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National Numbering Plan

National Numbering Plan

A Plan issued by the Telecommunications
Regulatory Authority

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National Numbering Plan

Table of contents

1	Introduction.....	1
2	Definitions	2
1	The National Numbering Plan	7
1.1	Numbers	7
1.2	Codes and Short Codes	7
2	The National Numbering Plan Conventions.....	8
2.1	Introduction.....	8
2.2	Convention 1. Rights and responsibilities	8
2.3	Convention 2. Applying for numbers or codes	9
2.4	Convention 3. Reserving numbers or codes.....	10
2.5	Convention 4. Considering applications	11
2.6	Convention 5. Conditions placed on allocations	13
2.7	Convention 6. Re-allocating and withdrawing numbers or codes	14
2.8	Convention 7. Requirement to notify others	15
2.9	Convention 8. National Numbering Plan records	15
2.10	Convention 9. The review procedure	16
2.11	Convention 10. Charging for Numbers	17
3	Schedules	18
Schedule 1	Structure of the Schedules.....	18
Schedule 2	Standards and standard presentation	18
Schedule 3	Access Numbers	19
Schedule 4	Licensed Operator Numbers.....	20
Schedule 5	Special Services Numbers (8 Series)	20
Schedule 6	Premium Rate Services Numbers (9 Series)	21
Schedule 7	Short Codes.....	23
4	Conventions for other codes and numbers.....	26
5	Numbering Report Template.....	27
Appendix 1	Allocation Certificate Proforma.....	28

PLAN

National Numbering Plan

1 Introduction

Legislative Decree No. 48 of 2002 promulgated the Telecommunications Law for the Kingdom of Bahrain. This Law formed the Telecommunications Regulatory Authority (the “TRA”) which has responsibility for the regulation of the telecommunications sector in the Kingdom of Bahrain.

One of the roles assigned to the TRA under Section 3.C.12 Duties and Powers of the Authority, is to prepare and maintain a National Numbering Plan and allocate numbers to operators in accordance with that Plan.

The licences issued to the operators require that they maintain their own individual numbering plans and provide an annual numbering report to the Authority in compliance with the National Plan.

This Plan provides a clear and unambiguous National Numbering Plan (the “Plan”) for the national telecommunications infrastructure, so that competing operators can configure their networks with confidence.

Queries related to the use of the Plan may be submitted to the Authority in writing at the following address:

The Numbering Unit
Telecommunications Regulatory Authority
PO Box 10353
Manama
Kingdom of Bahrain

Alternatively, e-mail queries may be sent to the Authority’s e-mail address at numbering@tra.org.bh

The National Numbering Plan is applicable to all appropriately licensed telecommunications operators wishing to make use of the national resource of numbers. The Plan and its processes and strictures are mandatory on all such operators.

PLAN

National Numbering Plan

2 Definitions

Access Code

Short dialled numbers, which allow users to access a wide range of services, e.g. international services via the access code 00.

Allocated

Status of a number or block of numbers that have been assigned to an operator for a particular purpose

Allocated for Migration Only

Status of a number or code block that has been allocated for a temporary period during migration from one numbering scheme to another

Allocation Certificate

A formal document that carries the request for allocation and the allocation of a number or code block (or blocks) to an operator for a particular purpose.

Annual Numbering Report

An annual report produced by the Authority that summarises the information supplied by operators in their own annual report providing the current position with regard to the Allocated numbering resources.

Broadband

A service or connection allowing a considerable amount of information to be conveyed, such as television pictures. Broadband is generally defined as a bandwidth that is more than 2Mbits per second.

Closed Numbering Scheme

A numbering system in which all national numbers are the same length.

Block

A sequence of contiguous numbers used as the basis for allocating codes to operators

Conservation area

A geographic code area, that has a realistic expectation of number exhaustion within the foreseeable future. This definition is based on knowledge of operators' business plans in a particular area or, generally, the amount of numbering capacity available and on information provided in operators' Annual Numbering Returns. The Authority will publish and keep updated the list of Conservation Areas and it will be available on the Authority's website.

Consultation

A Consultation is a document issued by the Authority that expresses some intent with regard to telecommunications regulation prior to its imposition in order to allow interested parties to comment on it.

PLAN

National Numbering Plan

Convention

The Kingdom of Bahrain's National Numbering Conventions. These are a set of rules and principles that govern the use, management and allocation of the national resource of numbers from the Plan. It is a breach of the licence granted to an operator under the Telecommunications Law, for an operator to not have a Numbering Plan, or to have a Numbering Plan that does not accord with these Conventions.

Country code (CC)*

The combination of one, two or three digits that identifies a specific country or countries in an integrated numbering plan or a specific geographic area. The public switched telephone network CC for the Kingdom of Bahrain is 973. This code follows the international dialling prefix on calls made from outside the Kingdom, and should be followed by the NSN of the destination within the Kingdom.

Data Network Numbering and Data Network Identification Code (DNIC)

Data network numbering conforms to international standards and is assigned to the Kingdom of Bahrain by the ITU-T as required.

Designated

The use of a number series or range of numbers specified for a particular purpose. For example the 9 Series is Designated for Premium Rate services.

The (General) Director

The (General) Director of the Telecommunications Regulatory Authority.

Mobile services

These are services that enable end users to be contacted, wherever their location, where the call charge is not distance dependent. Mobile, personal numbering and paging services are included in this category.

Free

Status of a number or block that has not been allocated for any purpose

Free for X

Status of a number or block that is Free but its use is restricted for a specific purpose

Geographic Numbering Range (GNR)

Number series or a range of numbers that have geographic significance.

Indirect Access

Indirect access is the acquisition of calls by an operator through a different operator's infrastructure.

Individual Licence

A Telecommunications License granted to a particular Person on terms specific to that Person in accordance with the provisions of Article 29 of the Telecommunications Law;

PLAN

National Numbering Plan

International Prefix

The International Prefix is the recognised numeric prefix that is added before the called number, which the telecommunications system uses to recognise. For example, as when an international number is being called. For the Kingdom of Bahrain, the prefix is 00.

ITU Telecommunications Standardisation Sector (ITU-T)

The ITU-T is a permanent organ of the International Telecommunications Union (ITU), the United Nation's specialised agency in the field of telecommunications. The ITU-T is responsible for studying technical, operating and tariff questions and issuing Recommendations on them with a view to standardising telecommunications on a world-wide basis.

Licensed Operator

A Person who is licensed to operate a Telecommunications Network or to provide a Telecommunications service under Section (25) of the Telecommunications Law

National Destination Code (NDC)*

A nationally optional code field, within the international public telecommunications numbering plan as set out in the ITU-T Recommendation E.164 number plan, which, combined with the subscriber number, will constitute the National Significant Number. In the Kingdom of Bahrain, this corresponds to the area code, used before the called subscribers number. In the Kingdom of Bahrain, the NDC has 2 digits.

National Numbering Plan (the Plan)

The Kingdom of Bahrain's Numbering Scheme (also known as the Plan). The Plan indicates the number ranges that are delegated for particular purposes or not delegated (see Section 2.9 - Convention 8).

Numbering Plan List (Number List)

The list of numbers and codes published by the Authority on its website and updated on a regular basis. The List gives details of the current status of designated parts of the Plan, e.g. Allocated, Free, Protected or Reserved.

National Rate

An indication that the price for the call is equivalent to the rate for a geographic national call set by the relevant originating operator, where such a rate exists (National Rate is not differentiated at present in Bahrain).

National Significant Number (NSN)*

NSN refers to that portion of the number that follows the country code for geographic areas. The National Significant Number consists of the National Destination Code followed by the Subscriber Number.

PLAN

National Numbering Plan

Number Block

A unit of 10, 1,000, 10,000, or 100,000 numbers depending on the section of the Plan to which the number pertains.

Number Range

A set of contiguous numbers of a specified or unspecified size

Numbering Arrangements Condition

The condition contained in certain licences granted under the Telecommunications Law. This deals with numbering arrangements in respect of numbers commonly referred to as public numbers, such as a licensee's obligation to adopt a numbering plan for such numbers allocated to him by the General Director of the Authority from the Plan in accordance with the Conventions.

Numbering Plans

Plans that licensed operators adopt for such numbers as are allocated to them from the Plan. These plans describe the method adopted, or to be adopted, for allocating and reallocating a number to any network termination point, user, telecommunication apparatus or service element. The Numbering Arrangements Condition in the licence granted under the Telecommunications Law obliges a licensee to have a numbering plan that is consistent with the Conventions. Pursuant to that condition, the General Director of the Authority may request such information about the licensee's operations and its numbering plan as he may reasonably require in order to administer the Plan.

Open Numbering Scheme

A numbering scheme in which numbers may take different lengths and meanings depending on the contents of the number

Personal Identification Code (PIN)

A number defined by a user that provides a degree of security in the operation of a service.

Personal Numbering Service (PNS)

This is a service based on number translation that enables end users to be called, using a single personal telephone number, and to receive those calls at almost any telephone number, including mobile numbers. Personal numbers are suitable for end users who habitually move location. For the avoidance of any doubt, personal numbers shall not be used for Premium Rate Services.

Ported Number

This is a number that has been allocated to a particular operator who has then re-allocated the number to a third party in accordance with the provisions of the Plan.

Premium Rate Services (PRS)

Services that are paid for through the telephone bill of a subscriber, and charged at rates above those for Special Services. The revenue for a PRS call may be shared between the operator and the provider of the service.

PLAN

National Numbering Plan

Protected

The status of a number or code block that is withheld from issue for some future purpose

PSTN

Public Switched Telephone Network

Reserved

The status of a number or code block that has been provisionally allocated to an unnamed party pending confirmation

Schedules

Those sections of this document that detail the designations of numbers specific to the National Numbering Plan.

Special Services

Services that are paid for through the telephone bill of a subscriber, and charged at special rates, from free up to, and including, national rate. Charges for these calls can be paid by the called party, shared between the caller and the called party, or paid wholly by the caller.

Subscriber Number (SN)*

The number identifying a subscriber in a network or numbering area.

Telecommunications Numbering and Addressing Body (TNAB)

A body approved by the Director as representative of public telecommunication operators and other persons whom the Director considers it appropriate to include in consultations about the content of the Conventions and the Scheme (at the time of publication no such body has been approved).

Telecommunications Regulatory Authority

The body set up under the Telecommunications Law to administer the regulation of telecommunications in the Kingdom of Bahrain.

Telecommunications Service

The transmission, conveyance, or routing of voice, data, audio, video, or any other information or signals to a point, or between or among points, by or through any electronic, radio, satellite, optical, microwave, or other medium or method now in existence or hereafter devised, regardless of the protocol used for such transmission, conveyance, or routing.

* - Indicates that this is based on an ITU-T Recommendation

PLAN

National Numbering Plan

1 The National Numbering Plan

1.1 Numbers

1. The National Numbering Plan makes use of a closed numbering scheme based on 8 digit number length. Figure 1 shows the broad structure of the Plan.

Leading Digit	Purpose
0	Access Codes and Type B Short Codes.
1	Licensed Operator Numbers and Type C Short Codes
2	Reserved for Future Use
3	Licensed Operator Numbers
4	Licensed Operator Numbers
5	Reserved for Future Use
6	Licensed Operator Numbers
7	Licensed Operator Numbers
8	Special Services Numbers
9	Premium Rate Numbers and Type A Short Codes

Figure 1. Numbering scheme

1.2 Codes and Short Codes

2. Codes are subsets of the number scheme and consist of variations to the full 8 digit number to allow short dialling sequences. Examples are 3 digit codes to call emergency services, or 5 digit access codes to select an individual operator. Codes are designated as one of three categories:
3. Type A is designated for use as emergency service codes. The code is allocated against a service (not associated with any licenced operator). Callers must be able to call such a code at any time from any network without charge.
4. Type B is designated for use as Access codes for the purpose of accessing other licenced operators and their services.
5. Type C is designated for use as "On-Net" codes for the purpose of accessing the services of a single licenced operator by that operator's own subscribers. TRA have mandated the use of common type C short codes to enable ease of transition for users should they change Licensed Operator.

PLAN

National Numbering Plan

2 The National Numbering Plan Conventions

6. The Plan is governed by a number of general Conventions that are outlined in this section. These Conventions apply universally to all aspects of the Plan and generally describe the administrative mechanisms whereby the Plan can be executed. In addition to the Conventions, a set of Schedules attached to this document define the current status of the Plan in relation to each specific group of numbers that has been allocated or reserved for some other purpose.
 - Convention 1. Rights and responsibilities.
 - Convention 2. Applying for numbers or codes.
 - Convention 3. Reserving numbers or codes.
 - Convention 4. Considering applications.
 - Convention 5. Conditions placed on allocations.
 - Convention 6. Re-allocating and withdrawing numbers or codes.
 - Convention 7. Requirement to notify others.
 - Convention 8. National Numbering Plan records.
 - Convention 9. The review procedure

2.1 Introduction

7. The Numbering Conventions for the Kingdom of Bahrain (the 'Conventions') are a set of principles and rules relating to the use and management of numbers from the Plan.
8. The Conventions govern the specification and application of the National Numbering Plan and licensees' Numbering Plans. It is a breach of the licence granted under section 3 of the Telecommunications Law for an operator to have a Numbering Plan that does not comply with these Conventions. Each licensee is required to submit their numbering plan to the Authority for approval, and to report to the Authority on a regular basis the status of their usage of numbers.
9. The Conventions are revised from time to time by the General Director of the Authority after consultation with relevant licensees and interested parties.
10. The Authority will publish information on the National Numbering Plan, and the current usage of numbers on the Authority's website at www.tra.org.bh

2.2 Convention 1. Rights and responsibilities

The Authority's guiding principles:

11. The Authority is responsible for developing and managing the National Numbering Plan and issuing the Conventions. Numbers and Codes are a national resource and the following principles will be taken into account by the Authority when allocating, reserving or managing numbers:
 - (a) The Authority will manage the Plan to ensure that there are sufficient numbers available to meet all reasonable demands that end users and Licensed Operators might have.

PLAN

National Numbering Plan

- (b) The Plan will, where applicable, be compatible with relevant international agreements, standards and recommendations.
- (c) The Plan will, wherever possible, seek to ensure that numbers of different types give a broad indication of service type and/or tariff so that end users can be aware of the service type they are using, and its likely cost.
- (d) The Authority will ensure that costs or inconvenience to consumers, operators and Licensed Operators are objectively justified, and kept to the minimum consistent with meeting demands for numbers and sound management of the Plan.
- (e) The Authority will allocate or reserve numbers in a fair and equitable manner, normally to the first operator that requests the block or code (i.e. on a 'first come first served' basis). The Authority will only allocate or reserve numbering capacity to operators who meet the eligibility criteria set out in Convention 2.
- (f) The Authority will take into account the need to anticipate growth and innovative services in demand for telecommunications services. In particular, the utilisation of previous numbering allocations will be taken into account when considering new requests for numbers.

Operators' responsibilities

12. Operators who have received allocations of numbers or codes shall publish a Numbering Plan, detailing the use of allocated numbers or codes in accordance with the Conventions and submit their Plan to the Authority for approval annually by the last day of January.

2.3 Convention 2. Applying for numbers or codes

Criteria for the eligibility of applicants for number allocations and reservations

13. Only holders of Individual licences granted under Chapter 7 of the Telecommunications Law are eligible to apply for allocations and reservations of numbering capacity.
14. Other persons who may require an allocation of numbering capacity, but who are not eligible under clause 6, should seek a sub-allocation from a licenced operator with an allocation of numbers. Sub-allocations should be fairly and reasonably made available from such operators.

Information to be supplied by an applicant for a numbering allocation and/ or reservation

15. When applying for an allocation or reservation of numbering capacity, the applicant shall provide the following information to the Authority's Numbering Unit on an appropriate application form (contained in **Error! Reference source not found.**):
 - (a) Name and contact details of the applicant.
 - (b) Where a person submits an application form on behalf of the applicant, a signed and dated letter of authorisation shall accompany it from that applicant.

PLAN

National Numbering Plan

- (c) Details of the licence granted under the Telecommunications Law under which the applicant intends to operate the numbering capacity sought.
 - (d) A preferred numbering code and/or block and, where appropriate, second and third preferences should be indicated.
 - (e) Where relevant, details of the type of telecommunications service intended on the range and the proposed tariff rate of the service.
 - (f) Any other information that the applicant considers necessary or appropriate to justify the application.
16. In addition, applicants shall provide to the Authority any other information, judged by the Authority to be relevant to the application. This may include a brief description of the applicant's technical and operational system configuration.

Timing of applications

17. Applications for numbering allocations should not, in general, be made more than six months prior to the planned in-service date.

2.4 Convention 3. Reserving numbers or codes

Making reservations

18. In addition to allocating numbering capacity, the Authority may, at its discretion, agree to reserve it. Reservations may be appropriate under the following circumstances:
- (a) To extend an existing logical range previously allocated
 - (b) Where an applicant does not wish to be identified;
 - (c) Where the reason for the application should not be divulged prior to an application for the allocation; or
 - (d) Where a customer order has not been finalised.
19. A reservation may be made against a specific request submitted by any person eligible to receive allocations (for example, for the expansion or growth of existing services or for the introduction of new services).
20. An application for a reservation shall be made to the Authority's Numbering Unit in accordance with Convention 2. Applications for reservations will be made public in the same way as allocations, unless the applicant requests otherwise and the Authority agrees that the request for confidentiality is reasonable.

Limitations

21. Wherever possible, the Authority will endeavour to convert a reservation into an allocation upon request. However, it should be noted that a reservation does not automatically entitle an applicant to activate the capacity. Nor, where numbering capacity is reserved, is there any guarantee that a corresponding allocation will subsequently be made.
22. Reservations will be time-limited and the limit for reservations will normally be three months.

PLAN

National Numbering Plan

23. Reservations may be renewable on request to the Authority. Reservations must be converted into allocations and approved before the number range can be activated.

Cancellation

24. Once a reservation has been made, that numbering capacity will be unavailable for allocation, except for the purpose and to the organisation for which the reservation was made. However, a reservation will automatically be cancelled if:

- (a) the time limit has expired;
- (b) the applicant withdraws the reservation; or
- (c) The Authority and the applicant agree a substitute reservation or allocation.

Competing requests

25. Where available number ranges are limited, and several operators have requested the same number block, the Authority may reserve the block for more than one operator, but will allocate it to the first operator who provides the Authority with firm evidence of a customer order. In these circumstances, the Authority will inform each of the competing operators that their reservation is subject to competition.

2.5 Convention 4. Considering applications

26. When making number allocations or reservations within the Plan, the Authority will take into account:

- (a) the guiding principles set out in Convention 1;
- (b) the provisions of the numbering section of the licence and, where appropriate, any other relevant licence conditions;
- (c) the views of the applicant and other interested parties (through consultation, where appropriate);
- (d) any other matters that the Authority deems relevant (e.g. any requirement to open a new range or make changes to the Plan in order to allocate the required numbers or codes); and
- (e) new number ranges or changes to the Plan;

27. Before opening any new ranges, or significant parts of ranges, the Authority will publish a notification. The Authority will give at least 28 calendar days' notice of the opening of any new ranges or significant parts of ranges. The Authority will also specify a date for the initial receipt of applications for those ranges and, prior to that date, no applications will be accepted.

28. The Authority will notify the ITU Development Sector (ITU-D) of changes to the Scheme and ensure that the correct notification is given in the ITU-D Operational Bulletin. Where the Authority considers it appropriate, it will also notify other overseas administrations, such as those that do not subscribe to the ITU-D Operational Bulletin.

PLAN

National Numbering Plan

Number portability

29. The Authority will take into account how the applicant intends to provide portability for relevant numbers when considering applications.

Timescale for handling applications for numbering capacity

30. The Authority will use all reasonable endeavours to make an allocation or reservation in accordance with the Conventions, in response to applications for numbering capacity, within a period of twenty-eight calendar days following receipt of an application that contains all of the information required by Convention 2. The 28 day period may be exceeded where:

- (a) additional information is required from the applicant;
- (b) a period of consultation is necessary, as initiated by the Authority;
- (c) there are significant issues relating to the application that cannot be reasonably handled within that period;
- (d) evidence is required that an applicant is running a system licensed under chapter 7 of the Telecommunications Law; or
- (e) The Authority considers that an alternative period of time is justified.

31. Where the Authority considers that an exception to the normal period is required, then it will inform the applicant in writing of its reasons and of the revised period.

Refusal of applications for numbering capacity

32. The Authority may at its discretion refuse an application for an allocation or reservation of numbering capacity. Alternatively, the Authority may not grant the application in full, or may attach specific conditions to the allocation which are consistent with the Conventions and/or Schedules and relate to the use and management of the numbering capacity allocated. Such specific conditions will be set out in the letter that accompanies the Allocation Certificate.

33. In the event of a refusal, whether in part or in full, or where specific conditions are attached, the Authority will inform the applicant, in writing, of its reasons.

34. The Authority may, following consultation with the applicant, make an alternative allocation that has the potential to satisfy the applicant's requirements without conflicting with the criteria that caused the original application to be refused.

35. Where the Authority refuses an application, either in part or in full, or attaches specific conditions to the allocation, the applicant may write to the General Director disputing the reasons given by the Authority for its decision or giving further information for consideration regarding the application. The General Director will then consider the request and respond to the applicant within 28 calendar days.

Allocation of numbers in response to an application

36. Once the Authority has made a decision to allocate a range of numbers to an operator for a specific purpose, it will issue an Allocation Certificate to the operator. The operator may not make any changes relating to the requested allocation of numbers until it has this certificate in its possession.

PLAN

National Numbering Plan

2.6 Convention 5. Conditions placed on allocations

General conditions

37. In addition to any specific conditions that may apply (see Convention 4), the following general conditions relating to the use and management of numbering capacity apply to all allocations made by the Authority:
- (a) the allocation shall be used for the purpose specified in the application (e.g. including any classification by type or tariff as set out in the Plan);
 - (b) the person originally allocated numbers shall be responsible for them. This does not prevent that recipient sub-allocating numbers, provided that the sub-allocation is still for the use specified in the original application and in accordance with the Conventions;
 - (c) the holder of the allocation shall maintain a record of the numbers in use;
 - (d) the holder of the allocation shall maintain a record of numbers that have been ported to another operator (Ported Numbers);
 - (e) holders of numbering capacity shall not, unless the General Director consents otherwise, charge any person for a number allocated to him (other than a coveted number allocated to a person who is not a public telecommunications operator at the request of such a person); in such circumstances where a charge is authorised, the Authority reserves the right to make a charge against the operator to which the number(s) were first allocated; and
 - (f) an operator shall not use numbers from the Plan other than those allocated by the Authority and for which the operator has in its possession a valid Allocation Certificate (see Convention 4-36 above).
 - (g) licenced operators with allocated numbers and codes, including licenced operators with suballocations, shall not prevent or delay connection to those numbers or codes if called, whether on their network or the network of other Licenced Operators

Conditional allocations

38. The Authority may allocate numbers or code(s) to an operator on the condition that it is used exclusively for traffic to and from a specified third party. In addition, it may be allocated on the condition that the code shall be capable of being transferred to that third party if, in due course, that third party becomes eligible to receive allocations of codes in its own right by satisfying the eligibility criteria in Convention 2.

Changes to allocations

39. Those who have been allocated numbering capacity are required to apply to the Authority to make any changes:
- (a) to the ownership of the numbers or code(s);
 - (b) to the purpose or use of the numbering allocation; or
 - (c) which relate to conditions of use placed on the allocation.

PLAN

National Numbering Plan

The audit process

40. Each holder of an allocation shall submit to the Authority an Annual Numbering Report. The Annual Numbering Report shall refer to information at the calendar year end and shall be submitted to the Authority within one month of the end of that year.
41. The following information shall be provided in the Annual Numbering Report for each allocation:
- (a) the current use of the allocation;
 - (b) numbers in service allocated to end users;
 - (c) details of numbers set aside for planned growth, customer orders or other usage, with explanations;
 - (d) blocks of numbers allocated to any person for purposes other than end use; and
 - (e) the proportion of numbers ported, at the request of end users, to another operator, including those ported before allocation.
42. Each Annual Numbering Report shall also provide:
- (a) a three year forecast of demand within significant ranges, as specified by the Authority;
 - (b) any other information requested by the Authority.
43. This information shall be supplied in a format specified by the Authority (see Appendix 1).

TRA Annual numbering report

44. The Authority will prepare an Annual Numbering Report on the organisation and use of the Plan for publication each year, usually in April.

2.7 Convention 6. Re-allocating and withdrawing numbers or codes

Reallocation

45. If a substantial proportion of numbers from an allocation has been transferred (e.g. sub-allocated or ported) to another operator, the Authority may, with the agreement of the operators concerned, re-allocate the number block to the operator who has most users in the block. The Authority will re-allocate number blocks or codes only when it has received the written consent of both the existing and the intended new, operator. In these circumstances the original Allocation Certificate will be withdrawn and a new one issued to the new holder of the allocation.

Withdrawal

46. The Authority will withdraw capacity that it has allocated, or part of such capacity, if its continued use or allocation is not in compliance with:
- (a) the Conventions and/or Schedules;
 - (b) the Plan;
 - (c) any specific conditions of the allocation; or
 - (d) it is no longer required.

PLAN

National Numbering Plan

47. Withdrawal of an in-service numbering range, which has been allocated by the Authority, can be made only after the Authority has consulted with interested parties for a period of not less than twenty-eight calendar days. It will be subject to a period of notice of not less than three months following that consultation.
48. If an allocation or part of an allocation is not brought into service within six months, it may be withdrawn after consultation with such interested parties.

2.8 Convention 7. Requirement to notify others

49. When activating a number allocation, the TRA will inform other licenced operators in the Kingdom of Bahrain to ensure activation in their networks within a designated period of time, and other relevant authorities including ITU-D of the new number allocation.
50. Those who have been allocated numbering capacity are required to advise the Authority, on an ongoing basis, of the names and contact details of persons in their organisations to which Allocation Certificates should be sent.
51. The Authority will maintain a list of such contacts and will make it available on request to all organisations listed on it, and others who, in the Authority's opinion, have need of that information.

2.9 Convention 8. National Numbering Plan records

52. The Authority will maintain comprehensive records of the status of all numbers referred to in the Plan. The full Plan will be set out in a list (the "Plan List") kept by the Authority and made available on the Authority's website. The Authority will update the Plan List on the Authority's website on a regular basis.
53. Where available and not commercially sensitive, details of the operators' plans for reserved numbering will be included on the List on the Authority's website. However, those requiring further details of reservations are advised to contact the person for whom the code or block of numbers has been reserved.

Publication of changes

54. In addition to updating the Plan at the earliest opportunity, the Authority will publish confirmations of allocations, reservations or withdrawals, setting out the number range(s) being allocated, reserved or withdrawn, the person to whom the allocation has been made or from whom it has been withdrawn, and the action date.

Status indicators

55. The Authority will structure the Plan so that all numbers or codes will fall into one of two categories: namely, either **Designated** or **Not Designated**. Designated numbers or codes are those set aside within the scheme for particular usage: e.g. Licensed Operator, Premium Rate, etc. Designation is no indication as to the availability, or otherwise, of a number or code. Those parts of the Plan that are Not Designated have not been set aside for a use specified in the Schedules, and are therefore not available for allocation or reservation.
56. Codes or numbers that have been Designated will, unless this is with reference to a Type A or Type C Short Code have one of the following, more specific, status indicators (listed in alphabetical order) within the Plan:

PLAN

National Numbering Plan

- **Allocated** - indicates codes or numbers that have been allocated to a person or organisation whose name will be listed alongside. While the majority of codes and number blocks shown as Allocated may also be in public service, these records will not contain information about in-service dates. In addition, allocations will not appear with full details on the List while an applicant maintains a requirement to protect commercially sensitive information prior to the opening of service.
- **Allocated for Migration Only** - indicates that the code or block has been allocated to a listed person for the express purpose of managing a migration from one range to another. This may be a temporary allocation and, after a suitable specified time, and the meeting of allocation criteria, the Authority may determine that the block could be used for new business and its status changed accordingly.
- **Free** - indicates that this code or block is available for allocation or reservation. Applicants should note that a number block shown as Free could have already been requested by another operator between the time of the last update of the list and the time of applying for the number block.
- **Free for X** - indicates numbering ranges which are free only for specific purposes, e.g. Free for Premium Rate Only, and Free for New 10,000 Block Only, which indicates where number ranges are not normally available for allocation or reservation while numbers are still Free in previously opened ranges.
- **Protected** - indicates where a number block is protected until further notice or, where a date is shown, until that date. Numbers are protected, e.g. for future planning purposes or to avoid temporary or permanent dialling problems.
- **Reserved** - indicates a provisional allocation, subject to confirmation by the applicant and/or the Authority. The applicant's name will normally appear alongside the reservation unless the Authority has agreed to maintain commercial confidentiality.

2.10 Convention 9. The review procedure

Reviews of the Conventions and the Scheme

57. The Authority may from time to time review the Conventions and/or the Plan upon its own initiative, or upon a request in writing by any operator, Licensed Operator, user or other interested party.
58. The General Director may from time to time amend or withdraw in full or in part the Plan and/or a Convention already published, or publish additional Conventions. This would take place only after consulting with relevant licensees, interested parties and, if the Director considers it appropriate, end users.
59. The normal consultation period for changes to the Plan will be three months. However, in exceptional circumstances, a shorter consultation period may be appropriate.

PLAN

National Numbering Plan

Structure of the Conventions and Schedules

60. These Conventions set out the general rules or principles concerning the procedures for applications, reservations, withdrawals and other operations of the Plan from both the Authority's and recipients' points of view. Specific rules relating to numbers or codes within the Plan are defined in the Schedules attached hereto.

2.11 Convention 10. Charging for Numbers

61. TRA will charge licensees for managing and maintaining the resource of National Numbers from 1st January 2009.

62. The charges to be applied may be reviewed from time to time following consultation.

63. Number applications will incur an administration charge in accordance with the TRA scale of fees as published on the TRA website and amended from time to time.

64. Continued use of numbers will incur an annual fee in accordance with the TRA scale of fees as published on the TRA website and amended from time to time.

PLAN

National Numbering Plan

3 Schedules

65. The following sections contain the Schedules to the National Numbering Plan. These Schedules contain specific information relating to the use of number ranges within the Kingdom of Bahrain.

Schedule 1 Structure of the Schedules

Schedule 1.1 The National Significant Number (NSN)

66. The National Significant Number (NSN) will usually be eight digits long, notated by the sequence ABCDEFGH.

Leading Digit (A)	Purpose
0	Access Codes and Type B Short Codes.
1	Licensed Operator Numbers and Type C Short Codes
2	Reserved for Future Use
3	Licensed Operator Numbers
4	Licensed Operator Numbers
5	Reserved for Future Use
6	Licensed Operator Numbers
7	Licensed Operator Numbers
8	Special Services Numbers
9	Premium Rate Numbers and Type A Short Codes

Table 1. High level allocation of numbers to purposes within the Plan

Schedule 1.2 Allocation of sub-blocks

67. Since the numbering capacity associated with a range may exceed the potential demand for the usage identified in Table 1, allocations will be made from particular B digits, leaving other values of B digit free for future allocation to the given usage or for alternative designation. Similarly, capacity will be conserved by care in the allocation of C and D digits to avoid large blocks of numbers becoming sterilised. Numbers will normally be allocated from the lowest available block upwards.

Schedule 2 Standards and standard presentation

Schedule 2.1 Standards

68. So far as it is practicable, the Scheme will conform to the relevant international standards.

PLAN

National Numbering Plan

Schedule 2.2 International service numbering

69. ITU-T Recommendations **E.169.2**, **E.169.3**, **E.175**, **E.191** and **E.195** describe the role of the ITU-T in introducing universal services. The allocation of numbers for such services (e.g. International Freephone 00800) is the responsibility of the ITU-T.

Schedule 2.3 Country code

70. The country code allocated by the ITU-T to the Kingdom of Bahrain is 973. This code follows the international dialling prefix on calls made from outside the Kingdom, and should be followed by the National Significant Number (NSN) of the destination within the Kingdom.

Schedule 2.4 Maximum number of digits

71. Particular attention is drawn to ITU-T Recommendation E.164 which states that the maximum number of digits that a national system is expected to handle on an outgoing international call is fifteen (15) (excluding the international dialling prefix).

Schedule 2.5 Alphanumeric arrangements

72. The Plan will use the decimal character set 0-9 for all number allocations. Letters and other non-decimal characters will not form any part of the NSN.

Schedule 2.6 International Prefix (AB = 00)

73. The international prefix 00 is used for international dialling from within the Kingdom of Bahrain. The digits of the country code and the NSN will follow this prefix. This also applies, where relevant, to ISDN data calls. Where an operator supports the use of handsets with the '+' character, this shall be interpreted as the International Prefix when used at the beginning of a dialling sequence.

Schedule 2.7 Consistency of format

74. Numbers must retain a consistent format for number presentation and there must be no intention to deceive or confuse. The recommended formats for eight-digit NSNs under the Plan are as follows:

National format

ABCDEFGH – with eight digit dialling

International format (incoming)

+973 ABCDEFGH – within the ITU maximum of fifteen digit dialling

Schedule 3 Access Numbers

75. The series of numbers with leading digit 0 are designated for use as access to hierarchical elements of telecommunication service provision. The general concept has been adopted from larger countries where 00 is designated to access international services, and 0 is designated to access national services.

PLAN

National Numbering Plan

76. For the Kingdom of Bahrain, 00 is designated as the access to international services. Dialling 00 is normally followed by a country code, then the national digits required to access the service. Where available within operator capability, the + sign is used as an equivalent to the 00 international level access number.
77. 02CDE is designated for national Carrier Selection (CS) and Carrier Pre-Selection (CPS) Access Numbers. Where the CDE digits identify a Licenced Operator.
78. Access Numbers are allocated individually.
79. In the National Area, Access Numbers may be concatenated with other Licenced Operator Numbers, Special Services Numbers, Premium Rate Numbers and Short Codes to allow customers of one Licenced Operator to access the services of another Licenced Operator.

Schedule 4 Licensed Operator Numbers

80. The 1, 3, 4, 6 and 7 series of numbers are designated for use by Individual Licence holders for the provision of Telecommunication Services. The designation does not define the service provided by the licence holders. The licence holders are required to present a number plan defining their use of the ranges allocated to them as defined in Convention 1.
81. A significant amount of 1 series numbers are used as Type C short codes to cater for On Net services. Some of these codes are now considered as common codes that should be used on every network for the same purpose if that service is provided. For example National and International Directory Enquiries. See Schedule 7 for the details.
82. Allocation of Licensed Operator numbers will be made in blocks of 100,000.
83. Calls anywhere within a Licensed Operator number range will be made using full 8 digit national dialling except in the case of Short Codes.

Schedule 5 Special Services Numbers (8 Series)

84. The 8 Series range has been designated exclusively for Special Services. These are services paid for through the telephone bill of a subscriber, and charged at special rates. The cost of the call to services in the 8X range shall be:
- (a) paid wholly by the called party;
 - (b) shared between the caller and the called party; or
 - (c) paid wholly by the caller.
85. Licensed Operators shall offer services at the stated tariffs, which shall be no higher than the tariff for national calls.

The general format of this Special Service Range is:

8B CDEFGH

where

PLAN

National Numbering Plan

8B identifies the service

CDEFGH identifies the subscriber

86. The series beginning with 81, 85 and 88 are shortened to 5 digit special service numbers. These numbers are designated as detailed in Table 3 for use by Licenced Operators to provide services such as voting, and may be used for any type of call, e.g. voice, data or messaging.

87. Allocation of numbers in the 8 series will normally be in blocks of 1,000 except the short numbers which will be allocated in blocks of 10

88. In order to allow meaningful tariff information, codes will be allocated with A, and B digits having the following significance:

AB	Service
80	No charge to caller
82	Protected
83	Protected
84	Cost shared with operator
86	Protected
87	Cost born by the caller
89	Protected

Table 2 Allocation of Special number codes in the 8 Series

AB	Service
81CDE	Short special service number - no charge to caller
85CDE	Short special service number - cost shared with operator
88CDE	Short special service number - cost born by caller

Table 3 Allocation of Short Special number codes in the 8 Series

89. Where revenues from providing Special Services to end users are shared between operators, the operator allocated the number shall not abuse their position by demanding an excessive share of revenues.

Schedule 6 Premium Rate Services Numbers (9 Series)

Schedule 6.1 General

90. The 9 series has been designated for Premium Rate Services.

91. The general format for this Premium Service Range is:

PLAN

National Numbering Plan

9B CDEFG

Where:

9 identifies the Premium Rate Service

B identifies the charge band, B = 0-9

CDEFGH identifies the subscriber, CDEFGH = 0-9

92. The series beginning with 91, 94 and 96 are short 5 digit Premium Service numbers. These numbers are designated as detailed in Table 5 for use by Licenced Operators to provide services such as voting, and may be used for any type of call, e.g. voice, data or messaging.

93. Allocation of numbers in the 9 series range will normally be in blocks of 1,000 except the short numbers which will be allocated in blocks of 10.

94. The charge bands identified in tables 4 and 5 below are designated as High, Medium and Low and are specified to allow consumers an indication of potential costs of calling these numbers. To facilitate more stringent consumer protection if required, these bands may be subject to a separate regulation.

95. The maximum levy for calls in the High Band will be 0.5 BD per minute open ended. The maximum levy for calls in the Medium Band will be less than the High Band per minute open ended. The maximum levy for calls in the Low Band will be less than the High and Medium Bands per minute, with a total call charge of no more than 3BD.

Number Range:	Charge Band	Status
90	High Band	Designated
92	High Band	Protected for future use
93	Medium Band	Protected for future use
95	Medium Band	Designated
97	Low Band	Designated
98	Low Band	Protected for future use
99	Protected	Protected for emergency services

Table 4 Classification of Premium Rate service numbering

Number Range:	Charge Band	Status
91XXX	High Band	Short High Band

PLAN

National Numbering Plan

94XXX	Medium Band	Short Medium Band
96XXX	Low Band	Short Low Band

Table 5 Classification of Short Premium Rate service numbering

Schedule 6.2 Premium Rate Services

96. Premium Rate Services are normally expected to have the following characteristics:

- (a) they are paid for through the telephone bill of a subscriber;
- (b) they are charged at rates above Special Services in the 8 series;
- (c) the revenue for the call, which comprises the price of the call plus the content, product or service, is shared between the operator and the provider of the service whether directly or indirectly.

97. Operators are required to publish allocations and sub-allocations in the interests of consumer protection.

98. Where revenues from providing Premium Services to end users are shared between operators, the operator allocated the number shall not abuse their position by demanding an excessive share of revenues.

99. Operators are mandated with this Plan to publish a list of the tariffs being applied to their allocated numbers.

Schedule 7 Short Codes

Schedule 7.1 General

100. Short codes are short, generally easier to memorise numbers, which allow end users to access a wide range of telephony services.

101. Short codes are categorised by the type of service for which they are used. There are three types of Short codes: Types A, B and C.

102. The use of short codes represents substantial numbering capacity and, for this reason, is recorded in the details of the Plan.

Schedule 7.2 Type A Short Codes

103. Type A Short Codes are used by callers to reach commonly used emergency services. As such these numbers are not allocated to operators, but to the services themselves. The codes are mandatory for implementation and all operators must allow calls to these codes at no charge to the subscriber.

104. The use of Type A Short Codes has been refined for particular services where there is a social imperative, and if necessary will be backed up by regulatory force. Type A codes will be designated individually by the Authority for such services and shown separately on the TRA numbering web pages.

105. Type A codes are three (3) digits in length and are designated as shown in Table 6:

PLAN

National Numbering Plan

Description	Short Code
Common international emergency code for mobile networks	112
Traffic Accident Police	199
Casualty Bureau	990
Reserved	991
Criminal Investigation (CID)	992
Reserved	993
Coast Guard (CGD)	994
Reserved	995
Reserved	996
Reserved	997
Reserved	998
National Emergency Call Centre	999

Table 6 Type A Short Codes

Schedule 7.3 Type B Short Codes

106. Type B Short Codes have network-wide significance as they are used by the end users of one Licensed Operator to select another Licensed Operator. For example, callers will use Type B codes to select other Licensed Operators for such as services as long distance and/or international calls where the call charges may be more beneficial. These codes are allocated by the Authority to appropriately licensed Licensed Operators.
107. Type B Short Codes are allocated by the Authority to appropriately licensed operators. Licensed operators may suballocate Type B Short Codes.
108. Direct routing of calls to suballocatees is allowed where the suballocatee is interconnected with other licenced operators, and where the licenced operator to whom the code is allocated consents in writing, and obtains the written approval of the Authority.
109. Type B Codes are five (5) digits in length and are used for access to other operators or Licensed Operators. The format is 0B CDE, where 0B is the prefix and indicates to the network that another Licensed Operator is being selected, followed by the CDE which identifies the selected operator.

Schedule 7.4 Type C Short Codes

110. Type C short codes are any other code except type A or type B. Some confusion in the use of these codes has required TRA to designate common Type C codes to be implemented by all National licenced operators where the applicable service is supplied.
111. Common Type C codes may be accessed by subscribers of other Licenced Operators via the appropriate Carrier Access numbers.
112. Type C codes not designated as common may be set by the licencees, either to provide particular services exclusively to their directly connected end users or for internal network operations. This might include for example

PLAN

National Numbering Plan

codes for access to sales services. These codes must not conflict with any other numbers, and may only be defined within the individual operator's allocated number range.

113. Non common Type C codes may be defined individually by each Licensed Operator, and will not be accessed from other Licenced Operators.

Description	Common Short Code
Local Call Operator Assisted Calls	100
Fault Report Center	121
Speaking Clock (English)	140
Speaking Clock (Arabic)	141
International Operator Assisted Calls	151
National Directory Enquiries	181
Directory Enquiries-Mobile	188
International Enquiries (Operator Services)	191

Table 7 Common Type C Short Codes

PLAN

National Numbering Plan

4 Conventions for other codes and numbers

114. The Authority recognises that there is a need to manage other aspects of numbering in addition to those covered above. The Authority has already undertaken the task of administering these resources and they are now included as part of the NNP under the responsibility of the TRA. These include:

- Data network codes
- Legacy system codes (e.g. Telex)
- Mobile Network Codes
- Domestic SS7 Point Codes
- Signalling Area Network Codes/ International Signalling Point Codes (SANC/ISPC)

115. Applications, reservations and withdrawals for these numbers are administered in exactly the same way as other numbers, as detailed in the Conventions.

PLAN

National Numbering Plan

5 Numbering Report Template

The reporting template shall be a Microsoft spreadsheet, with a sheet allocated to each service. Each service will then be reported with the following headings shown with example data:

Service:	e.g. Fixed, Mobile, Premium Rate, Special Services etc.
Ranges:	13600000 - 13609999
Type:	Fixed Wireless
Total Available Numbers:	10,000
Total Working Numbers:	6,200
Total Spare Numbers:	3,800
%Utilised End 2007:	72.2%
%Annual Growth:	10.5%
%Utilised End 2008:	79.6%
%Utilised End 2009:	87.3%
%Utilised End 2010:	94.7%

PLAN

National Numbering Plan

Appendix 1 Allocation Certificate Proforma

The Authority manages the allocation of the numbers in the Plan by means of a database, reports from which will be made accessible through its web site. Holders of the relevant licences shall apply for an allocation of ranges of numbers using a form which is included at Following this note.

It is intended that a single form will serve for two purposes:

- Application for the allocation of a range of numbers
- De-allocation of a range of numbers

Allocation of a range of numbers is authorised by use of a numbering certificate, which is a separate document.

All allocations will take place making use of the form based presented in this section. Initially, an operator will prepare, and submit to the Authority, an Application Form. On receipt, the Authority will log the application and process it through its internal procedures to ensure that the requested number range is available for allocation, and is being requested for use within the definitions of the Plan.

Once the Authority is satisfied that the number range is available and is to be used correctly, then the range will be marked up in the database to show the allocation and this will be made available on the web site. On completion, a Numbering Certificate will be created and forwarded, duly authorised, to the applicant.

In the event that the Authority wishes to withdraw a range of numbers from a licence holder (as for example in the case of need for conservation measures then it may, following consultation with the licence holder to which the numbers had been allocated, issue a De-allocation Certificate that may cancel all or part of a previously issued Numbering Certificate and return a range of numbers to the pool of the Plan. Any such De-allocation Certificate will refer to the original Numbering Certificates that are affected by the de-allocation process.

Where the Authority finds that a number range cannot be allocated, for whatever reason (e.g. prior allocation of the range and no suitable 2nd and 3rd choices; or inappropriate use of the number range), then the Application Form will be returned to the applicant with the TRA signature marked 'Unapproved'. The Application Form will be accompanied by a letter explaining the reasons for the rejection and the action that needs to be taken in order for a subsequent application to be successful.

PLAN

National Numbering Plan

Telecommunications Regulatory Authority Network Numbering Application Form					
Applicant details:			Type of certificate		
Name			Application		
Company			Reservation		
Address			Allocation		
			De-Allocation		
			Type of number requested		
			Geographic		
Telephone			Find me anywhere		
Facsimile			Special		
E-Mail			Premium		
			Other		
Applicant's reference number			TRA reference number		
Applicant's licence reference			Superseded allocation(s)		
Range of numbers requested					
	1st choice		to		inclusive
or	2nd choice		to		inclusive
or	3rd choice		to		inclusive
Purpose of allocation					
Special conditions					
Applicants signature			TRA signature		
Name			Name		
Role	Date		Role	Date	
TRA Internal use only					
Received and logged			Listed on website		
Range available			Certificate issued		
Allocated in database					

Figure 2 Application Form

PLAN

National Numbering Plan

Telecommunications Regulatory Authority Network Numbering Application Form

Notes on completion:

Applicant details: Should include the name of a previously agreed responsible person, together with address and contact details for further correspondence.

Type of certificate: One of the boxes should be ticked. Forms submitted to the TRA should be either Applications or Reservations. A numbering certificate will be issued once this application has been processed by the TRA.

A de-allocation certificate removes the right of use for the defined number range from the operator.

Type of number: This must be one of the defined purposes from the Plan

Reference numbers: Forms submitted to the TRA should include an applicant's reference number by which it can be tracked. The TRA will assign the application a TRA reference number during the processing of the application

Licence reference: The identity of the licence under which the application is being made.

Over-ridden allocations: If the form is being used as a de-allocation, then any previous allocations that are over-ridden by the de-allocation will be referred to.

Range requested: The applicant should enter here the first choice of the number range selected. To allow for the possibility of coincident applications second and (if required) third choice number ranges may also be included to cover the possibility that the first choice range has been allocated already. As a general principle one form should cover one contiguous block of numbers.

Purpose of allocation: A brief description of the use to which the additional numbers will be put and why the request has been made.

Use of existing allocations: A list of the allocations currently available to the

Special conditions: Reference may be made by the Authority to any special conditions (e.g. duration of reservation) that may apply to the Allocation

Signatures: The Application only has force if it is signed by a previously agreed authorised person. The Allocation only has force if it is signed by the General Director of the TRA or his nominated representative.

Figure 3 Notes for completion of the Application Form