Revision of Nigeria's NNP to Include M2M Numbering

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Uses of Numbering Plan

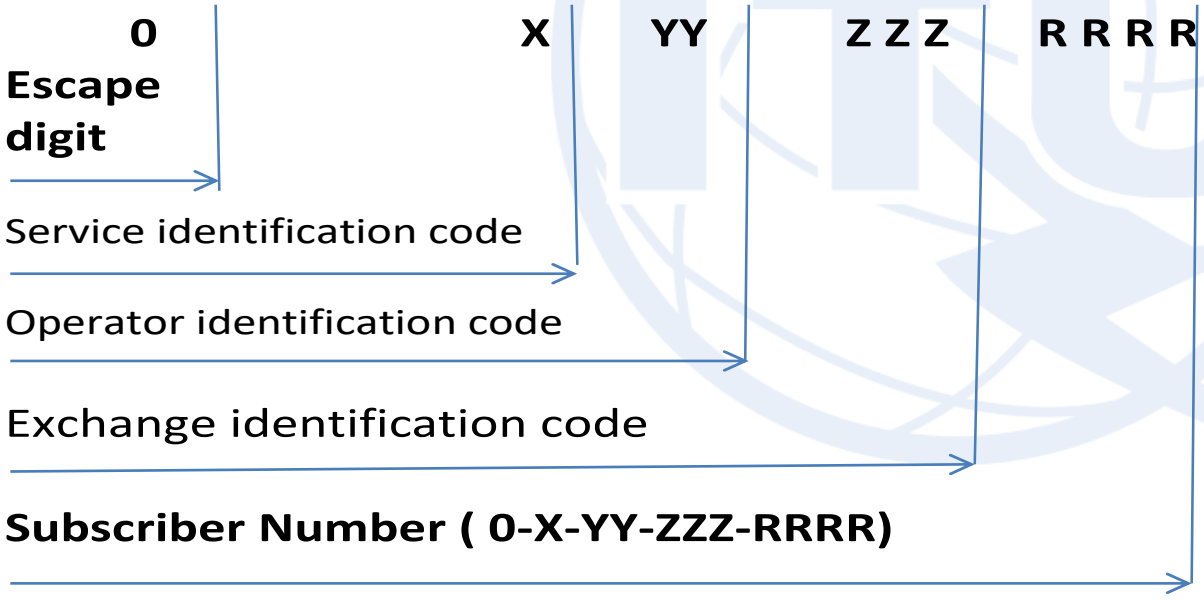
- Identification of subscribers and devices
- Routing of calls
- Billing and tariff
- Branding and service differentiation

Project Objectives

- Recovery of numbers assigned to obsolete services or collapsed operators (coin boxes)
- Phasing out of obsolete numbers (090 analogue mobile)
- Allocation of numbers to new and emerging telecom services (IoT, OTT, M -to -M)
- Expansion of available numbers to cater for population growth
- To accommodate new technologies and convergence

General Structure of Telephone Numbers

2.1 General structure of telephone numbers



Determination of Number of Digits for each Telephone Number

- Nigeria's projected population in 2050 is estimated at 490 million
- Minimum number of digits required can be obtained by solving the equation

$$10^n \geq P \text{ (490 million)}$$

Where n= number of digits and P is the population (490,000,000)

Quantitative Analysis Of The NNP

The present 10-digit number adopted will cater for the following:

- 6 billion mobile ssb numbers
- 1 billion fixed ssb numbers
- 1 billion connected devices (M2M)
- 100 unique operator codes

CHANGE OF INTERNATIONAL ACCESS CODE FROM '009' T0 '00'

Reasons for Change:

- ✓ To align it with international best practices
- ✓ To reduce the chance of errors since less numbers are now dialled
- ✓ Saving of processor time since fewer numbers need be analysed
- ✓ 00 is more user-friendly, especially for foreigners

CHANGE OF INTERNATIONAL ACCESS CODE FROM '009' T0 '00'

- ✓ 009X coincides with the country codes of some Asian countries and this causes routing errors and wrong billing when dialled in error
- ✓ 009 creates problem when registering subscriber number on websites that leave room for only 2-digit access codes

LEAD DIGIT ALLOCATION PLAN

Lead digit is the first number/numbers dialled when initiating a connection to a network

(a) Zero lead digits

0 national calls (inter-operator calls)

00 international calls

LEAD DIGIT ALLOCATION PLAN

(b) Non zero lead digits

1	toll free short codes
2 to 9	Short codes (calls not routed across networks but confined to specific operator networks)
* and #	USSD codes (* xxxx #)

SERVICE IDENTIFICATION CODES

(0) 0 NOT ASSIGNABLE
(0) 1 reserved
(0) 2 Fixed services
(0) 3 Reserved
(0) 4 Machine-to-Machine and Internet of Things

SERVICE IDENTIFICATION CODES

- (0) 5 Reserved
- (0) 6 Reserved

(0) 7 Mobile services

(0) 8 ,, ,,

(0) 9 ,, ,,

PHASING OUT OF GEOGRAPHIC CODES

- Modern Digital packet switching renders geographical codes irrelevant and obsolete
- Its elimination will help Nigeria free up millions of numbers assigned to fixed services which are no more operational
- The demand for fixed services/ numbers have gone down considerably in favour of mobile numbers

PHASING OUT OF GEOGRAPHIC CODES

- Geographic codes require continual disruptive changes as population grows or population shifts due to migration.
- All fixed line operators that responded to NCC enquiries supported this position

NEW NUMBERS FOR FIXED LINES

- All fixed service numbers will be converted from 8 digits to ten digits
- All geographic codes to be replaced with 3-digit operator codes
- All fixed service numbers will be exactly ten digits, no more no less, like their mobile counterpart.

NEW NUMBERS FOR FIXED LINES

- All fixed service numbers will start with lead digit ‘2’ i.e. after the escape digit zero (0)
- NCC to assign new operator codes to all fixed service operators
- Number length harmonization will make it easier to detect wrongly dialled numbers


Conclusion

Migration Of Fixed Numbers To New Format

- Present number can be converted to new fixed number by simply replacing the 1-digit area code with a 3-digit operator code, other digits remain unchanged
- All mobile numbers will remain as they are presently, no changes required.

Number Migration

- Old fixed numbers will still be valid for at least 6 months after the new fixed number takes effect
- Pre-recorded announcement indicating number change will be available for six months after cut-over

1956 2016
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