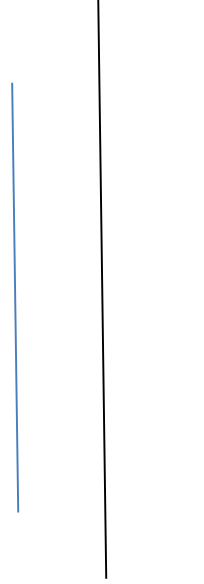


# National Numbering Allocation Plan



**Nepal Telecommunication Authority**

**Jamal, Kathmandu, Nepal**



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## 1. Introduction

- 1.1 Numbering is a finite national resource and therefore must be managed farsightedly to ensure that these resources are adequate to support the existing telecommunications services and have enough capacity for the introduction of new services as become available near future.
- 1.2 The purposed Numbering Plan complies with the ITU-T Recommendations E.164.
- 1.3 The Numbering Plan defines the number ranges and their assignment to various telecommunication services including fixed telecommunications services, cellular mobile telecommunications services, rural telecommunications services, signaling point codes, emergency and special services.
- 1.4 Numbers are necessary resources to facilitate the development of new products and services and to provide means of accessing them. Thereof numbering plan must ensure the fair, transparent and efficient distribution as well as utilization. Plans for the designation, reservation and assignment of numbers need to be forward looking and to reflect not only current requirements but also to anticipate the future requirements brought about by next generation networks and services.
- 1.5 NTA takes the view that the National Numbering Plan (NNP) should provide the clear, transparent and forward looking numbering and could cater the numbering needs in respect of the existing and likely new services.
- 1.6 National Numbering Plan has been aligned with various ITU-T Recommendations and international best practices in the sector. The changes are planned in such a way that the customers suffer minimum disruptions/ number changes while the numbering capacity is enhanced to take care of the sector for more than a decade.

## 2. Objectives

The main objectives of the national numbering plan are:

- i) Ensure enough numbering capacity to meet the current and future demands to create enabling environment for competition and innovation in telecom services.
- ii) Provide frameworks and formats for number allocation and distribution for a wide range of services.

- iii) Ensure non-discretionary, transparent, and predictable distribution of numbers in effective and efficient manner.

### 3. Scope

3.1 National Numbering Plan provides a set of guidelines and procedures for the assignment of number ranges to telecommunication services including fixed telecommunications services, cellular mobile telecommunications services, rural telecommunications services, signaling point codes, emergency and special services and the IoT and M2M services. The Plan generally follows ITU-T Recommendations E.164

### 4. Role of the NTA

- 4.1 NTA as telecommunication regulator makes and mandates the implementation of the National Numbering Plan and further ensures that the number allocation process is equitable, fair and transparent.
- 4.2 NTA, in consultation with all the stakeholders, will review the national numbering plan, from time to time, to ensure its continued relevance.
- 4.3 NTA, in consultation with all the stakeholders, will allocate national levels reserved for future use to new services and networks as these services become available.

### 5. Number Allocation Process

- 5.1 Only operators licensed to provide telecommunication services in Nepal may apply for allocation of numbers as authorized in the license. When number utilization targets set out by the NTA are met, the licensed operator may apply for further allocation of numbering resource and shall provide the justifications of the application.
- 5.2 Normally the allocation is a subsequent step to the reservation and sufficient numbers will be allocated to meet the requirements of the application. The application for allocation shall be submitted to the NTA at least three months prior to the estimated date for number activation. The application shall be in accordance with the provisions of National Numbering Plan.

- 5.3 Numbers for all services (except for Short Code and Value-Added Services) are generally allocated in blocks from the pool of available number ranges. The total quantity allocated will depend on the requirements and will be at the discretion of NTA.
- 5.4 Subsequent allocation of numbers to individual subscribers (except for Short Code and Value-Added Services) is considered as secondary allocation and is under the responsibility and control of the licensee who submits the application.
- 5.5 The allocation shall be used for the purpose specified in the application.
- 5.6 Licensees shall not use number allocations in an anti-competitive way.
- 5.7 Licensees shall maintain an up to date record of the percentages of number blocks in use and reserved.
- 5.8 Allocated numbers shall not be traded.
- 5.9 Allocated numbers shall not be directly transferred between licensees.
- 5.10 NTA may, at its discretion, apply additional specific conditions of use to an allocation if NTA considers that it is in the national interest to impose such conditions.
- 5.11 The licensees who have been allocated number blocks are required to apply to NTA for approval if they require any changes to the use of the number allocated or to any conditions placed on the allocation.
- 5.12 When applying for an allocation of number all the details as specified by NTA shall be provided.
- 5.13 NTA has the right for the allocation of the number and if NTA cannot make the allocation it will provide the substantial reasons for it.
- 5.14 In addition to the above, information as specified in the related directives must be attached with the application for Short Code and Value-Added Services.
- 5.15 In addition to the above, NTA shall provide the special services Short Codes to other organizations.

## 6. Assignments of Numbers

The National Numbering Plan will be as specified below:

### 6.1 Country Level Number Plan

Country Code:	977
Mobile Country Code	429

### 6.2 Fixed Telecommunication Service

PSTN numbers are assigned to licensee of the basic telecommunications service providers for the subsequent allocation of numbers to their customers for the provision of PSTN services. The national numbers for the fixed telecommunications services have a total of 8-digit numerals where first digit is used as area code, second digit as operator code and remaining 6-digits as the subscriber number to represent the PSTN line inside Kathmandu Valley whereas first 2-digits is used as area code, third digit as operator code and remaining 5-digits as the subscriber number to represent the PSTN line outside Kathmandu Valley. Following table depicts the PSTN number structure.

Inside Kathmandu Valley	<b>X-Y-ZZZZZZ</b> (8 digits)	<b>X</b> =Area Code for Kathmandu Valley (1 digit) <b>Y</b> =Operator Code (1 digit) <b>Z</b> =Subscriber Number (6 digits)
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Outside Kathmandu Valley	<b>XX-Y-ZZZZZ</b> (8 digits)	<b>X</b> =Area Code for Outside Kathmandu Valley (2 digits) <b>Y</b> =Operator Code (1 digit) <b>Z</b> =Subscriber Number (5 digits)
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S. N.	Operator	Operator Code	Subscriber Number
1	Nepal Doorsanchar Company Limited (Nepal Telecom)	4,5,6	Z = 0 to 9

### 6.3 Cellular Mobile Telecommunication Service

Cellular Mobile Numbers are assigned to cellular mobile operators for subsequent allocation of numbers to their customers for the provision of mobile services. The national numbers for the cellular mobile telecommunications services have a total of 10-digit numerals where first

2-digits are used as system code, third digit as operator code and remaining 7-digits as the subscriber number to represent the cellular mobile numbers. Following table depicts the cellular mobile telecommunications services number structure.

<b>Mobile Codes</b>	
<b>Mobile Country Code</b>	<b>429</b>
<b>Operator</b>	<b>Mobile Network Code</b>
Nepal Telecom	01
Ncell Axiata Limited (Ncell)	02
Smart Telecom Pvt. Ltd (Smart)	04

96 - X - ZZZZZZ	98/ 97/ 96 = System Code
97 - X - ZZZZZZ	X = Operator Code
98 - X - ZZZZZZ	Z = Subscriber Number

S.N.	Operator	System Code	Operator Code	Subscriber Number
1.	Nepal Telecom	97	4, 5, 6	Z = 0 to 9
		98	4, 5, 6	
2.	Ncell	98	0, 1, 2	
		97	0	
3.	UTL	97	2	
5.	Smart	96	1,2	
		98	8	

## 6.4 Rural Telecommunication Service

Rural Telecommunications Numbers are assigned to Rural Telecommunication Service (RTS) operators for subsequent allocation of numbers to their customers for the RTS services. The national numbers for the RTS have a total of 9-digit numerals where first 2-digits are used as system code, third digit as operator code, fourth 2-digits as area code and last 4-digits as the subscriber number to represent the RTS numbers. Following table depicts the rural telecommunications services number structure.

99 - X - YY - ZZZZ	99 = System Code
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	X = Operator Code
	Y = Area Code
	Z = Subscriber Number

S.N.	Operator	System Code	Operator Code	Area Code	Subscriber Number
1.	CG Communications Pvt. Ltd.	99	0	Existing Area Code of Nepal	Z = 0 to 9

### 6.5 Internet of Things (IoT)/Machine to Machine (M2M) Services

The national numbers for the IoT/M2M services have a total of 10-digit numerals where first 2-digits are used as system code, third digit as operator code and remaining 7-digits as the subscriber number to represent the IoT/M2M numbers. Following table depicts the IoT and M2M services number structure.

90 - X - ZZZZZZ	90 = System Code
	X = Operator Code (1 digit)
	Z = Subscriber Number (7 digits)

### 6.6 Toll Free Service

Toll Free Services (TFS) numbers are assigned to telecommunication operators for subsequent allocation of numbers to their customers for the TFS services for large corporate offices, commercial organizations and social communities. International Toll-Free Services (ITFS) enables an ITFS customer in one country to allow ITFS callers in another country to call the ITFS customer free of charge. Following table depicts the National and International TFS services number structure.



International Toll-Free Services	<b>1800-ZZZZZZ</b> (11-digits)	<b>1800</b> =System Code (4 digit) <b>Z</b> =Subscriber Number (7 digits)
National Toll-Free Services	<b>1810-X-ZZZZZZ</b> (8 digits)	<b>1810</b> =System Code (4 digit) <b>X</b> = Operator Code (1 digit) <b>Z</b> =Subscriber Number (6 digits)

## 6.7 Signaling Point Codes

The format of the code is used to identify the signaling point. The format of the 14-bit binary code is used for the identification of signaling point. International Signaling Point are allocated by ITU-T and 4-058-X and 4-059-X has been assigned for Nepal. Following table depicts the Signaling Point Format.

	<b>International Signaling Point Code (ISPC)</b>	<b>National Signaling Point Code (NSPC)</b>
<b>Format</b>	<b>XXX-XXXXXXXX-XXX</b>	<b>XXX-XXXXXXXX-XXX</b>
Signaling Area Network Code	4-058-X	ALL
	4-059-X	
<b>Operator</b>	<b>ISPC</b>	<b>NSPC</b>
Nepal Telecom	4-058-0; 4-058-1; 4-058-4; 4-058-6; 4-059-2; 4-059-4	
UTL	4-058-2; 4-058-7; 4-059-0; 4-059-1	1020 and 1031
Ncell	4-058-3, 4-059-3	2001 to 2100
Smart	4-059-5	4001 to 4005
Spare	4-059-6; 4-059-7	0 to 16383 (in decimal) except assigned above
<b>Note:</b> While assigning ISPC, the number assigned for Nepal (i.e. <b>4-058-X</b> and <b>4-059-X</b> ) should be followed. In case of NSPC, it can be done by the Authority itself.		

## 6.8 Short Code

Short Codes are the numbers assigned to the other services rather than the basic telecommunications services.

### 6.8.1 USSD Based Digital Financial Services

USSD based digital financial services numbers are assigned to digital financial service providers for the provision of digital financial services. USSD short code is assigned for the USSD based digital financial services for the expansion of digital services through the country. Following table depicts the USSD based digital financial services number structure.

S. N.	USSD Based DFS Code Format	Remarks
1	*5XY#	XY represents the Digital Financial Services Providers.

### 6.8.2 Five Digit Short Codes Assignment

Five-digit Short Codes are the numbers assigned to the operators to provide the Value-Added Services (VAS). Following table depicts the 5-digit value-added services number structure.

S. N.	5 Digit Code Assignment Format	Remarks
1	1XXXX	Operator Based VAS services
2	3XXXX	Third Party Based VAS services

### 6.8.3 Short Codes for Emergency Services

Following table depicts the short code assigned to provide the emergency services to the customers.

<b>S. No.</b>	<b>Service Used by</b>	<b>Short Digit Number</b>
1	Nepal Police	100
2	Fire Brigade	101
3	Ambulance	102
4	Valley Traffic Police	103
5	Child Rescue Nepal	104/1098

## 7. Miscellaneous

The provisions relating to number allocation, assignment, and management shall be made and revised by NTA as per necessity. Moreover, the numbers for other services shall be defined by NTA following international practices, ITU standards, and context of Nepal.