



Commission for
Communications Regulation

Reference Document

National Numbering Conventions

(Version 3.0)

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An Coimisiún um Rialáil Cumarsáide

Commission for Communications Regulation

Abbey Court Irish Life Centre Lower Abbey Street Dublin 1 Ireland

Telephone +353 1 804 9600 Fax +353 1 804 9680 Email info@comreg.ie Web www.comreg.ie

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1. Scope of the Conventions

The National Numbering Scheme is a national resource and the design, adoption and management of the scheme affects the national interest. ComReg is responsible for managing the scheme and in this capacity it makes allocations and reservations of numbering capacity from the scheme to licensed operators who sub-allocate individual numbers to service providers and end users. Sub-allocated capacity remains part of the national resource managed by ComReg.

The National Numbering Conventions are intended to provide a long-term framework within which the Irish telephone numbering scheme may continue to be developed, by agreement, for the benefit of all Irish public telecommunications users.

The annexes to these Conventions form a fully integral part of the Conventions. They are separated from the main text only for clarity and/or where their content may be subject to more frequent change than is desirable for main body text.

Version 3 of the Conventions represents a general updating of the document but also introduces coverage of several new areas:

- Text Messaging Short Codes;
- Fixed Mailbox Numbers;
- National Signalling Point Codes (ISPCs).

To achieve the above aims the Conventions must:

1. ensure transparent and non-discriminatory access to national numbering resources;
2. take existing EU policy into account.
Note: This document will be adapted to the new EU regulatory framework and its transposition into Irish law when appropriate. At this stage, it is not anticipated that the introduction of that framework will significantly impact the National Numbering Conventions;
3. support the principle of many public telecommunications network operators and service providers working on equal and competitively neutral terms in the Irish marketplace;
4. take account of uniquely Irish situations and environments, ensure flexibility over time and cater for individual or new requirements;
5. leave solutions to market mechanisms wherever possible and reasonable;
6. be forward-looking, allowing for future extension of the Numbering Conventions to cover additional types of numbers, names and addresses;
7. seek to ensure that changes to subscribers' numbers are minimised.

Notes: This document sets out ComReg's current position on the regulatory regime to be adopted with regard to numbering conventions; ComReg is not bound by it and may amend it from time to time. This document is without prejudice to the legal position of ComReg and to its rights and duties to regulate the market generally.

2. Definition Of Terms

(a) Activated

Activated is the status of a number which is fully operational such that it is able to support the telecommunications service for which it is designated. Therefore 'activation' implies bringing the number into service so that a call from the PSTN can be made to that number.

(b) Allocation

An allocation is:

1. the granting of rights of use over numbers from designated number ranges to individual network operators, service providers or end-users.

Note: Allocation does not imply the granting of any proprietary rights to the number.

But is also

2. an allocated set of numbers, as described in (1), including its attached conditions.

(c) Assignee

A natural or legal person to whom an allocation of numbers is made.

(d) Bursty Traffic

A "Bursty" application is one that is likely to generate in excess of 10 call attempts per second in a single originating telephone exchange.

(e) ComReg

Means the Commission for Communications Regulation.

(f) Convention

(a) An individual convention or rule within the overall National Numbering Conventions.

Note: Each Convention herein is numerically identified by its place within the overall set of conventions as section/sub-section-Number, to facilitate referencing (e.g. 4.1-5 is the fifth Convention within sub-section 4.1).

(g) Designation

Designation is the process of assigning functions and structures to specific number ranges and to special codes. Thus numbers or codes issued by the NPM from any designated range or code may only be used by the recipient or its customers for fulfilling the designated function¹.

(h) Licensee

A person or organisation licensed under section 111(2) or section 111(3) of the Postal and Telecommunications Services Act, 1983 (as amended).

¹ For example, 1800 has been designated for Freephone services.

(i) Management of the Scheme

This activity consists of:

- assignment of numbers from designated number ranges;
- surveillance of usage of reserved and allocated numbers;
- withdrawal of assigned numbers.

(j) Mobile Network

For the purposes of these National Numbering Conventions, “mobile network” means an 08X-based GSM (or equivalent) wireless network or (in future) a 3rd Generation digital wireless network (e.g. UMTS).

(k) National Numbering Conventions

The National Numbering Conventions (abbreviated to the ‘Conventions’) is the set of ‘rules’ under which the Irish National Numbering Scheme is managed and administered.

(l) National Numbering Scheme

The national numbering scheme specifies the status of numbers or number ranges within public telecommunications networks in Ireland, including mobile networks, which may be dialled from that network or externally, and is as published by ComReg from time to time.

(m) Network-Use Short Code (NUSC)

A NUSC is one of a strictly limited number of short codes dedicated to offering services which are restricted to use within the network concerned. The NUSCs are therefore never normally transmitted across network-to-network interfaces. The use of each code must be notified to and agreed beforehand between the network operator concerned and ComReg (See 11.3.7 below).

Note: Thirteen NUSCs have been defined, within the 171-174 ranges, in Ireland.

(n) Network Operator

An entity that operates a telecommunications network in order to provide telecommunication services.

(o) Numbering Advisory Panel (NAP)

This is a panel whose membership is broadly representative of parties interested in the telecommunications industry as a whole, including users. Individual members are drawn from telecommunications service suppliers, from the business world and from public consumer organisations. ComReg seeks the panel’s advice in matters concerning the numbering scheme, the numbering conventions or related issues.

(p) Numbering Plan Management (NPM)

This is the function within ComReg which carries out management of the Irish National Numbering Scheme.

(q) ComReg

Means the Commission for Communications Regulation.

(r) Operator

For the purposes of these Numbering Conventions the term ‘operator’ includes both network operators and telecommunications service providers, as appropriate to the context.

Note: an operator will usually also be a Licensee, though this is not necessarily so in all cases (e.g. Internet ISPs are exceptions).

(s) Primary Allocation/Reservation

The allocation or reservation of numbers by the NPM to individual network operators, service providers or users.

(t) PSTN

The Public Switched (fixed) Telephone Network, which for the purposes of these Conventions is deemed to include the Integrated Services Digital Network (ISDN).

(u) Quarantined Numbers

These are numbers which will not be allocated during the period of quarantine. Quarantine typically occurs following de-activation of the number, but other examples may occur.

(v) Retail Charge

For the purposes of the National Numbering Conventions, the term “retail charge” means the standard published retail charge made to retail customers.

(w) Secondary Allocation/Reservation

The allocation or reservation of numbers by recipients of a primary allocation to their customers.

(x) Service Provider

An entity that offers telecommunications services to subscribers and/or other service providers, involving the use of telecommunication facilities provided by network operators.

(y) Short Code

A dialable number that is 2-5 digits long, used to access heavily used network-related services and/or key public-interest services (e.g. directory services, emergency services).

(z) Subscriber/Customer

A person or organisation that receives telecommunications services from an operator, usually against payment. The subscriber / customer is normally also an end-user of the relevant service.

3. Responsibilities

3.1 Responsibilities of ComReg

In accordance with the terms of Regulation 13 of S.I. No.15 of 1998 (European Communities (Interconnection in Telecommunications) Regulations, 1998), ComReg is vested with responsibility for administering the national telecommunications numbering resource. In particular, ComReg has a statutory obligation to put in place procedures to ensure that the allocation of numbers is carried out in an objective, transparent, non-discriminatory and timely manner.

In performing this function of controlling the Irish national numbering scheme (through the NPM function), ComReg is conscious that:

- 1 the National Numbering Scheme should provide sufficient capacity and flexibility to meet future demands, including the provision of reasonable capacity as a contingency reserve for new services and for ease of future expansion of the scheme;
- 2 numbering arrangements should result in efficient utilisation of numbering space;
- 3 the scheme should support fair and effective competition by ensuring equal treatment with respect to access to numbers and allocation policy;
- 4 the scheme should support the principle of number portability;
- 5 the scheme should be in line with ITU-T Recommendations as far as possible;
- 6 EU harmonisation measures, where relevant, should be taken into account;
- 7 numbering scheme management should be carried out in an objective, non-discriminatory, equitable, proportionate, timely and transparent manner;
- 8 where changes to the numbering scheme are necessary, the aim should be to implement them in a way that minimises disruption, cost and inconvenience for customers and service providers;
- 9 publicity for changes in any substantial part of the active national telephone number space should be well co-ordinated and should commence well in advance of the change taking place;
- 10 information should be available regarding the national numbering conventions, primary allocations by the NPM and the status of each number. The national numbering scheme shall be made available on the ComReg web site.

ComReg holds consultative processes on Numbering Convention issues that it considers to be of importance and on large-scale withdrawal of allocated numbers, subject always to its obligation to regulate the market.

3.2 Operators Responsibilities

Under Condition 10 of the General Telecommunications Licence, Condition 8 of the Mobile License, and Condition 5.10 of the Basic License, all operators are required to conform to these Numbering Conventions. As part of this obligation, all licensed operators should:

- 1 promptly inform their customers of any number changes or imminent number changes which may affect those customers. Wherever relevant or appropriate², operators shall, as part of this advice, highlight the impact on Calling Line Identification (CLI) numbers sent prior to and following the switch over to the new numbers;
[Note: it is left to operators themselves to decide the most appropriate way to provide this advice to their customers.]
- 2 open access from their networks to all geographic country codes³ except 353^{2a} listed by the ITU (i.e. in its Recommendation E.164), as early as possible and subject only to restrictions imposed by practical limitations on implementation;
- 3 open access from their networks for all calls to the European Telephony Numbering Space (ETNS) whose access code is 3883.
[Note: This requirement is without prejudice to the right of all operators concerned to recover their costs for the conveyance of such calls.]
- 4 if designated as having significant market power in access networks, open access from those networks to all relevant numbers allocated by the NPM;
- 5 in the case of all other network operators, open access from their networks to all relevant numbers allocated by the NPM, subject only to commercial negotiations between operators;
- 6 publicise in all relevant literature supplied to their equipment suppliers that all terminal equipment to be connected to their networks should be capable of routing emergency calls dialled using codes 112 or 999, free of charge to the caller;
[Note: This is an awareness creation convention. It is not intended that operators should be required to actively police implementation of the requirement by suppliers.]
- 7 ensure that the following measures are in place wherever possible⁴ and appropriate, when number changes are introduced:
 - i a period of parallel running, at no extra charge to the number holder, during which both old and new numbers are available for use;
 - ii changed number announcements are made to callers to the old number, free of charge to the caller, after the end of the parallel running period.

Note: Annex 6 defines a reference process to be followed in respect of this Convention, including recommended periods.

² Users may need specific information on the changeover of presented CLI if the date of this is not coincident with the date notified for the subscriber number change, in order to prepare equipment dependent on the CLI.

³ ITU-T Recommendation E.164 country codes for global services and networks (as opposed to those for geographic countries) are not included in this requirement and are for commercial decision by those concerned.

^{3a} 353 is the country code for Ireland.

⁴ The basic obligation to provide parallel running and recorded announcements may not be appropriate in all cases and variations on this Convention may be necessary, subject to ComReg approval.

4. Allocation of Numbers

Telephone number allocation from within the Irish numbering scheme normally occurs in two stages; Primary Allocation and Secondary Allocation. Primary allocation means the allocation of blocks of numbers by ComReg to Network Operators or relevant Telecommunications Service Providers. Secondary and subsequent allocation (both hereafter covered by 'Secondary' allocation) is the subsequent allocation of individual numbers by those primary assignees to their own customers or users⁵. The only arrangement for direct transfer of allocated numbers between operators is Number Portability; other transfers can only occur by withdrawal and re-issue of numbers by ComReg.

4.1 The application process

4.1.1 Applications for primary allocation

The following Conventions apply:

- 1 the current eligibility criteria for applicants shall be as set out in Annex 1;
- 2 the principle of 'first come, first served' shall be applied in respect of choice of numbers or number blocks, except when starting allocation from newly allocated number ranges. In either case, allocation shall be carried out in an open, transparent and non-discriminatory manner;
- 3 applicants shall have the right to indicate their preferences for specific telephone number blocks or short codes. However, these preferences will not necessarily be agreed by the NPM;
- 4 applicants shall be informed as soon as possible of the receipt of their applications by the NPM.

4.1.2 Applications for secondary allocation

The following Conventions apply:

- 1 secondary number allocation shall be made in compliance with these Numbering Conventions and the National Numbering Scheme;
- 2 the principle of 'first come, first served' shall be applied in respect of choice of numbers, except when starting allocation from newly allocated number blocks. In either case, allocation shall be carried out in an open, transparent and non-discriminatory manner;
- 3 applicants shall be informed as soon as possible of the receipt of their applications by the operator concerned.

4.2 Information required when making an application

- 1 The information required from applicants for a primary allocation is listed in Annex 3 but ComReg reserves the right to request additional information, where necessary;
- 2 incomplete applications, which require ComReg to request additional information, can be excluded from further consideration should the new information not be received within two months;

⁵ ComReg may directly allocate numbers to subscribers in certain cases.

- 3 applications should be sent to the following address:

The Numbering Division
Commission for Communications Regulation
Abbey Court
Irish Life Centre
Lower Abbey Street
Dublin 1.
Email: numapps@comreg.ie

4.3 Refusal of primary or secondary allocation

- 1 ComReg may refuse an application for an allocation of primary numbering capacity. Grounds for rejecting an application include, but are not limited to, those listed in Annex 2. ComReg may alternatively not grant the application in full, or may attach specific conditions to the allocation;
- 2 operators may also refuse applications for secondary allocations which they consider are not justified, or may attach special conditions to the allocations. In this case authority to refuse or alter the allocation is through delegation from ComReg and in cases of doubt the operator should first check with ComReg;
- 3 the reasons for refusal shall be consistent with these Numbering Conventions and relate to the use and management of the numbering capacity allocated, having considered the application as set out in Conventions 4.1 and having taken into account the criteria for eligibility (which is defined in Annex 1);
- 4 when ComReg or an operator refuses an application for numbering capacity, or does not grant the application in full, or attaches specific conditions to the allocation (on allocation or subsequently) then:
 - i it shall inform the applicant, in writing, of the reasons for this;
 - ii the applicant may follow the appeals procedure described in Section 4.6 below.

4.4 Confidentiality

- 1 If an applicant considers that certain specified information included in the application contains trade secrets which could be damaging if publicly revealed, it shall clearly state this;
- 2 ComReg will not disclose information covered by the obligation of professional secrecy, in particular information about undertakings, their business relations or their cost components.

It should however be noted that, in accordance with the relevant statutory provisions, such non-disclosure shall be without prejudice to ComReg's right to undertake disclosure where it is essential for the purpose of fulfilment by ComReg of its duties. However, in such circumstances, ComReg will ensure that the disclosure will be proportionate and will have regard to the interests of undertakings in the protection of their business secrets.

4.5 Timescales for applications

- 1 Applications for numbering allocations shall not normally be made more than 6 calendar months prior to the planned activation date;
- 2 the time limit between receipt of a properly completed application for primary allocation and notification of the subsequent decision should not exceed 3 weeks. Exceptions to this period may be:
 - i where additional information is required from the applicant;
 - ii where a period of consultation is required to be initiated by ComReg;
 - iii where, in the opinion of ComReg, there are significant issues relating to the application that cannot be reasonably handled within that period;
 - iv where use of the requested numbers is dependent upon the issue to the applicant of a licence, pursuant to the Postal & Telecommunications Services Act of 1983, as amended; or
 - v where ComReg is of the opinion that an alternative period of time is justified (e.g. where allocation may involve a competitive element). In this case ComReg shall inform the applicant in writing of the reasons for the exception and of the revised period, which shall generally not exceed 6 weeks from receipt of all application information;
- 3 the time limit for start of activation⁶ of primarily allocated numbers/codes shall not exceed 1 year;
- 4 the time limit for activation⁶ of secondarily allocated numbers shall normally not exceed 3 calendar months.

4.6 Appeals to ComReg

1. Refusal by an operator to make a secondary allocation or the attachment of special conditions to an allocation may be appealed to ComReg by the applicant for that allocation;
2. the applicant may then write to ComReg, making representations with regard to the refusal or limitation or attachment of conditions to an allocation or giving further information for consideration regarding the application;
3. ComReg will consider the matter and respond within 28 calendar days;
4. ComReg may reject the request or, following consultation with the applicant and (if necessary) the operator, make or require the operator to make the original requested allocation;
5. ComReg might instead require the operator to make an alternative allocation that in the opinion of ComReg meets the applicant's requirements – if the latter does not conflict with any criteria which first caused the application to be legitimately refused.

⁶ A number is active when a call from the PSTN can be made to that number.

5. Reservation of numbers

5.1 Primary Reservations to Operators

As well as making allocations of numbering capacity, ComReg shall also make reservations of numbering capacity, where applicable. Reservation means setting the relevant capacity aside for future allocation to the reservation holder; it is thus unavailable for allocation to others during the period of reservation.

- 1 Reservations may be used where either:
 - i the applicant does not wish to be identified; or
 - ii the reason for the reservation should not be publicly divulged prior to application for allocation; or
 - iii a customer order has not been finalised; or
 - iv a route for migrating numbers from another block or code needs to be identified;
- 2 a reservation may be made:
 - i in anticipation of an application for numbering capacity, in accordance with a three-year rolling forecast provided by licensees entitled to apply for allocation; or
 - ii against a specific request submitted by any organisation eligible to receive allocations (e.g. for the expansion or growth of existing services or for the introduction of new services);
- 3 an application for reservation should be made to ComReg. The applicant shall provide to ComReg all relevant information required by Convention 4.2;
- 4 applications for the reservation of numbering capacity shall be treated in confidence by ComReg where the applicant requests this, and shall be subject to the normal consultation procedure, where commercial confidentiality permits;
- 5 in evaluating applications for the reservation of numbering capacity, ComReg will take into account:
 - i these Conventions;
 - ii the provisions of relevant licence conditions;
 - iii the views of the applicant and other interested parties;
 - iv the reasonableness of the quantities of numbers being requested; and
 - v any other matters ComReg regards as relevant.
- 6 a reservation does **not** entitle operators to activate the capacity. Where numbering capacity is reserved, this does not guarantee that a corresponding allocation will subsequently be made. A subsequent request for allocation of the capacity will be considered by ComReg and will normally be accepted if it is in compliance with the criteria set out in Annex 1: Eligibility criteria for applicants (as amended from time to time);
- 7 the time period for ComReg to respond to a reservation application shall be the same as for responding to a corresponding application for allocation (see Section 4.5 above);
- 8 reservations will be time-limited. Unless a longer reservation is needed for the effective management of the Scheme, the limit for reservations will be 3 calendar months. Reservations may be renewable on request to ComReg;
- 9 once a reservation exists then that numbering capacity is unavailable for allocation except for the purpose and/or to the organisation for whom the reservation was made. However, the

reservation may be cancelled or changed by ComReg if, taking into account the same conditions considered when evaluating the application for reservation (see above), either:

- i the time-limit has expired; or
 - ii the applicant withdraws the reservation; or
 - iii ComReg and the applicant agree a substitution;
- 10 ComReg may withdraw any reservation made to an organisation that fails to obtain a suitable licence under relevant legislation within a time period ComReg considers reasonable;
 - 11 eligibility conditions for reservation of numbers are given in Annex 1.

5.2 Reservation to end-users

Operators shall be entitled to make reservations of numbering capacity for their customers, from within blocks of numbers or codes allocated or reserved to themselves, where this is relevant. ComReg may also make reservations for end-users⁷, where this is appropriate.

- 1 Such reservations may be used where:
 - i the applicant does not want to be identified; or
 - ii the reason for the application should not be divulged prior to application for allocation;
- 2 a reservation may be made:
 - i in anticipation of an application for numbering capacity in accordance with a forecast of use by the applicant, which satisfies the operator concerned;
 - ii against a specific request submitted by any organisation eligible to receive allocations (e.g. for the expansion or growth of existing services to meet specific customer demands or for the introduction of new services);
- 3 an application for reservation should be made to the operator. The applicant shall provide to the operator all relevant information required by Convention 4.2;
- 4 applications for the reservation of numbering capacity shall be treated in confidence by the operator, where the applicant requests this;
- 5 the time period for the operator to respond to a reservation application shall be the same as for responding to a corresponding application for allocation;
- 6 reservations will be time-limited to three calendar months, at which time they expire and the applicant has no further claim on them;
- 7 owners of reservations may re-apply for repeat reservations upon the expiry of existing reservations and they shall have precedence over other candidates for those number(s) so long as the new application follows immediately on from the previous reservation;
- 8 if there is contention from two or more customers for allocation or reservation of a number whose existing reservation has expired then the operator shall use a fair and neutral mechanism to determine the outcome;
- 9 once a reservation exists then that numbering capacity is unavailable for allocation except for the purpose and to the organisation for whom the reservation was made.

⁷ An end-user is the ultimate user or potential future user of the number or code.

6. Allocation of short codes

Short codes are a scarce national resource and not all applicants who could use short codes can be allocated one. Because of this it is necessary to undergo an assessment process before short codes are designated or allocated.

- 1 Adjacent short codes will not normally be issued for use by dissimilar services.
- 2 The following criteria will be taken into account by ComReg in assessing the merit of applications for short codes:
 - i allocation of a short code is clearly in the national interest for social, economic, and/or other important reasons (e.g. emergency calls);
 - ii use of a short code is necessary to enable completion of a call.
Note: This would be the case with Carrier Selection, but not necessarily with Carrier Access. It would also be a consideration for operator services and directory services;
 - iii the service is expected to generate a large volume of “hits” (i.e. high frequency of calls);
 - iv a short code is required for technical reasons.
Note: Generally this means that an alternative technical solution is not feasible. It does not imply that short codes may be used as a cheap alternative to proper technical solutions;
 - v no alternative numbering solutions are feasible;
 - vi a code is needed to allow/facilitate harmonisation with European and/or international numbering approaches;
 - vii no competitive imbalances should be created by the allocation.

7. Responsibilities for notification of number activation

ComReg shall provide notification in writing to the party involved of the details of any allocation or reservation of numbers made to it, in each case where such an allocation/reservation occurs.

It shall be the responsibility of the recipient of each allocation to negotiate with and to notify all relevant Irish operators and, where appropriate, overseas authorities of the implementation of these allocations, within time-scales which are acceptable to the holder and to the operators concerned.

Operators and others to whom number allocations have been made shall advise ComReg of the contact points in their organisations who are to receive notification of the dates for activation of allocated codes and number blocks. ComReg shall maintain a list of such contacts and shall make it available upon request.

Note: while ComReg will maintain data on allocations and reservations on its web site at <http://www.comreg.ie>, this does not relieve operators of their own duty to inform other concerned parties of the status of their allocated numbers.

8. Right to use numbers, number blocks and codes

The rights of operators to use number blocks and of end users to use numbers are summarised separately below. For the purposes of this section ‘numbers’ is assumed to also include short codes.

8.1 The rights of operators to numbers / number blocks

- 1 Numbers are a public resource to be administered for the common good, initially in the form of a primary allocation or reservation by ComReg;
- 2 operators shall have a right to use numbers allocated to or reserved for them, but only in accordance with directions set by ComReg.
Note: in practice, this means in accordance with their Licence conditions, including use of these Conventions.
- 3 no operator shall be entitled to ownership of, or to any other interest in, any number or numbers allocated to that operator, or to any customer thereof.

8.2 The rights of end users to numbers

- 1 Numbers are a public resource to be administered for the common good, initially in the form of a secondary allocation or reservation by an operator to whom a primary allocation or reservation has already been made;
- 2 end-users shall be entitled to retain use of their allocated numbers in all normal circumstances. The recovery of numbers in exceptional cases shall be justified by reference to these conventions;
- 3 end-users shall have a right to use numbers allocated to or reserved for them, but only in accordance with such directions as may be set by the operator and/or ComReg, as appropriate;
- 4 end-users shall have rights of use to telephone numbers that are not subject to frequent misdialling;
- 5 end-users shall have the right to a change of telephone number if an existing number is subject to nuisance or malicious calls. Whether a charge is applied for such a change is a matter for the operator’s discretion;
- 6 end-users shall have the right to have their numbers or addressing information excluded from telephone directories if they so require;
- 7 numbers shall be considered as non-proprietary data to which no particular organisation or institution or individual may claim ownership.

9. Audit information required from operators

It is necessary that operators assist ComReg in carrying out its functions by providing information relating to their services and networks, on an ongoing basis. This information will be provided routinely on request from ComReg by recipients of allocations, or otherwise when important changes occur in the services or networks. The format and content of presentation will be specified by ComReg, which may also revise it from time to time.

- 1 Operators shall provide the following information upon request to ComReg:
 - i numbers of connected customers, for each category defined by ComReg in the audit request;
 - ii total of unused and available numbers for each such category;
 - iii numbers reserved within existing DDI groups;
 - iv numbers reserved for internal use (e.g. as service numbers or test numbers);
 - v identification of any 'quarantined' numbers, with comments where relevant;
 - vi planned utilisation figures for next 12 months;
 - vii details of all ported numbers;
- 2 this information shall be presented as an up to date 'snapshot' of the network or service (i.e. all information is to be broadly synchronised in time);
- 3 ComReg should maintain full security and confidentiality over this information while it remains in a form where the data and/or its source may be identifiable, unless the audit request expressly specifies that it will be published;
- 4 the information collected may be published (normally in summary format) after aggregation with similar and/or related data from other sources, depending on the purposes of the audit.

10. Charging Fees for Numbering Allocations

ComReg considers there is merit in charging fees to licensees for allocations of numbers, number blocks or codes. No charge is made at present but this situation may change in the future. Licensees shall not charge subscribers for allocations of numbers or codes, except in accordance with any direction from ComReg authorising charges.

11. Conditions of use for numbers and short codes

11.1 General conditions

The same conditions described for allocations in this and in the following sub-sections shall also be applicable to reservations, as appropriate.

- 1 Allocations shall be used only for the purposes specified in their applications. Service descriptions for the various code/number types are included as Annex 7.
In particular, number holders shall ensure that the numbers allocated to them are not used for the provision of Premium Rate Services unless they are Premium Rate Numbers, allocated and used in accordance with Section 11.4 below (see definition in that Section);
- 2 allocations shall be controlled by the original applicant. This does not prevent the recipient making sub-allocation to others from within the numbering range, provided that the sub-allocation is for uses specified in the application and is in compliance with the Conventions;
- 3 the holder of an allocation shall maintain an up to date record of the percentages of numbers in use and reserved;
- 4 the holder of an allocation shall maintain a record of numbers that have been ported (i.e. at end users' request) to other operators;
- 5 numbers, number blocks or codes shall not be traded. Holders of primary allocations shall take steps to implement this convention when incidences of contravention by their holders of secondary allocations come to their attention;
- 6 apart from Number Portability, allocated numbers, number blocks or codes shall not be directly transferred between assignees without the specific approval of ComReg; such transfer can normally only occur by withdrawal and re-allocation;
- 7 allocations shall be used in accordance with any additional specific conditions set down by ComReg, including any classifications by type or maximum tariff;
- 8 at the time of number allocation or at any time thereafter ComReg may, at its discretion, apply additional specific conditions of use to an allocation if it considers that it is in the national interest to impose such conditions. The conditions will be consistent with these Conventions and will relate to the management and use of allocated numbering capacity. The procedure/recourse set out in Convention 4.3-4 shall apply to the making of conditions;
- 9 the maximum charge to be applied to calls to geographic numbers shall not exceed the billing operator's notified tariff for geographic rates;
- 10 where a tariff for telecommunications services includes a distance-dependent element, it shall be possible for a caller to establish the price for a call to any particular destination from the codes and/or the leading digits of the local number in the geographic numbering range used;
- 11 calls to geographic numbers are usually routed to a fixed destination in a discrete geographical area. Calls may also be forwarded to other destinations provided that:
 - a) the caller is only required to pay the billing operator's standard tariff for the original Irish geographic destination; and
 - b) they are forwarded in a manner which does not restrict the ability to implement Number Portability;
- 12 numbers and/or blocks of numbers must be activated within the time period specified by the allocating body (Commission or operator). Otherwise the allocation should be reclaimed;
- 13 disruption to users resulting from number changes shall be minimised;

- 14 numbers allocated to an end-user involved in change of ownership (e.g. through merger, take-over or acquisition) may be retained; this is not deemed to be number trading or number transfer;
- 15 numbers allocated to a company or individual moving premises within an MNA may be retained if the primary allocation holder is prepared to support this.
- 16 services shall not be introduced which rely on or encourage the use of over-length numbers (i.e. numbers that include extra non-allocated digits) and provision shall not be made in networks specifically to encourage or facilitate the use of over-length numbers.
Note: End-users of number allocations should only use them in the format allocated i.e. without the inclusion of extra digits.

11.2 Subscriber numbers usage

11.2.1 Usage conditions after primary allocation

- 1 Allocation only implies the granting of rights of use; no proprietary rights are granted;
- 2 the legitimate purpose of usage of allocated numbers is as defined in section 11, above;
- 3 the assignee shall provide information on usage to the NPM;
- 4 the assignee shall not use network-specific telephone numbers that may cause interference with the national telephone numbering scheme;
- 5 any relevant conditions of usage, above, shall be applied in turn to subscribers when making secondary assignments.

11.2.2 Usage conditions after secondary allocation

The conditions of use applied to secondary assignments shall be consistent with these Numbering Conventions.

11.2.3 Usage of “bursty” numbers

- 1 Bursty traffic applications shall only be terminated on numbers allocated in the National Numbering Scheme for this type of application;
- 2 operators may withdraw or suspend service from any Bursty service that uses numbers outside the ranges allocated for Bursty applications;
- 3 operators shall, if so requested by ComReg, immediately withdraw or suspend service from Bursty services operating outside the ranges allocated for Bursty applications.

11.2.4 Usage of Fixed Mailbox Numbers

1. Access code “080” is designated for Fixed Line Mailbox Services⁸ in which each individual customer subscriber number has a directly associated mailbox number;
2. A customer reaches its mailbox using this mechanism by dialling:

⁸ More specifically, the number ranges 080 X Y.....Y where X =1, 2, 4, 5, 6, 7, and 9 are designated for fixed line diallable mailbox services.

-
- 08 + STD Code + Subscriber Number, from anywhere within Ireland (whether local or long-distance).
Note: this corresponds to 080+NDC⁹+subscriber number, though the description above is more suitable for use in communications to Subscribers;
 - +353+8+STD Code+Subscriber Number from anywhere abroad
Note: this corresponds to +353.80+NDC⁹+subscriber number, though the description above is more suitable for use in communications to Subscribers;
3. A caller using the access code 080 to access its mailbox service from a fixed line within Ireland shall not be charged a rate exceeding the national tariff rate of the operator providing the mailbox service;
 4. A caller using the access code 080 to access its mailbox service from abroad or from a mobile source shall not be charged a higher rate than that for a call to the corresponding subscriber number, except insofar as foreign operators impose higher charges in respect of such calls.
Note: The availability of access from abroad is considered to be a fundamental feature of “080” mailbox services;
 5. Calls to fixed line mailbox services, using the access code 080, shall be clearly identified on itemised bills. The information provided shall include number, date, time, duration and charge in accordance with Decision Notice D9/01¹⁰, and shall also identify that the call was to a mailbox service;
 6. Mailboxes are, by definition, repositories and should not normally originate calls¹¹. Operators devising innovative mailbox applications involving call-origination shall seek the approval of ComReg for this feature and for its modus-operandii, and shall not bring it into service without approval. *Note: If exceptional circumstances justify approval, it will be granted only on the basis that calls originating from such a mailbox feature will be included in both the “national” and “all calls” options for Carrier Pre-Selected Services¹²;*
 7. Irish operators providing 080 mailbox facilities to their customers shall take bilateral action with the foreign entities concerned to support any customers affected by potential difficulties¹³ in respect of calls from abroad, consequential to the extended number length of mailbox numbers. In the event of major difficulties, the operators shall notify ComReg and assist it to take whatever corrective action it deems to be necessary;
 8. Mailbox access numbers shall only be used for the purpose of accessing mailbox services. They are specifically not to be sub-allocated as normal subscriber numbers;
 9. Number Portability requirements for mailbox numbers are described in Section 11.10 below.

⁹ Without the trunk prefix.

¹⁰ Document ODTR 01/53: “Itemised billing by Telecommunications operators”, D9/01.

¹¹ However, there is no reason why calls could not be forwarded from mailbox numbers using call-forwarding services.

¹² CPS is a call originating service.

¹³ Fixed line 080 mailboxes currently use the longest numbers for any Irish service and there is a risk of initial difficulties for subscribers in respect of calls from abroad (e.g. if some foreign operators fail to set up their systems appropriately, despite notification published by ITU-T).

11.3 Conditions of Use for Specific Number Types

11.3.1 Short codes usage

- 1 The conditions in 11.2 also apply to short codes. Specific conditions may be applied at the time of allocation;
- 2 Calls to the customer service codes 190X shall be free of charge to the caller, regardless of the network from which the call is originated.

11.3.2 Freephone Usage

Network operators shall not charge originating callers for calls to Freephone (1800) numbers, regardless of which network operators, service providers or Freephone number holders are involved in the calls.

11.3.3 Shared Cost numbers Usage

- 1 The charge made by network operators to callers to 1850 numbers shall be independent of the duration of the call, and shall in no case exceed the retail charge for a 5 minute call calculated at the appropriate local tariff rate of the network from which the call is made;
- 2 the charge to callers to 1890 numbers shall in no case exceed the retail charge for a call of the same duration calculated at the appropriate local tariff rate of the network from which the call is made.

11.3.4 Universal Access number Usage

Network operators shall not charge originating callers to 0818 numbers more than the retail charge for making the call if calculated at the standard national tariff rate of the network operator from which the call is made.

Note: 'Standard' in this case means not taking account of weekend offers or other special prices.

11.3.5 Personal Number Usage

- 1 The charge to callers of 0700 numbers shall not exceed the retail charge for making the call to the Personal Numbering service provider alone, and shall not include any of the cost of providing a call from the service provider to the called party, or any of the cost of providing the Personal Numbering service;
- 2 There shall be no direct or indirect revenue sharing or equivalent rewards (or the prospect thereof) from the Personal Number Service Provider or any involved network operator to the called customer for calls to 0700 Personal Numbers;
- 3 Premium Rate services shall not be offered on 0700 personal numbers.

11.3.6 Directory Access number Usage

118XX directory information access codes shall be used only for the provision of directory enquiry services and relevant value added services.

11.3.7 Use of Network-Use Short Codes (NUSC)

Different network operators may use these codes for different applications, thereby facilitating the introduction of new network-specific services, while still achieving efficiency of code use.

Note: Nevertheless, where operators are introducing services which are substantially the same as those offered in another network, they are encouraged to use the same code(s) as that (those) used by the other operator, so as to help customers associate the service with the code(s) concerned.

- 1 As the number of NUSCs is limited, network operators shall prioritise the services earmarked for each such code;
- 2 ComReg shall be notified of the intention to open access to a new service using any NUSC, at least fourteen days prior to service implementation;
- 3 the use of any NUSC shall at all times conform with the National Numbering Scheme, and shall be subject to all conditions of these Numbering Conventions, including conditions relating to change or withdrawal of codes;
- 4 NUSCs are dialled codes, which shall only be used to provide access to services that the access network is licensed to provide, or services that are supplemental to them;
- 5 tariffs for calls from any fixed network phone to any NUSC shall not exceed the cost of a local call on the same network;
- 6 tariffs for calls from any mobile phone to any NUSC shall not exceed the tariff charged for a mobile-to-mobile call on the same network;
- 7 NUSCs shall not be used to provide unfair competition vis-à-vis non network operators, using shorter dialling access to services that are capable of being adequately provided for, using other parts of the numbering scheme.

11.3.8 Text Messaging Short Codes

- 1 Network operators shall not charge originating callers for sending text messages to mobile 50XXX numbers, regardless of which network operators or service providers are involved in the calls;
- 2 the charge to customers for text messages sent to mobile 51XXX numbers shall in no case exceed the published retail cost of a standard SMS text message of the network from which the message is originated;
- 3 Premium Rate Text Messaging Short Codes are those in the ranges 53XXX to 59XXX;
- 4 Premium Rate Text Messaging Short Codes shall be allocated only to applicants that are licensed Network Operators or independent Service Providers for the provision of Premium Rate Text Messaging Services.
Note: Premium Rate Text Messaging Services, are services where part of the overall charge paid by the consumer to the originating network operator is passed on by a network operator, directly or indirectly, to a service provider or individual, organisation or company that participates in the service;
- 5 applicants for 5XXXX short codes shall be current holders of an agreement with the Regulator of Premium Rate Services, RegTel, or have signed a corresponding agreement providing for such regulation with a body that holds such an agreement with RegTel.
Note: For the purposes of this section only, the terms “Network Operator” and “Service Provider” shall have the meanings defined for them in the current version of any Code of Practice issued for text messaging purposes from time to time by RegTel;
- 6 the charge to customers sending text messages to mobile numbers in the range 53000-56899 (Basic Premium Rated services) shall in no case exceed €0.80, including VAT;
- 7 entities authorised to carry out secondary allocation of 5XXXX short codes shall ensure that any unlicensed entities to which they allocate text messaging short codes are obliged to meet all relevant conditions of these National Numbering Conventions;
- 8 adult type text messages (e.g. those associated with violence or gambling or those of a sexually suggestive or titillating nature, known as “closed services”) shall be provided only using 59XXX numbers or 1559 Premium Rate Numbers;

- 9 the charge for customers sending messages to any Premium Rate text messaging services shall be clearly stated by Premium Rate Service Providers in all promotions.

11.4 Use of Premium Rate Numbers

- 1 Premium Rate Numbers shall be allocated only to applicants which are licensed Network Operators or Service Providers for the provision of Premium Rate Services.
Note: Premium Rate Services, which are regulated under SI No 194 of 1995, are services where part of the overall charge paid by the consumer to the originating network operator is passed on by the terminating network operator, directly or indirectly, to a service provider or individual, organisation or company that participates in the service;
- 2 they shall be current holders of an agreement with the Regulator of Premium Rate Services, Regtel, or have signed a corresponding agreement providing for such regulation with a body that holds such an agreement with Regtel.
Note: For the purposes of this section only, the terms “Network Operator” and “Service Provider” shall have the meanings defined for them in the current version of any Code of Practice issued from time to time by Regtel;
- 3 Licensed network operators and service providers shall ensure that any unlicensed entities to which they allocate Premium Rate Numbers are obliged to meet all relevant conditions of these National Numbering Conventions;
- 4 adult type Premium Rate services (e.g. those associated with violence or gambling or those of a sexually suggestive or titillating nature) shall be provided only using 1559 numbers;
- 5 the charge for calls to all Premium Rate services shall be clearly stated by Premium Rate Service Providers in all promotions.

11.5 Geographic number usage - Definition of areas

- 1 The boundaries of geographic NDC areas and minimum numbering areas shall be as specified by ComReg from time to time¹⁴;
- 2 geographic numbers may only be used within their designated geographic numbering areas.
Note: Call forwarding is not considered to be a violation of this Convention.

11.6 Mobile Numbers and Mobile Codes Usage

- 1 ComReg is responsible for the national administration of all mobile communications numbers, including subscriber numbers (i.e. E.164 numbers), and International Mobile Subscriber Identities (IMSI);
- 2 mobile communications numbers shall only be used for the purposes for which they are allocated (e.g. E.164 numbers as subscriber numbers, mailbox numbers etc.);
- 3 mobile network access codes (NDCs) will only be allocated from the 08X series. Access codes for Paging networks will also be allocated from this series;
- 4 the allocation of Mobile Subscriber Identification Numbers (MSINs), which are part of the GSM and UMTS IMSI structure, is currently carried out directly to their subscribers (i.e. within SIM cards) by individual operators who have been allocated Mobile Network Codes (MNCs);

¹⁴ These boundaries will be defined by the then current versions of maps which are shown in document ODTR 98/42, - or its replacement. Note: ComReg can identify more precise boundaries, when necessary, using electronic maps.

- 5 Mobile Network Codes (MNCs), which are inserted following the Irish Mobile Country Code 272¹⁵, shall be allocated by ComReg. Currently issued MNCs are all of 2-digit length.
Note: future allocations of MNCs may be of the 3-digit type, if this is found to be possible¹⁶, to avoid risk of future scarcity;
- 6 the allocation to an operator of a GSM or UMTS MNC and authorisation to use it in conjunction with the Irish Country Code does not imply any reservation of corresponding numbers for TETRA use as (T)MCC + (T)MNC, or vice versa;
- 7 in principle, only one IMSI MNC will be issued per GSM or UMTS network. Any request for an additional MNC should be supported by a fully justified case. *Note: At present, no situations are foreseen where an extra MNC allocation would be permitted for GSM/UMTS;*
- 8 MSINs shall be of 10-digit length when used with 2-digit MNCs.
Note: they will be of 9-digit length if used with 3-digit MNCs at a later stage.

11.7 Usage Conditions for Data Network Identification Codes (DNICs)

Note: DNICs are used for the provision of data services on public data networks where there is a need to interconnect with other public networks. Numbers following DNICs are used for terminal identification rather than for identification of users. The DNIC and Terminal identification structure for Irish public networks is shown in Annex 5.

- 1 Unless otherwise specified, all appropriate conditions of use for telephone numbers shall also apply to DNICs;
- 2 applications for DNICs shall include identification of any other DNICs or parts of DNICs which have been assigned to them by another country or by ITU-T, or for which the applicant has an application pending in another country or with ITU-T.
Note: The NPM will assess these as alternative resources available to the applicant, which might provide adequate capacity for the intended usage;
- 3 DNICs allocated by the NPM may be used for networks which extend outside Ireland. However, DNICs will not be allocated to networks which have not got nodes within the national territory and where no evidence can be shown of plans to base one or more nodes inside the national territory;
- 4 In view of the potential risk of DNIC exhaustion (with only 10 network identifiers possible behind the Irish Data Country Code), the NPM will limit future allocations to 10% of the capacity behind a DNIC, depending on planned network size. Data network operators shall engineer their systems to carry out routing analysis on at least the four DNIC digits and the first TI digit;
- 5 DNICs will be issued upon (justified) request, on an individual basis to public data network operators of substantial size, until at least 7 of the 10 codes are in use. Thereafter, the NPM will consider the introduction of DNIC sharing with existing DNIC holders for new applicants. Existing holders will be given up to 12 months warning, wherever possible, but at least 6 months warning of the imminence of such sharing arrangements, in order to make any necessary network adjustments.

¹⁵ The MCC 272 is used for GSM and will also be used for UMTS.

¹⁶ GSM standards, for example, impose 2-digit MNCs. ECTRA is at present studying MNC lengths and the difficulties of operating 2 and 3-digit MNCs under one Country Code.

11.8 Usage Conditions for International Signalling Point Codes (ISPCs)

Note: ISPCs are used by network operators within telephone networks for identification of network nodes e.g. switches, to allow communication between the network nodes. The structure and the use of ISPCs are defined in ITU-T Recommendation Q.708; for Ireland this will be 2-ABC-D, where ABC are single digits representing the country and network and D is a single digit (the "identification code") identifying the relevant switch.

- 1 The ITU-T should be notified by the NPM of ISPC allocations and withdrawals within one month of such an event. The notification should comprise the assigned ISPC and the information received from the applicant in respect of the applicant's identity, as well as the unique identity of the concerned signalling point (town and/or name). Subsequent changes in this information should also be notified to the ITU-T;
- 2 the relevant signalling point must have or be expected shortly to have at least one Message Transfer Point (MTP) signalling relationship with other signalling points having ISPCs in the international signalling network;
- 3 ComReg shall be notified, within one month, of any change in ISPC-related information previously provided to it by assignees;
- 4 the signalling point shall comply with relevant ITU-T Recommendations and relevant ETSI¹⁷ deliverables;
- 5 assigned ISPCs shall be activated within one year of the date of allocation;
- 6 assigned ISPCs shall be used efficiently;
- 7 when an assigned ISPC is no longer in use, the assignee shall inform the NPM of this within one month;
- 8 the concerned signalling points shall be physically located within the national territory;

11.9 Usage Conditions for National Signalling Point Codes (NSPCs)

Note: NSPCs are used by network operators within national telephone networks for identification of network nodes e.g. switches, to allow communication between the network nodes. The structure and the use of NSPCs are briefly defined in ITU-T Recommendation Q.708.

- 1 The signalling point shall comply with any relevant ITU-T Recommendations and relevant ETSI¹⁷ deliverables;
- 2 assigned NSPCs shall be activated within one year of the date of allocation;
- 3 assigned NSPCs shall be used efficiently;
- 4 when an assigned NSPC is no longer in use, the assignee shall inform the NPM of this within one month;
- 5 when any change occurs that affects NSPC-related information previously provided by assignees, they shall notify the NPM of this within one month of the change.

¹⁷ European Telecommunications Standardisation Organisation.

11.10 Portability of numbers

- 1 All fixed network operators with Geographic or Non-geographic number allocations are obliged to offer full Operator Number Portability to their customers. In the case of geographic numbers, Location Portability may also be offered by an operator, but only within the MNA for which the number was originally allocated.
Note: Network operators are expected to follow agreed industry procedures in implementing number portability, wherever such processes exist¹⁸;
- 2 GSM-based mobile operators shall offer subscriber mobile number portability to their customers. This requires that the (E.164) subscriber number but not the NDC, shall be portable between operators. *Note: In the future, as described in Decision Notice D1/01, they will be required to provide full mobile number portability to their customers;*
- 3 Where a fixed line customer, being the sole resident of any already allocated complete 1,000-number block and using 25 % or more of that block requests this, the block may be re-allocated to a different operator (i.e. rather than ported);
- 4 Recipient operators accept responsibility for the management of their imported numbers, vis-à-vis the NPM, taking over this role from the corresponding donor operators.
Note: this does not absolve any end-user from ultimate responsibility for proper usage of numbers under its control;
- 5 Number Portability occurs within fixed networks and within mobile networks but not between those network types. For fixed networks it currently applies to geographic numbers, Freephone numbers, shared cost numbers, Premium Rate Numbers, Personal numbers, Universal Access numbers and Internet access numbers¹⁹ based on 189X;
- 6 Porting of a geographic Subscriber Number automatically implies simultaneous porting of the corresponding mailbox number to the same Recipient Operator, in order to keep the porting processes and incoming mail alerts simple. This imposes no obligation on the Recipient Operator to provide either the same mailbox facilities or indeed any mailbox facilities to the porting customer, but Recipients should inform potential porting customers of the differences in service that will occur after a port;
- 7 For a ported geographic number pair (i.e. subscriber number + mailbox number), the once off transaction cost charged by the exporting operator shall not be greater than the transaction cost for a single number;
- 8 For ported geographic mailbox numbers, a conveyance charge may apply for each established call, but not for un-established calls where for example the recipient operator does not offer a mailbox service.

¹⁸ An extensive set of processes has already been developed and agreed.

¹⁹ Internet access numbers are portable between networks insofar as ISPs can move between network operators. Because of the traffic volumes involved and likely need for new interconnection paths between networks, Internet access number portability will be subject to special processes and timescales.

11.11 Withdrawal, quarantine and change of numbers

11.11.1 Withdrawal or change of primary number allocations

- 1 Withdrawal shall only be carried out for a limited set of reasons. These are listed in Annex 4;
- 2 the overall societal costs of a withdrawal shall be carefully considered;
- 3 the procedure for withdrawal shall allow the holder to clarify its position before a decision is taken;
- 4 when a change of active telephone numbers is imposed, the users of those active numbers shall have the right of minimum disruption;
- 5 operators and others to whom allocations of numbering capacity have been made are required to apply to ComReg:
 - i to transfer the block or code to another entity; or
 - ii to make any changes to the purpose or use of a numbering allocation; or
 - iii to make any changes which relate to conditions of use placed on the allocation.

11.11.2 Withdrawal or change of secondary number allocations

The conditions for withdrawal of secondary allocations shall correspond (as appropriate) to those in 11.11.1 above, relating to withdrawal of numbers from assignees of primary allocations.

11.11.3 Quarantine of numbers

The following shall apply to all numbers and short-codes. It shall apply to primary, secondary, and subsequent allocations:

- 1 when a number allocation that has been in use is cancelled by the assignee, or is recovered or replaced by the allocator, then that number shall be placed in quarantine;
- 2 while a number is in quarantine, it can not be re-allocated to anyone but the previous assignee;
- 3 an assignee may waive its right to have a number quarantined, though the allocating body should carefully weigh the risks of early re-use, before deciding to take advantage of this;
- 4 the normal quarantine period shall be one year²⁰;
- 5 ComReg may override any of the above Conventions where it deems that the needs of the National Numbering Scheme require this.

²⁰ Mobile number portability may be one exception to this.

12. Use of Numbers and alpha-numeric characters

12.1 Standards for alpha-numeric keypads

- 1 The Irish numbering scheme shall use the decimal character set 0-9 for all number allocations;
- 2 however, letters may appear alongside numbers on terminal apparatus, which could support the use of more memorable and user-friendly 'numbers'. ComReg wishes to facilitate the consistency of correspondence between numbers and letters for such purposes;

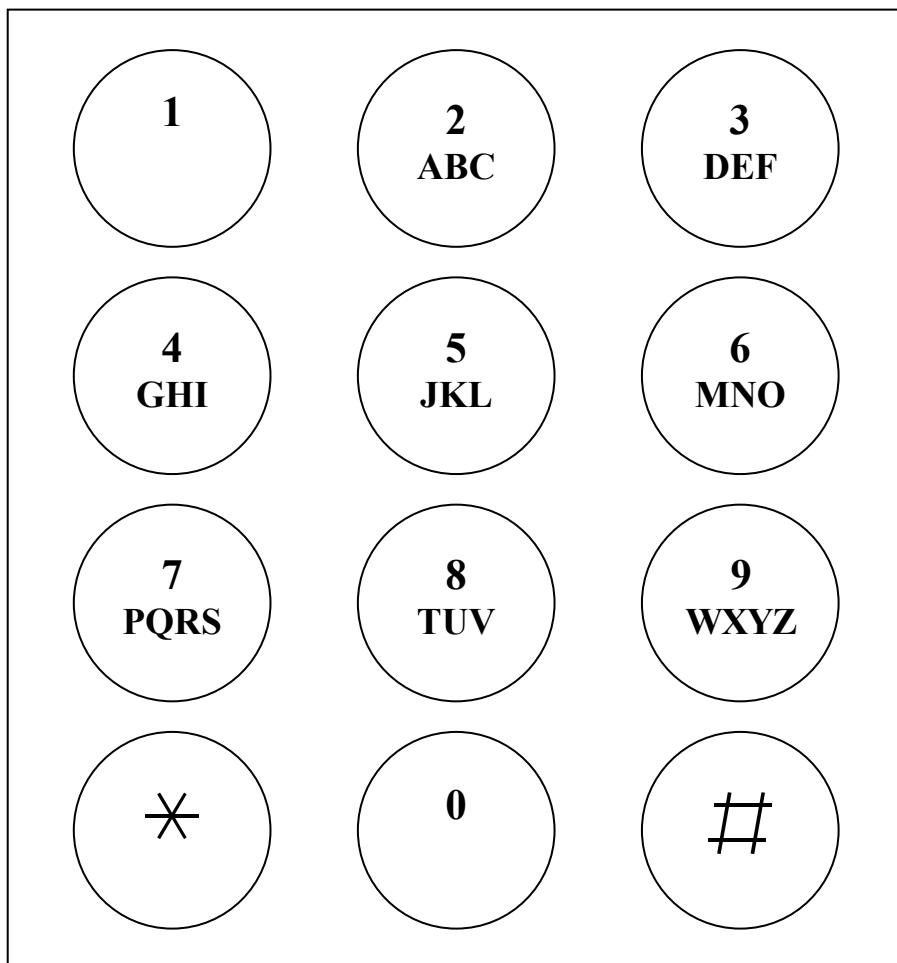


Figure 1: 12-button keypad arrangement showing alphanumeric relationships

- 3 nevertheless, ComReg will accept applications for and make allocations (or reservations) using only numeric (decimal) characters. The correspondence between letters and numbers will be treated by ComReg as only an aid to making numbers more memorable;
- 4 as the common use of such alphanumeric characters will only be helpful to users if uniformly applied, ComReg strongly recommends use of a standardised set based on ITU-T Recommendation E.161 Option A. Figure 1 above shows the preferred correspondence of alpha characters to numerics on individual buttons. Use of other alphanumeric relationships may result in misdialling from existing equipment, particularly when using letters O, Q and Z.

12.2 Presentation of Numbers

Consistent presentation of telephone numbers helps to avoid dialling errors and allows compact presentation in telephone directories. The following presentation of telephone numbers is recommended for use on stationery, directories and other documentation, in respect of PSTN, ISDN and Mobile numbers²¹:

Table 1: Presentation of geographic or mobile numbers

Subscriber number length	National numbers	International numbers	Fixed Mailbox numbers
5 digits	(0+NDC ²¹) 12345	+353 NDC 12345	+353 80 NDC 12345
6 digits	(0+NDC ²¹) 123 456	+353 NDC 123 456	+353 80 NDC 123 456
7 digits	(0+NDC ²¹) 123 4567	+353 NDC 123 4567	+353 80 NDC 123 4567
8 digits	(0+NDC ²¹) 1234 5678	+353 NDC 1234 5678	NA

Notes: Periods (full stops) may be used in place of spaces in informal documents (e.g. advertising), though the latter is preferred (in accordance with ITU Recommendation E.123). Usage should not be mixed. The fixed mailbox numbers may alternatively be shown as 8+STD (e.g. 8 021 for a Cork subscriber's mailbox) instead of 80+NDC (e.g. 80 21).

Table 2: Presentation of service numbers

Typical Service Examples	Format
Freephone	1800 123 456 or Freephone 1800 123 456
Shared Cost	1850 123 456

12.3 Directory Information Services

Directory Information Service Providers should only supply numbers from the National Numbering Scheme to enquiring customers in their correct length format, as issued by the NPM. The use or provision of over-length numbers is not permissible as this could cause difficulties or even failures for networks, processes and terminal equipments.

Note: Annex 5 contains examples of how numbers should be presented.

²¹ NDC is the National Destination Code, which may alternatively be called the service or network access code for mobile numbers (e.g. 85, 86 or 87).

13. Mandatory dialling procedures

13.1 Local, national and international calls

Callers use the telephone number in different ways when making calls. As Figure 3 (Annex 5) illustrates, there are three different dialling procedures:

- 1 for calls into or out of Ireland the caller dials an international prefix (most commonly 00) followed by the country code, the NDC and the subscriber number.
Note: The country code allocated by the ITU-T to Ireland is 353;
- 2 for calls within Ireland the caller dials 0 (the trunk prefix) followed by the NDC and the subscriber number (i.e. full national dialling);
- 3 for local calls within the same NDC area the caller need only dial the subscriber number
Note: the caller of course also has the option of using full national dialling in this case.

Network operators shall engineer their systems to accept local calls made using national dialling (i.e. prefixed by 0 and the local NDC²²), or local dialling (i.e. using only the subscriber number).

The existing numbering arrangements are summarised in Annex 5.

Note: The National Numbering Scheme is available on ComReg's web site at <http://www.comreg.ie>.

13.2 Calls to Northern Ireland

13.2.1 use of the NI access code

Normal usage in the Irish Republic is that calls to Northern Ireland should use national dialling, based on the NDC 048 followed by the current UK 8-digit subscriber number. Use of this code ensures that billing occurs at a rate appropriate to national destinations.

13.2.2 use of the UK country code

Calls from the Irish Republic to Northern Ireland using the full international dialling and access codes (0044 28), followed by the current UK 8-digit subscriber number shall be possible from all networks. In this case, charging might occur at a rate which is different from that used for nationally dialled calls.

²² National Destination Code (See Annex 5 for explanation)

14. Publication of dialling and numbering scheme Usage

ComReg will maintain an up to date plan of allocated number ranges and codes on the ComReg web site at <http://www.comreg.ie>. The information will be refreshed following an allocation. Copyright of this information belongs to ComReg but use for own purposes (i.e. not for resale) is unrestricted.

15. Revision of the National Numbering Conventions

- 1 Reviews of these Conventions will be undertaken from time to time as appropriate. The target is for review at 12-month intervals, unless interim changes have meanwhile been carried out, in which case the period may be extended accordingly;
- 2 ComReg may from time to time amend or withdraw a Convention already published or publish additional Conventions within the scope of or outside a formal review, as appropriate. This will usually occur after consultation with interested parties (usually including members of NAP);
- 3 ComReg shall afford a reasonable period, being not less than 28 days, for interested parties to make representations;
- 4 ComReg shall give reasonable notice, typically being at least three months but in any case not less than one month, to operators to comply with any such amendment or withdrawal of a Convention;
- 5 requests to undertake a review, amend or replace a Convention, or add a new Convention, may be submitted at any time by any operator, user or other, and these requests shall be considered by ComReg;
- 6 In deciding on any subsequent change to Conventions, ComReg shall have regard to:
 - i the Guiding Principles of these Conventions;
 - ii the provisions of relevant licence conditions;
 - iii the views of the applicant and other interested parties;
 - iv International developments, including Standards'; and
 - v any other matters that ComReg regards as relevant.

Annex 1: Eligibility Criteria for Applicants

The eligibility criteria for applicants for allocation or reservation of numbers, whether geographic numbering, non-geographic numbering, mobile numbering, access codes or short codes, will be described individually in published ComReg documents. These documents will be made available on the ComReg web site at <http://www.comreg.ie>.

A1.1 Geographic Numbering Criteria

Only holders of a General Telecommunications Licence (under Section 111(2) of the Postal and Telecommunications Services Act, 1983, as amended) shall be eligible to apply for primary allocation or reservation of geographic numbers. In addition the following supporting information will be sought from the applicant:

- 1 evidence of technical capability to implement the specified services. This includes existence of proprietary physical infrastructure dedicated to supporting the relevant numbering areas, or definite arrangements for the provision of or access to non-proprietary infrastructure;
- 2 evidence of an existing customer base, or a base of potential customers who have expressed interest in the services, in each area of interest;
- 3 a summary of the market plan for the proposed services, including launch dates;
- 4 a forecast of expected utilisation for the requested numbers, over a period of at least one year;
- 5 any other information deemed relevant by ComReg.

A1.2 Non-Geographic Numbering Criteria

Only holders of a General Telecommunications Licence (under Section 111(2) of the Postal and Telecommunications Services Act, 1983, as amended) shall be eligible to apply for primary allocation or reservation of non-geographic numbers. In addition the following supporting information will be sought from the applicant:

- 1 a description of the planned services;
- 2 evidence of technical capability to implement the services;
- 3 the dates by which the allocation is required;
- 4 a forecast of expected utilisation of the requested numbers, over a period of at least one year;
- 5 any other information deemed relevant by ComReg.

A1.3 Mobile Numbering Criteria

Holders of a Mobile Telecommunications Licence pursuant to Section 111(2) of the Postal and Telecommunications Services Act, 1983, as amended shall be eligible to apply for a Mobile Network Code (MNC) and for primary allocation or reservation of mobile numbers. In certain circumstances, holders of a General Telecommunications Licence (under Section 111(2) of the Postal and Telecommunications Services Act, 1983, as amended) may also be eligible to apply for these. In addition the following supporting justification will be sought from the applicant:

- 1 evidence of technical capability to implement the specified services. This includes existence of adequate proprietary physical infrastructure, or definite arrangements for the provision of or access to non-proprietary infrastructure;
- 2 evidence of an existing customer base, or a base of potential customers who have expressed interest in the services to be offered;

- 3 a summary of the market plan for the proposed services, including launch dates;
- 4 a forecast of expected utilisation for the requested numbers, over a period of at least one year;
- 5 the usage status of all existing allocations;
- 6 any other information that ComReg may, from time to time, deem appropriate.

A1.4 Carrier Access / Carrier (Pre)Selection Code Criteria

Carrier access short codes, carrier selection short codes and carrier pre-selection (CPS) short codes are all currently utilised to access Irish telecommunications networks. These codes support the use of network-to-network-interfaces (NNI) to allow Irish telecommunications users to reach their chosen network providers.

The allocation format of these codes is 13ABC for carrier access and carrier selection, where the ABC element is specific to the operator concerned. Digit A can be 0-8.

The allocation format is 139BC for CPS, where the BC element is specific to the operator concerned. *Note: Most 13ABC codes with digit C value '0' have been retained to allow for possible future expansion.*

Only holders of either a Basic or a General Telecommunication (under Section 111(2) or 111(3) of the Postal and Telecommunications Services Act, 1983, as amended) shall be eligible to apply for the allocation or reservation of carrier access, carrier selection and / or CPS codes. The following conditions will apply and the following supporting information will be sought from the applicant:

- 1 only one carrier access, one carrier selection and one CPS code will be allocated to any telecommunications service provider at the present time. However the situation may be revised in the future;
- 2 applicants shall be required to justify their requirements for these access codes based on their level (or planned level) of provision of telecommunications services to the public;
- 3 all eligible applicants shall have equal access to available codes in the 13ABC range (carrier access, carrier selection and CPS);
- 4 an applicant for any of these access codes shall (at least initially) support network to network interface (NNI) between its network and the public switched telephone network;
- 5 these codes shall only be used for the provision of telecommunication access services to the public via a NNI, and in accordance with ComReg Documents 98/18 and 99/29, or their replacements from time to time²³;
- 6 all operators using these access codes shall support dialling of both '112' and '999' designated emergency access codes in their systems;
- 7 ComReg may request such additional information as it, from time to time, deems appropriate.

A1.5 Number Portability Routing Prefix Criteria

NP Routing prefix codes are utilised for the routing of calls to ported numbers. The prefixes are 7-digit in length and of the format 175DXXX, where XXX identifies the terminating operator's switch and the value of D is 1 for non-geographic numbers, a digit in the range 2 to 8 (incl.) for geographic numbers and 9 for mobile numbers.

²³ Superseded documents are so indicated on the ComReg web site at www.comreg.ie.

Only holders of either a Basic or General Telecommunication License (under Section 111(2) or 111(3) of the Postal and Telecommunications Services Act, 1983, as amended) or a Mobile Telecommunications License pursuant to Section 111(2) of the Postal and Telecommunications Services Act, 1983, as amended shall be eligible to apply for the allocation or reservation of Number Portability routing prefix codes. The following conditions will apply and the following supporting information will be sought from the applicant:

Note: ComReg may request such additional information as it, from time to time, deems appropriate.

- 1 only one Non-Geographic Number Portability (NGNP) routing prefix code will be allocated per operator;
- 2 only one block of 100 Geographic Number Portability (GNP) routing prefix codes will initially be allocated per operator;
- 3 the NP routing prefixes must not be used for calls to non-ported numbers (e.g. to route a call on a non-ported number to the number block holder or between networks)²⁴;
- 4 a special routing prefix 1750 has been allocated for use by network operators within the confines of their own networks. This shall not be used for calls passed across an interconnect to another network operator;
- 5 applicants will usually be allocated their routing codes along with a notification that they will be required to support number portability. They may be required to justify their requirements for these routing codes based on their level (or planned level) of provision of telecommunications services to the public;
- 6 all eligible applicants shall have equal access to codes available for allocation in the 175DXXX range;

A1.6 Directory Information Access Code Criteria

Applicants for allocation or reservation of directory information access codes shall justify their requests as specified in ODTR Doc. 98/53. Specifically, supporting information provided by the applicants shall include the following:

- 1 a description of the services planned, including (at outline level) expected growth patterns;
- 2 evidence of technical capabilities for the implementation of own services;
- 3 a description of the degree to which any services to be offered rely on or are a re-direction / re-routing of directory information services fundamentally provided from elsewhere;
- 4 a summary of the applicants marketing plan for the intended services, including launch dates. This should include a description of any arrangements already made, and identification of which telecommunications network operators will promote the applicants services;
- 5 plans, preparations or completed actions for accessing / accumulating comprehensive database information from any Irish network operators;
- 6 availability of or definite plans for access to a call centre suitably equipped to handle directory information services;
- 7 quality of service targets;
- 8 timescales for commencement of service following the allocation/reservation of code(s);

²⁴ An exception is permitted where operators may use the prefix for routing of non-ported calls strictly within the confines of its own network boundaries.

- 9 any other information deemed by the applicant to be relevant to its application and/or which shows the allocation/reservation will be used for the purposes stated in the application;
- 10 any other information that ComReg may, from time to time, deem appropriate.

A1.7 Internet Access Number Criteria

At present the access numbers 189X YYY YYY, where $X > 0$, allow access to the Internet under defined tariff conditions²⁵. These numbers may only be used by Internet Service Providers (ISPs). Applicants for allocation and/or reservation of any of these numbers shall meet the following eligibility criteria:

- 1 the number shall be used to route traffic from the PSTN or ISDN or mobile network to the point of presence of the internet service provider to whom the number is associated;
- 2 the number shall only be used for routing Internet access traffic;
- 3 the number shall be issued on the understanding that it may be withdrawn or altered as required, as part of changes to the Irish numbering plan and/or changes to Internet access mechanisms;

A1.8 ISPC Criteria

Only holders of a General Telecommunications Licence (under Section 111(2) of the Postal and Telecommunications Services Act, 1983, as amended) or a Mobile Telecommunications License pursuant to Section 111(2) of the Postal and Telecommunications Services Act, 1983, as amended shall be eligible to apply for ISPCs. In addition the applicant will be expected to show evidence of technical capability to implement the necessary services. This includes existence of adequate proprietary physical infrastructure.

A1.9 NSPC Criteria

Only holders of a General Telecommunications Licence (under Section 111(2) of the Postal and Telecommunications Services Act, 1983, as amended) are normally eligible to apply for NSPCs. In addition the applicant will be expected to show evidence of technical capability to implement the necessary services. This includes existence of adequate proprietary physical infrastructure.

²⁵ Numbers using the prefixes 1891, 1892 and 1893 may be used to provide access at local rate, Pay-As-You-Go, and flat rates, respectively.

Annex 2: Grounds for rejecting an application

A2.1 Refusal of Primary Allocation / Reservation

Applications for allocation or reservation of number blocks and/or short codes may be refused by ComReg on the following grounds:

- 1 the requested number blocks or codes are not available for allocation or reservation;
- 2 the applicant is not a holder of an appropriate licence for such an allocation/reservation;
- 3 the applicant has not established that he/she meets the eligibility criteria laid down;
- 4 the planned activation date is too far ahead;
- 5 the planned services are not considered by ComReg to be appropriate for implementation on the requested number blocks or codes;
- 6 a previous allocation remains significantly under utilised vis-à-vis the applicant's stated plans;
- 7 a previous related reservation has not yet been opened for use in accordance with the applicant's stated plans;
- 8 the same reservation has already been renewed several times without sufficient justification for not being allocated and brought into use;
- 9 a previous allocation has been used for services or purposes other than those specified or permitted in the terms of allocation or reservation;
- 10 ComReg considers that allocation/reservation would not be in the national interest.

A2.2 Refusal of Secondary Allocation / Reservation

Applications for allocation or reservation of numbers and/or short codes may be refused to end-users by operators, only on the grounds shown below:

- 1 the requested code or number range has been ported;
- 2 the requested numbers or codes are not available from that operator for allocation or reservation;
- 3 the applicant has not established that he/she meets the laid down eligibility criteria;
- 4 the planned activation date is too far ahead;
- 5 the planned services are not considered by the operator to be appropriate for implementation on the requested numbers or codes;
- 6 a previous allocation remains significantly under utilised vis-à-vis the applicant's stated plans;
- 7 a previous related reservation has not yet been opened for use in accordance with the applicant's stated plans;
- 8 the same reservation has already been renewed several times without sufficient justification for not being allocated and brought into use;
- 9 a previous allocation has been used for services or purposes other than those specified or permitted in the terms of allocation or reservation;
- 10 the allocation/reservation would conflict with previous allocations/reservations;
- 11 the operator considers that meeting the requested allocation/reservation would be detrimental to its own commercial interest as an operator or to the national interest;
- 12 In the event of refusal, the applicant shall be advised of the reasons and of its right to appeal to ComReg. Should the appeal be upheld the operator shall abide by ComReg's decision.

Annex 3: Information required from Applicants for Primary Allocation

Applicants for number block allocation or reservation or short code allocations shall provide the following information, where relevant:

- 1 name, address and, where relevant, company registration number of applicant;
- 2 details of the licence under which it operates;
- 3 purpose or use of numbering allocation;
- 4 geographic scope of the service (countries, area code / zones);
- 5 the date by which the allocation is required;
- 6 the date the service is planned to be operational;
- 7 relationship with existing allocations or reservations;
- 8 a declaration that the numbers will be used in accordance with the Numbering Conventions;
- 9 name of contact person;
- 10 authorised signature of applicant;
- 11 any other information that the applicant considers necessary or appropriate to justify the application, including any relevant tariff information;
- 12 any other information deemed by ComReg to be relevant to the application and the supply of which does not place an undue burden on the applicant.

In addition, applicants for telephone number block allocation or reservation or short code or DNIC allocations shall also provide the following information, where relevant:

- 13 Preferred numbering block or short code;
- 14 utilisation of existing allocations, including:
 - i - volume of numbers allocated to end users in service;
 - ii - numbers allocated but not in service; and
 - iii - reserved numbers;
- 15 a forecast of expected utilisation over a period of at least one year, in respect of each number series for which application is made.

In addition, applicants for ISCP allocation or reservation shall also provide the following information, where relevant:

- 16 A unique identity of the concerned signalling point (town and/or name);
- 17 if existing SPCs are allocated to the same signalling point, then full information on the status of that signalling point and the reasons for the new application shall be provided;
- 18 written confirmation that the concerned signalling point(s) is/are physically located within the national territory.

Annex 4: Grounds for withdrawal of Numbers

ComReg may request telecommunications operators to submit reports from time to time on how allocated number series are used, so it may maintain an overview of their utilisation. Number series which are not in use nor likely to be used in the short term may be recalled, thereby making them available to other telecommunications operators. However, grounds for the withdrawal of primary level allocations/reservations should be limited in number and be as specific as possible to ensure a reasonable level of certainty to the allocated party or parties. The following are the grounds foreseen at present; they are listed without prejudice to ComReg's right to regulate the market generally.

The same situation occurs, as appropriate, at secondary level between operators and end users of numbers.

A4.1 Withdrawing primary level allocations /reservations

The following shall, without limitation, be considered grounds for withdrawal of number allocations or reservations:

- 1 failure of the allocated party or parties to meet one or more of the usage conditions;
- 2 insufficient usage of a number range, in terms of allocation or reservation at secondary level;
- 3 all numbers of an allocated range have become deactivated;
- 4 the need for additional numbering capacity elsewhere mandates such withdrawal;
- 5 withdrawal is necessary to ensure that fair and open competition is maintained;
- 6 international harmonisation mandates such withdrawal;
- 7 withdrawal is deemed to be in the overall national interest;
- 8 it is necessary as part of a change to the National Numbering Scheme.

The following considerations and actions shall be addressed in respect of withdrawal:

- 9 the overall costs of the withdrawal, the time scales and the effect on number changes shall be considered before withdrawal takes place;
- 10 the affected party or parties shall first be informed of the intention to withdraw and the reasoning behind this and it shall be advised of the associated appeals procedure;
- 11 withdrawn active numbers shall simultaneously be replaced by numbers from previous or new allocations or from reserved numbers, wherever appropriate;
- 12 the *parallel running* and *recorded announcement* procedures of 3.2 above shall be put in place.

A4.2 *Withdrawing secondary level allocations/reservations*

The following shall, without limitation, be considered grounds for withdrawal of number allocations or reservations:

- 1 failure of the allocated party or parties to meet one or more of the usage conditions;
- 2 an allocated number has not been brought into service by the party or parties within a reasonable period from issue e.g. six-months;
- 3 all numbers of an allocated range have become deactivated;
- 4 the need for additional numbering capacity elsewhere mandates it;
- 5 withdrawal is necessary to ensure that fair and open competition is maintained;
- 6 international harmonisation mandates it;
- 7 withdrawal is deemed to be in the overall national interest;
- 8 it is necessary as part of a change to the National Numbering Scheme.

The following considerations and actions shall be addressed in respect of withdrawal:

- 9 the overall costs of the withdrawal, the time scales and the effect on number changes shall be considered before withdrawal takes place;
- 10 the affected party or parties shall first be informed of the intention to withdraw and the reasoning behind this and it shall be advised of the associated appeals procedure;
- 11 withdrawn active numbers shall simultaneously be replaced by numbers from previous or new allocations or from reserved numbers, as appropriate;
- 12 the *parallel running* and *recorded announcement* procedures of 3.2 above shall be put in place.

Annex 5: Existing numbering arrangements²⁶

Ireland currently uses the dialling and numbering scheme illustrated in the example, below.

For Example Only		
Figure 2: The Irish dialling and numbering scheme		
Digits dialled	Action performed by the network	Example
00 + International number (country code + NDC + subscriber number)	Call to another country	00 33 1 3456 7890
01 + 7-digit subscriber number	Call to Dublin subscriber (NDC = 1)	01 323 4567
021 + 7-digit subscriber number	Call to Cork subscriber (NDC = 21)	021 234 5678
08 + 21 + 7-digit subscriber number	Call to Cork subscriber's mailbox	08 021 234 5678
0402 + 5-digit subscriber number	Call to subscriber in Arklow (NDC = 402)	0402 22345
00 44 28 + UK local number or 048 + UK local number	Call to subscriber in N. Ireland	00 44 28 9042 3456 048 9042 3456
086 + 7-digit subscriber number	Call to mobile (GSM) subscriber (NDC = 86)	086 841 2345
087 + '5' + 7-digit subscriber number	Call to mobile (GSM) subscriber mailbox (NDC = 87; mailbox prefix always '5')	087 5912 3456
10	Reach operator for operator-assisted call	
112 or 999	Call to emergency services	
1800 + 6 digits	Call to freephone subscriber	1800 223 223
YXX XXXX ⁽¹⁾	Local call to subscriber in Dublin	323 4567
YXXXXX or YXXXXX ⁽¹⁾	Local call to subscriber in other parts of Ireland	23 456 or 234 567 or 234 5678

⁽¹⁾ Y = 2 to 9, X = 0 to 9

There are three dialling procedures – one for international calls, one for calls within Ireland and one for local calls.

For national calls, users dial the trunk prefix 0 followed by a national significant number (i.e. NDC+subscriber number). The national significant number varies in format and length, the following being some case examples:

²⁶ From ODTR 98/09; Numbering in Ireland: Proposals for the 21st Century (A consultative Document).

Category	Example		
Geographic numbers ²⁷	1+XXX XXXX, 52+XXXXX,	21+XXX XXXX, 502+XXXXX	51+XXX XXX, 502+XXXXX
Fixed line mailbox numbers ²⁷	80+1+XXX XXXX, 80+52+XXXXX,	80+21+XXX XXXX, 80+502+XXXXX	80+51+XXX XXX, 80+502+XXXXX
Mobile ²⁷	85+XXX XXXX,	86+XXX XXXX,	87+XXX XXXX
Mobile mailboxes ²⁷	85+5+XXX XXXX,	86+5+XXX XXXX,	87+5+XXX XXXX
Non-geographic ²⁷	82X+XXX XXX,	70X+XXX XXX,	818 XXX XXX
Non-geographic** ²⁸	15XX+XXX XXX,	18XX XXX XXX	

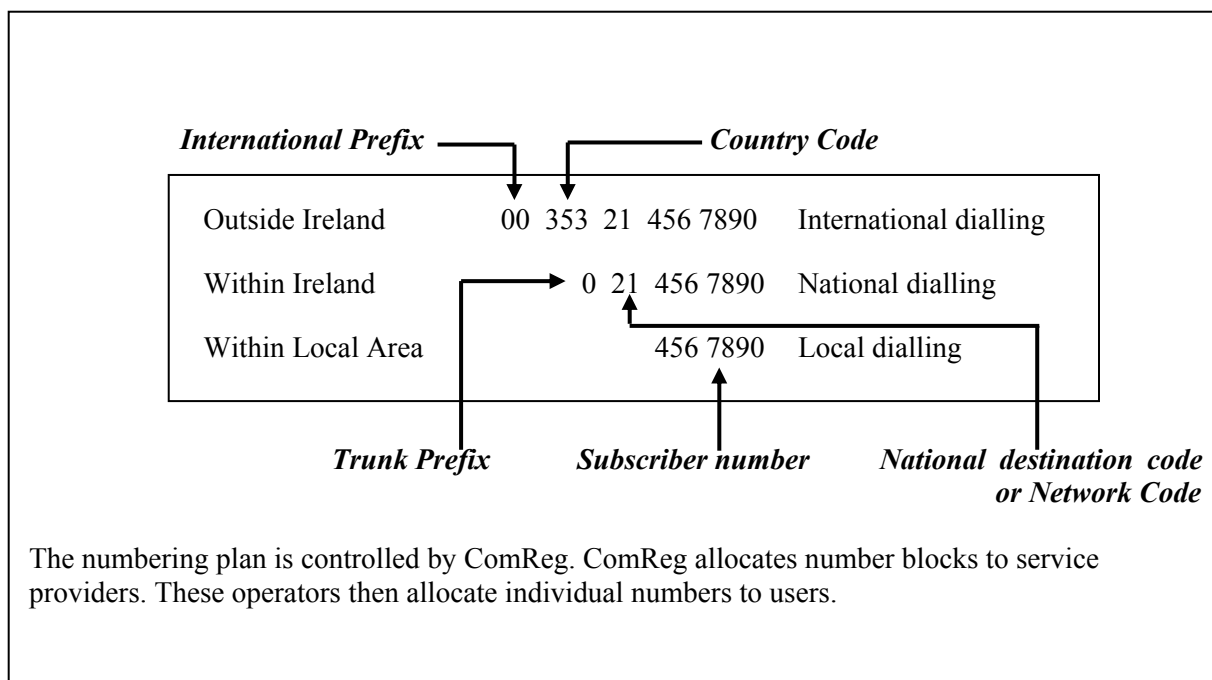
*Accessible from abroad,

Table 3: National Significant Numbers – Number Format Examples

For local calls, users dial the geographic subscriber number only.

Figure 3, below shows how these dialling procedures work and defines the main terms used in this document.

Figure 3: The different PSTN numbering terms and dialling procedures used in Ireland



²⁷ Accessible from abroad.

²⁸ National access only - trunk prefix 0 not inserted.

Figure 4: The structure of the IMSI

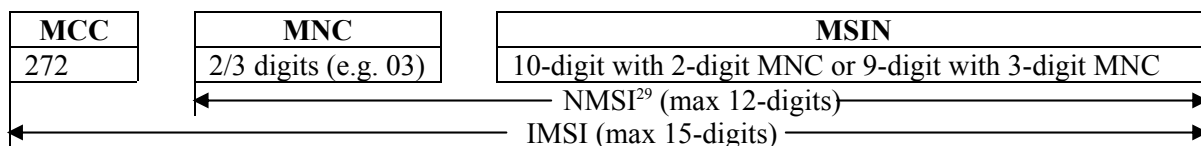
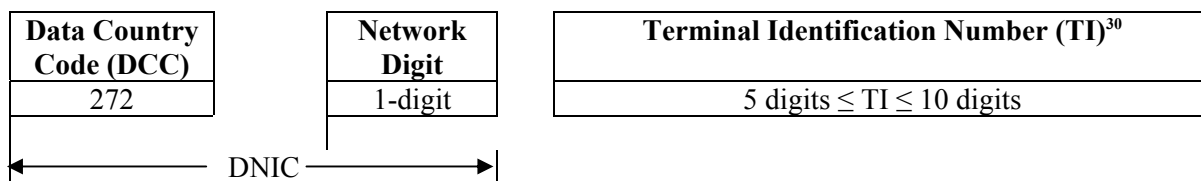


Figure 5: The structure of the DNIC and terminal identifiers



Note: The DNIC is issued by the NPM; the TI will be assigned to individual DCE/DTEs by the operator of the public network, from the block of TIs allocated by the NPM.

²⁹ NMSI=National Mobile Station Identifier.

³⁰ SSI=Short Subscriber Identity.

Annex 6: Number Change Process (Ref. Section 3.2)

Stage No.	Activity	Responsibility	Comments
1	Decision on Number Changes and applicable dates ¹	ComReg	For major changes, this will usually be by way of a Decision Notice following a Public Consultation.
2	Consultation with industry on implementation issues	ComReg, affected network operators & service providers	A detailed guidance document containing the agreed implementation details may be produced by ComReg.
3	Communication of number changes to the public	ComReg, affected network operators & service providers	This will include general communications from ComReg, and more specific communications from network operators to their respective customers, including known timescales. It may also include agreed joint communications.
4	Commencement of parallel working ²	Affected network operator	From the public commencement date of parallel working for any area, communicated to the public in 3 above, either the old or new number may be used by callers. <i>[Note: for practical reasons some numbers may be capable of parallel working a little earlier than this.]</i>
5	Updating of Directory databases ³ and distribution of paper directories	Directory info service providers (electronic / paper)	The new Directories for an area undergoing number changes will list its new numbers and will be distributed during the weeks (typically 2 to 6 weeks) preceding the end of parallel working.
6	Changeover from old to new CLIs	Affected network operators	The changeover from the old to new CLI for each subscriber should be implemented on the Number Change Day ¹ or during the week preceding Change Day , and in all cases before the old number is routed to a recorded announcement.
7	Cessation of parallel working on Number Change Day(s) ¹	Affected network operators	The public cessation date(s) for parallel working represent the earliest date(s) from which the old numbers will become inoperative, but, for practical reasons, some old numbers may remain operative for a short period after these respective date(s).
8	Routing to recorded announcements ⁴ of calls made using the old numbers	Affected network operators	After the old numbers become inoperative, calls made using these numbers are routed to recorded announcements which prompt the caller with the prefix for the new number and, where applicable, the new code.

Stage No.	Activity	Responsibility	Comments
9	Changeover from old to new numbers on telephone bills.	network operator	The old number should continue to be used on each bill despatched before Number Change Day but each bill dispatched on or after that Day should refer to the new number.
10	Provision of recorded announcements ⁴ no longer guaranteed	Affected network operator	Calls to old numbers should be routed to recorded announcements for a period of at least 6 months (but preferably 12 months) after Number Change Day .
11	Quarantine of old numbers	ComReg	Normally for 12 months ⁵ .

Notes to Number Change Process

¹ The **Number Change Day** for a specified area is the day communicated to the public, on which parallel working can no longer be guaranteed and calls made using the old number for that area may be routed to recorded announcements. **Number Change Day** will often coincide with completion of the distribution of Directories listing the new numbers for the area concerned.

² The period of parallel working should run for 12 months, approximately. *[Note: Parallel working may not be appropriate in all cases or this period may need to be varied in special cases.]*

³ Directory Information Service Providers should ensure that their databases have been updated with the new numbers, so they are ready for use from **Number Change Day** onwards.

⁴ Up to three types of detailed recorded announcement may be required:

- Type 1 – for use at international gateway switches for inbound international calls, in particular for call cases where the NDC has been changed;
- Type 2 – for national and some local call cases where the full number (Trunk Code + NDC + Subscriber Number) is dialled, in particular for call cases where the NDC has been changed;
- Type 3 – for all call cases where the Subscriber Number only is dialled and some call cases where the NDC has not been changed.

Detailed recorded announcements (with specific prompts on new STD Code (where applicable) and new digits preceding old Subscriber Number) should be provided for at least three months after **Number Change Day**. Network Operators may opt to replace these detailed recorded announcements with more generic recorded announcements after three months, where appropriate.

Callers using the old numbers should be routed to recorded announcements (either detailed announcements followed by generic announcements or detailed announcements only) for a total period of at least 6 months (though preferably 12 months) after **Number Change Day**.

Note: Recorded announcements may not be appropriate in all cases of number change.

⁵ The quarantine period for the old numbers is normally 12 months commencing from the end of the 12 month recorded announcement period, i.e. 24 months from **Number Change Day** but this period is subject to the conditions of convention 11.11.3-4. Where number lengths are extended, ‘Quarantine’ means not issuing new numbers during the quarantine period that include the old shorter numbers as lead digits, to avoid incidences of incomplete dialling.

Annex 7: Service descriptions for numbers and codes

(as used in the Irish National Numbering Scheme)

The following service descriptions are intended only as guidelines, in the interests of transparency, and to assist applicants and users to understand the purposes for which individual codes and numbers are allocated. As such the descriptions are not necessarily all-encompassing for all situations. Applicants or users who are in any doubt as to the validity of the usage they propose for specific numbers or codes should first check that usage with ComReg, as ComReg reserves its right to manage the numbering resource in accordance with the National interest. Misuse may result in withdrawal of the numbers/codes. If new or special situations arise, the NPM may be prepared to issue new codes to deal with them.

Note: these service descriptions are customer oriented and, unless otherwise indicated, “costs” refers to charges made to end-users (i.e. not to inter-connection charges of any kind).

A7.1 Geographic Numbers and Services

Geographic ranges consist of area codes (NDCs) of 1 to 3 digits followed by subscriber numbers of 5 to 7 digits. Dialling procedures require the addition of national or international prefix digits or (for local dialling) the omission of the NDC. Callers may associate these codes and numbers with anticipated distance-related charging regimes.

An additional digit “80” precedes the NDC and follows the country code (for international calls) or the trunk prefix (for national calls) in the case of calls to fixed mailboxes; for such calls the use of the NDC is mandatory (i.e. local dialling is not possible). For example, in the case of a call to Cork subscriber number “021 123 4567” (International: “+353.21.123 4567”) the subscriber’s mailbox is reached by dialling “080 21 123 4567” from within Ireland (including from Cork) or by dialling “+353.80 21 123 4567” from abroad.

These area codes and subscriber numbers should be used to identify termination points to which calls may be routed, within geographic zones defined from time to time by the NPM³¹.

Note: Numbering Convention 11.1-11 permits forwarding of the call under certain conditions.

Geographic numbers may be used to provide services, with certain exceptions (notably Premium Rate Services).

A7.2 Mobile E.164 Numbers and Services

Mobile E.164 ranges consist of mobile network access codes (NDCs) of 2 digits followed by subscriber numbers of 7 digits for subscriber numbers and 8 digits for mobile mailbox numbers. Mobile mailbox numbers can be directly derived from the corresponding subscriber numbers by preceding the latter with the digit ‘5’. Dialling procedures require the addition of national or international prefix digits (‘0’ or ‘00 353’, respectively).

These E.164 codes and numbers should be used to identify termination points (typically handsets) to which calls may be routed.

Mobile E.164 numbers may be used to provide services, with certain exceptions (notably Premium Rate Services).

³¹ Currently, these destinations are MNAs described in document ODTR 98/42. More precise information on MNA boundaries may be obtained from ComReg, if necessary.

A7.3 Non-geographic Numbers and Services

In non-geographic numbers, the normal geographic termination point is not identifiable from the number structure.

Table A7.1 below gives a summary of the non-geographic services which currently apply. In each case, the individual number is composed of an access code (4-digit) and a subscriber number (6-digit) – see freephone example in Figure 2. Other non-geographic numbers may be added in due course if new applications, not fitting into these six categories, arise.

The services and corresponding number ranges are described in more detail below. Those commencing with ‘0’ can be dialled from abroad by dropping the leading ‘0’ and adding international access digits, whereas those commencing with ‘1’ cannot (currently) be directly accessed from abroad.

Service	Access Code
Freephone Calls	1800
Shared Cost (Fixed)	1850
Shared Cost (Timed)	1890
Universal Access	0818
Premium Rate	1520, 1530, 1540, 1550, 1560, 1570 and 1580
Premium Rate (Adult)	1559
Personal Numbering	0700
Internet Access	1891, 1892, 1893

Table A7.1: Summary of Non-geographic Numbering Services.

A7.3.1 Freephone numbers and services

Freephone services allow the called party to be reached at no charge to the caller. The total cost of a Freephone call is borne by the called party. While the caller shall not be charged for calling a Freephone number, it is not mandatory to use a Freephone number for all calls that are free to the caller.

Freephone numbers for non-bursty usage will be allocated in blocks of 1,000 at primary allocation.

A7.3.2 Shared Cost numbers and services

Shared Cost services allow the caller to be charged for only part of the cost of the call, with the called party being charged for the remainder. Allocations will be made to service providers from two separate Shared Cost numbering ranges as follows:

- 1890 - where the caller is charged at local tariff rate for the originating network;
- 1850 - where the caller is charged a fixed fee, which is independent of the duration of the call, and based on the local tariff rate

While the caller shall only be charged for calling these 18X0 numbers in accordance with the structures just described, it is not essential that these specific ranges should be used in all cases where an operator wishes to charge at rates coinciding with these structures.

Numbers will be allocated for local rate and fixed fee Shared Cost services for non-bursty usage in blocks of 1,000 at primary allocation.

A7.3.3 Premium Rate Numbers and Services

Premium Rate Services are those that substantially³² meet the definition in SI No. 194 of 1995 viz. *“Premium Rate Telephone Service” means a telephone service in respect of which part of the telephone charge paid or payable by a telephone subscriber or caller in respect of the call is passed by Bord Telecom Éireann or another telecommunications network operator, directly or indirectly, to an individual, organisation or company which is participating in the provision of the service”*.

Premium Rate services give the caller access to information or other added value services. The charge to the caller is comprised of the cost of carrying the call and a charge for access to the service. At present there is a family of eight distinct numbering ranges available for Premium Rate services and all Premium Rate services shall be provided using numbers from these ranges, unless new arrangements are specifically agreed with the NPM. These numbering ranges are identified by eight distinctive access codes, as follows:

1520, 1530, 1540, 1550, 1559, 1560, 1570, 1580.

Adult type services shall only be provided using the access code 1559. The other access codes in the range 1520 to 1580 are used to provide distinctive types of service, and generally speaking, the maximum tariff rate will increase incrementally from 1520 (the lowest), to 1580 (the highest).

Premium Rate Numbers using access codes 1520 to 1580 will be allocated for non-bursty usage in blocks of 1,000 at primary allocation.

A7.3.4 Universal Access Numbers and Services

Universal Access services allow the called party to receive calls at a single or several different locations, depending on cost-related parameters set by the called party (e.g. those related to the time the call is made, the location of the caller, etc). The caller, who may well be unaware of the termination point, is charged for the cost of the call at a rate not exceeding the national tariff rate of the operator concerned, and the called party is charged any additional retail charges involved in providing the universal access service. The 0818 access code shall be used only for the provision of Universal Access Services but services corresponding to these could be legitimately offered using other number ranges.

Allocations of Universal Access Numbers for non-bursty usage will be made in blocks of 1,000 at primary allocation.

A7.3.5 Personal Numbers and Services

Personal Numbering services allow the called person to receive calls at various different locations or terminals, including a mobile telephone, depending on the time the call is made or depending on other variables pre-defined by the called party (e.g. the location of and telecommunication facilities available to the called party at the time of the call). Unlike the Universal Access service, personal number calls do not vary depending on the caller location. The 0700 access code shall be used only for the provision of Personal Numbering Services but services corresponding to these could be legitimately offered using other number ranges.

A Personal Number call may be completed in more than one stage, comprising an initial stage from the caller to the service provider and subsequent stage(s) from the service provider to the called person. The caller is charged at a rate not exceeding the retail charge for the initial stage of the call

³² Bord Telecom Éireann is now replaced by *eircom*. The definition above is also clarified in the Code of Practice of RegTel, which is given certain responsibilities in respect of PRS in SI No 194 of 1995.

(i.e. to the SP) and the called party is responsible for any additional retail charges involved in providing the personal numbering service. *Note: if the SP manages to convey the call as a single stage operation³³, without routing it via the SP, the cost to the caller shall nevertheless not exceed the equivalent charge for a call to the SP alone.*

Allocations of Personal numbers for non-bursty usage will be made in blocks of 1,000 at primary allocation.

A7.3.6 Internet Access Numbers and Services

Designated Internet Access numbers provide a convenient means of distinguishing Internet data traffic from normal voice traffic, thereby allowing separation between these traffic flows, with their different characteristics. This facilitates efficient traffic management by network operators. These numbers also allow operators and Internet Service Providers (ISPs) to devise special tariff arrangements for Internet access. The numbers differ from geographic numbers in that the same number may be used by an ISP in different geographic locations. They also differ from typical non-geographic numbers in that they need not be number translation codes³⁴. In fact each of these numbers is currently used directly to route Internet traffic to the local Point-of-Presence (POP) of the same ISP in each area in which it has the number in operation.

Allocations of Internet Access numbers will be made individually to operators and/or directly to ISPs in the format:

1891 ABC DEF, 1892 ABC DEF and 1893 ABC DEF.

Numbers using the code 1891 shall only be used for Internet access where the customer is charged at or below the standard local call rate for its telecommunications time on-line, with no separate telecommunications packet-based traffic charge. The customer may also be charged a separate subscription fee and/or packet-based charge by his/her ISP.

Numbers using the 1892 code shall only be used for Pay As You Go (PAYG) Internet access, where the customer is charged for the telecommunications element of the service, based on time on-line and/or packet-based traffic generated, but Internet service is provided free of charge.

Numbers using the code 1893 shall only be used for Internet access where the customer is not charged for its telecommunications time on-line and/or for packet-based traffic generated up to a pre-set limit or with no limits, but pays an agreed flat rate subscription fee, for its Internet service.

These 189X numbers shall be used only for the provision of Internet access services but services corresponding to these or alternative Internet access services could be legitimately offered using various other number ranges³⁵.

³³ Where the SP has full access to end-to-end IN control facilities in respect of a call (i.e. the SP is in fact the only operator in the chain, or by use of advanced Personal Numbering arrangements, such as UPT), direct end-to-end routing of a Personal Numbering call is possible. Regardless of the called party's location, or the types of network involved, this should not result in higher charges for the caller than the normal maximum tariff above.

³⁴ Number Translation Codes are numbers which are only indirectly (and perhaps temporarily) bound to a network termination point. They must first be converted into other number types (typically geographic or mobile numbers) before their (current) termination points (and/or in certain cases origination points) can be identified.

³⁵ For example, shared cost numbers based on 1890 codes are sometimes used for Internet access on a Pay-As-You-Go basis, as these are charged at local rate.

A7.4 Bursty Traffic Numbers and Services

Certain types of telephone services can by their nature generate very large volumes of calls over comparatively short periods of time (e.g. competition lines), with the intensity of call traffic in some cases being so severe as to risk overloading telephone networks. In extreme cases this could lead to escalation into major network failure. Furthermore, the telephone network most adversely affected by bursty traffic might not be the network of the service provider offering the service responsible for the sudden traffic bursts.

As survival of the public networks is regarded as a matter of strategic national importance, it is important that networks at risk can identify traffic which is potentially bursty in nature. This allows them to implement whatever protective measures they consider to be necessary.

Bursty traffic generally occurs with calls to non-geographic numbers but could also occur on geographic numbers.

In order to distinguish bursty traffic from other traffic, the NPM reserves number blocks commencing with the digits 71 behind all non-geographic codes³⁶ for allocation to potentially bursty applications. These are allocated in blocks of 100 to applicants. The full number format is therefore: Service code + 71 + (4-digits);

Network operators and service providers are expected to make all efforts to ensure that traffic of a bursty nature is confined to the appropriate numbers, taking steps if necessary against persistent offenders who repeatedly apply bursty traffic to unapproved numbers, without prior agreement.

A7.5 Short Codes

A7.5.1 Customer Support Short Codes

Customer service short codes are allocated primarily to provide service to existing customers; they must not be used for the purpose of providing access to sales services for products for which open competition is permitted.

These are specific short codes whose usage is pre-defined and well-known and common across all networks. Their purpose is to provide assistance to customers of the networks concerned. Access should be provided from all external networks to services using 190X codes and may or may not be provided to other customer service codes on a network. The services behind these codes may be directly related to network performance and offer improved levels of user-friendliness or they may be for general network services to the public. Examples of these codes are 190X, 1471 etc.

A7.5.2 Network-Use Short Codes

These are the short codes 171, 172, 173 and 1740 to 1749, inclusive. Services provided on one network using any of these codes are not accessible using that code from other networks in normal circumstances, although equivalent services may be provided on other networks. Their usage may therefore be independently decided by each network operator.

They are intended for use by the network operators themselves for services directly related to the network, its performance and its user-friendliness. They should only be used for services which generate sufficiently high demand³⁷ to justify a short code, and where the nature of the service is such that it would not be expected to compete with service providers who are not network

³⁶ 189X Internet access codes are not included, as they are allocated individually and carry traffic of a characteristic type in any case.

³⁷ This is a subjective term which (in this case) can only be policed by the operators themselves, knowing that they have a maximum of 13 such codes available for use.

operators. No new codes of this type will be issued and network operators are therefore expected to use them sparingly.

Although operators are free to use any codes within these ranges for justifiable services, they are strongly encouraged to use the same code as other operators, when introducing equivalent services on their own networks to pre-existing services offered by other operators; such harmonisation is customer-friendly and is more beneficial to all operators than introducing different codes.

The NUSC codes are issued with predefined digit lengths and operators are not free to unilaterally add extra digits. Where there is a strong case for extending the length of any specific code to suit some application, a request should be submitted to the NPM explaining the reason for this and describing the proposed usage. Pending a decision, no authorisation for extension of number length should be assumed.

A7.5.3 Text Messaging Short Codes

These are 5-digit short codes in the range 5BCDE³⁸, being typically used for advanced SMS messaging purposes. Services provided on one network using any of these codes are not currently accessible using that code from other networks, although equivalent services may be provided in parallel on other networks. Secondary allocation or reservation of the codes should be carried out without discrimination between third party service providers and without giving preference to services run directly by network operators.

The codes are intended for use only with innovative text-based services, which generate sufficiently high demand to justify a short code, and where the service need not be one that supports or enhances network operation or network performance.

Operators and Service Providers may only use these codes for justifiable services, in accordance with specific allocation conditions that ensure individual codes cannot be used for different purposes or by different number holders on different networks. Such harmonisation is customer-friendly and is more beneficial to all operators than introducing different codes.

Maximum charges for individual code ranges are defined in the Numbering Conventions. These charges may be applied to each mobile originated leg or each mobile terminated leg (MO or MT) of any SMS transaction sequence between the customer and network or may be shared between both legs, but in any case the total amount for one MO/MT message exchange should not exceed the maximum amount specified. Where one MO message triggers a series of MT response messages (or vice versa) over a period of time (e.g. weather reports, football scores etc), a charge not exceeding the maximum limit may be applied to each individual response message.

The maximum number of 5XXX codes in any category which may be allocated to any single service provider will be reviewed from time to time. This limit is currently set at 25 codes. SPs are encouraged to minimise their use of codes in order to enhance their familiarity to customers.

³⁸ Codes using Digit C=9 will be reserved for possible expansion purposes.

A7.5.4 Carrier Short Codes

These are 5-digit short codes in the range 13CDE³⁹, that allow subscribers to gain access to their preferred telecommunications service providers. They consist of Carrier Access (CA) and Carrier Select (CS) codes used for call-by-call selection of a preferred SP, and Carrier Preselection (CPS) codes used for permanent or semi-permanent selection of a preferred SP. Callers use CA and CS codes by prefixing the called number with the code concerned, this involving a 2-stage process in the case of CA and a single stage process in the case of CS. In the case of CPS, the code is automatically inserted by the access network, once the CPS customer has subscribed to a CPS service provider.

³⁹ The digit C is always 9 in the case of Carrier Pre-selection.