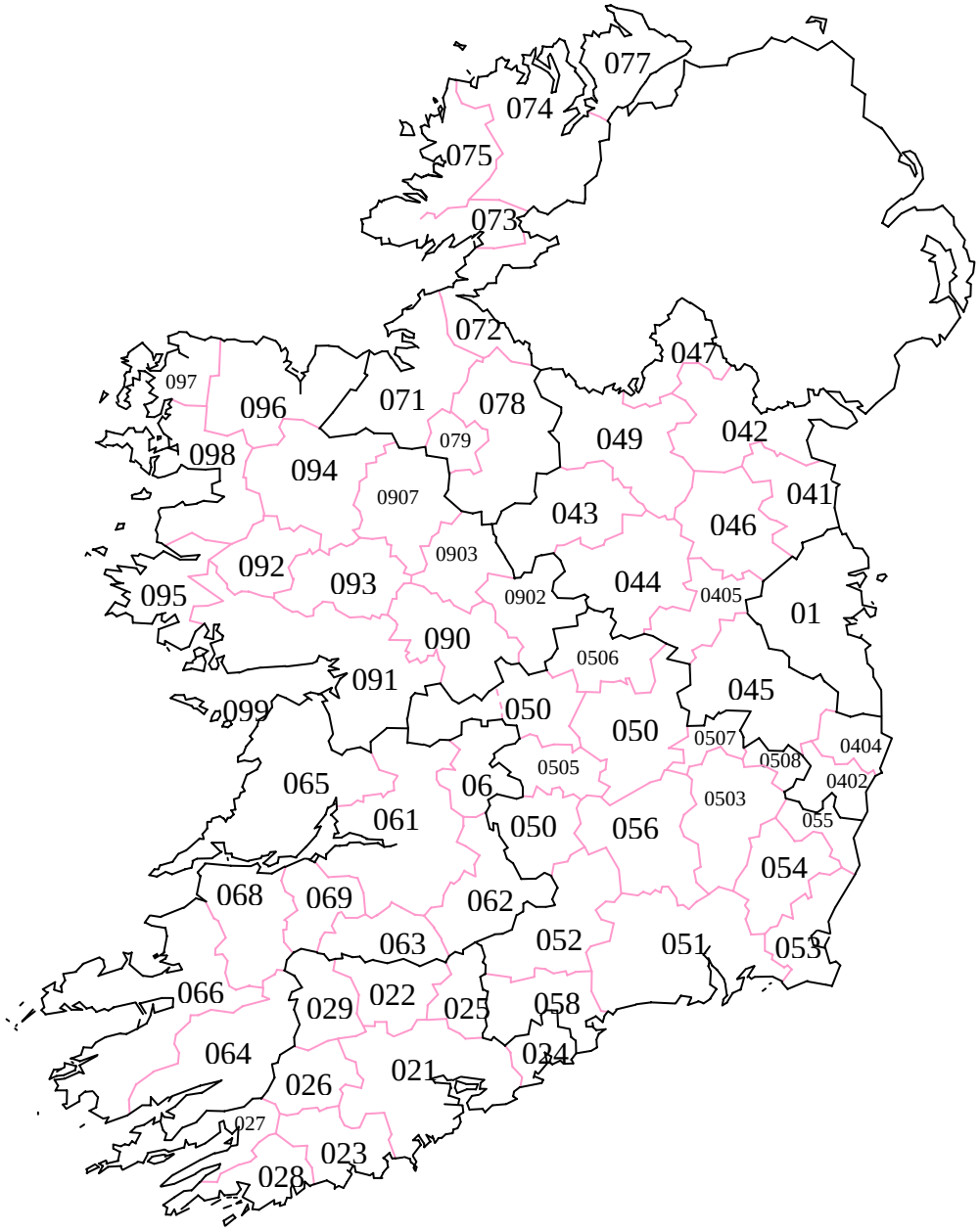
The ODTR will consult with the telecommunications industry to assess the demand for and the possible establishment of an individual number allocation process for certain non-geographic numbers.

ANNEX 1: Summary of Geographic Number changes proposed in the Consultation Paper for Provincial Areas

STD Code Area	Minimum Numbering Area	Phase	STD Code Change	Number Change	MNA Change
Cork	Cork	1			
	Midleton	1			Merge into Cork
	Bantry	5		5 to 7 digits	
	Skibbereen	5	028 -> 027	5 to 7 digits	
Longford	Longford	1		5 to 7 digits	
	Granard	1		5 to 7 digits	
Mullingar	Mullingar	1		5 to 7 digits	
	Killucan	1		5 to 7 digits	Merge into Mullingar
	Myvore	1		5 to 7 digits	Merge into Mullingar
	Castlepollard	1		5 to 7 digits	
	Tyrellspass	1		5 to 7 digits	
Navan	Navan	1		5 to 7 digits	
	Nobber	1		5 to 7 digits	Merge into Navan
	Kells	1		5 to 7 digits	
	Trim	1		5 to 7 digits	
Enfield	Enfield	1	0405 -> 046	5 to 7 digits	
	Edenderry	1	0405 -> 046	5 to 7 digits	
Waterford	Wellington Br.	1			Merge into Waterford
Clonmel	Clonmel	1		5 to 7 digits	
	Cahir	1		5 to 7 digits	
	Killenaule	1		5 to 7 digits	
Wicklow	Wicklow	4	0404 -> 055	5 to 7 digits	
Arklow	Arklow	4	0402 -> 055	5 to 7 digits	
Gorey	Gorey	4		5 to 7 digits	
Kilkenny	Kilkenny	1		5 to 7 digits	
	Castlecomer	1		5 to 7 digits	
	Freshford	1		5 to 7 digits	
Portlaoise	Portlaoise	1	0502 -> 057	5 to 7 digits	
	Abbeyleix	1	0502 -> 057	5 to 7 digits	
Tullamore	Tullamore	1	0506 -> 057	5 to 7 digits	
	Clara	1	0506 -> 057	5 to 7 digits	Merge into Tullamore
Portumna	Birr	1	0509 -> 057	5 to 7 digits	
	Banagher (South)	1	0509 -> 057	5 to 7 digits	Merge into Birr
Carlow	Carlow	1	0503 -> 059	5 to 7 digits	
	Muine Bheag	1	0503 -> 059	5 to 7 digits	
Athy	Athy	1	0507 -> 059	5 to 7 digits	
Baltinglass	Baltinglass	1	0508 -> 059	5 to 7 digits	
Limerick	Limerick	1		6 to 7 digits	
	Adare	1		6 to 7 digits	Merge into Limerick
	Cappamore	1		6 to 7 digits	Merge into Limerick
	Killaloe	1		6 to 7 digits	Merge into Limerick
	Scarriff	1		6 to 7 digits	Merge into Limerick
	Shannon Airport	1		6 to 7 digits	Merge into Limerick
Killarney	Killarney	1		5 to 7 digits	
	Rathmore	1		5 to 7 digits	
Nenagh	Nenagh	1		5 to 7 digits	
Roscrea	Roscrea	1	0505 -> 067	5 to 7 digits	
Thurles	Thurles	1	0504 -> 067	5 to 7 digits	
	Templemore	1	0504 -> 067	5 to 7 digits	Merge into Thurles

STD Code Area	Minimum Numbering Area	Phase	STD Code Change	Number Change	MNA Change
Galway	Galway			6 to 7 digits	
	Gort			6 to 7 digits	
	Loughrea			6 to 7 digits	
Kilronan	Kilronan		099 -> 091	5 to 7 digits	
Clifden	Clifden		095 -> 091	5 to 7 digits	
Athlone	Athlone	2	0902 -> 092	5 to 7 digits	
	Banagher (North)	2	0902 -> 092	5 to 7 digits	Merge into Athlone
Ballinasloe	Ballinasloe	2	0905 -> 092	5 to 7 digits	
Roscommon	Roscommon	2	0903 -> 092	5 to 7 digits	
Portumna	Portumna	2	0509 -> 092	5 to 7 digits	
Castlebar	Castlebar	1		5 to 7 digits	
	Swinford	1		5 to 7 digits	Merge into Castlebar
	Claremorris	1		5 to 7 digits	
Ballinrobe	Ballinrobe	1	092 -> 094	5 to 7 digits	
Castlerea	Castlerea	1	0907 -> 094	5 to 7 digits	
	Ballaghaderreen	1	0907 -> 094	5 to 7 digits	Merge into Castlerea
Ballina	Ballina	1		5 to 7 digits	
Belmullet	Belmullet	1	097 -> 096	5 to 7 digits	
Letterkenny	Letterkenny	3	074 -> 097	5 to 7 digits	
	Lifford	3	074 -> 097	5 to 7 digits	Merge into Letterkenny
	Ramelton	3	074 -> 097	5 to 7 digits	Merge into Letterkenny
Buncrana	Buncrana	3	074 -> 097	5 to 7 digits	
Dungloe	Dungloe	3	075 -> 097	5 to 7 digits	
Donegal	Donegal	3	073 -> 097	5 to 7 digits	
Sligo	Sligo	3	071 -> 095	5 to 7 digits	
	Ballymote	3	071 -> 095	5 to 7 digits	Merge into Sligo
Manor-hamilton	Manorhamilton	3	072 -> 095	5 to 7 digits	
Carrick-on-Shannon	Carrick-on-Shannon	3	078 -> 095	5 to 7 digits	
	Drumshambo	3	078 -> 095	5 to 7 digits	Merge into Carrick on Shannon
Boyle	Boyle	3	079 -> 095	5 to 7 digits	Merge into Carrick on Shannon

ANNEX 2: Ireland – Subscriber Trunk Dialling Code Areas, 2001



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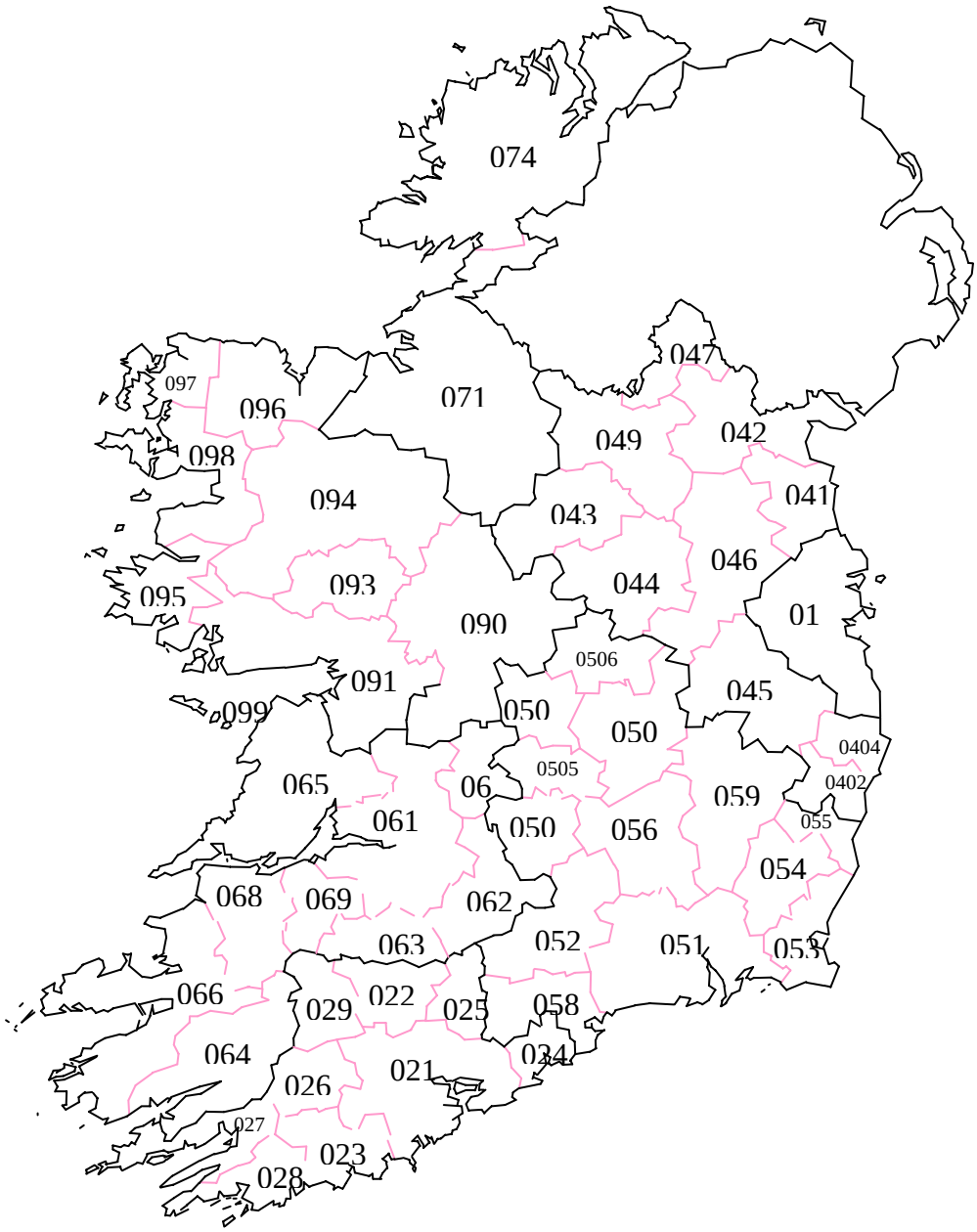
ANNEX 3: Ireland – Subscriber Trunk Dialling Code Areas, 2003



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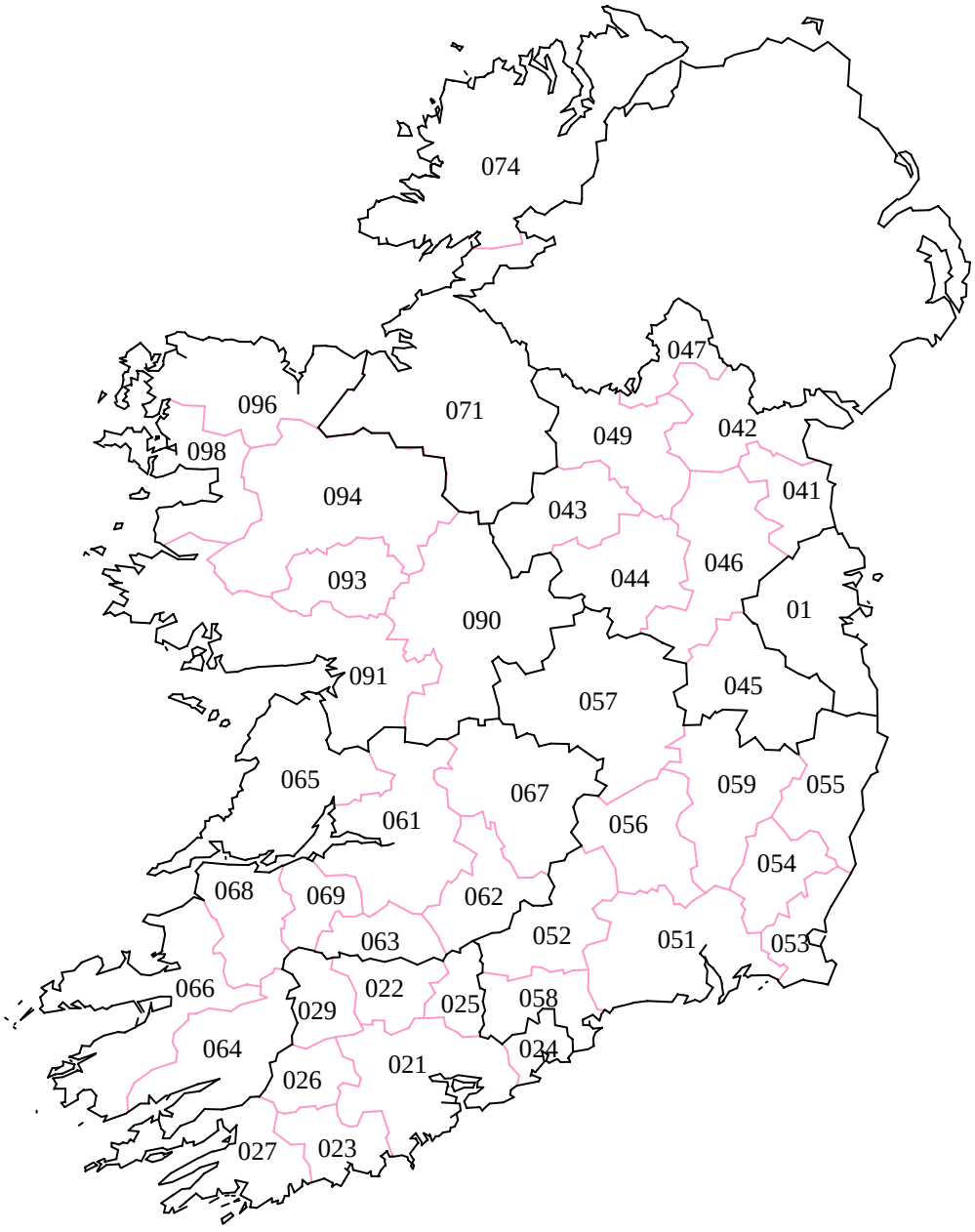
ANNEX 4: Ireland – Subscriber Trunk Dialling Code Areas, Framework Plan



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ANNEX 5: Glossary of terms

CC	Country Code
CLI	Calling Line Identification
DSL	Digital Subscriber Line
E.164	ITU recommendation on numbering plans for the ISDN era
IDD	International Direct Dialling
ISDN	Integrated Services Digital Network
ITU	International Telecommunications Union
MNA	Minimum Numbering Area
NDC	National Destination Code
NP	Number Portability
NSN	Nationally Significant Number
NSNL	Nationally Significant Number Length
ODTR	Office of the Director of Telecommunications Regulation
PSTN	Public Switched Telephone Network
SN	Subscriber Number
STD	Subscriber Trunk Dialling
WLL	Wireless Local Loop
VoIP	Voice over Internet Protocol