TANZANIA COMMUNICATIONS REGULATORY AUTHORITY

NATIONAL NUMBERING PLAN AND SIGNALING POINT CODES PLAN

June 2024

THE UNITED REPUBLIC OF TANZANIA
TANZANIA COMMUNICATIONS REGULATORY AUTHOURITY

NATIONAL NUMBERING PLAN

AND

SIGNALING POINT CODES PLAN

June 2024

Document No: TCRA/NP04

Approved by	Title	Signature	Date
Dr. Jabiri K. Bakari	**Director General**		**25th June, 2024**

Table of Contents

List of Tables

Definitions

Country Code (CC) for Geographic Areas: The combination of one, two or three digits identifying a specific country, countries in an integrated numbering plan, or a specific geographic area.

Country Code (CC) for Networks: A shared 3-digit Country Code used in combination with an identification code to identify an international Network.

Identification Code (IC): The code after a shared E.164 Country Code that uniquely identifies an international Network.

International Prefix: A digit or combination of digits to be dialed by a calling subscriber making a call to a subscriber in another country to obtain access to the automatic outgoing international equipment (000 for Tanzania).

Identifier: A series of digits, characters and symbols used to identify uniquely a subscriber, a user, a network element, a function, a network entity, a service or an application. Identifiers can be used for registration or authorization. They can be either public to all networks or private to a specific network (private IDs are normally not disclosed to third parties)

International Signalling Point Code (ISPC): This is a Signalling point code with a unique 14-bit format used at the international level for Signalling message routing and identification of Signalling points involved.

National Destination Code (NDC): A nationally optional code field within the E.164 number plan, which combined with the subscriber's number (SN), will constitute the national (significant) number of the international public telecommunication number for geographic areas. The NDC will have a network and/or trunk code selection function.

National (Significant) Number (N(S) N): The number to be dialed following the national (trunk) prefix to obtain a subscriber in the same country (or group of countries included in one integrated numbering plan) but outside the same local network or numbering area.

National Signaling Point Code (NSPC): This is a code with a unique 14-bit format used at the national level for Signaling message routing and identification of Signaling points involved.

National (trunk) Prefix: A digit or combination of digits to be dialed by a calling subscriber, making a call to a subscriber in his own country but outside his numbering area. It provides access to the automatic outgoing trunk equipment.

Network: Internationally interconnected physical nodes and operational systems operated and maintained by one or more Recognized Operating Agencies (ROAs) to provide public telecommunication services. Private networks are not included in this

section. **Note:** The use of capital 'N' in the word 'Networks' indicates that this definition applies

Number: A string of decimal digits that uniquely indicates the public network termination point. The number contains the information necessary to route the call to this termination point. A number can be in a format determined nationally or in an international format. The international format is known as the International Public Telecommunication Number, which includes the country code and subsequent digits, but not the international prefix.

Prefix: A prefix is an indicator consisting of one or more digits that allows the selection of different types of number formats (e.g. local, national or international), transit networks and/or the service. Prefixes are not part of the number and are not signalled over the inter-network or international boundaries.

Signalling Point: this is a node in a Signalling network that originates and receives Signalling messages and transfers Signalling messages from one Signalling link to another, or both.

Signalling System No. 7 (SS7) is a stack of Signalling protocols, which was initially developed by the International Telecommunication Union Consultative Committee for International Telephony and Telegraphy (ITU CCITT) in the mid-1980s. The set of telephony Signalling protocols that are used to set up the public switched telephone network (PSTN) telephone calls. SS7 primarily sets up and tears down telephone calls, but other uses include number translation, prepaid billing mechanisms, local number portability, short message service (SMS), and a variety of mass-market services.

Subscriber Number (SN): The number identifying a subscriber in a network or numbering area.

Trial Service: Temporary services offered by an innovator, researcher or start-up company conducting the trial or viability of potential new ICT innovation(s), research and studies.

Trunk Code (TC): A digit or combination of digits, not including the national (trunk) prefix, identifying the numbering area within a country (or group of countries included in one integrated numbering plan or specific geographic area).

Value Added Services (VAS): A service that is offered in addition to or in conjunction with basic telecommunication services such as voice call, short message service (SMS), multimedia messaging service (MMS) and data access.

PART 1: INTRODUCTION

In pursuance of Section 79 of the Electronic and Postal Communications Act, 2010 and Section 4 (1) to 6 of the Electronic and Postal Communications (Electronic Communication Numbering and Addressing) Regulation, 2018 and its amendment in Electronic and Postal Communications (Electronic Communication Numbering and Addressing) (Amendment) Regulations, 2020; Tanzania Communications Regulatory Authority (TCRA) has the overall responsibility to manage all electronic communication numbers and addresses including: -

a) Planning, allocation, assignment, reservation and withdrawal of Communications Numbering and addressing resources; and
b) Monitoring utilization of the administered resources to ensure compliance.

The National Numbering and Signalling Point Codes Plan provide a framework for the allocation of numbers and identifiers in the national telecommunications system to different service providers and conform with the International Telecommunication Union's Recommendations, ITU-T E.164 (International public telecommunication numbering plan), ITU-T E.169 (Universal Freephone, premium rate and shared cost services), ITU-T E.212 (IMSI codes), ITUT-Q.708 (Signaling area network codes) and ITU-T X.121 (Public data networks) and other appropriate ITU-T Recommendations.

The plan provides a national numbering and network identifiers scheme that has taken into account technological changes and market demand for the provision of new applications and services. The plan has also allocated communication resources for the testing of trial services for startups or innovators.

This document consists of two main parts:

1) Numbering Plan, Allocation and Assignments

   This part provides the numbering structure in a set-up based on service provisional for acquiring, receiving, using, or transmitting a telecommunication service. The plan provides available number formats for different use including: -

   i. Access services at the national, regional and international levels.
   ii. Numbers for the public/consumers to receive service without incurring any cost as described in the categories below;
      a) Telephone numbers are made available for use without being allocated to specific service providers. These include all customer

assistance services which the service provider is urged to provide to the customer.

b) Telephone Numbers made available and assigned to specific agencies/ministries/departments for the provision of life and safety services.

iii. Other Assignments: This part provides details of numbers planned for Value Added Services (VAS Short Codes-SMS & USSD), Utility Services, Voice Mail, Carrier and Pre-Selection Codes and Local Special Services Access Codes.

2) Network Identification Code, Allocation and Assignment

Signalling point codes (SPCs) are used to address Signalling points in Signalling networks based on International Telecommunication Union - Telecommunication Standardization Sector (ITU T) Signalling System No 7 (SS No 7). SPCs are valid only within a Signalling network.

The SPCs are processed in the SS7 network by the Message Transfer Part (MTP) of each Signalling Point (SP) or Signalling Transfer Point (STP) to enable the establishment of speech path connections.

The Signalling Point Codes (SPCs) are divided into two types; International and national SPCs. A distinction is made between the national Signalling networks as described in ITU-T Recommendation Q.704 and the international Signalling network described in ITU-T Recommendation Q.708.

The National SPCs have been left by the ITU-T Secretariat to be defined at the national level whereas International SPCs are assigned to each member state by ITU's Telecommunication Standardization Bureau (TSB) in blocks of eight codes (Signalling area/network codes – SANCs).

PART 2: NUMBERING PLAN

2.1 Telephone Numbering Plan for Access Services

Numbering structure (format) used to provide access services which include the following: -

Access Codes: Access codes are prefix numbers used as the service identification number for acquiring, receiving, using, or transmitting a telecommunication service.

0T is the format used for access code for the provision of different services where T stands for the application of the given access code. The list of services under access codes is listed in **Table 1**.

Table 1: Access Codes for Different Services

0T	Services
00	Regional prefix
01	Reserved for carrier selection use
02	PSTN services
03	Machine-to-Machine Communications Services
04	Corporate Services (e.g. VoIP)
05	Corporate networks
06	The “Find me anywhere” Services
07	The “Find me anywhere” Services
08	The special service number range
09	Premium rate and multimedia service

2.1.1 Regional and International Prefix

2.1.1.1 International Prefix: **000 + CC + NDC + SN**

Where **CC** stands for Country Code for Network
NDC stand for National Destination Code
SN stands for Subscriber Number

2.1.1.2 East African Countries Calling Format:**00T+NDC+SN**

The East African Countries made arrangements on the calling format as listed in **Table 2**. It aimed at not calling each other through normal country code international dialling format.

Where T is a digit assigned to an East African country
NDC stand for National Destination Code
SN stands for Subscriber Number

Table 2: East African countries calling format

To	Calling Format
Kenya	005 + NDC + SN
Uganda	006 + NDC + SN
Rwanda	004 + NDC + SN
Burundi	003+NDC + SN

2.1.2 Public Switched Telephone Network Services (PSTN)

This refers to a traditional circuit-switched telephone network, operated by telecommunication service providers to provide fixed communication services.

The numbering format for PSTN services is 02**A Y XXXXXX.**

Where: NDC for geographical areas has 7 codes in line with the international trend for fewer and bigger local dialling areas.

02 is the access code,
A is part of the NDC code representing the dialing Area code,
Y is part of the subscriber number representing the Operator offering the service and
X is representing the subscriber number where the subscriber (SN) is seven digits in length.

Table 3: Geographic dialling area codes

02A	The geographic dialing area allocated
020	Reserved for future use
021	Reserved for future use
022	Dar es Salaam Region
023	Coast, Lindi, Morogoro, Mtwara Regions
024	Zanzibar (including Pemba and Unguja)
025	Katavi, Mbeya, Rukwa, Ruvuma and Songwe Regions
026	Dodoma, Iringa, Njombe, Singida and Tabora Regions
027	Arusha, Kilimanjaro, Manyara and Tanga Regions
028	Geita, Kagera, Kigoma, Mara, Mwanza, Shinyanga and Simiyu Regions
029	Reserved for future use

The geographical dialing area code in **Table 3** is represented in Figure 1.

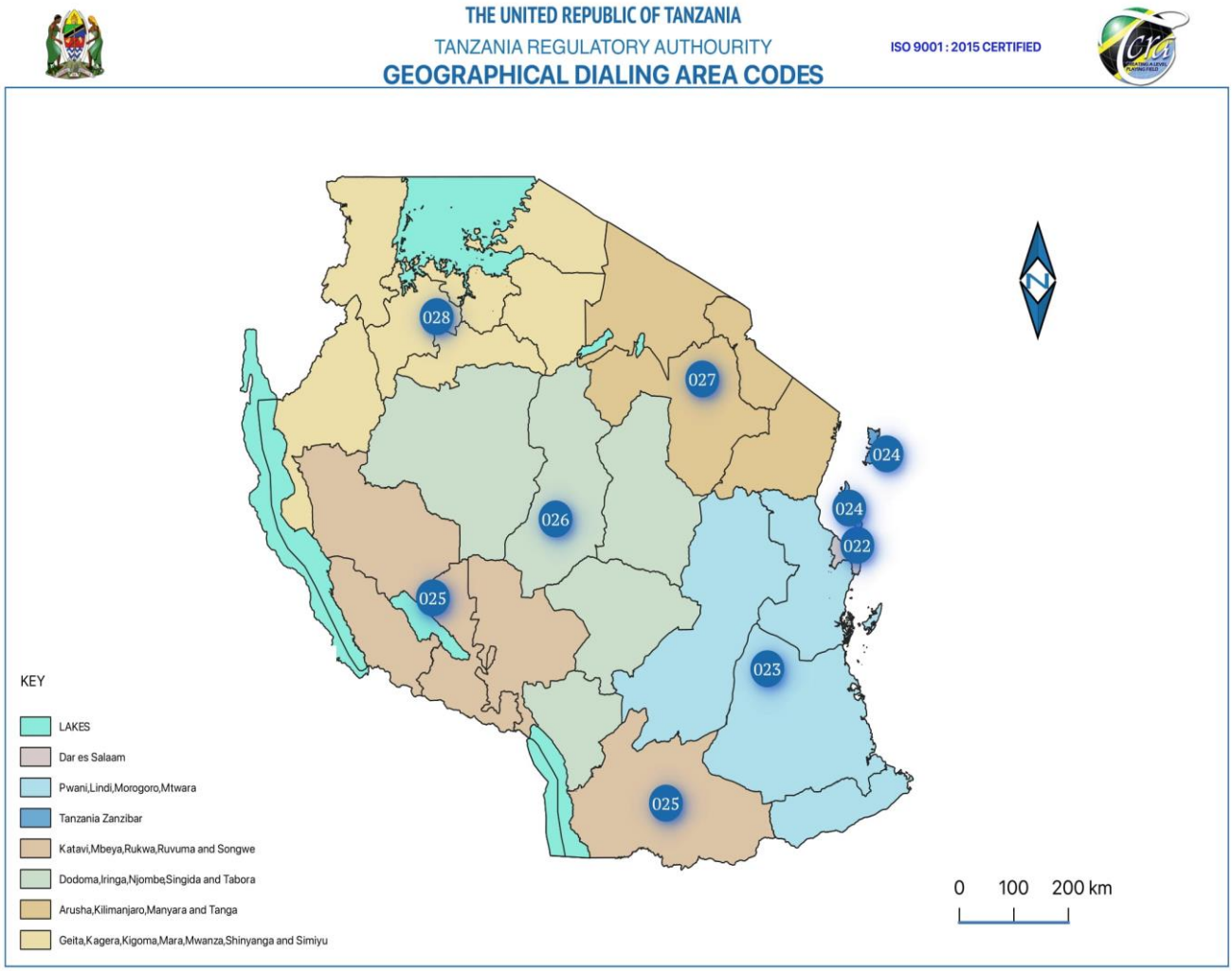

Figure 1: Tanzania Geographic Dialing Area Codes

2.1.3 Machine to Machine Communications Services (M2M)

Machine to Machine Communications Services (M2M) are numbers planned for service that require the use of Mobile Station International Subscriber Directory Number (MSISDN) at minimum or no human intervention. M2M communication is where devices can transfer data to other devices over a network without much human intervention.

M2M/IoT services considered under this category include but are not limited to Automotive & transport such as car tracking, utilities such as smart metering and grids, healthcare (e-health, m-health, telemedicine and assisted living), smart agriculture, smart buildings (structural health, access control and security, lighting, water, lifts, fire and smoke alarms, power and cooling systems), smart

manufacturing, Security & surveillance, Environmental monitoring homes, and all other services of same nature.

The Subscriber Identity Module (SIM) used in M2M communications can be physical or an electronic Subscriber's Identity Module (e-SIM). Usage of physical SIM and e-SIM is subject to Electronic and Postal Communications (SIM Card Registration) Regulations, 2020 and its amendments.

M2M numbers are assigned on a 15-digit numbering range to ensure availability to meet future needs. The format of M2M numbers is: **0300YY XXXXXXX**

Where YY are two digits identifying an Operator
XXXXXXX are seven digits identifying the subscriber number

Table 4: Number Plan for M2M Access Codes

NDC	M2M Number	Type of Service
300 **YY**	+255 300 YY XXXXXXX	M2M Communications Services

2.1.4 Corporate Services

The numbers for corporate services are set out for a provisional of defined corporate services offered over the Internet such as Voice over Internet Protocol. The numbering format for this category is: **04B YY *XXXXX***

Where the **B** digit identifies the type of corporate service
YY digits identify the Operator
XXXXX digits identifying subscriber number

Table 5: Corporate Services

S/N	Number Range/Code	Service Type
1.	040 YY XXXXX	SPARE
2.	041 YY XXXXX	Voice over IP (VoIP)
3.	(042-049) YY XXXXX	SPARE

2.1.5 Corporate Data Networks

The numbers for corporate network services are intended to be utilized by private or public data networks. The numbering format for this category is: -
05B YY XXXXX

Where **B** identifies the network
YY identify the operator
XXXXX 5 digits for subscriber Number.

Table 6: Corporate Data Network

S/N	05X XXXXX Range	Application
1.	050 YYXXXXX	Reserved
2.	(051 -055) YYXXXXX	Private Data Network
3.	(056 -058) YYXXXXX	Public Data Network
4.	(059)YYXXXXX	Reserved

2.1.6 Mobile Network Destination Codes

The Mobile Network Destination Codes (MNDC) classified as "find me anywhere service" is used for accessing mobile communications services. The numbers are These are non-geographical and the call charge is not distance dependent. The numbering format MNDC is:
06YA XXXXXX and 07YA XXXXXX

Where **A** Can take any digits except 0 and 1 which can be used upon the approval from TCRA
Y is a single digit that identifies the operator network
XXXXXX 6 digits for subscriber Number

Table 7: Number Ranges for 'find me anywhere' Access Codes

06A/07A Ranges	Type of Service
060 A XXXXXX	Reserved for future use
061 A XXXXXX - 069 A XXXXXX	Assigned to mobile operators
070 A XXXXXX, 079 A XXXXXX	Spare for mobile operators
071 A XXXXXX, 073 A XXXXXX-078 A XXXXXX	Assigned to mobile operators

2.1.7 Special and Fixed Rate Services

These include free phone (National and Global use), shared cost services, and national and special rate services. The numbering format for this category is:
08BB YY XXXX

Where **BB** Identifies the type of service
YY Identifies the operator network

XXXX Four digits for subscriber Number

Table 8: Fixed & special rate services numbering assignments

S/N	08XX NUMBER RANGE	Definitions
1.	0800 YY XXXX	National Free phone (Local Toll-Free).
2	0800 00 XXXX	National Free Phone for individual Organizations (Toll-Free)
3.	0808 YY XXXX	International Rate Services (Special Service).
4.	0840 YY XXXX	Shared Cost Services (Special Services Local Rate).
5.	0860 YY XXXX	National Rate Services (Special Services Toll Rate).
6.	0861 YY XXXX	Special Rate Services (Special Services Fixed Rates).

2.1.8 Premium Rate Services Numbering

The numbers are used for diverse services such as Information, chat, entertainment services, mobile games, TV voting and competitions. The numbering format for this category is: **090B YY XXXX**

Where **B** Identifies the type of service
YY Identifies the operator network
XXXX Four digits for subscriber Number

Table 9: Premium Rate Services Numbering

S/N	090X NUMBER RANGE	Definitions
1.	0900 YY XXXX	Information Services (Premium Services)
2.	0901 YY XXXX	Entertainments Services (Multi-media Services)
3.	0902 YY XXXX	Competitions/Tele-voting
4.	0903 YY XXXX - 0909 YY XXXX	Spare

Table 10: List of Numbering Resources Assignment for Access Services

S/N	APPLICATION	OPERATOR	ASSIGNED CODE	TYPE OF SERVICE	STATUS
1.	**PSTN Access Codes**	Tanzania Telecommunications Corporation	02A 2 + XXXXXX	PSTN	Operational
		HONORA Tanzania PLC	02A 5 + XXXXXX	PSTN	Operational

2.	**Machine to Machine Access Codes**	HONORA Tanzania PLC	0300-00-XXXXXXX	Machine to Machine	Operational
		Airtel Tanzania PLC	0300-01-XXXXXXX	Machine to Machine	Operational
		Viettel Tanzania PLC	*0300-02-XXXXXXX*	Machine to Machine	Operational
		Vodacom Tanzania PLC	*0300-03-XXXXXXX*	Machine to Machine	Operational
		HONORA Tanzania PLC	*0300-04-XXXXXXX*	Machine to Machine	Operational
		Tanzania Telecommunications Corporation	*0300-05-XXXXXXX*	Machine to Machine	Operational
3.	**Corporate Services: Voice over IP (VoIP)**	Tanzania Telecommunications Corporation	041 19 *XXXXX*	Voice over IP (VoIP)	Operational
4.	**Corporate Data Network Services**	WIA Company Limited	056 01 *XXXXX*	Public Data Networks	Operational
		Tanzania Railways Corporation	051 00 XXXXX	Private Data Networks	Operational
5.	**The 'find me anywhere" Access Codes**	Viettel Tanzania PLC	*061 + Y XXXXXX*	Mobile Communications Services	Operational
			062 + Y XXXXXX	Mobile Communications Services	
		HONORA Tanzania PLC	*065 + Y XXXXXX*	Mobile Communications Services	Operational
			067 + Y XXXXXX	Mobile Communications Services	Operational
			071 + Y XXXXXX	Mobile Communications Services	Operational
			077 + Y XXXXXX	Mobile Communications Services	Operational
		Vodacom Tanzania PLC	*066 + Y XXXXXX*	Mobile Communications Services	Operational
		Airtel Tanzania PLC	*068 + Y XXXXXX*	Mobile Communications Services	Operational
			069 + Y XXXXXX	Mobile Communications Services	Operational
			078 + Y XXXXXX	Mobile Communications Services	Operational
		Vodacom Tanzania PLC	074 + Y XXXXXX	Mobile Communications Services	Operational
			075 + Y XXXXXX	Mobile Communications Services	Operational
			076 + Y XXXXXX	Mobile Communications Services	Operational
		Tanzania Telecommunications Corporation	073 + Y XXXXXX	Mobile Communications Services	Operational

6.	Special, Fixed Rate Services	Tanzania Telecommunications Corporation	0800 11 XXXX	Local Toll Free	Operational
		HONORA Tanzania PLC	0800 12 XXXX	Local Toll Free	Operational
		HONORA Tanzania PLC	0800 71 XXXX	Local Toll Free	Operational
		Vodacom Tanzania PLC	0800 75 XXXX	Local Toll Free	Operational
		Airtel Tanzania PLC	0800 78 XXXX	Local Toll Free	Operational
		Tanzania Telecommunications Corporation	0808 11 XXXX	International Toll Number	Operational
		Vodacom Tanzania PLC	0808 00 XXXX	International Toll Number	Operational
7.	Premium Rate Services	Airtel Tanzania PLC	0901 00 XXXX	Entertainments Services (Multi-media Services)	Operational
		Vodacom Tanzania PLC	0901 12 XXXX	Entertainments Services (Multi-media Services)	Operational
		HONORA Tanzania PLC	0901 65 XXXX	Entertainments Services (Multi-media Services)	Operational
		Vodacom Tanzania PLC	0901 76 XXXX	Entertainments Services (Multi-media Services)	Operational
		Viettel Tanzania PLC	0901 22 XXXX	Entertainments Services (Multi-media Services)	Operational
		Vodacom Tanzania PLC	0900 01 XXXX	Information Services (Premium Services)	Operational

2.2 Numbers for Public Communications Free of Charge

2.2.1 Customer Assistance Services (Free of Charge)

Telephone numbers are made available (free of charge) for use without being allocated to specific service providers with a number range of **10B.**

Where **B** stands for service application

Table 11: Customer assistance (free of charge)

S/N	10B RANGE	APPLICATION	STATUS
1.	100	Customer Care/Operator Assistance (Swahili)	*Operational*
2.	101	Customer Care/Operator Assistance (English)	
3.	102	Check Balance/Billing Inquiry (Swahili)	
4.	103	Check Balance/Billing Inquiry (English)	
5.	104	Recharge (Swahili)	
6.	105	Recharge (English)	

S/N	10B RANGE	APPLICATION	STATUS
7	106	Check to confirm if your SIM Card is Registered	
8.	107	Customer Care IVR	
9.	108	e-Government Services	Reserved
10.	109	e-Government Services Zanzibar	Reserved

2.2.2 Life and Safety Services (Free of Charge)

These are 3-digit codes made available and assigned to specific agencies/ministries/departments for the provision of life-saving services.

To bring this numbering Scheme in line with International development, the short codes for emergency services offered by Telecommunication Operators, the **"11B"** range is used. These short codes are common to all Operators in Tanzania. A summary of the applicable short codes and their applications in the New Numbering Scheme is provided in **Table 12**:

Table 12: Life and safety (free of charge) services

S/N	11B & 19B RANGE	APPLICATION	STATUS
1.	110	Emergency services for Lake Victoria and other water bodies	*Reserved*
2.	111	Crime Stoppers	*Operational*
3.	112	Emergency, Police	*Operational*
4.	113	Anti-corruption	*Operational*
5.	114	Fire Services	*Operational*
6.	115	Ambulance Services & M-mama Services	Operational
7.	116	Child Help Line	*Operational*
8.	117	Health Help Line	*Operational*
10.	119	Anti-Drugs	*Operational*
11.	190	Disaster Services	*Operational*
12.	199	Medical Emergency for Outbreak Diseases	*Operational*
13.	118, 191-198	Spare	Spare

2.2.3 East Africa Region Common Short Codes (Free of Charge)

In light of the move towards harmonization of common short codes in East African member states, the following numbers have been harmonized to facilitate East African Roamers' seamless use of short codes across the region.

Table 13: East Africa regional common short codes (free of charge)

S/N	1BB RANGE	APPLICATION
1.	100	Customer Service
2.	130	Recharge
3.	131	Check Balance
4.	121	Surface and Marine Transport Instant Reporting Services
5.	123	Voicemail retrieval
6.	110	Emergency Services for Lake Victoria
7.	112	Emergency, Police
8.	116	Child Helpline
9.	17B	Carrier selection

2.3 Other Assignments

2.3.1 Voice Mail Services

The services used to collect/deliver voice messages from/to direct users and subscribers. This system consumes the services supplied by its Voice Store-and-Forward Unit and consumed by its users. Planned numbers for voice mail use the format 12B where B stands for where the service is being applied as illustrated in **Table 18**.

Table 14: Voice Mail (discounted tariff)

S/N	12B RANGE	APPLICATION
1.	123	Voice Mail Retrieval
2.	124	Indirect Voice Mail Deposit / Retrieval
3.	120-122;128-129	Spare

2.3.2 Utility Services Numbering

These are simple and memorable short codes for utility services used particularly for services with high public interest such as Electricity, Water and sewage and Gas. The numbering format is 18B where B stands for a type of utility (water and sewage, gas or electricity).

Table 15: Utility Services Numbering Assignments

S/N	18B RANGE	APPLICATION
1.	180-181	Electricity
2.	182	Water and Sewage
3.	183	Fault reporting on the ICT backbone
4.	184	Gas
5.	185-189	Spares

2.3.3 Value Added Services Short Codes – VAS USSD and SMS

Unstructured Supplementary Service Data (USSD) is a Global System for Mobile (GSM) communication technology that is used to offer interactive text-based Values Added Services (VAS) between a mobile phone user and an application program in the network. Applications may include prepaid roaming, mobile money transactions, mobile banking services and other e-commerce services.

Table 16: VAS USSD numbering allocation

S/N	14B / 15B RANGE	FORMAT	APPLICATION
1.	146	*146*YY	Trial Services
2.	147	*147*YY	General Services
3.	148	*148*YY	Free Services
4.		*148*90	Mobile number Portability Service
5.	149	*149*YY	General Services
6.	150	*150*YY	E-Commerce (financial) Services
7.	151	*151*YY	E-Commerce (financial) Services
8.	152	*152*YY	Government Services

Table 17: VAS SMS numbering Allocation

S/N	Number Range	Service Category/Number Assignment
	14BYY and 15B YY	Value Added Service (VAS) Numbering Assignments Where: **B** is the Service Category and **YY** is the operator identification
1.	146 YY	Trial Services for Innovators/Researchers/or Start-ups
2.	150 YY	Free Text Codes
3.	15040	Report on Fraud
4.	15090	Equipment Verification by using IMEI
5.	151 YY	Financial and Commercial related applications
6.	152 YY	Government Services

7.	153 YY	Standard Rate Codes (e.g. voting; at standard rates up to the basic premium rate)
8.	154 YY	Standard Rate services
9.	155 YY	Basic Premium Rate Codes (e.g. Lotto, horoscope, Download of video, Images & Graphics etc.; charged at basic premium rates)
10.	156 YY	Basic premium rate services
11.	157 YY	High Premium Rate Codes (e.g. Mobile Lottery, Gaming; charged the highest rate)
12.	158 YY	Spare for high premium rate codes
13.	159 YY	Free Text Codes (e.g. Public services such as AIDS, Health)
14.	160YY	Standard Rate services

Notice for Vas Short Code Usage and Assignments

The Authority has identified GOLD, SILVER, BRONZE and Ordinary VAS SMS Codes from respectively the most memorable to least memorable codes.

The following assignment criteria shall apply for VAS Short Code Usage and Assignment:

1. GOLD, SILVER and BRONZE codes are assigned based on the applicant's preference as the codes have different registration fees.

2. Ordinary codes are assigned serially depending on availability.

3. An applicant for an electronic communications number will be assigned one VAS SMS Short Code and one VAS USSD short Code and where additional short codes are required, the applicant shall apply for an application services license as provided by the Authority. All application of Numbering resources should be done through TCRA's Tanzanite portal (https://tanzanite.tcra.go.tz/index.htm)

4. When the applicant requires more codes than stated in the criteria above, an 'application services license' should be applied before the assignment of the applied codes

PART 3: IDENTIFICATION CODES

3.1 Signalling Point Codes (SPCs)

3.1.1 Format of the International Signaling Point Code (ISPC)

The International Telecommunication Union Telecommunication Standardization Sector (ITU-T) has specified in Recommendation Q.708 the following 14-bit binary format for the identification of the International Signalling Point Codes to be used in the international SS7 Signalling links

N M L	**K J I H G F E D**	**C B A**
Zone/Geographic Area Identification **3 bits**	Area/Network Identification **8 bits**	Signalling Point Identification **3 bits**
Signalling Area/Network Code (SANC)		
International Signalling Point Code (3-8-3)		

First bit transmitted

Figure 2: ITU-T format for the ISPCs

The **3-bit** sub-field '**NML**' defines the world geographical zone where the network is located. The **8-bit** sub-field '**KJIHGFED**' identifies the geographical area or network within a specific world zone. The **3-bit** sub-field '**CBA**' identifies the Signalling point (international exchange) within a specific geographical area or network.

The combination of sub-fields 'NML-KJIHGFED' is defined as a Signalling Area /Network Code (SANC). Each country shall be assigned at least one SANC.

The allocation of the codes in the first sub-field 'CBA' in this 3-8-3 bit structure is left for the National Communications Regulator who is responsible to notify the ITU-T Secretariat of the code usage. The 3-bit structure of the 'CBA' sub-field allows 8 International Signalling Point Codes to be used for each SANC code. Should more than 8 International Signalling Points be required, one or more additional SANC code(s) would then be assigned by ITU-T for the country.

3.1.2 Current Assignments of the International Signalling Point Code

The following are the current ISPC based on services as per the descriptions aforementioned.

The assigned SANCs to Tanzania by ITU's TSB are **6-080**, **6-081** and **6-123**. The assignment of ISPC to Telecommunication System Operators is indicated in Table 19.

Table 18: International Signalling Point Codes Assignments in Tanzania

S/N	EXCHANGE OPERATOR	ASSIGNED ISPC (3-8-3)
1.	Tanzania Telecommunications Corporation	6–080–0
2.	Honora Tanzania Plc	6–080–2
3.	Honora Tanzania Plc	6–080–7
4.	Vodacom Tanzania Plc	6–080–4
5.	Tanzania Telecommunications Corporation	6–081–0
6.	Vodacom Tanzania Plc	6–081–3
7.	Airtel Tanzania Plc	6–081–6
8.	Airtel Tanzania Plc	6–081–7
9.	Viettel Tanzania Plc	6–081–1
10.	Viettel Tanzania Plc	6–081–4
11.	Vodacom Tanzania Plc	6–123–0
12.	Tanzania Telecommunications Corporation	6–123–3

3.1.3 Format of the National Signaling Point Code (NSPC)

The recommended structure for SPCs to be used to identify exchanges in national-level networks is 14-bits as described in figure 3.

N M L K	**J I**	**H G F**	**E D C B A**
Network /Operator Identification **4 bits**	Exchange Type (hierarchical layer) Identification **2 bits**	Geographical Area Identification **3 bits**	Signalling Point (exchange) Identification **5 bits**
National Signalling Point Code (4-2-3-5)			

→ First bit transmitted

Figure 3: General format for the NSPC

The **4-bit sub-field 'NMLK** 'defines the network (operator) in which the exchange is located in.
The **2-bit sub-field 'JI'** shall define the hierarchical layer of the exchange in the operator's network as follows:

Hierarchical Layer	**Bit Pattern 'JI' [binary]**	**Bit Pattern 'JI' [decimal]**
International layer	00	0
National transit layer	01	1
Local tandem layer	10	2
Local layer	11	3

Note: In case an exchange is a combined exchange operating on two or more layers, it shall be specified on its highest operating layer in the sub-field 'JI'.

The **3-bit sub-field 'HGF'** is used to identify the geographical area where the exchange is located in.

The SPC area boundaries follow the local dialing numbering area boundaries in the new National Numbering Scheme. An exception is made in the Dar es Salaam numbering area which is divided into DSM North and DSM South Areas to provide enough capacity for the densely populated capital area.
The geographical areas to be used in the SPC numbering are shown in Table 1 and pictorially depicted in the below map.

Table 19: Geographic Signalling Area Codes

Code	**Geographical area**
0	Dar es Salaam North
1	Dar es Salaam South
2	Coast, Morogoro, Mtwara and Lindi Regions
3	Zanzibar (including Pemba and Unguja) Regions
4	Mbeya, Ruvuma, Katavi, Songwe and Rukwa Regions
5	Dodoma, Iringa, Njombe, Singida and Tabora Regions
6	Arusha, Kilimanjaro, Manyara and Tanga Regions
7	Geita, Kagera, Kigoma, Mara, Mwanza, Shinyanga and Simiyu Regions

The first sub-field to be transmitted '**EDCBA'** shall define the exchange, i.e. the Signalling Point within a geographical area defined in the sub-field 'HGF'.

Figure 4: Tanzania Geographic Signalling Area Codes

3.1.4 Assignment of the National Signalling Point Codes

The assignment of National SPCs to Telecommunications System providers is indicated in **Table 21**.

Table 20: National Signalling Point Codes (ISPCs)

SN	SERVICE	EXCHANGE OPERATOR	ALLOCATION/ASSIGNMENT
CALL CENTRES FOR EMERGENCY AND LIFE & SAFETY NUMBERS			
1	LIFE & SAFETY	LIFE & SAFETY OPERATORS	1-0-0-21 to 1-0-0-31
PUBLIC SWITCHED TELEPHONE NETWORK (PSTN)			
1	PSTN	TANZANIA TELECOMMUNICATIONS CORPORATION	1-Y-X-ZZ except 1-0-0-21 to 1-0-0-31
2	PSTN	HONORA TANZANIA PLC	2-Y-X-ZZ
PUBLIC LAND MOBILE NETWORK (PLMN)			
1	PLMN	HONORA TANZANIA PLC	8-Y-X-ZZ

SN	SERVICE	EXCHANGE OPERATOR	ALLOCATION/ASSIGNMENT
CALL CENTRES FOR EMERGENCY AND LIFE & SAFETY NUMBERS			
1	LIFE & SAFETY	LIFE & SAFETY OPERATORS	1-0-0-21 to 1-0-0-31
PUBLIC LAND MOBILE NETWORK (PLMN)			
2	PLMN	Tanzania Telecommunications Corporation	9-Y-X-ZZ
3	PLMN	Honora Tanzania Plc	10-Y-X-ZZ
4	PLMN	Vodacom Tanzania Plc	11-Y-X-ZZ
5	PLMN	Airtel Tanzania Plc	12-Y-X-ZZ
6	PLMN	Viettel Tanzania Plc	14-Y-X-ZZ
Reserved			0-Y-X-ZZ
Reserved			3-Y-X-ZZ

3.2 Identifiers for Public Cellular Network

Numbers allocated for Identifiers of Public Cellular Network

3.2.1 Mobile Country Code / Mobile Network Code (MCC/MNC)

Assignment of MNC is as per ITU T. Rec E.122; in Tanzania the assignment is in the format: 640-XX where 640 is the Mobile country code (MCC) and XX indicates the MNC assigned to the different mobile operator which together identifies uniquely the Public Land Mobile Network (PLMN) worldwide

Table 21: Identification Codes for Public Cellular Networks in the Country

S/N	OPERATOR	MCC+MNC
1.	HONORA Tanzania PLC	640-02
2.	HONORA Tanzania PLC	640-03
3.	Vodacom Tanzania PLC	640-04
4.	Airtel Tanzania PLC	640-05
5.	WIA Company Limited	640-06
6.	Tanzania Telecommunications Corporation	640-07
7.	Viettel Tanzania PLC	640-09

3.2.2 Assignments for Public Cellular Networks in the Country

These are seven digits numbers used to identify the subscriber Identity Module (SIM). The IIN follows the format: 89-255-XX, where 89 was assigned to the telecommunications industry; 255 is the country code for Tanzania and XX is the MNC. The resource has been assigned as per ITU-T Rec. E. 118

Table 22: Issuer Identifier Numbers (IIN)/SIM

S/N	OPERATOR	ASSIGNED CODES
1	HONORA Tanzania PLC	89-255-02
2	HONORA Tanzania PLC	89-255-03
3	Vodacom Tanzania PLC	89-255-04
4	Airtel Tanzania PLC	89-255-05
5	Tanzania Telecommunications Corporation	89-255-07
6	WIA Company Limited	89-255-08
7	Viettel Tanzania PLC	89-255-09

3.2.3 Data Network Identification Codes (DNIC)

Tanzania has been assigned DNIC 640- X by ITU TSB as per ITU-T Rec. X.121. DNIC uniquely identifies the Public data network worldwide.

Table 23: Data Network Identification Codes (DNIC) for Public Data Networks

S/N	OPERATOR	ASSIGNED CODE
1.	Satcom Networks Africa Limited	640-5
2.	Simbanet Tanzania Limited	640-6

4.0 Future Assignments

The numbering resources planning, allocation and assignment will be a continuous process depending on but not limited to industry and technological needs, and Recommendations from the regional and International organizations e.g. ITU. Procedures for assignment of the numbering resources are provided by the guiding document that can be found through the TCRA website www.tcra.go.tz.

Contact Us

Mamlaka ya Mawasiliano Tanzania
Mawasiliano Towers, Na. 20 Barabara ya Sam Nujoma,
S. L. P 474, Dar Es Salaam
+255 22 2199760 - 9 / +255 22 2412011 - 2 / +255 784558270 - 1
dg@tcra.go.tz | barua@tcra.go.tz