



*Communication for all in East Africa*

**EACO GUIDELINES FOR ALLOCATION OF  
NETWORK COLOUR CODES FOR USE AT  
BORDERS OF EACO MEMBER STATES**

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## ***Table of Contents***

1	Introduction.....	1
2	Purpose And Scope .....	1
2.1	Purpose .....	1
2.2	Scope .....	1
3	Network Colour Codes .....	2
3.1	Ncc In The Plan .....	2
3.2	Allocated Ncc.....	2
3.3	Available Ncc.....	2
4	Procedure for Identification and Allocation of Network Colour Codes for Use at Borders Within EACO Member States .....	2

## ***1 INTRODUCTION***

East Africa Communications Organisation (EACO) identified interference and forced roaming at borders as one of the problems and challenges faced by East African citizens and consumers of ICT communications services that live at border areas.

In response to this problem, EACO identified unique Network Colour Codes (NCC)<sup>1</sup> to be allocated to member states for use by Global System for Mobile communication (GSM) Operators along borders to minimize incidences of interference and forced roaming at borders in addition to supporting and trade, free movement and integration, among other reasons.

In recognition of the above stated challenge, EACO has developed guidelines for application, identification, harmonization and allocation of Network Colour Codes to be used by GSM networks along borders to minimize potential interference and forced roaming incidences along borders.

These guidelines have been developed in order to provide guiding principle to EACO Member States when dealing with NCC allocation.

## ***2 PURPOSE AND SCOPE***

### **2.1 Purpose**

The purpose of these guidelines is to provide EACO member states a clear, open and transparent process and procedures in the allocation of Network Colour Codes to members for use at border areas.

### **2.2 Scope**

These guidelines apply to EACO member states and Network Colour Codes.

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<sup>1</sup> The Network Colour Code is a part of the Base Station Identity Code ([BSIC](#)). This code is used in GSM to uniquely identify a base station within a particular geographic area. The NCC is the part of the BSIC that identifies the operator. The NCC is also called the Public Land Mobile Network (PLMN) colour code.

The BSIC is needed to identify a base station, because more than one base station can use the same frequency for their [broadcast channel](#). This is especially the case in border areas, where operators at both sides of the border might use the same frequencies for their base station broadcasting channel.

The NCC is a 3 bit code (with a value of 0 up to 7).

### 3 NETWORK COLOUR CODES

#### 3.1 NCC in the plan

0, 1, 2, 3, 4, 5, 6, 7

#### 3.2 Allocated NCC

The NCC allocated to member states for use along borders, are as follows:

Allocated Network Colour Codes		
Country	NCC	Areas To Be Used
Kenya	2	To be used along borders with Uganda, South Sudan and Tanzania
Uganda	3	To be used along borders with Kenya, Rwanda, South Sudan and Tanzania
Tanzania	4	To be used along borders with Kenya, Uganda, Rwanda and Burundi
Burundi	5	To be used along borders with Rwanda and Tanzania
Rwanda	6	To be used along borders with Burundi, Uganda and Tanzania
South Sudan	7	To be used along borders with Kenya and Uganda

#### 3.3 Available NCC

The NCCs that are available to member states for use along borders, as at July 2019 are as follows:

Available Network Colour Codes		
Spares	NCC 0 & 1	Spare for future allocations

### 4 PROCEDURE FOR IDENTIFICATION AND ALLOCATION OF NETWORK COLOUR CODES FOR USE AT BORDERS WITHIN EACO MEMBER STATES

1. EACO Work group 06 which is responsible for Management and Administration of Numbering Resources will manage Network Colour Codes for use by a member state at the borders with other member states for implementation by Operators the purpose of ensuring no forced roaming to consumers in addition to supporting socio-economic activities.

2. The identified Network Colour Codes for allocation to a member country shall be a code ranging from 0 to 7 and such a code shall be unique to all EACO member countries sharing a border with the country.
3. Any request for allocation and/or reservation of a Network Colour Code for a service within the region, shall be made to the EACO secretariat.
4. In the case of a country that is not a Member of EACO, the request shall be made by the National Regulatory Authority representing a member state or the member state itself.
5. On receiving the request, the EACO secretariat will forward and present to the request to the next sitting Work Group 06 responsible for Numbering Resources.
6. The Work Group responsible for Numbering Resources will deliberate and make recommendations to EACO secretariat through the relevant Assembly for adoption and Approval by Congress.
7. If the matter is of urgent nature, the EACO secretariat shall consult with the chair or leadership of the EACO Work group responsible for Management and Administration of Numbering Resources. The allocation will be proposed and presented to EACO top leadership for approval, awaiting ratification by EACO Congress.
8. These procedures apply to EACO member states. However, National Regulatory Authorities of the member state and member states may negotiate bilaterally with a bordering non-member country for use of Short Codes. However, any Network Colour Code agreed on during the bilateral arrangements shall be a unique code that does not interfere with any other EACO member country.