COMMUNICATIONS AUTHORITY OF KENYA

CONSULTATION PAPER

ENHANCEMENT OF THE NATIONAL TELECOMMUNICATIONS NUMBERING, NAMING, ADDRESSING, AND IDENTIFICATION (NNAI) RESOURCES FRAMEWORK

1. Introduction

The Communications Authority of Kenya (CA), established in 1999 by the Kenya Information and Communications Act, no. 2 of 1998, is the regulatory Authority for the Information and Communication Technology (ICT) sector in Kenya. The Authority's mandate spans development of broadcasting, cybersecurity, multimedia, telecommunications, electronic commerce(e-commerce), as well as postal and courier services. This mandate is realised through licensing, competition management, frequency and numbering resource management, and ICT consumers protection.

2. Numbering, Naming, Addressing, and Identification (NNAI) Resources

Numbering, Naming, Addressing, and Identification (NNAI) Resources comprises digits, select alphabets, and select special characters that uniquely distinguish between subscribers, services, and networks in the telecommunications field.

They facilitate routing, call termination, messaging, and access to various value-added services on telecommunication and computer networks. They are finite in both technical and human capability terms, and thus require prudent administration and management to prevent their inefficient use and/or depletion.

Internationally, the administration of main telephony numbers is coordinated multilaterally at, and by, the International Telecommunications Union (ITU), where the structure, format, length, and use of the numbering digits are determined.

3. Background to enhancement of the current Numbering, Naming, Addressing and Identification (NNAI) Resources Framework

The current Numbering, Naming, Addressing, and Identification (NNAI) Architecture was developed during the inception of the Authority in the year 1999. Due to technological changes,

the current Architecture has had to undergo amendments and enhancements to accommodate the changes.

The Authority has therefore embarked on enhancing the current NNAI architecture with a view to increasing capacity and ensuring agility of the same given technological changes. The proposed changes include seven(7) key fundamental structural changes, namely:

3.1. Geographical Reallocation: Grouping of geographical numbers based on groups of counties instead of towns.

3.2. VoIP Category: Designation of a separate category for VoIP, replacing the use of 020 geographical numbers.

3.3. M2M and IoT Separation: Differentiation between machine-to-machine and IoT, Dedicated Short Codes.

3.4. Creation of new and separate categories of short codes for County governments, Ministries, Departments, and Agencies(MDAs), and Semi-Autonomous Government Agencies (SAGAs).

3.5. Service-Based segmentation: service-based segregation of short codes as opposed to operator-based for informational, betting and gaming, financial, and educational services.

3.6. Unstructured Supplementary Service Data (USSD): Lengthening of the USSD format in line with the USSD international standard, which increases capacity.

3.7. Charging: introduction of charges for NNAI resources used in the network and special patterned numbers, as opposed to charging for all NNAI resources.

4. Transition

The proposed changes in architecture, once effected, will not affect existing numbers that have already been assigned, which will continue to be used until their natural end of life.

5. Public and Stakeholder Consultations

This consultation paper, and the attendant proposed draft Numbering, Naming, Addressing and Identification (NNAI) framework, are therefore meant to stimulate, and jump-start the stakeholder and public consultation process for the NNAI framework.

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Director General
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Date