



Commission for
Communications Regulation

Reference Document

National Numbering Conventions v6.0

Document No:	08/02
Date:	02, January 2008

Table of Contents

1.	SCOPE OF THE CONVENTIONS	5
2.	DEFINITION OF TERMS	6
3.	RESPONSIBILITIES	10
3.1	Responsibilities of ComReg	10
3.2	Authorised Persons Responsibilities	11
3.2.1	All Authorised Persons:	11
3.2.2	Network Operators	12
3.2.3	Service Providers	13
3.2.4	Non-Authorised Persons	13
4.	ALLOCATION OF NUMBERS	14
4.1	The application process	14
4.1.1	Applications for primary allocation	14
4.1.2	Applications for secondary allocation	14
4.2	Information required when making an application	14
4.3	Refusal of primary or secondary allocation	15
4.4	Confidentiality	15
4.5	Timescales for applications	16
4.6	Appeals to ComReg	16
5.	RESERVATION OF NUMBERS	17
5.1	Primary Reservations to Undertakings	17
5.2	Reservation to end-users	18
6.	ALLOCATION OF SHORT CODES	19
7.	RESPONSIBILITIES FOR NOTIFICATION OF NUMBER ACTIVATION	20
8.	RIGHT OF USE TO NUMBERS, NUMBER BLOCKS AND CODES	21
8.1	The rights of Authorised Persons to numbers/number blocks	21
8.2	The rights of end users to numbers	21
9.	AUDIT INFORMATION REQUIRED FROM AUTHORISED PERSONS	22
10.	CHARGING FEES FOR NUMBERING ALLOCATIONS	23
11.	CONDITIONS OF USE FOR NUMBERS AND SHORT CODES	24
11.1	General conditions	24
11.2	Conditions of Use for Specific Number Types	25
11.2.1	Geographic numbers usage	25
11.2.2	Usage of Fixed Mailbox Numbers	27
11.2.3	Usage of "bursty" numbers	28
11.2.4	Freephone Usage	28
11.2.5	Shared Cost numbers Usage	28
11.2.6	Universal Access number Usage	28
11.2.7	Personal Number Usage	28
11.2.8	Use of Premium Rate Numbers (excluding text – see 11.4.3)	29
11.2.9	IP-based Number Usage (i.e. 076 range)	29
11.3	Internet Access Number Usage	30
11.4	Short codes usage	30

11.4.0	19XX Network Support Short Codes	30
11.4.1	Telecommunications Directory Access Codes Usage	30
11.4.2	Use of Network-Use Short Codes (NUSC)	31
11.4.3	Use of 5XXXX-series Messaging Short Codes (including Premium Codes)	31
11.4.4	Mobile Numbers and Mobile Codes Usage	32
11.4.5	Usage Conditions for Harmonised European Short Codes of Social Value (HESCs)	33
11.4.6	Usage Conditions for Data Network Identification Codes (DNICs)	34
11.4.7	Usage Conditions for International Signalling Point Codes (ISPCs)	34
11.4.8	Usage Conditions for National Signalling Point Codes (NSPCs)	35
11.4.9	Usage Conditions for Carrier Access / Carrier (Pre)Selection Codes	35
11.4.10	Usage Conditions for Number Portability Routing Prefixes	36
11.5	Usage conditions after secondary allocation	36
11.6	Usage of Numbers for ENUM Purposes	36
11.7	Portability of numbers (NP)	37
11.8	Withdrawal, quarantine and change of numbers	38
11.8.1	Withdrawal or change of primary number allocations	38
11.8.2	Withdrawal or change of secondary number allocations	38
11.8.3	Quarantine of numbers	38
12.	USE OF NUMBERS AND ALPHA-NUMERIC CHARACTERS	39
12.1	Standards for alpha-numeric keypads	39
12.2	Presentation of Numbers	40
12.3	Directory Information Services	40
13.	MANDATORY DIALLING PROCEDURES	41
13.1	Local, national and international calls	41
13.2	Calls to Northern Ireland	41
13.2.1	use of the NI access code	41
13.2.2	use of the UK country code	41
14.	PUBLICATION OF DIALLING AND NUMBERING SCHEME USAGE	42
15.	REVISION OF THE NATIONAL NUMBERING CONVENTIONS	43
ANNEX 1:	ELIGIBILITY CRITERIA FOR APPLICANTS	44
A1.1	Geographic Numbering Criteria	44
A1.2	Non-Geographic Numbering Criteria	44
A1.3	Mobile Numbering Criteria	44
A1.4	Carrier Access / Carrier (Pre)Selection Code Criteria	45
A1.5	Number Portability Routing Prefix Criteria	45
A1.6	Telecommunications Directory Information Access Code Criteria	45
A1.7	Internet Access Number Criteria	46
A1.8	ISPC and NSPC Criteria	46
ANNEX 2:	GROUND FOR REJECTING AN APPLICATION	47
A2.1	Refusal of Primary Allocation / Reservation	47
A2.2	Refusal of Secondary Allocation / Reservation	47
ANNEX 3:	GROUND FOR WITHDRAWAL OF NUMBERS	48
A3.1	Withdrawing primary level allocations /reservations	48
A3.2	Withdrawing secondary level allocations/reservations	49

ANNEX 4: EXISTING NUMBERING ARRANGEMENTS	51
ANNEX 5: NUMBER CHANGE PROCESS (REF. SECTION 3.2)	54
ANNEX 6: DESIGNATIONS FOR NUMBERS AND CODES	56
A6.1 Geographic Numbers and Services	56
A6.2 Mobile Numbers, Mobile Codes and Services	57
A6.3 Non-geographic Numbers and Services	57
A6.3.1 Freephone numbers and services	58
A6.3.2 Shared Cost numbers and services	58
A6.3.3 Premium Rate Numbers and Services (excluding text – see A6.5.3)	58
A6.3.4 Universal Access Numbers and Services	59
A6.3.5 Personal Numbers and Services	59
A6.3.6 Internet Access Numbers and Services	60
A6.3.7 IP-Based Numbers (076 Range)	60
A6.4 Bursty Traffic Numbers and Services	61
A6.5 Short Codes	61
A6.5.1 Customer Support Short Codes	61
A6.5.2 Network-Use Short Codes	62
A6.5.3 Text/Multimedia Messaging Short Codes (including Premium codes)	63
A6.5.4 Carrier Short Codes	63
A6.5.5 Telecommunications Directory Enquiry Access Codes	64
A6.5.6 European Harmonised Codes of Social Value (HESC)	64
A6.5.7 Data Network Identification Codes (DNICs)	65
A6.5.8 International Signalling Point Codes (ISPCs)	65
A6.5.9 National Signalling Point Codes (NSPCs)	65
A6.5.10 Number Portability Routing Prefixes	65

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 generally makes allocations and reservations of numbering capacity from the scheme to notified network operators, who each sub-allocate individual numbers to service providers and end users. Sub-allocated capacity remains part of the national resource managed by ComReg. Internet names and addresses (such as IP addresses, URIs etc.) are not part of the National Numbering Scheme and are therefore not governed by these Numbering Conventions. To the extent that ENUM domain names are a reflection of telephone numbers they are indirectly impacted by the Numbering Conventions.

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 6 of the Conventions represents a general updating of the document but also introduces changes to.

- take account of the European Commission Decision of 15/02/2007 on the opening within Member States of Harmonised Services of Social Value (HESC), based on the common access code '116' (Sections 11.4.5 and A6.5.6);
- strengthen text related to withdrawal of numbers in cases of abuse (Sections A3.1 and A3.2);
- take account of the publication of ComReg 07/15, relating to home-zonal services (Sections 11.2.1 and A6.1);

To achieve the above aims the Conventions must:

1. ensure transparent and non-discriminatory access to national numbering resources;
2. take EU policy and Directives and national legislation into account;
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;
8. have regard to current number portability procedures and the parameters thereof.

2. Definition Of Terms

Note: the following definitions are those to be applied when interpreting these National Numbering Conventions. They may therefore differ in whole or in part from those used elsewhere.

(a) Access Regulations

Means the European Communities (Electronic Communications Networks and Services) (Access) Regulations, 2003 (S.I. No. 305 of 2003).

(b) 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.

(c) Act of 2002

Means the Communications Regulation Act, 2002.

(d) 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 propriety rights to the number.

But is also

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

(e) Assignee

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

(f) Authorisation Regulations

Means the European Communities (Electronic Communications Networks and Services) (Authorisation) Regulations, 2003 (S.I. No. 306 of 2003).

(g) Authorised Person

Under the terms of Regulation 4(3) of the Authorisation Regulations, a person is deemed to be authorised to provide an electronic communications network or service upon receipt by ComReg of a correctly completed Notification Form, as described in Regulation 4(2) of the Authorisation Regulations. Such persons may, subject to meeting other conditions herein, be eligible to receive numbering resources. Unless otherwise stated herein, all references to Authorisations or Authorised Persons refer to authorisation in accordance with Regulation 4(3).

Note: Under the terms of Regulation 4(7) of the Authorisation Regulations a person (undertaking) not required to notify is also deemed to be authorised but such persons are not eligible to receive numbering resources from ComReg.

(h) 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.

(i) ComReg

Means the Commission for Communications Regulation.

(j) Convention

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).

(k) 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.

(l) Framework Regulations

Means the European Communities (Electronic Communications Networks and Services) (Framework) Regulations, 2003 (S.I. No. 307 of 2003).

(m) 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;
- publication of information about assignments and allocations/reservations.

(n) Mobile Network

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

(o) 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. It includes the conditions of use for different number types.

(p) National Numbering Scheme

The national numbering scheme specifies the status of numbers or number ranges within publicly available electronic communications networks in Ireland, including mobile networks, which may be dialled from within those networks or externally, and is as published by ComReg from time to time. The Numbering Scheme consists of:

- The numbering plan databases containing allocation details of all numbers;
- The status report document, listing designations of all number types;
- The numbering application procedure, including application forms;
- These Numbering Conventions.

(q) 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

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

agreed beforehand with ComReg by the network operator concerned (See 11.4.2 below).
Note: Thirteen NUSCs have been defined, within the 171-174 ranges, in Ireland.

(r) Network Operator

An Authorised Person or legal entity providing or authorised to provide a public electronic communications network and which has provided a notification to ComReg in accordance with Regulation 4(2) of the Authorisation Regulations.

(s) 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.

(t) Numbering Plan Management (NPM)

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

(u) Primary Allocation/Reservation

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

(v) PSTN

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

(w) 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.

(x) Retail Charge

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

(y) Secondary Allocation/Reservation

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

(z) Service Provider

For numbering purposes, this is an Authorised Person or legal entity providing or authorised to provide publicly available electronic communications services and which has provided a notification to ComReg in accordance with Regulation 4(2) of the Authorisation Regulations.

(aa) 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).

(bb) Subscriber/Customer

Any natural person or legal entity who or which is party to a contract with the provider of publicly available electronic communication services or publicly available electronic communications

networks for the supply of such services or network facilities. The subscriber / customer is normally also an end-user of the relevant service.

(cc) Undertaking

Means a person engaged or intending to engage in the provision of electronic communications networks or services or associated facilities.

Note: Normally this will be a Network Operator or a Service Provider;

(dd) Universal Service Regulations

Means the European Communities (Electronic Communications Networks and Services) (Universal Service and Users' Rights) Regulations, 2003 (S.I. No. 308 of 2003).

(ee) VoIP

Means Voice over Internet Protocol.

(ff) Other Definitions

The following terms are as defined in the Framework Regulations and the Universal Service Regulations:

Electronic Communications Network (ECN)

Means transmission systems and, where applicable, switching or routing equipment and other resources which permit the conveyance of signals by wire, by radio, by optical or by other electromagnetic means, including satellite networks, fixed (circuit- and packet-switched, including Internet) and mobile terrestrial networks, electricity cable systems, to the extent that they are used for the purpose of transmitting signals, networks used for radio and television broadcasting, and cable television networks, irrespective of the type of information conveyed;

Electronic Communications Service (ECS)

Means a service normally provided for remuneration which consists wholly or mainly in the conveyance of signals on electronic communications networks, including telecommunications services and transmission services in networks used for broadcasting, but excludes –

- (a) a service providing, or exercising editorial control over, content transmitted using electronic communications networks and services; and
- (b) an information society service, as defined in Article 1 of Directive 98/34/EC, which does not consist wholly or mainly in the conveyance of signals on electronic communications networks;

Publicly Available Telephone Service (PATS)

Means a service available to the public for originating and receiving national and international calls and access to emergency services through a number or numbers in a national or international telephone numbering plan, and in addition may, where relevant, include one or more of the following services: the provision of operator assistance, directory enquiry services, directories, provision of public pay phones, provision of service under special terms, provision of special facilities for customers with disabilities or special social needs or the provision of non-geographic services or both;

Note: The term ECS is often loosely used in general discussion when referring to a category that is different from PATS. However, as PATS is actually a sub-set of ECS it has been necessary in various parts of this document to refer to “non-PATS ECS” in order to more precisely establish that PATS are not being referred to at that point.

3. Responsibilities

3.1 Responsibilities of ComReg

In accordance with the terms of Regulation 22 of the Framework Regulations, ComReg is vested with sole responsibility for administering the national telecommunications numbering resource. Anyone who assigns numbers from the national numbering scheme to locations, terminals, persons or functions on public telecommunications networks that have not been specifically allocated to it by ComReg for the purpose of providing publicly available electronic communications services is guilty of an offence.

Furthermore, under Regulation 14 of the Authorisation Regulations, ComReg has a statutory obligation to define conditions to be attached to rights of use of numbers, in accordance with part C of the schedule to those Regulations. A person granted a right of use for numbers which fails to comply with any conditions attached to those numbers is guilty of an offence.

ComReg has put in place procedures to ensure fair and equitable treatment of all number-holders, subject to the need to ensure efficient use and effective management of numbering resources. In accordance with Regulations 13 and 14 of the Authorisation Regulations, these procedures and conditions attached to number allocations are required to be open, transparent and non-discriminatory, as well as being publicly available. ComReg meets these obligations through the media of the publicly available Numbering Conventions, Numbering Status Reports, the numbering plan databases and the numbering applications procedures.

Where ComReg finds that a person has not complied with one or more condition of the rights of use of numbers allocated to it or with a related direction issued under the Authorisation Regulations and/or Framework Regulations, the legislation enables ComReg to take measures to remedy any such non-compliance.

Where ComReg wishes to further specify compliance requirements relating to a right of use for numbers, it may issue directions to a person to do or refrain from doing anything which ComReg specifies in that direction.

In performing its function of administering the national telecommunications numbering resource (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 and currently agreed procedures of number portability;
- 5 the scheme should be in line with ITU-T Recommendations as far as possible and/or (if relevant) other European or International standards;
- 6 conditions attached to the rights of use for numbers should include designation of the service for which the number may be used, including requirements linked to the provision of that service (as per Regulation 14 of the Authorisation Regulations);
- 7 the interests of users should be promoted, in pursuance of ComReg's obligations under Section 12(2)(c) of the Act of 2002, by *inter alia* ensuring a high level of protection for consumers in their dealings with suppliers and by promoting the provision of clear information, in particular

- requiring transparency of tariffs and conditions for using publicly available electronic communication services;
- 8 EU harmonisation measures, where relevant, should be taken into account;
 - 9 numbering scheme management should be carried out in an objective, non-discriminatory, equitable, proportionate, timely and transparent manner;
 - 10 where changes to the numbering scheme or rights of use are necessary, the aim should be to implement them in a way that minimises disruption, cost and inconvenience for customers and service providers. Changes to rights of use for allocated numbers or their conditions of allocation or procedures should be limited to objectively justified cases and should be carried out in a proportionate manner;
 - 11 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;
 - 12 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 attaches conditions of use to number allocations in compliance with the Numbering Conventions, which implement Part C of the Schedule to the Authorisation Regulations. 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 Authorised Persons Responsibilities

3.2.1 All Authorised Persons:

- 1 shall only assign numbers from the National Numbering Scheme to other persons, terminals, locations or functions in accordance with these Numbering Conventions and any specific allocation conditions directed by ComReg. It is an offence under Regulation 22 of the Framework Regulations to assign numbers without such approval;
- 2 providing publicly available telephone service (including public pay telephones) to end users shall, under Regulation 22(1) of the Universal Service Regulations, ensure that such end-users are able to call the emergency services free of charge by using either the '112' or '999' access numbers;
- 3 providing publicly available telephone networks shall as soon as practicable, make caller location information available to authorities handling emergencies, to the extent technically feasible, for all calls made using either the '112' or '999' access numbers;
- 4 should be aware that where ComReg considers there is or has been serious or repeated non-compliance by a person with the conditions attached to a right of use for numbers granted to it, ComReg may decide, having considered any representations, that that person is no longer authorised under Regulation 4(3) of the Authorisation Regulations and/or it may suspend or withdraw the right of use for numbers granted to the person.
- 5 shall ensure that the CLI transmitted with a telephone call is the assigned geographic, mobile or IP-based number for the calling party, except in clearly justified cases where permission has exceptionally been given by ComReg.

[Note: guidance on cases where an exception may be made, if it is in the wider public interest, is detailed in the Numbering Advisory Panel document NAP 80 (available from ComReg) and the ETP guidelines²]

3.2.2 Network Operators

(i.e. Authorised Persons providing publicly available electronic communications networks)

Under condition 15 of the General Authorisation, all network operators are required to conform to these Numbering Conventions. As part of this obligation, operators should, in addition to their obligations under 3.2.1 above:

- 1 promptly inform their customers of any number changes or impending agreed number changes which may affect those customers. Wherever relevant or appropriate³, 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 the 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 codes⁴, except 353⁵, 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 to and convey all calls originating on or transiting through their networks to the European Telephony Numbering Space (ETNS) whose virtual country code is '388 3'. In order to ensure connection of calls to the ETNS, Authorised Persons should ensure that calls using '388 3' are directly or indirectly interconnected to ETNS serving network(s), the interconnections being governed by the provisions of the Access Regulations;
[Note: This requirement is without prejudice to the right of all operators concerned to recover their costs for the conveyance of such calls.]
- 4 where technically and economically feasible, facilitate access and conveyance of calls from other Member States to Irish non-geographic numbers, except where the called subscriber has chosen for commercial reasons to limit access by calling parties located in specific geographical areas;
- 5 if designated as having significant market power in access networks, open access from those networks to all relevant numbers allocated by the NPM;
- 6 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;
- 7 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.]
- 8 ensure that the following measures are in place wherever possible⁶ and appropriate, when number changes are introduced:

² The European Telecommunications Platform (ETP) guidelines (02)051, available at http://www.etp-online.org/downloads/02_051_CLI_Guidelines_Sep_2002.pdf

³ 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.

⁴ 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.

⁵ 353 is the country code for Ireland.

- 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 5 defines a reference process to be followed in respect of this Convention, including recommended periods.

3.2.3 Service Providers

(i.e. Authorised Persons providing electronic communications services)

Pursuant to condition 15 of the General Authorisation, Service providers who have been allocated numbers from the national numbering plan shall conform to these Numbering Conventions, including requirements of Section 3.2.1 above, as applicable.

Note: In pursuance of efficient management of the numbering resource, numbers are directly allocated by ComReg to Service Providers in only certain very restricted cases, as described later in this document.

3.2.4 Non-Authorised Persons

Non-authorised persons to whom numbering resources of any kind are allocated shall conform to all provisions of these Numbering Conventions, including any requirements of section 3.2.1 above, that are relevant to the specific resources allocated. In cases of doubt, such persons should refer to ComReg's Numbering Plan Management for guidance.

⁶The 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 plan normally occurs in two stages; Primary Allocation and Secondary Allocation. Primary allocation means the allocation of blocks of numbers by ComReg to Authorised Persons (i.e. 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 users⁷. 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 and they shall be provided with responses, including allocation lists or rejection notes, as appropriate, within the timescale shown in 4.5 below for all properly completed applications.

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 and of the decisions made on allocation or rejection.

4.2 Information required when making an application

- 1 The information required from applicants for a primary allocation is listed in ComReg's Numbering Application Form, available for download from its web site but ComReg reserves the right to request additional information, where necessary in accordance with Regulation 16 and/or Regulation 18 of the Authorisation Regulations;
- 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;

⁷ ComReg may directly allocate numbers to subscribers in certain cases.

- 3 Applications should be sent to the following address:

The Numbering Plan Management
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 those listed in Annex 2. ComReg may alternatively not grant the application in full, or may attach specific conditions to the allocation in compliance with Part C of the schedule to the Authorisation Regulations;
- 2 Operators may also refuse applications for secondary allocations which they consider are not justified, or may attach special conditions to the allocations that comply with Part C of the schedule to the Authorisation Regulations. In this case, primary-level number-holders (or number-block holders) derive their authority to refuse or alter the secondary number allocation by delegation of this responsibility 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 Authorised Persons, 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 Authorised Persons 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 in the case of available numbers for which designations exist. Exceptions to this period may be:
 - i where essential additional information is needed 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 unforeseen issues relating to the application of such significance that they cannot reasonably be handled within that period;
 - iv 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 activation⁸ of primarily allocated numbers/codes shall not exceed 1 year, unless confirmation is received in writing from ComReg that a longer period is acceptable;
- 4 The time limit for activation⁸ of secondarily allocated numbers shall normally not exceed 3 calendar months unless confirmation is received in writing from the allocating entity that a longer period is acceptable;
- 5 Where activation has not occurred after 12 months in the case of primary allocation or 3 calendar months in the case of secondary allocation, and approval has not been granted for a longer period, ComReg or the allocating entity (as appropriate) may recover the allocations simply by informing the current holder accordingly in writing (letter and/or email), in order to preserve the numbering resource.

4.6 Appeals to ComReg

1. Refusal by ComReg to make a primary allocation or the attachment of special conditions to a primary allocation may be appealed in accordance with the procedures described in Part 2 of the Framework Regulations;
2. Refusal by an operator to make a secondary allocation or the attachment of special conditions to a secondary allocation may be appealed to the operator by the applicant for that allocation;
3. The applicant may then, if necessary, 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;
4. ComReg will consider the matter and respond within 28 calendar days;
5. 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;
6. 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.

⁸ 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 Undertakings

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 details of relevant notifications under the General Authorisation.
Note: No reservation will be made in the absence of a Notification;
 - iii the views of the applicant and other interested parties;
 - iv the details of any existing number allocations to the applicant;
 - v the reasonableness of the quantities of numbers being requested; and
 - vi any other matters ComReg regards as relevant.
- 6 A reservation does **not** entitle undertakings 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 National Numbering Scheme or where a specific case has been made for a

- longer period of time needed for introduction of a new product, the validity of reservations will be limited to 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 which 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 Eligibility conditions for reservation of numbers are given in Annex 1.

5.2 Reservation to end-users

Undertakings 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-users⁹, 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 undertaking 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 undertaking. The applicant shall provide to the undertaking all relevant information required by Convention 4.2;
- 4 Applications for the reservation of numbering capacity shall be treated in confidence by the undertaking, where the applicant requests this;
- 5 The time period for the undertaking 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 undertaking 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.

⁹ 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 criteria that will be taken into account by ComReg in assessing the merit of applications for short codes include:
 - 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 or operators 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 of use to numbers, number blocks and codes

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

8.1 The rights of Authorised Persons 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 ComReg may, on receipt of a properly completed application in such form as it may from time to time determine, grant a right of use for any class or description of numbers to any person it considers appropriate, based on appropriate conditions of use;
- 3 Except as otherwise indicated herein, and for efficient management purposes, primary allocation or reservation of most numbering resources is made only to (authorised) undertakings (network operators or certain service providers), who are then responsible for carrying out secondary allocation in accordance with these Conventions;
- 4 Undertakings shall have a right to use numbers allocated to them, but only in accordance with directions set by ComReg. *Note: in practice, this means in accordance with these Conventions, as amended from time to time;*
- 5 ComReg may decide that certain conditions may not apply to persons of such class or type as it determines to be appropriate;
- 6 Once numbers are allocated with specific rights of use attached, the conditions of allocation will only be amended by ComReg in objectively justified cases and in a proportionate manner;
- 7 No undertaking shall be entitled to ownership of, or to any other interest in, any number or numbers allocated to that undertaking, 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 undertaking 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 objectively justified by reference to these conventions;
- 3 End-users shall have a right to use numbers allocated to them, but strictly subject to such directions as may be set by the allocating undertaking and/or ComReg, as appropriate. If subsequent amendments to the directions are considered necessary at any stage, these shall be objectively justified and shall be carried out in a proportionate manner;
- 4 End-users rights of use include the allocation of telephone numbers that are not subject to frequent misdialling;
- 5 End-users rights of use include a change of telephone number if an existing number is subject to unacceptable levels of nuisance or malicious calls. Whether a charge is applied for such a change is a matter for the undertaking’s discretion;
- 6 End-users rights of use include having 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 Authorised Persons

It is necessary that Authorised Persons 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 by recipients of allocations following request from ComReg, or otherwise when important changes occur in the services or networks. It may also be requested by ComReg to verify compliance with conditions attached to rights of use for numbers. The format and content of presentation will be specified by ComReg, which may also revise it from time to time.

- 1 In particular, Authorised Persons shall provide the following information to ComReg upon request, as appropriate to their network(s) and/or service(s):
 - 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 shall respect the confidentiality of this information in accordance with the provisions of the Authorisation and Framework Regulations 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 recipients for their allocations of numbers, number blocks or codes. No charge is made at present but this situation may change in the future. Recipients of numbers, number blocks or codes from ComReg shall not charge subscribers for allocations of numbers or codes, except in accordance with any direction from ComReg authorising charges.

Should the above situation change, any fees imposed will reflect the need to ensure the optimal use of the national numbering scheme. ComReg shall ensure that any such fee impositions are objectively justified, transparent, non-discriminatory and proportionate in relation to their intended purpose and they will take into account the objectives of ComReg pursuant to section 12 of the Act of 2002.

11. Conditions of use for numbers and short codes

11.1 General conditions

The conditions of use described herein apply to number allocations to both PATS and non-PATS ECS undertakings, as appropriate, regardless of technology. The same conditions described for allocations in this and in the following sub-sections shall also be applicable to reservations, as appropriate.

- 1 Designations for the various code/number types included in the Numbering Scheme are included in Annex 6, describing the services and/or networks for which individual numbers/codes have been released;
- 2 In making numbers available from a limited resource and against quite specific designations, the NPM aims to support transparency for consumers and for all affected persons. Allocations shall therefore only be used in line with these designations for the purposes specified in their conditions of allocation as well as fulfilling the purposes described in the Authorised Person's application to ComReg;
- 3 Allocations shall be used in accordance with any additional specific conditions set down by ComReg, including any classifications by type or maximum tariff;
- 4 Allocation of numbers only implies the granting of rights of use; no proprietary rights are granted;
- 5 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 11.2.8 below (see definition in that Section); or
 - Premium Rate Text Messages unless they are Premium Rate Text Messaging Short Codes, allocated and used in accordance with Section 11.4.3 below (see definition in that Section);
- 6 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;
- 7 The holder of an allocation shall maintain an up to date record of the percentages of numbers in use and reserved;
- 8 The holder of an allocation shall maintain a record of numbers that have been ported (i.e. at end users' request) to other operators;
- 9 Numbers, number blocks or codes shall not be traded. Holders of primary allocations shall, following consultation with ComReg and with ComReg's agreement, take steps to reverse or otherwise correct such transactions when incidences of contravention by their holders of secondary allocations come to their attention (see also convention 11.1-11 below);
- 10 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;
- 11 Numbers allocated to an end-user involved in subsequent 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;
- 12 The transfer or trading of allocated numbers from one person to another (other than in accordance with 11.1-11), without specific approval by ComReg, will be seen as evidence that

the original holder no longer requires the numbers allocated to it and shall therefore be considered adequate justification for immediate recovery of the numbers;

- 13 At the time of number allocation or at any time thereafter ComReg may, at its discretion and subject to convention 3.1-10, apply additional specific conditions to the rights of use of 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/or rights of use of allocated numbering capacity. The procedure/recourse set out in Convention 4.3-4 shall apply to the making of conditions;
- 14 Numbers and/or blocks of numbers must be activated within the time period specified by the allocating body (ComReg or undertaking). Otherwise the allocation should be reclaimed;
- 15 Disruption to users resulting from number changes shall be minimised;
- 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 inoperative extra digits;
- 17 The assignee shall not use network-specific telephone numbers that may cause interference with the national telephone numbering scheme or prevent evolution of the scheme in any way.
Note: This precludes the use of unallocated on-network numbers for public services, which would cause conflict in the event of closure of the Irish numbering and dialling scheme;
- 18 Non-geographic numbers, apart from personal numbers and the 076 range are designated for termination on services and must not be used to originate calls. Apart from the 076 range and temporary nomadic operation in the case of personal numbers, termination must occur within the State;
Note: Mobile numbers are unaffected by this Convention.
- 19 ECS providers including those who are not providing publicly available telephone services but who are allocated numbers from the national numbering plan shall ensure that end-users sub-allocated those numbers either:
 - (a) are able to call the emergency services free of charge by using ‘999’ and ‘112’, or else
 - (b) are made aware of any limitations on such access by an explicit statement to this effect in the contract for services to which the end-users attention has been drawn;

End-users without full access to the emergency services through the use of ‘999/112’ should be advised to label their terminal apparatus in a way that appropriately alerts third parties attempting to make emergency calls from the terminals to the limitations involved;

Before entering into a contract, end-users shall also be made aware by the ECS provider in writing of any other limitations on service compared with what would reasonably be expected from a traditional PATS service;
- 20 Any relevant conditions of usage, above, shall be applied in turn to subscribers when making secondary assignments.

11.2 Conditions of Use for Specific Number Types

11.2.1 Geographic numbers usage

- 1 The maximum charge to be applied to calls to geographic numbers shall not exceed the billing operator’s notified tariff for geographic rates;

-
- 2 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;
 - 3 Calls to geographic numbers are routed to a fixed destination in a discrete geographical area (an MNA). 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 operator Number Portability.

Note; for mobile networks (e.g. using home-zonal type services) the "fixed destination" referred to in this convention is the user's address as registered with ComReg or its network operator, which means that delivery of a call to the user should be from the mobile cell containing that address.
 - 4 Where geographic numbers are hosted by a fixed-line operator on behalf of a non-fixed-line terminating operator (e.g. for home-zonal purposes) handover of calls between those two operators may occur outside the MNA associated with a call provided that termination to the called party occurs within the MNA;
 - 5 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;
 - 6 The boundaries of geographic NDC areas and minimum numbering areas shall be as specified by ComReg from time to time¹⁰;
 - 7 A geographic number may only be allocated to an entity whose address, as registered with ComReg or its network operator, is within the designated geographic numbering area for that number. This means that, for PSTN purposes, calls to the number concerned must be fully terminated to the end-user within that geographic area unless they clearly exit the fixed network PSTN within the area (i.e. logical termination on a gateway to some other network).

Note: Call forwarding is not considered to be a violation of this Convention nor is genuine and short-term nomadic operation, for example in the case of VoIP services.
 - 8 Operators providing geographic numbers to consumers must advise¹¹ those consumers in their contracts of any limitations of their service (including delivery of calls to the emergency services) vis-à-vis what those consumers might legitimately expect from a traditional PATS service.

Note: This convention is especially addressed towards new and/or innovative services whose range of facilities might not be as expected by many consumers;
 - 9 Geographic numbers may be allocated to non-PATS ECS operators with certain restrictions where no risk is foreseen of number changes even allowing for a large build-up of demand for VoIP during the following 5-10 years:
 - (a) They must be willing to fully support GNP on a full reciprocal basis for their part. Notwithstanding this, they must advise any customers to which they allocate geographic numbers as well as porting-in customers, that it may not be possible for them to port out those geographic numbers to some other operators;
 - (b) They must limit geographic number allocations to consumers to a maximum of two numbers per registered user, except if agreement is specifically given by ComReg to exceed this in special circumstances;

¹⁰ These boundaries will be defined by the then current versions of maps which are shown in document ComReg 03/147, - or its replacement. Note: ComReg can identify more precise boundaries, when necessary, using electronic maps.

¹¹ ComReg has published guidelines for VoIP SPs (ComReg 05/50) covering their treatment of consumers; it might be appropriate to make reference to this document, available from ComReg's web site.

- (c) They must undertake reasonable efforts to ensure delivery of ‘112’ and ‘999’ calls to the emergency services is achieved and users must be advised of any limitations.

11.2.2 Usage of Fixed Mailbox Numbers

1. Access code “080” is designated for Fixed Line Mailbox Services¹² in which each individual customer subscriber number has a directly associated mailbox number;
2. A customer reaches its mailbox using this mechanism by dialling:
 - 08 + STD Code + Subscriber Number, from anywhere within Ireland (whether local or long-distance).
Note: this corresponds to 080+NDC¹³+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+NDC¹³+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 D9/01¹⁴, and shall also identify that the call was to a mailbox service;
6. Mailboxes are, by definition, repositories and should not normally originate calls¹⁵. 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 Services¹⁶;*
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 difficulties¹⁷ 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;

¹² More specifically, the number ranges 080 X YY where X =1, 2, 4, 5, 6, 7, and 9 are designated for fixed line diallable mailbox services.

¹³ Without the trunk prefix.

¹⁴ Document ODTR 01/53: “Itemised billing by Telecommunications operators”, D9/01.

¹⁵ However, there is no reason why calls could not be forwarded from mailbox numbers using call-forwarding services.

¹⁶ CPS is a call originating service.

¹⁷ 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).

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 11.7 below.

11.2.3 Usage of “bursty” numbers

1. Bursty traffic applications shall only be terminated on numbers designated in the National Numbering Scheme for this type of application;
2. Undertakings may withdraw or suspend service from any Bursty service that uses numbers outside the ranges allocated for Bursty applications;
3. Undertakings 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 Freephone Usage

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

11.2.5 Shared Cost numbers Usage

1. The charge made by undertakings to Irish-based 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 Irish-based 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.

11.2.6 Universal Access number Usage

Undertakings 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 undertaking from which the call is made.

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

11.2.7 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.

11.2.8 Use of Premium Rate Numbers (excluding text – see 11.4.3)

Note 1: 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.

Note 2: This description of Premium Rate Services is provided for the purposes of the National Numbering Conventions and is without prejudice to any definition or description which may be used from time to time by Regtel (e.g. in Regtel's Code of Practice), if different.

- 1 Authorised network operators and authorised service providers shall ensure that any entities to which they provide secondary allocations of Premium Rate Numbers are obliged to meet all relevant conditions of these National Numbering Conventions.

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;

- 2 All end-users of Premium Rate Numbers (i.e. those offering the relevant content services) 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. They shall remain in compliance with that agreement throughout the period that they retain rights of use to such Premium Rate Numbers;

- 3 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 1598 or 1599 numbers.
Note: for adult SMS-type services (incl. EMS/MMS) see Section 11.4.3 below;

- 4 The retail charge for calls to all Premium Rate services shall be clearly stated by Premium Rate Service Providers in all promotions and – for calls made within Ireland - shall not exceed the limits defined by the relevant charging bands shown in Annex 6.
Note: In practice, the actual retail charges may be restricted to the price-points shown in Annex 6, because of current network billing limitations.

- 5 Undertakings offering on-line services such as VoIP shall not provide access by end-users outside the State to Irish Premium Rate numbers unless the undertakings accept direct liability for any consequent bad debt that arises as well as liability for any potentially unacceptable content being delivered across borders.

Note: 1: ComReg decided in Decision No. 7 of its document ComReg 04/103 that Premium Rate Numbers should not be allocated to ECS services at present.

Note 2: This convention is not intended to address end-users with Irish billing addresses who are temporarily outside the State (i.e. operating nomadically).

11.2.9 IP-based Number Usage (i.e. 076 range)

- 1 076 numbers shall be assigned to specific termination points or specific personnel, as appropriate, and in a manner consistent with efficient use of numbering resources;

Note: the distribution of inappropriate quantities of these numbers by undertakings in a wasteful fashion will be considered an abuse;

- 2 076 numbers shall only be distributed to Irish residents or to those who establish to the satisfaction of the undertaking concerned that they have some genuine association with Ireland.

11.3 Internet Access Number Usage

At present the access numbers 189X YYY YYY, where $X > 0$, allow access to the Internet under defined tariff conditions¹⁸.

- 1 These numbers may only be used by Internet Service Providers (ISPs) and only for routing Internet access traffic;
- 2 They 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.

11.4 Short codes usage

Note: The conditions in 11.2.1 also apply to short codes. Specific additional conditions may be applied at the time of allocation.

11.4.0 19XX Network Support Short Codes

- 1 Calls to the customer support short codes 190X and 191X shall be free of charge to the caller, regardless of the network from which the call is originated;
- 2 calls to a 190X or 191X code shall not include advertising, entertainment, marketing and selling or future selling of commercial services.
Note: this does not preclude customer care representatives providing information or helpful advice on price plans or service features in response to unsolicited customer queries from existing customers nor does it preclude activation of a price plan (e.g. for pre-pay services), where the actual selling has already been completed by other means;
- 3 Only a single 190X or 191X customer support short code shall be allocated per communications service provider.

11.4.1 Telecommunications Directory Access Codes Usage

- 1 118XX directory information access codes shall be used only for the provision of telecommunications directory enquiry services and relevant value added services e.g. call completion services;
- 2 Directory information access codes may be allocated to eligible telecommunications directory information service providers offering national only, or national and international telecommunications directory information services; up to six codes will be allocated as appropriate and subject to justification of need;
- 3 Provision has been made in the Irish numbering scheme to access geographic telephone numbers in Northern Ireland by dialling 048. All national telecommunications directory information services shall include full support for accessing Northern Ireland geographic numbers using this method. *Note: International telecommunications directory information services may also provide support for Northern Ireland numbers;*
- 4 Directory information service providers to whom access codes are allocated are expected to provide a comprehensive telecommunications directory inquiry service. Failure to do so may result in recovery of the allocated code;
- 5 Text-based calls (e.g. SMS) to and from a 118XX number are permitted.

¹⁸ Numbers using the prefixes 1891, 1892 and 1893 may be used to provide access at no more than local rate, Pay-As-You-Go, and flat rates, respectively.

11.4.2 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 conform to the service description of A.6.5.2, or services that are directly supplemental to these;
- 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.

11.4.3 Use of 5XXXX-series Messaging Short Codes (including Premium Codes)

- 1 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. They shall remain in compliance with that agreement throughout the period that they retain rights of use to such 5XXXX messaging short codes.
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;
- 2 Network operators shall not charge originating callers for sending text messages¹⁹ (including EMS or MMS) to mobile 50XXX numbers, regardless of which network operators or service providers are involved in the calls;
- 3 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;
- 4 The charge to customers sending text messages to mobile numbers in the range 53000-56998 (Basic Premium Rated services) shall in no case exceed €0.80, including VAT;
- 5 The charge for customers sending messages to any Premium Rate 5XXXX messaging services shall be clearly stated by Premium Rate Service Providers in all promotions.
- 6 Premium Rate Text Messaging Short Codes are those in the ranges 53XXX to 59XXX;

¹⁹ The term ‘text message’ is used in this document as a generic or short-hand term to also cover EMS and MMS and any similar message type. It is recognised that it is not an ideal description of MMS, for example.

- 7 Premium Rate Text Messaging Short Codes shall be allocated only to applicants that are authorised Network Operators or independent Service Providers for the provision of Premium Rate Text Messaging Services which have completed the relevant ComReg application procedures for these codes.

Note: Premium Rate Text Messaging Services, are non-voice 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;

- 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”) may only be provided using either 58XXX (General Adult services) or 59XXX numbers (Adult Services of a sexual nature) (as appropriate), or 1559 Premium Rate Numbers;
- 9 Entities authorised to carry out secondary allocation of 5XXXX short codes shall ensure that any entities to which they allocate text messaging short codes are obliged to meet all relevant conditions of these National Numbering Conventions;

11.4.4 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) (i.e. E.212 numbers);
- 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; E.212 codes as described in ITU-T Recommendation E.212);
- 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 Operators providing mobile numbers to consumers must advise²⁰ those consumers in their contracts of any limitations of their service (including delivery of calls to the emergency services) vis-à-vis what those consumers might legitimately expect from a PATS service.
Note: This convention is especially addressed towards new and/or innovative services whose range of facilities might not be as expected by many consumers;
- 5 The allocation of Mobile Subscriber Identification Numbers (MSINs), which are *inter alia* 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). It is the responsibility of these operators to ensure that MSIN allocation is managed efficiently in order to ensure sufficient numbers are available for all the operator’s users, within the context of a single MNC;
- 6 Mobile Network Codes (MNCs), which are inserted following the Irish Mobile Country Code 272²¹, shall be allocated by ComReg. Currently issued MNCs are all of 2-digit length. MNCs may be issued for use with fixed networks, typically for providing publicly available SMS;
- 7 In principle, only one IMSI MNC will be issued per GSM, UMTS or other technology 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;

²⁰ ComReg has published guidelines for VoIP SPs covering their treatment of consumers; it might be appropriate to make reference to this document, available from ComReg’s web site.

²¹ The MCC 272 is used for GSM and will also be used for 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.
- 9 Any MNC allocated shall be used only for the purposes described in the assignee's application for the code, in accordance with ITU-T Recommendation E.212 and solely within the applicant's network;

11.4.5 Usage Conditions for Harmonised European Short Codes of Social Value (HESCs)

HESCs are 6-digit harmonised European short codes, which are the responsibility of each national numbering plan administration but whose usage is co-ordinated at European level.

- 1 HESC Numbers will only be assigned by ComReg to interested parties if those numbers are listed in the Annex to the European Commission Decision 2007/116/EC²², as amended from time to time;
- 1 Each HESC number will normally be allocated directly to the first applicant which meets the applicable criteria for the number concerned if no other applicant submits a request within a period of 1 calendar month (the 'Open Period') after that applicant's original request. No allocation will be made until that Open Period has elapsed;
- 2 Where a number of valid applications have been made to ComReg before the 'Open Period' has elapsed, the number will be allocated to the winner of a selection contest (i.e. selected by lottery) carried out by ComReg;
- 3 As only a single number will be available for each HESC service, the successful entity will be expected to declare itself willing to share the number with other service providers, if such other service providers emerge during the 'Open Period' or subsequently;
- 4 Where more than one applicant exists at the end of the 'Open Period', the number will only be allocated once the successful applicant has reached agreement with a majority of the others on sharing of the number. Should such agreement not have been reached after three months ComReg will decide whether to re-run the selection process, to extend the period for agreement by another three months or to allocate the number without further delay to the successful applicant;
- 5 Correspondingly, it will be necessary for unsuccessful applicants in a selection lottery and/or those applying after the end of the 'Open Period' to come to an agreement with the entity awarded the number by ComReg. In that respect, ComReg draws the attention of all interested parties to the absolute prohibition on trading or selling of rights to numbers;
- 6 Any abuse of conditions attached to the rights of use of a HESC may result in immediate withdrawal of the number concerned and it may be re-assigned – immediately or later – to any other interested party;
- 7 Each HESC shall provide information or assistance or a reporting tool to citizens, or any combination of these;
- 8 The service provided using a HESC shall be open to all citizens without any requirement of prior registration;
- 9 The service provided using a HESC shall not be time limited²³;

²² *European Commission Decision 2007/116/EC on reserving the national numbering range beginning with '116' for harmonised numbers for harmonised services of social value.*

²³ This requirement may be interpreted as meaning that where the service is not continuously available (i.e. 24 hours a day, 7 days a week, national-wide), the service provider shall ensure that information about availability is made publicly available in an easily accessible form, and that during periods of unavailability, callers to the service are advised when the service will next become available.

- 10 No payment or payment commitment of any kind shall be required from the caller as a prerequisite to the use of a HESC;
- 11 Calls to a HESC shall not include advertising, entertainment, marketing and selling or future selling of commercial services;
- 12 Calls to 116XXX must originate and terminate on Irish public networks, though subsequent call forwarding (including within the private domain) is permissible. Where such call forwarding occurs – whether to initiate a call into the Irish public network or to finally terminate one outside of Ireland – this shall be made known to ComReg as early as possible;
- 13 Specific additional conditions may be attached by ComReg to the rights of use of any specific HESC, either at ComReg’s own discretion, because these are set out in the Annex to the Commission Decision mentioned above, or because they reflect offer declarations made by the applicant for the number.

11.4.6 Usage Conditions for Data Network Identification Codes (DNICs)

- 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.

11.4.7 Usage Conditions for International Signalling Point Codes (ISPCs)

- 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 ETSI²⁴ 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.

11.4.8 Usage Conditions for National Signalling Point Codes (NSPCs)

- 1 All National Signalling Point codes in use on 25 July 2003 for signalling between operator's networks within Ireland shall be notified to ComReg and are deemed to be part of the national numbering plan with effect from that date. Requests for new NSPC allocations, for changes or for recovery of NSPCs shall be carried out in the same manner as for other number/code types;
- 2 Signalling points shall comply with any relevant ITU-T Recommendations and relevant ETSI²⁴ deliverables;
- 3 Assigned NSPCs shall be activated within one year of the date of allocation;
- 4 Assigned NSPCs shall be used efficiently;
- 5 When an assigned NSPC is no longer in use, the assignee shall inform the NPM of this within one month;
- 6 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.

11.4.9 Usage Conditions for Carrier Access / Carrier (Pre)Selection Codes

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

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

- 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 time²⁵;

²⁴ European Telecommunications Standardisation Organisation.

²⁵ Superseded documents are so indicated on the ComReg web site at www.comreg.ie.

- 6 All operators using these access codes shall support dialling of both '112' and '999' designated emergency access codes in their systems;
- 7 All operators using CPS access codes shall open and keep open on their networks the CPS Operator Identification Codes described in Section A6.5.4, so that customers can at all times identify the operator(s) supporting their local, national and international traffic;
- 8 ComReg may request such additional information as it, from time to time, deems appropriate.

11.4.10 Usage Conditions for Number Portability Routing Prefixes

- 1 Only one Non-Geographic Number Portability (NGNP) routing prefix code may be requested and allocated per operator;
- 2 Only one block of 100 Geographic Number Portability (GNP) routing prefix codes may initially be requested and be allocated per operator;
- 3 Only one Mobile Number Portability (MNP) routing prefix code may initially be requested and be allocated per operator;
- 4 In fixed networks, 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)²⁶;
- 5 The special routing prefix 1750 designated for use by network operators within the confines of their own networks shall not be used for calls passed across an interconnect to another network operator;
- 6 Applicants will normally be allocated their routing codes along with a notification that they will be required to support number portability. They will 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;
- 7 All eligible applicants shall have equal access to codes available for allocation in the relevant routing prefix range.

11.5 Usage conditions after secondary allocation

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

11.6 Usage of Numbers for ENUM Purposes

- 1 The ENUM protocol described in IETF RFC 3761 (previously RFC 2916) relies on the use of E.164 numbers that are part of the national numbering scheme for its operation. ComReg considers that the user-specific part of the Internet domain name that issues from the ENUM algorithm is simply a manipulation of the corresponding E.164 telephone number and therefore is governed by the Framework Regulations (see Section 3.1);
- 2 Each holder of an E.164 number of a type that is deemed suitable for use with ENUM is automatically granted exclusive rights of use for that number for ENUM purposes, subject to not conflicting with any other Numbering Conventions;
- 3 No one else may use that number for ENUM purposes as if it was his/her own;
- 4 At present, only geographic, mobile, 076 IP-based numbers and personal numbers are deemed suitable for ENUM use.

²⁶ 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.

11.7 Portability of numbers (NP)

- 1 ECS undertakings applying for numbers from the national numbering plan are required to support the normal industry processes for GNP and NGNP, as appropriate, on a reciprocal basis, irrespective of the technology they use (i.e. IP or otherwise).
Note: This means that PATS undertakings are expected to support GNP and NGNP towards ECS operators and ECS undertakings must reciprocate. In any case, NP is unconditionally required between all ECS undertakings availing of numbers;
- 2 Concerning PATS, all fixed network operators with Geographic or Non-geographic number allocations and all mobile network operators, including MVNOs, 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 required to follow agreed industry procedures in implementing number portability, wherever such processes exist²⁷;
- 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 Geographic and Non-Geographic Number Portability (GNP & NGNP, respectively) occur between different networks offering service at a fixed location²⁸, GNP and NGNP can also occur – for geographic numbers - between fixed and mobile networks, where the mobile networks offer service at a fixed location.
Note: GNP currently applies to geographic numbers, while NGNP applies to Freephone numbers, Shared Cost numbers, Premium Rate Numbers, Personal numbers, Universal Access numbers, IP-based numbers and Internet access numbers²⁹ based on 189X;
- 6 Mobile Number Portability (MNP) occurs between different mobile networks. MNP can also occur – for mobile numbers - between networks offering service at a fixed location and mobile networks, where the networks offering service at a fixed location include substantial mobile capability within their offerings;
- 7 Porting of a geographic Subscriber Number or a mobile 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 any differences in service that will occur after a port;
- 8 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;

²⁷ An extensive set of processes has already been developed and agreed.

²⁸ VoIP services are considered in principle to be services offered at a fixed location (i.e. the contracted place of service). Terminals connected elsewhere in nomadic use do not change this; they are regarded as being temporarily not at that fixed location.

²⁹ 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.

- 9 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;
- 10 Nomadic operation when using fixed numbers is not deemed to be an impediment to NP.

11.8 Withdrawal, quarantine and change of numbers

11.8.1 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 3;
- 2 The procedure for withdrawal shall allow the holder to clarify its position before a decision is taken;
- 3 When a change of active telephone numbers is imposed, the users of those active numbers shall have the right of minimum disruption;
- 4 The overall societal costs of a number change shall be carefully considered by ComReg;
- 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.

11.8.2 Withdrawal or change of secondary number allocations

The conditions for withdrawal of secondary allocations shall correspond (as appropriate) to those in 11.8.1 above, relating to withdrawal of numbers from assignees of primary allocations.

11.8.3 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 13 months³⁰; *Note: This figure is decided in order to avoid risk of re-activated numbers missing the protection from automatic opt-out of unsolicited marketing and/or adult content calls afforded under data privacy rules for a period of 12 months from last usage, if re-activated exactly at 12 months from last use.*
- 5 ComReg may override any of the above Conventions where it deems that the needs of the National Numbering Scheme require this.

³⁰ The prepaid mobile quarantine period was one past exception to this; In Decision Notice D1/01 ComReg determined that the quarantine period for pre-paid numbers should be only six months to aid more efficient use of the numbering resource through more rapid recycling. That exception is no longer necessary and the quarantine period for mobile numbers is now the same as for other numbers – see above.

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;

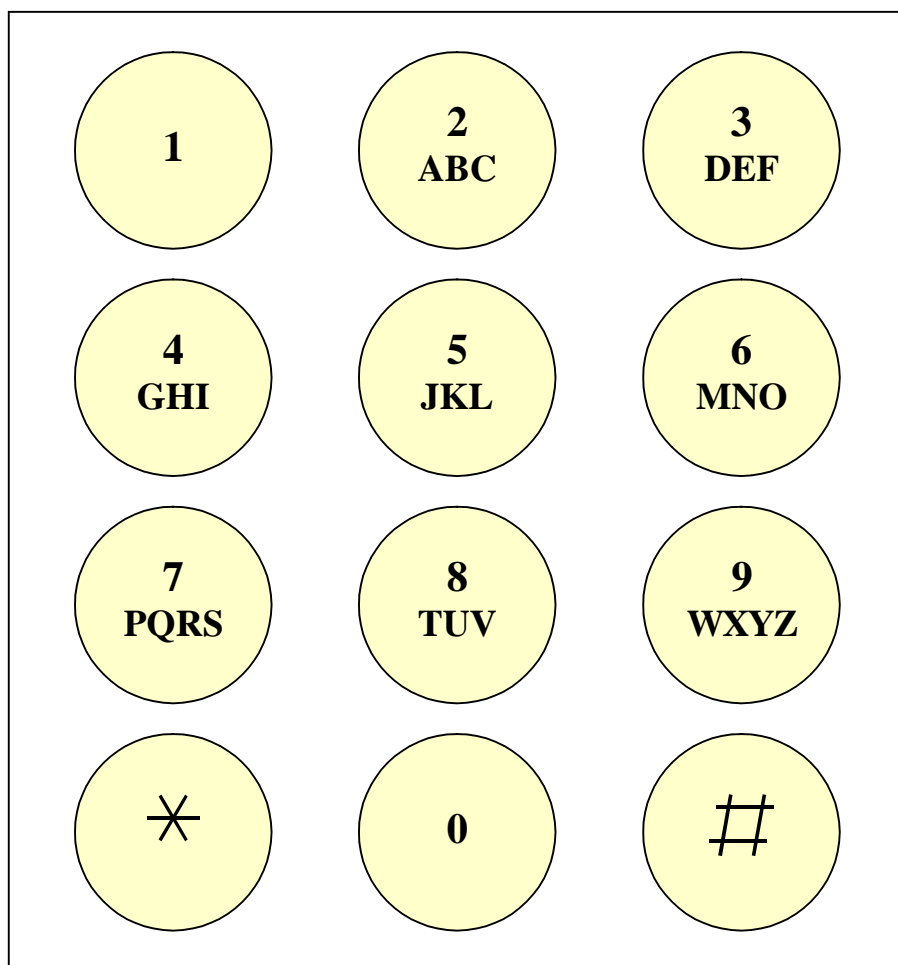


Figure 1: 12-button keypad arrangement showing alphanumeric relationships

- 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 numbers³¹:

Table 1: Presentation of geographic or mobile numbers

Subscriber number length	National numbers	International numbers	Fixed Mailbox numbers
5 digits	(0+NDC ³¹) 12345	+353 NDC 12345	+353 80 NDC 12345
6 digits	(0+NDC ³¹) 123 456	+353 NDC 123 456	+353 80 NDC 123 456
7 digits	(0+NDC ³¹) 123 4567	+353 NDC 123 4567	+353 80 NDC 123 4567
8 digits	(0+NDC ³¹) 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 4 contains examples of how numbers should be presented.

³¹ 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 4) illustrates, there are three different dialling procedures:

- 1 For calls into or out of Ireland the caller dials an international prefix (most commonly 00³²) 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 NDC³³), or local dialling (i.e. using only the subscriber number).

The existing numbering arrangements are summarised in Annex 4.

Note: The National Numbering Scheme is available, in the form of a numbering and dialling scheme status report, 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.

³² The '00' code is mandatory throughout the EU, in accordance with Article 27 of the Universal Service Directive.

³³ National Destination Code (See Annex 5 for explanation)

14. Publication of dialling and numbering scheme Usage

ComReg maintains a two-part up to date plan (database) of allocated number ranges and codes on the ComReg web site at <http://www.comreg.ie>. Part 2 of this plan lists 5XXXX-series Messaging short codes while Part 1 covers all other listed E.164 numbers. This information is refreshed in each case following an allocation. Copyright of this information belongs to ComReg but use for own purposes (i.e. not for resale) is unrestricted.

In addition, ComReg publishes a status report document that is amended from time to time and which lists the designations of all commonly used E.164 numbers from the National Numbering Plan, indicating those that are in use or reserved and those that are still free.

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 18-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 will afford a reasonable period, normally 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, as appropriate, to:
 - i the Guiding Principles of these Conventions;
 - ii the provisions of relevant authorisation conditions and/or conditions of use on allocated numbers;
 - 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, are described herein and/or in the Numbering Applications document. Where changes occur or new number types are designated, special conditions may be described in individual published ComReg documents, pending their inclusion in the Conventions or the Applications documents. All of these documents are available on the ComReg web site at <http://www.comreg.ie>.

A1.1 Geographic Numbering Criteria

- 1 Only Authorised Persons who have made a notification to ComReg showing they are providers of a publicly available electronic communications network or service shall be eligible to apply for primary allocation or reservation of geographic numbers;
- 2 Applicants for geographic numbers are required to provide supporting information, as listed in the Numbering Application Form, which will be evaluated by ComReg;
- 3 Allocations will only be made where the provided information is complete and confirms the applicant has a genuine and sufficient need to be provided with a share of the finite numbering resource.

A1.2 Non-Geographic Numbering Criteria

- 1 Only Authorised Persons who have made a notification to ComReg showing they are providers of a publicly available electronic communications network or service shall be eligible to apply for primary allocation or reservation of non-geographic numbers or codes;
- 2 Applicants for non-geographic numbers are required to provide supporting information, as described in the Numbering Application Form, which will be evaluated by ComReg;
- 3 Allocations will only be made where the provided information is complete and confirms the applicant has a genuine and sufficient need to be provided with a share of the finite numbering resource.

A1.3 Mobile Numbering Criteria

- 1 Only Authorised Persons who have made a notification to ComReg showing they are providers of a publicly available electronic communications network shall be eligible to apply for a Mobile Network Code (MNC) and/or for primary allocation or reservation of mobile numbers;
- 2 Mobile network codes (MNCs) will only be issued to network operators who can demonstrate that they provide or have convincing plans to install or otherwise achieve effective contractual control over adequate infrastructure to operate either a full mobile network service or a mobile virtual network service (MVNO) or a large-scale fixed network mobile-type service that requires the use of an MNC for its operation;
- 3 ComReg considers that the absolute minimum necessary infrastructure to be considered an infrastructure-based MVNO as described in A1.3-2, which needs its own MNC and/or its own mobile numbering range for operation, consists of a Mobile Switching Centre (MSC), Home Location Register (HLR) and Authentication Centre (AUC). Each of these must have adequate capacity to provide appropriate levels of service to the foreseen number of Irish customers. In addition, plans for the use of extra facilities provided by other operators to that MVNO will be taken into account by ComReg in arriving at its decision;
- 4 MNCs may be issued for use to fixed network operators where strong evidence is demonstrated of advanced plans to provide and operate SMS (or similar, such as EMS/MMS) network-

support services. Such situations will be dealt with on a case-by-case basis for the present but sole control of adequate network infrastructure will be considered to be a pre-requisite;

- 5 Applicants for mobile numbers are required to provide supporting information, as described in the Numbering Application Form, which will be evaluated by ComReg. For services based on new or innovative technologies, this includes *inter alia* a requirement to demonstrate that the services to be provided on the requested numbers will transparently handle inter-cell handover and roaming (at national and international levels) to the levels expected by mobile consumers;
- 6 Allocations will only be made where the provided information is complete and confirms the applicant has a genuine and sufficient need to be provided with a share of the finite numbering resource.

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

- 1 Only Authorised Persons who have made a notification to ComReg showing they are providers of a publicly available electronic communications network shall be eligible to apply for the allocation or reservation of carrier access, carrier selection and / or CPS codes;
- 2 Applicants for these codes are required to provide information as described in the Numbering Application Form, which will be evaluated by ComReg;
- 3 Allocations will only be made where the provided information is complete and confirms the applicant has a genuine and sufficient need to be provided with a share of the finite numbering resource.

A1.5 Number Portability Routing Prefix Criteria

- 1 Only Authorised Persons who have made a notification to ComReg showing they are providers of a publicly available electronic communications network or service shall be eligible to apply for NP routing prefixes;
- 2 Applicants for NP routing prefixes will 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 and to provide supporting information, as described in the Numbering Application Form, which will be evaluated by ComReg;
- 3 Allocations will only be made where the provided information is complete and confirms the applicant has a genuine and sufficient need to be provided with a share of the finite numbering resource.

A1.6 Telecommunications Directory Information Access Code Criteria

- 1 Undertakings providing access to telephone directory information using the National Directory Database (NDD) shall be eligible to apply for telecommunications Directory Information Access Codes;

Note: Only Authorised Persons who have made a notification to ComReg showing they are providers of a publicly available Electronic Communications Network or Service may add a call completion service to a directory service.

- 2 Applicants for allocation or reservation of telecommunications directory information access codes shall justify their requests as specified in ComReg's numbering applications procedure (currently ComReg 08/03). Specifically, supporting information shall be provided by the applicants as described in the Numbering Application Form, which will be evaluated by ComReg;

- 3 Allocations will only be made where the provided information is complete and confirms the applicant has a genuine and sufficient need to be provided with a share of the finite numbering resource.

A1.7 Internet Access Number Criteria

- 1 Only Authorised Persons who have made a notification to ComReg showing they are providers of publicly available electronic communications services including Internet Service Providers (ISPs) shall be eligible to apply for 189X Internet Access Codes;
- 2 Applicants for Internet access numbers are required to provide supporting information, as described in the Numbering Application Form, which will be evaluated by ComReg;
- 3 Allocations will only be made where the provided information is complete and confirms the applicant has a genuine and sufficient need to be provided with a share of the finite numbering resource.

A1.8 ISPC and NSPC Criteria

- 1 Only Authorised Persons who have made a notification to ComReg showing they are providers of a publicly available electronic communications network shall be eligible to apply for ISPCs and/or NSPCs;
- 2 Applicants for SPCs are required to provide supporting information, as described in the Numbering Application Form, which will be evaluated by ComReg;
- 3 Allocations will only be made where the provided information is complete and confirms the applicant has a genuine and sufficient need to be provided with a share of the finite numbering resource.

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:

- 4 The requested number blocks or codes are not available for allocation or reservation;
- 5 The applicant is not a holder of an appropriate Authorisation for such an allocation/reservation;
- 6 The applicant has not established that he/she meets the eligibility criteria laid down;
- 7 The planned activation date is too far ahead;
- 8 The planned services are not considered by ComReg to be appropriate for implementation on the requested number blocks or codes;
- 9 A previous allocation remains significantly under utilised vis-à-vis the applicant's stated plans;
- 10 A previous related reservation has not yet been opened for use in accordance with the applicant's stated plans;
- 11 The same reservation has already been renewed several times without sufficient justification for not being allocated and brought into use;
- 12 One or more previous allocations has been used in a way that involves serious or repeated non-compliance with its conditions of use and/or with the conditions attached to the applicant's General Authorisation;
- 13 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: 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 or to add new grounds for withdrawal.

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

Where numbering conventions are breached at primary allocation level, or where Regtel provides notification as described in conventions A3.1-10 or A.3.2.10 below, the final decision as to whether a situation has occurred in which numbers or reservations should be withdrawn or suspended will be taken by ComReg. Where numbers have been allocated or reserved at secondary level (e.g. by network operators in normal circumstances), decisions of this nature concerning their own customers may be taken directly by each operator concerned where the evidence of breach of the National Numbering Conventions is considered to be clear-cut, or by reference to ComReg where doubt exists. ComReg may also issue Directions to an operator where it considers that a customer of that operator is breaching the Conventions if the operator has not itself taken appropriate and timely action.

A3.1 Withdrawing primary level allocations /reservations

The following shall, without limitation, be considered breach of the National Numbering Conventions and grounds for withdrawal of number allocations or reservations:

- 1 Serious or repeated failure of the allocated party or parties to comply with one or more of the conditions attached to rights of use of the allocation;
- 2 Insufficient usage of a number range, in terms of allocation or reservation at secondary level. *Note: only the numbers not already in use will be recovered on these grounds;*
- 3 All numbers of an allocated range have become deactivated. *Note: numbers will be recovered on these grounds on the basis of proper management of limited resources and not as a penalty on the current holder;*
- 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;
- 9 A number is being or has been used in the commission of an offence³⁴ in connection with telephones, as described in Section 13 of the Post Office (Amendment) Act 1951³⁵;
- 10 In the case of Premium Rate Numbers or Premium Rate Text Messaging Short Codes, notification by Regtel to ComReg that the holder of the allocation concerned is not in

³⁴ An offence as defined in that Act relates to voice or text messages that are grossly offensive, indecent, obscene, menacing, or calculated to cause annoyance, inconvenience or needless anxiety to another person.

³⁵ Section 13 of the Post Office (Amendment) Act 1951 is implemented in Schedule 1, Part 2 of the Communications Regulation (Amendment) Act 2007.

compliance with the agreement specified in convention 11.2.8-2 or convention 11.4.3-1 above, as appropriate, and where Regtel asserts that in its judgement this non-compliance has the effect of being injurious to the interests of consumers³⁶;

- 11 Where ComReg deems it necessary in the short term for the immediate protection of consumers or Undertakings or to prevent or stop serious abuse of a numbering resource, it may take all steps necessary to suspend the operation of that resource – including the issuing of Directions to any Undertaking concerned. Such suspension may last for up to three months at a time on a renewable basis, pending full withdrawal of the resource as foreseen in this section or elimination of the threat to consumer welfare or to the resource.

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

- 12 With the exception of case A3.1-1 below, the overall costs of the withdrawal, the time scales and the effect on number changes shall be considered before withdrawal takes place;
- 13 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. In case A3.1-1 below, ComReg may take steps – immediate or otherwise - to suspend any relevant numbering resource(s) pending clarification of the perceived non-compliance, if it considers that to be necessary for the protection of consumers or affected Undertakings;
- 14 Withdrawn active numbers shall simultaneously be replaced by numbers from previous or new allocations or from reserved numbers, if deemed appropriate;
- 15 The *parallel running* and *recorded announcement* procedures of 3.2 above shall be put in place, if deemed appropriate.

A3.2 Withdrawing secondary level allocations/reservations

The following shall, without limitation, be considered breach of the National Numbering Conventions and grounds for withdrawal of number allocations or reservations:

- 1 Serious or repeated failure of the allocated party or parties to comply with one or more of the conditions attached to rights of use of the allocation;
- 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. *Note: numbers are recovered on these grounds on the basis of proper management of limited resources and not as a penalty on the current holder;*
- 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 agreed by ComReg to be in the overall national interest or withdrawal is in conformance with a ComReg instruction;
- 8 It is necessary as part of a change to the National Numbering Scheme.
- 9 A number is being or has been used in the commission of an offence³⁴ in connection with telephones, as described in Section 13 of the Communications Regulation (Amendment) Act 2007;
- 10 In the case of Premium Rate Numbers or Premium Rate Text Messaging Short Codes, notification by Regtel to ComReg that the holder of the allocation concerned is not in compliance with the agreement specified in convention 11.2.8-2 or convention 11.4.3-1

³⁶ In these cases, ComReg will itself evaluate the available evidence taking due account of Regtel's assertion(s) and its expertise in these matters, before deciding whether number withdrawal is appropriate and proportionate.

above, as appropriate, and where Regtel asserts that in its judgement this non-compliance has the effect of being injurious to the interests of consumers;

- 11 Where ComReg deems it necessary in the short term for the immediate protection of consumers or Undertakings or to prevent or stop serious abuse of a numbering resource, it may take all steps necessary to suspend the operation of that resource – including the issuing of Directions to any Undertaking concerned. Such suspension may last for up to three months at a time on a renewable basis, pending full withdrawal of the resource as foreseen in this section or elimination of the threat to consumer welfare or to the resource;
- 12 In the case of a shared numbering resource (e.g. multiple services provided on a single 5XXXX number by different Undertakings), provisions in these conventions relating to withdrawal or suspension of resources may be applied to just one or more of the sharing Undertakings, as appropriate.

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

- 13 With the exception of case A3.2-1 above, the overall costs of the withdrawal, the time scales and the effect on number changes shall be considered before withdrawal takes place;
- 14 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. In case A3.2-1 above, ComReg may take steps – immediate or otherwise – to suspend any relevant numbering resource(s) pending clarification of the perceived non-compliance, if it considers that to be necessary for the protection of consumers or affected Undertakings;
- 15 Withdrawn active numbers shall simultaneously be replaced by numbers from previous or new allocations or from reserved numbers, if deemed appropriate;
- 16 The *parallel running* and *recorded announcement* procedures of 3.2 above shall be put in place, if deemed appropriate.

Annex 4: Existing numbering arrangements³⁷

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 + 021 + 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
118XX	Call to Directory Service (DQ)	11823
112 or 999	Call to emergency services	112
1800 + 6 digits	Call to freephone subscriber	1800 223 223
YXX XXXX ⁽¹⁾	Local call to subscriber in Dublin	323 4567
YXXXXX or YXXXX ⁽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:

³⁷ From ODTR 98/09; Numbering in Ireland: Proposals for the 21st Century (A consultative Document).

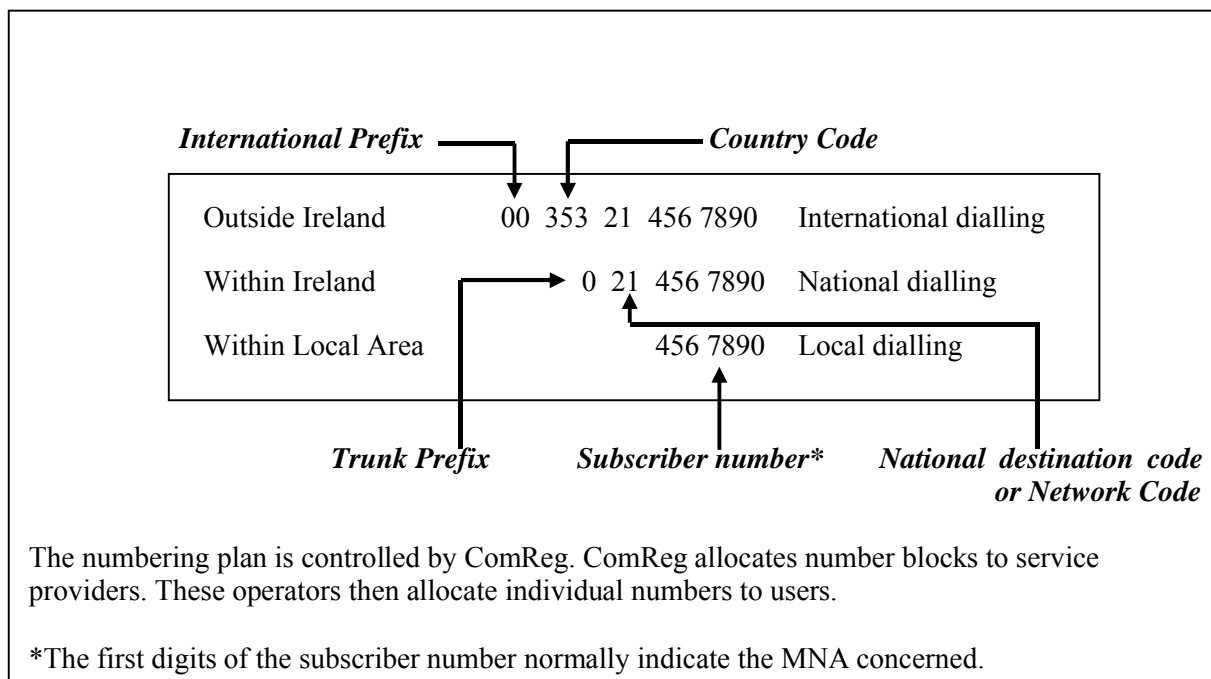
Category	Examples		
Geographic numbers ³⁸	52+XXXXX, 1+XXX XXXX	402+XXXXX, 21+XXX XXXX	51+XXX XXX, 80+51+XXX XXX
Fixed line mailbox numbers ³⁸	80+52+XXXXX, 80+1+XXX XXXX	80+402+XXXXX, 80+21+XXX XXXX	80+51+XXX XXX, 80+21+XXX XXXX
Mobile ³⁸	85+XXX XXXX,	86+XXX XXXX,	87+XXX XXXX
Mobile mailboxes ³⁸	85+5+XXX XXXX,	86+5+XXX XXXX,	87+5+XXX XXXX
Non-geographic ³⁸	76X+XXX XXX,	70X+XXX XXX,	818 XXX XXX
Non-geographic ³⁹	15XX+XXX XXX,	18XX XXX XXX	

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



³⁸ Accessible from abroad. Prefixed with '0' in use, except local calls to geographic numbers.

³⁹ National access only - trunk prefix 0 not inserted.

Figure 4: The structure of the IMSI

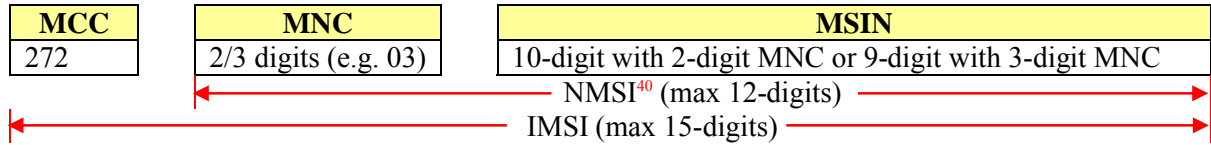
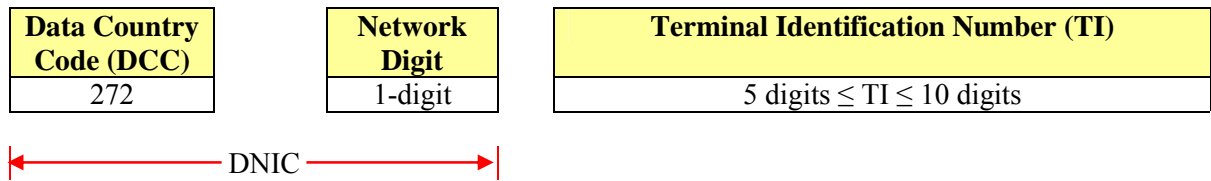


Figure 5: The structure of the DNIC and terminal identifiers



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.

⁴⁰ NMSI=National Mobile Station Identifier.

Annex 5: 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 proceeding 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 13 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 6 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 13 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 11.8.3-4. 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 6: Designations for numbers and codes

(as used in the Irish National Numbering Scheme)

The following designations are described 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 conformity of the practical usage they propose for specific numbers or codes with the designated conditions of use should first check this with ComReg, which will endeavour to ensure clarity. ComReg allocates numbers objectively and in a non-discriminatory manner in accordance with these designations and with the Numbering Conventions as a whole.

Misuse of numbers is an offence⁴¹ which may result in withdrawal of the numbers/codes in accordance with Annex 3 and Convention 3.2.1-4.

If new or special situations arise, the NPM will be prepared to designate new numbers/codes to deal with them where this is objectively justifiable and necessary.

Note: the designations described in this Annex, which are effectively 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).

A6.1 Geographic Numbers and Services

‘Normal’ usage of geographic numbers has until recently implied usage by/for fixed-line networks, in which consumers and originating operators have developed certain historical perceptions regarding their retail and termination costs, respectively. Granting of geographic number rights of use has been extended⁴² to mobile operators in the expectation that this will not result in violation of such legitimate expectations.

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. A full listing of geographic number ranges can be found in the document “Irish Telephony Numbering Scheme Status Report⁴³”, which is updated from time to time.

For calls to fixed mailboxes, an additional digit pair “80” precedes the NDC and follows the country code (for international calls) or the trunk prefix (for national calls); for such mailbox 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.

The 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 NPM⁴⁴.

Note: Numbering Convention 11.1-3 permits forwarding of the call under certain conditions.

⁴¹ “An undertaking granted a right of use for numbers which fails to comply with any conditions attached to such right ... is guilty of an offence” [European Communities (Electronic Communications Networks and Services (Authorisation) Regulations 2003 – S.I. No. 306 of 2003]

⁴² As of March 2007!

⁴³ The current version is Document ComReg 05/33 of April 2005.

⁴⁴ Currently, these destinations are MNAs described in document ComReg 03/147. More precise information on MNA boundaries may be obtained from ComReg, if necessary.

Geographic numbers may be used to access services, with certain exceptions (a notable exception is the provision of Premium Rate Services).

A6.2 Mobile Numbers, Mobile Codes 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' (i.e. the '5' is inserted between the NDC and the subscriber number; see example in Figure 2). 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 (a notable exception is the provision of Premium Rate Services).

Mobile network codes (MNCs) are issued to network operators from the range 01-99, to be used in accordance with ITU-T Recommendation E.212, only in conjunction with its mobile telecommunications service offering in Ireland.

A6.3 Non-geographic Numbers and Services

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

Table A6.1 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 over PSTN.

Service	Access Code
Freephone Calls	1800
Shared Cost (Fixed)	1850
Shared Cost (Timed)	1890
Universal Access	0818
Premium Rate – charged per-minute	1520, 1530, 1540, 1550, 1560, 1570, 1580 and 1590
Premium Rate – charged per-call	1512, 1513, 1514, 1515, 1516, 1517, 1518 and 1519
Premium Rate (Adult)	1598 (general adult services), 1599 (adult services of a sexual nature)
Personal Numbering	0700
Internet Access	1891, 1892, 1893
IP-based services	076

Table A6.1: Summary of Non-geographic Numbering Services.

A6.3.1 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.

A6.3.2 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 of the originating network;
- 1850 - where the caller is charged a fixed fee, which is independent of the duration of the call, and which corresponds to 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.

A6.3.3 Premium Rate Numbers and Services (excluding text – see A6.5.3)

Premium Rate Services, for the purposes of these conventions, are those that substantially⁴⁵ 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 content 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 are ten numbering ranges for per-minute charged Premium Rate services, and eight ranges for per-call charged services, each specifically designated for use within its own permitted price-band⁴⁶ whose maximum rate to the caller may not exceed the relevant limit, shown in the tables below. These numbering ranges are identified by distinctive 15XX access codes as shown in the tables, to assist recognition by consumers. All Premium Rate services – except for premium SMS services using 5XXXX codes, shall be provided using numbers from these ranges, unless new arrangements are specifically agreed with the NPM.

Adult type services shall only be provided using the access codes 1598 or 1599, with adult services of a sexual nature being restricted to the latter.

⁴⁵ 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 S.I. No. 194 of 1995.

⁴⁶ Specific industry agreed price-points that do not exceed these price-band limits are typically used to implement actual PRS services.

Access Code	Price-band (Retail cost per minute ⁴⁷ ; VAT incl.)
1520	Not exceeding €0.30
1530	Not exceeding €0.50
1540	Not exceeding €0.70
1550	Not exceeding €1.20
1560	Not exceeding €1.80
1570	Not exceeding €2.40
1580	Not exceeding €2.95
1590	Not exceeding €3.50
1598 (Adult services; General)	Variable price up to €3.50
1598 (Adult services; Sexual nature)	Variable price up to €3.50

Table A6.2: Price Bands for Per-minute Charged PRS

Access Code	Price-band (Retail cost per call; VAT incl.)
1512	Not exceeding €0.50
1513	Not exceeding €0.70
1514	Not exceeding €0.90
1515	Not exceeding €1.20
1516	Not exceeding €1.80
1517	Not exceeding €2.50
1518	Not exceeding €3.50
1519	Reserved for future use

Table A6.3: Price Bands for Per-call Charged PRS

A6.3.4 Universal Access Numbers and Services

Universal Access Services allow calls to be made to a central (typically corporate) number for re-routing to the most appropriate response point. The ultimate destination number for the call – decided by the called party – can depend 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, locations of local corporate offices, 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.

A6.3.5 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

⁴⁷ Actual billing may be done on a different basis e.g. per-second billing.

person. The caller is charged at a rate not exceeding the retail charge for the initial stage of the call (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 operation⁴⁸, 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.*

A6.3.6 Internet Access Numbers and Services

Designated Internet Access numbers provide a convenient means of distinguishing switched 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 codes⁴⁹. 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 partial or full flat-rate 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 (partial flat-rate) or with no limits (full flat-rate), 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 ranges⁵⁰.

A6.3.7 IP-Based Numbers (076 Range)

IP-based numbers are designated for use with services in which termination to the user normally occurs using IP-related protocols but where an E.164 number is required for that termination or to reach a gateway between the PSTN⁵¹ and another network.

⁴⁸ 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.

⁴⁹ 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.

⁵⁰ For example, shared cost numbers based on 1890 codes are sometimes used for Internet access on a Pay-As-You-Go basis, as 1890 calls are charged at local rate.

⁵¹ The term PSTN is used here in its widest sense, including ISDN and mobile public networks.

Unlike geographic ranges, these numbers may be assigned to individuals as well as to termination points and, unlike most non-geographic numbers, there is no need for number translation with the 076 range.

Unlike geographic or personal numbers which are limited to Ireland (apart from short-term nomadic operation), the IP-based ranges may be used over indefinite⁵² periods outside of Ireland for VoIP or similar purposes without conflicting with these Numbering Conventions.

Note: This obviously cannot imply that the 076 numbers, which inherently lie behind the +353 country code, will operate on the PSTN's of other countries.

IP-based numbers will be allocated to VoIP service providers as well as to network operators, in keeping with the nature of many – often substantial – VoIP undertakings, which don't necessarily have significant physical network facilities of their own. Block allocations of 076 numbers will only be made to authorised undertakings. Those undertakings are expected to allocate individual numbers to their subscribers based in Ireland or at least with genuine associations⁵³ with Ireland.

The retail price charged by an undertaking for calls to 076 numbers shall not exceed the undertaking's national call rate for calling geographic numbers. It is anticipated that, in practice, retail rates will in all or almost all cases be less than this.

A6.4 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 codes⁵⁴ 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.

A6.5 Short Codes

A6.5.1 Customer Support Short Codes

Customer support short codes are allocated to provide service and assistance to existing customers of the networks concerned; they must not be used for the purpose of providing access to sales or

⁵² ComReg may amend this process in the event that number shortage seems imminent on the range.

⁵³ ComReg does not expect to police this association requirement, which is stated in sufficiently general terms to cover any reasonable connection with Ireland (family, business etc). However, reported abuses may be investigated and if repeated following warning may lead to withdrawal of the right to receive further number blocks.

⁵⁴ 189X Internet access codes are not included, as they are allocated individually and carry traffic of a characteristic type in any case.

commercial services for products for which open competition is permitted and advertising of the codes should discourage calls with a commercial context.

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. Current examples of these codes are 190X, 1471, 196 etc. These are specific short codes whose usage is pre-defined and well-known and common across all networks.

Access should be provided from all external networks to services using 190X and 191X codes and may or may not be provided to other customer service codes on a network. 190X and 191X codes are not to be promoted as sales channels either explicitly, by stating an operator should be contacted on this code for a product, or implicitly by stating that 190X/191X is a general contact number. The code, where used in material, shall only be referenced as a customer service code and would normally be accompanied by an equally prominent number identified as a sales channel. When operators use reasonable endeavours to have customers call specific sales lines but exceptionally an unsolicited customer sales enquiry comes through from an existing customer on a 190X or 191X code, it is recognised that this can be handled by dealing with the customer or transferring the call to the appropriate person rather than requesting a customer call back on a sales line.

A6.5.2 Network-Use Short Codes

These are the short codes 171, 172, 173 and 1740 to 1749 inclusive and 199. 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 network⁵⁵, its performance and its user-friendliness. They should only be used for services which generate sufficiently high demand⁵⁶ 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 operators or, more generally, with services that use numbers from the rest of the national numbering space. 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.

⁵⁵ 'Top-up' services, which add credit to a user's account, fall within this category.

⁵⁶ 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.

A6.5.3 Text/Multimedia Messaging Short Codes (including Premium codes)

Range	Category	Price Range €	Codes Available
50 000 to 50 998	FreeText rate	Free of charge	999
51 000 to 51 998	Standard rate*	not exceeding €0.16, vat inc	999
52 000 to 52 998	Reserved Std Rate		999
53 000 to 53 998	Basic premium	not exceeding €0.80, vat inc	999
54 000 to 56 998	Reserved Premium		2998
57 000 to 57 998	High premium	€0.80 or above, vat inc	999
58 000 to 58 998	Resvd. Adult (General)	Variable price	999
59 000 to 59 998	Adult (Sexual nature)	Variable price	999
5X 999	All ranges	Reserved	As required

Table A6.4: Price Bands for SMS Text messaging services

* Standard network rate for SMS calls originated & terminated within the network concerned

These are 5-digit short codes in the range 5BCDE⁵⁷, being typically used for advanced SMS-type messaging purposes, including EMS and MMS messages. 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 SMS/MMS-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 of use 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 table below. These charges may be applied to each mobile originated leg or each mobile terminated leg (MO or MT) of any messaging 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 5XXXX 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 30 codes. SPs are encouraged to minimise their use of codes in order to enhance their familiarity to customers.

A6.5.4 Carrier Short Codes

These are 5-digit short codes in the range 13CDE⁵⁸, that allow subscribers to gain access to their preferred telecommunications service providers. They consist of Carrier Access (CA) and Carrier

⁵⁷ Codes using Digit C=9 are reserved for possible expansion purposes.

⁵⁸ The digit C is always 9 in the case of Carrier Pre-selection.

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. These codes support the use of network-to-network-interfaces (NNI) to allow Irish telecommunications users to reach their chosen network providers. 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.

CPS operators are required to also keep open on their networks a set of CPS Operator Identification Codes that enable a customer to identify the operator they are trafficking with for any particular call option. The CPS Operator Identification Codes that correspond to each CPS call option are as follows:

- Code 19800 Call Option : International Calls;
- Code 19801 Call Option : National Calls;
- Code 19822 Call Option : Local Calls.

A6.5.5 Telecommunications Directory Enquiry Access Codes

These are 5-digit short codes in the range 118XX that allow subscribers to gain access to their preferred directory service providers. The codes may only be used for the provision of the actual directory service and for supporting services that are directly associated with this, such as call completion. While providers of pure directory enquiry services are not considered to be electronic communications service providers and therefore need not be authorised, the addition of call completion services requires notification and authorisation by ComReg.

Telecommunications Directory Access services in Ireland are not currently deemed to be Premium Rate Services.

A6.5.6 European Harmonised Codes of Social Value (HESC)

The 6-digit code HESC code 116XXX is designated for the provision of services as described in (EU) “*Commission Decision 2007/116/EC on reserving the national numbering range beginning with ‘116’ for harmonised numbers for harmonised services of social value*”.

The specific HESC numbers and corresponding services that are in use at any time are listed in the Annex to the Commission Decision and are also listed on ComReg’s web site www.comreg.ie. The listing of a number does not carry a national obligation to provide such a service and whether or not one is provided is dependent on the emergence of interested service providers as well as the success of their commercial negotiations with network providers. Access to all HESC services is free of charge to the caller, regardless of the network from which the call is made (i.e. 116XXX is a Freephone service).

Note: this does not imply that the network provider must offer the service without recompense.

The general conditions attached to the rights of use of HESC are described in section 11.4.5 above but it should be noted that, in accordance with Article 4 and pre-ambls (4) and (5) of the Decision, specific additional conditions may be attached by ComReg to any specific HESC, according to the nature of the service provided. However, general objectives are that a HESC should be potentially of value to visitors from other countries and it should answer a specific social need, particularly by contributing to the well-being or safety of citizens or by helping citizens in difficulty. HESCs must not be used for commercial purposes.

Individual HESCs will be allocated directly to service providers by ComReg.

A6.5.7 Data Network Identification Codes (DNICs)

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 4.

A6.5.8 International Signalling Point Codes (ISPCs)

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.

A6.5.9 National Signalling Point Codes (NSPCs)

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.

A6.5.10 Number Portability Routing Prefixes

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 for fixed networks, where XXX identifies the terminating operator’s switch and the value of D is 1 for non-geographic numbers or a digit in the range 2 to 8 (incl.) for geographic numbers. The prefixes are 5-digit in length and of the format 176XX (for mobile networks).

A special routing prefix 1750 has also been designated for use by network operators within the confines of their own networks.