## Botswana (country code +267)

Communication of 26.IX.2023:
The Botswana Communications Regulatory Authority (BOCRA), Gaborone, announces the updated national numbering plan of Botswana.

## NATIONAL NUMBERING PLAN

AND
LIST OF NUMBERING RESOURCE ALLOCATIONS AND ASSIGNMENTS

## DEFINITIONS

"Administration of Numbering Resources" means the set of activities associated with the Assignment, Designation, and the oversight and monitoring of Numbering Resources, whose Allocation is established in the Numbering Plan.
"Allocation" means the attribution of the purpose and quantitative capacity of sets of Numbering Resources established in Numbering Plan.
"Assignment" means the allotment of Numbering Resources previously allocated in a Numbering Plan for a given telecommunications service provider or end-user.
"Assignee" means a person (natural or legal) to whom an assignment of numbers is made.
"End user" means a person who utilizes telecommunications services by assigned numbering resources.
"Facilities-based Service Provider" means a service provider who owns and operates the telecommunications network facilities used in the provision of a specified service.
"Freephone" means telephone service whereby a subscribing organization can pay for the incoming calls made by its clients or customers.
"National Numbering Plan" means the identification of the framework for allocation of ordinary numbering blocks, carrier identification codes, short codes, and other unique numbering resources to different applications and categories of resource
"Primary assignment" means the assignment of numbering resources by the BOCRA to individual companies and service providers
"Public Land Mobile Network" means a combination of wireless communication services offered by a specific operator in a specific country
"Public Switched Data Networks" means a publicly available network supporting packet-switched data, separate from the Public Switched Telephone Network.
"Public Switched Telephone Network" means is the aggregate of the world's circuit-switched telephone networks that are operated by national, regional, or local telephone operators, providing infrastructure and services for public telecommunication
"Secondary assignment" means the assignment of numbering resources by recipients of a primary assignment to their customers.
"Shared calls" means is the sharing of a phone number across multiple devices in different locations

## ACRONYMS

CRA Act Communications Regulatory Authority Act
BOCRA Botswana Communications Regulatory Authority,
CRASA Communications Regulators Association of Southern Africa.
CC Country Code
DNIC Data Network Interface Codes
IoT Internet of Things
ISPC International Signalling Point Codes
M2M Machine to Machine
MNC Mobile Network Codes
MCC Mobile Country Code
MNO Mobile Network Operator
NCC Network Colour Codes
NSPC National Signalling Point Codes
NNP National Numbering Plan
PRS Premium Rate Services
PLMN Public Land Mobile Network (PLMN)
PSDN Public Switched Data Network
PSTN Public Switched Telephone Network (PSTN)
SADC Southern Africa Development Community
SPC Signalling Point Code
USSD Unstructured Supplementary Service Data
VANs Value Added Network Service providers
VoIP Voice Over Internet Protocol

## 1. INTRODUCTION

1.1 Section 38 of the Communications Regulatory Authority Act of 2012, grants Botswana Communications Regulatory Authority (the Authority or BOCRA) the mandate to maintain a Numbering Plan and other telecommunication numbering resources used in Botswana.
1.2 In fulfilling this statutory mandate, BOCRA is required to develop a National Numbering Plan (NNP) for the efficient use of the numbering resources of telecommunications services and ensure adherence to the plan regarding the allocations and assignments of the numbering resources to the service providers. To achieve this mandate BOCRA shall:
1.2.1 Ensure that the National Numbering Plan, where applicable, will ensure that it is compatible with relevant Numbering Plan Standards and Industry Guidelines, International Agreements, Standards and Recommendations.
1.2.2 Manage the National Numbering Plan Allocations and Assignments to ensure that there are enough numbers available to meet current and reasonably anticipated future demands of services.
1.2.3 Ensure that there is equity, efficiency and transparency in the allocation and primary assignment of numbers, and that costs to service providers and consumers are objectively justified.

## 2. PURPOSE

The purpose of the National Numbering Plan is to ensure transparent, non-discriminatory and efficient use of numbers. This practice assures service providers and end-users of excellent provision and consumption of telecommunications services.

## 3. BACKGROUND

3.1 BOCRA adopts the principles and procedures, in the form of administration of Numbering Policies, Numbering Plan Code of Conduct and Numbering Database that govern the way numbering resources are allocated and assigned. These administrative mechanisms promote fair and efficient allocation, assignment and use of numbering resources. This shall provide BOCRA and the Service Providers with a management platform and the end users with specific identification of their respective services in relation to the numbering plan.

## 4. NATIONAL NUMBERING PLAN (NNP)

4.1 The National Numbering Plan is illustrated in Table 1.

Table 1 is the matrix for allocation of all numbers i.e., Fixed, Mobile, Short Codes, and other unique numbering resources. These are described in detail in the following sections.

Table 1: The National Numbering Plan

| First digit | Second digit |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 0 | Int'l | Short international dialling in region |  |  |  |  |  |  | $\begin{aligned} & 0800 \& \\ & 08 X X \end{aligned}$ |  |
| 1 | Short codes |  |  |  |  |  |  |  |  |  |
| 2 | NG | Geographic numbering (Francistown region) |  |  |  |  |  |  |  |  |
| 3 | NG | Geographic numbering (Gaborone) |  |  |  |  |  |  |  |  |
| 4 | NG | Geographic numbering (Palapye region) |  |  |  |  |  |  |  |  |
| 5 | NG | Geographic numbering (south-east region) |  |  |  |  |  |  |  |  |
| 6 | NG | Geographic numbering (north and west regions) |  |  |  |  |  |  |  |  |
| 7 | Mobile numbering |  |  |  |  |  |  |  |  |  |
| 8 | Non-geographic numbering (M2M and Mobile) |  |  |  |  |  |  |  |  |  |
| 9 | PRS | 91X | Reserved |  |  |  |  |  |  | 99X |

Int'l: international access code
NG: non-geographic numbering
PRS: premium rate services (non-geographic)

### 4.2 Unique Numbers and Short Code numbers

4.2.1 Level 0 - International Access and Freephone Numbers

Levels 0 is used for international access (00), the freephone numbers commencing with $\mathbf{0 8 0 0}$ and shared calls were allocated the 08XX numbering range.

### 4.2.2 Levels 1 - Short Codes

Level 1 is used for the Short Codes. Short codes are short telephone numbers classified into three categories being Types $\mathrm{A}, \mathrm{B}$ and C . The numbers occupy the $1 \mathrm{XX}, 1 \mathrm{XXX}$ and 1 XXXX number blocks i.e., three or four- and five-digits long numbers. Refer to Table 2.

Table 2: Summary of Types of Short Codes

| Short Code Types | Services and attributes | Length of number digits |
| :--- | :--- | :--- |
| Type A | Nationally important services <br> including emergency numbers | 3 digits long emergency services |
| Type B | Across net services i.e., accessed <br> through all public MNOs | 5 digits long:16XXX, 17XXX, 18XX(X) and <br> 19XXX number blocks. |
| Type C | On-Net services and can have same <br> number for different services within <br> the network. | $10 \mathrm{X}(\mathrm{X}), 11 \mathrm{XX}, 12 \mathrm{X}(\mathrm{X})$. |

### 4.2.3 Level *1 and *2 - USSD codes.

The levels *1 and *2 are used for the USSD codes which currently occupy the *1XX*XXX\# and *2XX*XXX\# numbering blocks.

### 4.2.4 Levels 1 and 9 - Emergency Numbers

Level 1 and part of level 9 is used for the emergency numbers. The emergency numbers occupy the 110-116, 99 X and 91X numbering blocks. Reference is made to Table 3 below being a list of Emergency Service Providers.

Table 3: Assigned Emergency Numbers

| Service Provider | Emergency Number |
| :--- | :--- |
| All Emergencies | 112 |
| ChildLine Botswana | 116 |
| Emergency Assist | 991 |
| MedRescue International | 992 |
| Rescue One | 993 |
| Boitekanelo Medical Services | 994 |
| Okavango Air Rescue | 995 |
| Botswana Fire Department | 998 |
| Ambulance (Ministry of Health) | 997 |
| Police | 999 |
| MedRescue International | 911 |
| Medflex | 914 |

### 4.2.5 Premium Rate Services

The Premium Rate Services (PRS) in level 09 remains unused and remains reserved for this service.

### 4.3 Fixed Numbers

4.3.1 Levels $\mathbf{2}$ to 6: Fixed numbers

Level 2 to 6 are the seven (7) digits long geographical numbers occupying the numbering range from 2 XX XXXX to 6XX XXXX respectively providing services to fixed line services. Reference is made to Table 4 below. This, however, excludes the following selected numbers on the second- and third-digit levels zero e.g., $2000000,3000000,4600000,5300000,6800000$ which are reserved.

Table 4: $\quad$ Fixed numbers by the geographical location

| Geographical Area | Number range | Zone |
| :---: | :---: | :---: |
| Francistown Area | 24X XXXX | 4 |
| Selebi-Phikwe Area | 26X XXXX | 4 |
| Letlhakane/Orapa Area | 29X XXXX | 4 |
| Gaborone Area | 3XX XXXX | 1 |
| Serowe Area | 46X XXXX | 3 |
| Mahalapye Area | 47X XXXX | 3 |
| Palapye Area | 49X XXXX | 3 |
| Ramotswa/Lobatse Area | 53X XXXX | 2 |
| Barolong/Ngwaketse Area | 54X XXXX | 2 |
| Mochudi Area | 57X XXXX | 2 |
| Jwaneng Area | 58X XXXX | 2 |
| Molepolole Area | 59X XXXX | 2 |
| Kasane Area | 62X XXXX | 5 |
| Ghanzi/Kgalagadi Area | 65X XXXX | 5 |
| Maun Area | 68X XXXX | 5 |

### 4.4 VOIP NUMBERS

### 4.4.1 Level 7

The level 7 range of 79 XXX XXX is allocated for VoIP numbering services.

### 4.5 MOBILE NUMBERS

### 4.5.1 Level 7 and 8

Levels 7 and part of Level 8 are an eight digits long mobile number range from :
71 XXX XXX to 78 XXX XXX ; and
81 XXX XXX to 85 XXX XXX respectively.

### 4.6 MACHINE TO MACHINE COMMUNICATIONS (M2M)/IOT

4.6.1 Level 8

The M2M communications is a 10 digit long numbering range that occupies numbering range from 86 XXXX XXXX to 89 XXXX XXXXX and supports the Internet of Things devices.

## 5. OTHER NUMBERING RESOURCES

5.1 The other numbering resources that enable seamless communications services and these are the known as Codes reference is made to table 5 below. These codes are listed as in the Recommendation ITU-T E.164.

Table 5: Instrumental Codes

| Important Codes | Relevance and Use |
| :--- | :--- |
| Country Code (CC) | 267 |
| Mobile Country Code (MCC) | 652 |
| National Signalling Point Codes | network interconnection purposes |
| Data Network Interface Code (DNICs) | X25 data networking |
| Network Colour Codes (NCC) | GSM base station identifiers |
| Mobile Network Code (MNC) | Public networks |
| International Signalling Point Code (ISPCs) | International signalling and it uses a 3-8-3 ITU format <br> standard. |

### 5.2 Mobile Network Code

There are three (03) Mobile Network Code (MNC) used in the networks of the Mobile Network Operators (MNOs) and these are allocated in accordance with the Recommendation ITU-T E.212. Reference is made to table 6 below.

| Table 6: | Mobile Network Codes |
| :---: | :--- |
| Mobile Network Codes | Mobile Network Operator |
| 01 | Mascom Wireless |
| 02 | Orange Botswana |
| 04 | BTCL |

### 5.3 The International Signalling Point Codes

These codes are used for the international signalling and are represented using a ITU 3-8-3 format. There are currently 6 spare ISPCs for Botswana. The following are assigned codes to Botswana for use as tabulated below.

Table 7: International Signalling Point Codes for Botswana

| International Signalling Point Code <br> (ITU 3-8-3 Format) | MNO Assigned |
| :--- | :--- |
| $6-104-0$ | Botswana Telecommunications Corporation Limited (BTCL) |
| $6-104-1$ | Botswana Telecommunications Corporation Limited (BTCL) |
| $6-104-2$ | Mascom Wireless |
| $6-104-3$ | Orange Botswana |
| $6-104-4$ | Orange Botswana |
| $6-104-5$ | Botswana Telecommunications Corporation Limited (BTCL) |
| $6-104-6$ | Botswana Telecommunications Corporation Limited (BTCL) |
| $6-104-7$ | Mascom Wireless |
| $6-105-0$ | Mascom Wireless |
| $6-105-1$ | Mascom Wireless |
| $6-105-2$ | Spare |
| $6-105-3$ | Spare |
| $6-105-4$ | Spare |
| $6-105-5$ | Spare |
| $6-105-6$ | Spare |
| $6-105-7$ | Spare |

## 6. NUMBERING ALLOCATIONS AND ASSIGNMENTS

### 6.1 Application for Number

6.1.1 All operators of a Public Switched Telephone Network (PSTN), Public Land Mobile Network (PLMN), or a Public Switched Data Network(PSDN), providing, or intending to provide within a specified time, publicly available telephone services, and owning and operating a public telecommunication system, are eligible to apply for primary assignments of telephone numbering capacity, subject to satisfying an eligibility criterion specified in the Numbering Policy, Code of Conduct and other relevant standard specifications such as the International Telecommunications Union's ITU-T Recommendations.
6.1.2 Non-facilities-based service providers may seek a secondary assignment from an eligible service provider unless the Authority advises otherwise. However, secondary assignments shall be made in an efficient and non-discriminatory manner.
6.2 National Number Allocations
6.2.1 The table 8 shows the 8 digits active mobile number allocations across all the three MNOs.

Table 8: Mobile Number Allocations as of August 2023

| Mobile Network Operator | Mobile Number Range | Quantity Allocated |
| :--- | :--- | :--- |
| Mascom Wireless | $71000000-71999999$ | $1,000,000$ |
|  | $74000000-74299999$ | 300,000 |
|  | $74500000-74799999$ | 300,000 |
|  | $75400000-75699999$ | 300,000 |
|  | $75900000-75999999$ | 100,000 |
|  | $76000000-76299999$ | 300,000 |
|  | $76600000-76799999$ | 200,000 |
|  | $77000000-77199999$ | 200,000 |
|  | $77600000-77799999$ | 200,000 |
|  | $77800000-77899999$ | 100,000 |
| Orange Botswana | $72000000-72999999$ | $1,000,000$ |
|  | $74300000-74499999$ | 200,000 |
|  | $74800000-74899999$ | 100,000 |
|  | $75000000-75399999$ | 400,000 |
|  | $75700000-75799999$ | 100,000 |
|  | $76300000-76599999$ | 300,000 |
|  | $76900000-76999999$ | 100,000 |
|  | $77300000-77599999$ | 300,000 |
|  | $77900000-77999999$ | 100,000 |
| $78000000-78199999$ | 200,000 |  |
|  | $78200000-78499999$ | 300,000 |
| Botswana Telecommunications | $78500000-78799999$ | 300,000 |
| Corporation Limited (BTCL) | $749000000-73999999$ | $1,000,000$ |
|  | $75800000-75899999$ | 100,000 |
|  | $76800000-76899999$ | 100,000 |
|  | $77200000-77299999$ | 100,000 |
|  |  | 100,000 |

6.2.2 The table 9 below shows the 8 digits active VoIP numbering allocations made to both the MNOs and the VANs:

Table 9: VoIP Numbers as of August 2023

| Service Provider | VolP Number range | Quantity Allocated |
| :--- | :--- | :--- |
| Virtual Business Network Services | $79100000-79100999$ | 1,000 |
| AfriTel | $79101000-79101999$ | 1,000 |
| Global Broadband Solutions | $79102000-79102999$ | 1,000 |
| Business Solutions Consultants | $79103000-79103999$ | 1,000 |
| Dimension Data | $79104000-79104999$ | 1,000 |
| OPQ Net | $79105000-79105999$ | 1,000 |
| Mega Internet | $79106000-79106999$ | 1,000 |
| Stature (OpenVoice) | $79107000-79107999$ | 2,000 |
| T9 113000-79113999 |  |  |
| Tsagae Communications | $79108000-79108999$ | 1,000 |
| MicroTeck Enterprises | $79109000-79109999$ | 1,000 |
| Microla Botswana | $79110000-79110999$ | 1,000 |
| Internet Options Botswana | $79111000-79111999$ | 1,000 |
| FDI Foneworx | $79112000-79112999$ | 1,000 |
| MTN Business Solutions | $79114000-79114999$ | 1,000 |
| Abari Communications | $79115000-79115999$ | 1,000 |
| Mission Communications | $79116000-79116999$ | 1,000 |
| ConceroTel | $79117000-79117999$ | 1,000 |
| Paratus Africa | $79118000-79118999$ | 1,000 |
| Blue Pearl Communications T/A ROI | $79119000-79119999$ | 1,000 |
| Dapit Ventures T/A GCSat Botswana | $79120000-79120999$ | 1,000 |
| Bantu Telecom | $79121000-79121999$ | 1,000 |
| Paratus Africa | $79122000-79123999$ | 2,000 |
| Netway Pty Ltd | $79124000-79125999$ | 2,000 |
| Apicom Pty Ltd | $79126000-79126999$ | 1,000 |
| Devaki Botswana | $79127000-79127999$ | 1,000 |
| Liquid Intelligent Technologies | $79128000-79128999$ | 1,000 |
| Orange Botswana | $79200000-79209999$ | 20,000 |
| Botswana Telecommunications | $79220000-79229999$ |  |
| Mascom Wireless | $79000-79219999$ | 10,000 |
|  | 50,000 |  |
|  | 7999 |  |

Note non coloured ranges are licensed SAP
6.2.3 The table 10 below shows the 10 number digits active Machine-to-Machine number allocations:

Table 10: M2M Number Allocations as of August 2023

| Mobile Network Operator | M2M Number range | Quantity Allocated |
| :--- | :--- | :--- |
| Orange Botswana | $8900000000-8900009999$ | 10,000 |
|  | $8900010000-8900019999$ | 10,000 |
|  | $8900020000-8900029999$ | 10,000 |
|  | $8900030000-8900039999$ | 10,000 |
|  | $8900040000-8900049999$ | 10,000 |
|  | $8900180000-8900189999$ | 10,000 |
|  | $8900190000-8900199999$ | 10,000 |
|  | $8900200000-8900209999$ | 10,000 |
|  | $8900210000-8900219999$ | 10,000 |
|  | $8900220000-8900229999$ | 10,000 |
|  | $8900230000-8900239999$ | 10,000 |
|  | $8900240000-8900249999$ | 10,000 |
|  | $8900250000-8900259999$ | 10,000 |
|  | $8900260000-8900269999$ | 10,000 |
|  | $8900270000-8900279999$ | 10,000 |
| $8900280000-8900289999$ | 10,000 |  |
| Botswana Telecommunications | $8900050000-8900059999$ | 10,000 |
| Corporation Limited (BTCL) | $8900060000-8900069999$ | 10,000 |
|  | $8900070000-8900079999$ | 10,000 |
|  | $8900080000-8900089999$ | 10,000 |
| Mascom Wireless | $8900090000-8900099999$ | 10,000 |
|  | $8900690000-8900699999$ | 10,000 |
|  | $8900100000-8900109999$ | 10,000 |
|  | $8900110000-8900119999$ | 10,000 |
|  | $8900120000-8900129999$ | 10,000 |
|  | $8900130000-8900139999$ | 10,000 |
|  | $8900140000-8900149999$ | 10,000 |
| $8900150000-8900159999$ | 10,000 |  |
|  | $8900160000-8900169999$ | 10,000 |
| $8900170000-8900179999$ | 10,000 |  |

Note ALL Allocations made in blocks of 10,000 numbers
6.2.4 The table 11 below shows the 7 number digits active Fixed number allocations:

Table 11: Fixed Number Allocations as of August 2023

| Number Blocks | Orange Botswana | Mascom Wireless | BTCL |
| :--- | :--- | :--- | :--- |
| $2 X X X X X X$ | - | 60,000 | 300,000 |
| $3 X X$ XXXX | - | 60,000 | 500,000 |
| $4 X X$ XXXX | - | 30,000 | 300,000 |
| $5 X X X X X X$ | - | 60,000 | 500,000 |
| $6 X X X X X X$ | $\mathbf{3 0 , 0 0 0}$ | $\mathbf{3 0 0 , 0 0 0}$ |  |
| Sub-Total | - | $\mathbf{2 4 0 , 0 0 0}$ | $\mathbf{1 , 9 0 0 , 0 0 0}$ |

## 7. CONCLUSION

7.1 The National Numbering Plan is a way of ensuring that:
7.1.1 The limited numbering resources are used prudently and efficiently and this allows for effective number management. This exercise enables customers to have access to services using numbers without undue expense and inconvenience, and to ensure that all service providers have the numbering resources they need to compete in the rapidly growing telecommunications marketplace with the associated proliferation of new telecommunications technologies and services; and
7.1.2 There is equity, efficiency, and transparency in the allocation of numbers as this is done objectively within the confines of the CRA Act of 2012.

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