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**Public Consultation on**

# **ANC Numbering and Addressing Plan**

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**Deadline for submission: 5 November 2021**

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## **1. Introduction**

### **1.1. Overview**

The aim of this Consultation Document is to seek views from industry and the public on the proposed introduction of National Numbering and Addressing Plan by the National Communications Authority (ANC) for the telecommunications sector.

Decree-Law no. 15/2012 of 28 March 2012 on the Regulation of the Telecommunications Law (the Telecommunications Decree-Law) sets out for the ANC the objective of establishing and maintaining an open, non-discriminatory, technologically neutral, objective, transparent and proportionate telecommunications regulatory regime. With that objective in mind, it is the intention of the ANC to adopt a numbering and addressing plan that supports new development in telecommunications technology to promote development of our telecommunications market in a way that is transparent and consistent with its policy of light regulation.

### **1.2. Purpose of the Consultation Document**

This Consultation Document sets out the ANC's proposals based on its assessment of the situation, materials and information available to it at the time of writing. It does not represent the final view of ANC on any of the matters consulted upon.

In order for the ANC to have a better understanding of the sector's needs and requirements, the ANC, invites reasoned views and comments from industry and members of the public on its proposals contained in this Consultation Document. All respondents are encouraged to support all views and comments with relevant argument and where possible, applicable, data, analysis, benchmarking studies and information based on Timor-Leste's situation or on the experience of other countries. In providing views and comments, respondents are requested to indicate the question number, paragraph or section to which their views and comments relate.

The ANC is under no obligation to adopt the views and comments of any respondent.

### **1.3. About the ANC Numbering and Addressing Plan**

Pursuant to Chapter XIV of the Telecommunications Decree-Law, Decree-Law No. 15/2012 on the Regulation of Telecommunications Sector, the Autoridade Nacional de Comunicações (Authority) is vested with the power to regulate and manage numbering and domain names.

More specifically, the Authority is responsible for the development of a National Numbering Plan and other relevant regulatory measures for numbering and electronic addressing of telecommunications network and application services.

Names and addresses are part of any telecommunications networks to communicate and correspond with each other. These names and addresses may be numeric, alphanumeric or combination of both. In telecommunication networks, common names & addresses are those associated with Telephone Numbers, IP Addresses and Domain Names.

The ANC Numbering and Addressing Plan (Plan) will provide a set of rules and guidelines for the use and assignment of numbers and addresses to telecommunication services delivered over the Public Switched Telephone Network (PSTN), the Mobile Network and the Internet or other Internet Protocol (IP) based networks.

The Plan also describes the assignment of numbers to international services, trunk service, emergency services, and special services such as voice mail and Intelligent Network services. Under the plan, numbers will be categorized in various services according to the first digit. The structure of the national number generally complies with the relevant International Telecommunication Union Standard Sector (ITU-T) Recommendations.

Recognizing that increasingly service providers are transitioning PSTN onto the IP Telephony (IPT) platform around the world, the Plan adopts only one numbering area in Timor-Leste without area or trunk codes. The PSTN, Mobile Network and IPT services all share the same numbering plan, which is a uniform 8-digit numbering plan.

In addition to telephone numbers, the Plan also describes the rules and guidelines for Internet numbering and Domain Name Addressing.

## 2. Structure of Telephone Numbering Plan

Following ITU-T recommendation E.164, the International Geographic Telephone Number broadly comprised of two fields:

- a. Country Code (CC) and
- b. the National Significant Number N(S)N.

The N(S)N part can be further divided by National Administrators into the following fields:

- a. National Destination Code and
- b. Subscriber numbers based on national requirements.

The foundation of N(S)N is based on a Leading digit which identifies the specific Telecommunication service within a country. In accordance with ITU recommendation E.164, TL telephone numbering scheme looks like:

Country Code	National Subscriber Number
670 (3-digits)	12-digits (15-3)

Note: The maximum length should not be more than 15-digits

The next sections will explain the Leading digits of N(S)N and would provide findings for regulations. The detailed matrix of the current Numbering plan with reference to subsequent digits is provided in Table 2 of the Appendix.

### 2.1. Leading Digit '0'

Globally the use of Leading Digit "0" is mostly for making long distance calls either international or inter-regional areas within a country. Emergency numbers with a leading digit '0' is also being used by some countries, notably Australia's "000".

Currently, "00" is being used for outgoing international traffic.

In this plan, "00" will continue to be used as the escape code for International outgoing calls. All subscribers need to dial "00" before calling any international geographic number outside the country.

All other blocks with leading digit "0" is kept protected for future use.

## 2.2. Leading digit “1”

Currently, several 3-digit short codes with leading digit 1 are being used in Timor-Leste. Many of these short codes were assigned before the establishment of the Authority for Emergency Services and for service provider services. The list of existing use is given in Table 1:

Table-1

Short code	Service provider services	Short Code	Emergency
100	Prepaid Service Recharge	110	Ambulance
101	Prepaid Service Recharge	112	Police
102	Prepaid Service Balance enquiry	115	Fire Service
108	Club Services	119	COVID-19 Helpline
109	Pulsa Lais Services		
121	FO pulsa Service		
125	Calling Card		
128	Directory Enquiries		
133	Voice Mail		
134	Voice Mail		
135	Voice Mail		
139	IVR access		
172	Customer Support		
177	Customer Support Internet		
19x	Internal Technical Services		

Globally, many countries prefer short codes allocation with leading digit ‘1’ for global harmonization especially for emergency services. Europe and most of the Asian countries use emergency short codes with leading digit ‘1’. Each national regulator further subdivides the short code capacity to accommodate other services that include service provider services, network identification services, and M2M services. Some countries e.g. Singapore and Saudi Arabia have allocated numbers for M2M using leading digit 1.

This consultation proposes to designate a series of short codes for the following groups:

## **Emergency Service**

These are defined in TL decree law and should be provided in accordance with the law. ANC may designate 11x (x=0-9) for such services. It is mandatory service and all service providers are required to allow access to these codes free of charge. Reference of existing emergency services is provided in Table-1.

## **Public Services/Community Services**

These services are provided by government departments to address any queries made by general public. All service providers should allow access to these codes from their networks to the desired termination point. The Plan designates 12xxx (x=0-9) for such services.

## **Service providers Services**

These services are operated by authorized service providers for calls originate and terminate within the service provider's own network. In addition to 10x, the Plan sets aside 12x, 13x, 19x to accommodate future allocation and assignment. To advance consumer interest, the Authority should encourage the use of common short codes across service providers for offering same services. Reference of existing service provider services is provided in Table-1.

## **Toll Free Services**

All numbers beginning with leading digit '1800' e.g. '1800 xxxx' are used for supplementary or value added services. Toll Free is one of such service and is using numbers with leading digit '1800'. Calls made to Toll Free numbers are free of charge.

Toll free services are using numbers beginning with prefix 1800. This is usually considered as an identity for Toll free service globally.

## **Premium Services**

All numbers beginning with leading digit '1900' e.g. '1900 xxxx' are allocated for future assignment of Premium Services. Calls made to these numbers are charged at a rate higher than the normal call tariff.

Internationally, premium services are often using the 900 prefix. This prefix is usually considered as an identity for such kind of services i.e. premium rate. The variant of 900 prefix is '0900' and '1900'.

## **Machine to Machine services**

Machine to Machine (M2M) communication is the communication or the exchange of information between machines. M2M is increasingly seen as the Internet of Things technology grows. There is a



partial human involvement in some modes of M2M.<sup>1</sup> Like every other network point, machines do require addresses for communication in a network.

The Plan sets aside the range with leading digit '14' e.g. '14xx-xxxx' for M2M numbers.

### **2.3. Leading Digit 2, 3, and 4**

Fixed line numbers are traditionally geographic in nature as they can be used to identify a specific region or location by using different leading digits. In the past, numbering series for fixed line services with leading digits of 2, 3, and 4 were used to designate the following region:

- 2-Western Region-WR
- 3-Central Region-CR
- 4-Eastern Region-ER

The existing number structure consists of seven digits including the leading digit. This leads to the theoretical capacity of 3-million numbers for fixed line services. There is a high concentration of consumer in the central region as it includes the capital city of Dili.

With the transition to the IP-based Next Generation Networks both in the core and access sides, service providers are implementing centralized routing techniques for efficient use of fixed line numbers. In addition Numbering Portability and uniform call tariffs have reduced the significance of geographic identification. Like mobile, national regulators around the world have started designating a single leading digit for fixed service as well.

Given that the total population of Timor-Leste is approximately 1.3 million and that there is currently only one fixed line operator, with fixed line penetration of less than 1%, this consultation proposes to migrate all 7-digits numbers to 8-digits by prefixing existing numbers with leading digit '5'. This will make all fixed line numbers leading with digit '5'. The Authority shall consult with all service providers for its implementation in order to avoid network disruption for customers.

### **2.4. Leading digit '5'**

All numbers beginning with leading digit '5' are currently vacant.

The Plan designates leading digit '5' for the migration of all Fixed Line numbers as described earlier.

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<sup>1</sup> National Numbering Scheme should include a capacity to accommodate M2M numbering for short and medium term. IPv6 address scheme are recommended for a long term solution. M2M are expecting exponential growth as every machine will require address and finite numbering plans cannot accommodate such a big capacity.

## **2.5. Leading Digit '6' and '7'**

All numbers beginning with leading digit '6' are currently vacant. Leading digit '6' is allocated for future assignment of mobile numbers.

Currently, all mobile numbers start from leading digit '7'. Mobile numbers are 8-digit long with a total capacity of 10-million numbers. There are three public mobile service providers operating in Timor-Leste. After the introduction of two new mobile service operators in 2012, mobile numbers were changed from 7 digits to 8 digits. This addition of leading digit '7' increased total mobile numbers capacity by ten times.

The increasing mobile penetration globally is pushing each country to introduce new leading digits for mobile services before any other expansion in the national numbering plan. Most countries implement numbers for mobile services as non-geographic.

The Plan continues to use of leading digit '7' for mobile service. Allocation of numbers for any other services should not be permitted from leading digit '7'.

In addition, the Plan also designates leading digit '6' to be allocated for future mobile number assignment. This allocation can be deployed once 60% of total capacity has already been allocated to service providers.

The Authority is to conduct an audit on the utilization of exiting ranges allocated to each service provider. The format for numbers audit is provided in appendix.

## **2.6. Leading digit '8'**

All numbers beginning with leading digit '8' are currently vacant. Leading digit '8' is reserved for future allocation.

## **2.7. Leading digit '9'**

All numbers beginning with leading digit '9' are currently vacant.

The Plan designates leading digit '9' for assignment of IP Telephony services.

### 3. Network Identification Codes

A Service Provider within a country use combination of digits for identifying various nodes and switches in the network. These codes are required to follow the international standards, to enable identification of traffic exchanged across different networks nodes both nationally and internationally. These codes are not allocated for public use.

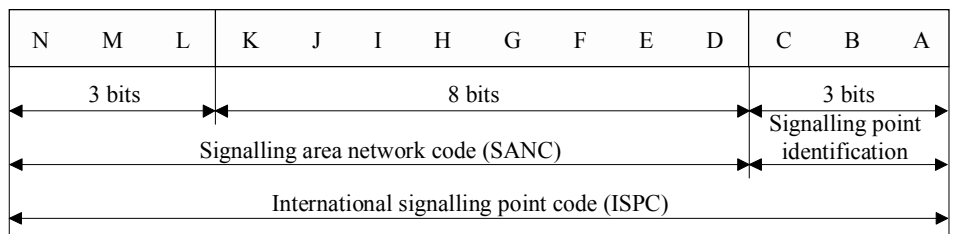
It shall be the Service Providers sole responsibility to ensure that there is no conflict between Network identification codes and all nodes must use codes in accordance with international practice. Currently the following codes are specified under the category of network codes which are:

#### 3.1. International Signaling Point Code (ISPC) Format

International obligations require the use of International Signaling point codes (ISPC) that are used to identify the border gateway of each country. The network traffic exit national geographic boundary, and is identifiable in the international networks and nodes through the use of ISPCs.

ISPCs are assigned to each member state by the Telecommunication Standardization Bureau of the International Telecommunications Union (ITU/TSB). They will adopt the procedures specified by the ITU/TSB from time to time in Recommendation Q.708 or its successor recommendation(s).

The format of the 14-bit binary code used for the identification of international signaling points is illustrated below.



T11105130-99

The binary code is represented by three (3) decimal numbers as follows:

- The first indicating the three (3) most significant bits (NML), with a value of 0 to 7;
- The second indicating the following eight (8) bits (K-D), with a value of 0 to 255;

and.

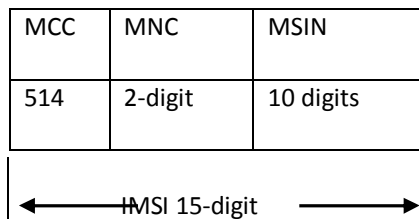
- The third consisting of the three (3) least significant bits (CBA), with a value of 0 to 7.

The combination of the fields containing bits NML and bits K-D is regarded as the Signaling Area/Network Code (SANC). The three (3) bits (CBA) identify a specific signaling point which when combined with the SANC forms the 14-bit ISPC (e.g. 2-068-1)

ITU assigned ISPCs to its each member states. Timor-Leste is currently assigned with 5-130-X where X=0-7.

### 3.2. Mobile Network Code

Mobile Network Code [MNC], ITU standard E.212

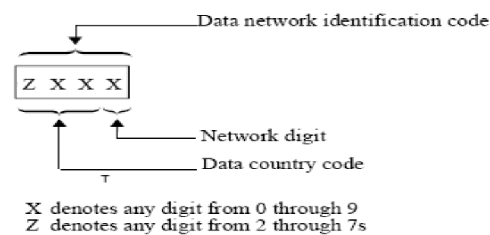


The first field in the IMSI format is allocated by ITU which is 514 for Timor-Leste. MNC is associated as network identification code is allocated to Service Provider providing public mobile services. MSIN assignment is made by the Service Provider to whom MNC was assigned.

The Plan adopts the ITU recommendation E.212 for IMSI allocation. ITU has assigned MCC 514 to Timor-Leste. The MNC is xx where x=0-9. ANC would allocate 99 MNCs with MCC code 514. Timor Telecom, Telemor and Telkomcel are currently using 514-02-xxxxxx, 514-01-xxxxxx and 514-03-xxxxxx.

### 3.3. Data Network Identification code

A DNIC consists of Data Country Code (DCC) and a network digit as per ITU-T standard X.121. Each network digit identifies a data network in a country. The assignment of DCC is made by ITU to all member countries. DNIC identifies a public data network in a specific country or geographic region.



## 4. Internet Protocol (IP) Numbering and Addressing

An IP address is a number that identifies each sender or receiver of information that is sent in packets across the Internet. When a HTML page is requested or an e-mail is sent, the Internet Protocol part of TCP/IP includes the IP address in the message and sends it to the IP address that is obtained by looking up the domain name in the Uniform Resource Locator which was requested or in the recipient's e-mail address. The recipient is able to see the IP address of the Web page requestor or the e-mail sender and can respond by sending another message using the IP address it received.

There are two version of IP Addresses currently in use; Internet Protocol Version 4 ("IPv4") and Internet Protocol Version 6 ("IPv6"). An IPv6 address is a protocol that was developed to support the recent exponential growth of the Internet and development of new applications. The use of the IPV6 protocol is mandatory for all Network Service Provider that provide access applications services, email, web and Domain Name System ("DNS") servers in Timor-Leste with effect from 1 July 2023.

### 4.1. IPv4 Addressing Structure

IPv4 Addresses use 32 binary bits to create a single unique address on the network and contains  $2^{32} = 4.3$  billion addresses.

IPv4 Addresses use four decimal numbers and each decimal number is separated by a dot. This is sometimes known as the dot address or "dotted-decimal notation". Dotted-decimal notation divides the 32-bit Internet address into four 8-bit fields and specifies the value of each field independently as a decimal number with the fields separated by dots.

X . X . X . X

Where X = Decimal numbers where the value are between 0 and 255.

### 4.2. IPv6 Addressing Structure

IPv6 Addresses use 128 binary bits to create a single unique address on the networks and the end-users and contain  $2^{128}$  addresses.

IPv6 Addresses are defined by the Internet assigned numbers authority (IANA), IETF Standard Document (RFC 4291). IPv6 use eight sets of four hexadecimal address (16 bits in each set), separated by a colon ':' as shown below:

X : X : X : X : X : X : X : X

Where X = Hexadecimal numbers where the value are between 0000 and FFFF.

### **4.3. Provision of IP Number Addresses**

IP Addresses are currently obtained from the Asia Pacific Network Information Centre (“APNIC”) or through holders of IP Address assignments located in Timor-Leste. The Authority intends to continue with this process subject to the conditions set out in this Plan.

APNIC assigns IP Address blocks based on an open policy as outlined at its website.

Only those assignment holders who are either entities of Timor-Leste or permanent residents of Timor-Leste, who have been issued with IP Addresses by APNIC, shall be required within thirty (30) working days of such provision to inform the Authority in writing.

### **4.4. Condition of Use**

All holders of IP Addresses shall be entitled to further provide IP Addresses to its end-users for use in Timor-Leste. The provision of IP Addresses to the end users shall be made in a fair, equitable and non-discriminatory manner.

### **4.5. Retention of Information**

Assignment holders of IP Addresses shall keep or retain the following information:

- a) The assignment holder’s use of IP Addresses issued by APNIC;
- b) The assigned IP Addresses; and
- c) The identity of each end-user of paragraph (b)

Assignment holders of IP Addresses issued by APNIC shall submit the information stated in subsection (a) to (c) above to the Authority.

## **5. Autonomous System Numbers (ASN)**

An Autonomous System Number (“ASN”) is a unique two-byte number associated with an Autonomous System (“AS”). The ASN is used as an identifier to allow the AS to exchange dynamic routing information with other Autonomous Systems. Exterior routing protocols such as the Border Gateway Protocol (“BGP”) requires ASNs to exchange information between networks.

### **5.1. AS Number Structure**

ASN are a series of numbers assigned by APNIC which begins with the alphabets “AS” followed by a number and alphabets.

### **5.2. Provision of AS Number**

Autonomous System Numbers (“AS Numbers”) which are used or to be used in Timor-Leste are currently obtained from APNIC. The Authority intends to continue with this process subject to the conditions set out in this Plan.

### **5.3. Provision of Information**

Holders of AS Numbers provided by APNIC shall submit the following information to the Authority:

- a) The AS Number;
- b) The party to whom the holder of the AS Number peers to;
- c) The peering arrangements; and
- d) The routing policy of the AS.

The Authority may in its request to AS Number holders require them to disclose further information in addition to the information listed above.

## 6. Domain Names Addressing

The Domain Name System (“DNS”) is a hierarchical naming system built on a distributed database for computers, services or any resource connected to the Internet. It translates domain names meaningful to humans into the numerical identifiers associated with networking equipment for the purpose of locating and addressing these devices worldwide.

### 6.1. Country Code Top Level Domain Names

In accordance with ISO 3166-1 list (Codes for the Representation of Names of Countries and Their Subdivisions) maintained by ISO 3166 Maintenance Agency, the two-letter country code top level domain (“ccTLD”) “.tl” has been designated to Timor-Leste by the Internet Assigned Numbers Authority (“IANA”).

Section 69 of the Telecommunications Decree-Law lay out the Authority’s purview over all domain names under the “.tl” ccTLD.

### 6.2. Structure of “.tl” Domain Names

A domain name in “.tl” usually consists of two or more parts separated by dots with the rightmost part of “.tl”. For example: [www.mtc.gov.tl](http://www.mtc.gov.tl). The rightmost part conveys the top-level domain, where in this case it is the country code top level domain “.tl”.

Subdomain is a domain that is part of a larger domain, for example, in the address of [www.mtc.gov.tl](http://www.mtc.gov.tl); “.mtc.gov.tl” is a subdomain of the “.gov.tl” domain.

### 6.3. Subdomain of “.tl” Domain Names

“.tl” domain names are categorized as follows:

“Second Level Domains” are those second level domain names open to all users. An example of a Second Level Domain is “.anc.tl”;

“Third Level Domains” are those third level domain names open to all eligible users. An example of an Third Level Domain is “.mtc.gov.tl” or “.untl.edu.tl”

“Internationalized Domain Names” are those second level domain names in extended multilingual characters which are open to all users. Examples are: “.informações.tl” and “.東帝汶.tl”.

Reserved Second Level Domain Names are those “.tl” second level domain names which are reserved by the Authority from time to time.



#### **6.4. Assignment of “.tl” Domain Names**

All “.tl” domain names are assigned by the Authority directly or through the Registrar to eligible end-users. Eligibility criteria and allocation rules that apply to the assignment of third and second level domain names are set out individually. End-users are required to meet the eligibility criteria and such other rules as may be specified by the Registrar.

Section 69 of the Telecommunications Decree-Law permits the Authority to delegate any or all its functions to a third party.

#### **6.5. Conditions of Registration**

The Registrar or its Reseller(s) shall ensure that the registration of any “.tl” domain name by a registrant shall be subject to the following conditions:

- a) that the registrant warrants that the Registration Data and all other information submitted for the application of registration is complete, true and accurate;
- b) that the registration of the domain name is governed under the terms and conditions as contained in the Registration Agreement; and
- c) that the registration of the domain name is in compliance with any provision of the Telecommunications Decree-Law or any subsidiary legislation made under the Telecommunications Decree-Law in relation to the registration or any relevant written laws.

## **7. Assignment of Numbering Resource**

### **7.1. Application for Allocations**

Relevant registered telecommunications service providers in Timor-Leste are eligible to apply for allocation of numbering resources based on the block allocation size (see Table 3 in Appendix).

The prescribed application forms for each National Numbering resource are to be provided on the ANC website.

All Applications will be processed strictly in the order in which they are received and acknowledged by the Authority. In general, any allocation will be decided by the Authority not later than four weeks after the submission of application, subject to the necessary information being available. However, the Authority may ask for additional information relating to the application if deemed necessary. In such a case, the Authority shall decide relating to numbering Assignment within the four weeks from the date of submission of such additional information by the applicant.

The Authority shall notify its decision in writing regarding any application for the allocation of numbers. If the application is refused or rejected, then a brief summary of the reasons can be provided with the notification.

### **7.2. Terms for Allocations**

The Authority may lay down specific terms for allocation of numbers or number series including the following:

- An assigned short code is not transferable.
- Allocated numbering resource can be surrendered to the Authority.
- The service provider or the assignee shall furnish necessary information, statement of accounts regarding use of numbering from time to time as required by the Authority.
- The Authority reserves exclusive right to change the numbering and allocation/assignment procedure from time to time.
- All deed agreement in relation to the use of numbering with other parties must be submitted to the Authority.
- The Authority will reserve exclusive right to decide on the eligibility and allocation/assignment of numbering.

### **7.3. Withdrawal of Allocations**

The Authority shall have the right to withdraw allocations in the following situations:

- Serious or repeated failures of a Service Provider to meet one or more of the usage conditions;
- All numbers of an allocated range having become deactivated.

- Sustained insufficient or inappropriate usage of one or more allocated numbers.
- The need for additional numbering capacity elsewhere mandates such withdrawal or International harmonization mandating such withdrawal;
- Withdrawal being deemed to be in the overall national interest;
- It being necessary as part of a change to the National Numbering Plan.

To withdraw any numbering resources in future, the ANC would need to communicate a minimum of three month notice. This notice period should be provided to all affected Service Providers in writing and provide the reasons for the proposed withdrawal.

The Authority may agree for a transition period, during which the Authority can discuss any implementation procedures such as how customers should be informed by relevant Service Providers. The period from the end of the notice period and the final withdrawal of the number allocations will vary depending on the circumstances, the customer impact and the magnitude of the technical and operational changes required for making such a withdrawal.

In addition, any assigned numbering resources may be cancelled by the Authority including for but not limited to the following reasons:

- Where applicable, if the assignee fails to use the number/s within the required enter-into-use date (e.g. 6 months after assignment of the numbers).
- If the use of the numbering resources is against public security or a subject of national interest.
- If the assignee is engaged in unfair competitive practices.
- If the assignee violates the terms and conditions of the Plan.
- If the assignee violates the regulations and laws of Timor-Leste.

#### **7.4. Duration of Allocations**

All allocations will last until the end of the license period of the Service Provider, and will be automatically extended if the license is renewed or extended, unless ANC specifies a shorter period when notifying a Service Provider of the allocation, and subject to rights to withdraw numbers described earlier.

#### **7.5. Return of Allocations**

A service provider/assignee may at any time return the numbering resources to the Authority. However, a service provider/assignee may only return a complete number block (see Table 3, allocation block size). Therefore it will not be possible to return parts of a number block. Such a return may take effect, at the earliest date as decided by the Authority.

## 8. Numbering and Addressing Charges

All numbering assignment holders or registrants of electronic addresses shall be required to pay such fees as may be prescribed by the Authority.

The assignment fee(s) may be prorated based on the period of use (for short term use, three months being the minimum term) or may be prorated to a specified expiry date.

The prescribed fees as set out by the Authority are as follows:

No	Type of Assignment	Annual Fee per number or domain address
1	Each assignment of mobile numbers	\$0.25
2	Each assignment of Land line numbers	\$0.25
3	Each assignment of IPT numbers	\$0.25
4	Each assignment of Short Codes	\$250
5	Each assignment of ISPC	\$1,000
6	Each assignment of Mobile Network Code	\$1,000
7	Each Data Network Identification Code	\$1,000
8	Each assignment of the second level .TL domain names	\$5

## 9. Questions

1. This consultation proposes to adopt only one numbering area in Timor-Leste and that the geographic areas of eastern, central and western are no longer used. The PSTN, Radio/Mobile Network, IP Telephony (IPT) services share the same numbering plan, which is a uniform 8-digit numbering plan. Do you agree with using only one numbering area for the whole national territory? What is your view of the proposal?
2. Numbers are categorised in various services under the ANC Numbering and Addressing Plan according to the first digit. Do you agree with this categorization approach? What is your view of the proposal?
3. The proposed Number Categories are: Short codes (“1”), Fixed (“5”), Radio/Mobile (“6” and “7”) and IP Telephony (“9”). Do you agree with these categories? What is your view of the proposal?
4. Section 2.1 proposes some changes to the categorization of short codes under leading digit “1” based on the nature of service provided by the short codes. What is your view of the proposal?
5. Section 4 of this consultation proposes to regulate the use of Internet Protocol (IP) address numbers in Timor-Leste. What is your view of the proposal?
6. Section 5 of this consultation proposes to regulate the use of Autonomous System (AS) numbers in Timor-Leste. What is your view of the proposal?
7. Section 6 of this consultation proposes to regulate the assignment and use of the Country Code Top Level Domain (ccTLD) of Timor-Leste (.TL). What is your view of the proposal?
8. Section 7 proposes terms and procedures for the assignment of numbering resources. What is your view of the proposal?
9. Section 8 of this consultation document proposes to charge certain amounts of annual fees on the assignment or the use of numbering resources. What is your view of the proposal?
10. Section 8 of this consultation document also proposes to charge certain amounts of annual fees on the assignment of second level domain name for .TL domain addresses. What is your view of the proposal?
11. Any other comments? If required, please use this space to provide any other comments and/or suggestions of relevance to this public consultation on the ANC Numbering and Addressing Plan.

## 10. The Consultation Process

This consultation process is as follows:

An interested person may submit one or more responses to this Consultation Document. Submissions must be received by 5 November 2021. Submissions received after that date shall not be considered.

Hard copy submissions may be addressed by mail or delivered by hand to:

**Autoridade Nacional de Comunicações (ANC)**

Ground floor, Telecom Building

Avenida Xavier do Amaral No.8

Caicoli, Dili, Timor-Leste

Telp: +670 3311415

E-mail: [info@anc.tl](mailto:info@anc.tl)

Soft copy submissions (in Microsoft Word or PDF format) may be sent by e-mail to **[consultation@anc.tl](mailto:consultation@anc.tl)**.

The ANC assumes that all submissions to this Consultation Document are not made in confidence unless otherwise specified. The ANC reserves the right to reproduce and publish the submissions in whole or in part in any form (including disclosing the identity of the respondent) and to use, adapt, or develop any proposals put forward without seeking permission or providing acknowledgement of the party making the proposal. Any part of the submission, which is considered by a respondent to be commercially sensitive or confidential should be clearly marked and set out in a separate annexure, which the ANC will take into account when disclosing the submission.

For clarifications concerning this consultation process, please write to: **[info@anc.tl](mailto:info@anc.tl)**.

## 11. Appendix

### 11.1. High level view of the current numbering structure

Table-2

Leading Digit	2nd Digit									
	0	1	2	3	4	5	6	7	8	9
<u>0</u>	Escape code	V	V	V	V	V	V	V	V	V
<u>1</u>	SC	SC	SC	SC	SC	SC	SC	SC	SC	SC
<u>2</u>	V	FL-WR	FL-WR	FL-WR	FL-WR	FL-WR	V	V	V	FL-WR
<u>3</u>	V	FL-CR	FL-CR	FL-CR	V	V	FL-CR	FL-CR	FL-CR	FL-CR
<u>4</u>	V	FL-ER	FL-ER	FL-ER	FL-ER	V	V	V	V	FL-ER
<u>5</u>	V	V	V	V	V	V	V	V	V	V
<u>6</u>	V	V	V	V	V	V	V	V	V	V
<u>7</u>	UPT	VM	V	M	M	M	M	M	M	Paging
<u>8</u>	V	V	V	V	V	V	V	V	V	V
<u>9</u>	V	V	V	V	V	V	V	V	V	V

V Vacant  
 SC Short code  
 FL-WR Fixed Line Western Region  
 FL-CR Fixed Line Central Region  
 FL-ER Fixed Line Eastern Region  
 UPT Universal Personal Telephony  
 VM Voice Mail  
 M Mobile Allocation  
 FF Freephone  
 PRS Premium Rate services

## 11.2. Allocation Block Size

Table-3

Leading Digit	Service Type	Allocation Block Size	Remarks
0	Escape code International outbound traffic	Individual	Only "00" is assigned
1	Short Codes	Individual	Future allocation should be allowed with individual block size
1800	Toll Free	1 10	FF allocation should be allowed in blocks of numbers as well as individual
1900	Premium	1 10	PRS allocation should be allowed in blocks of numbers as well as individual
2/3/4	Reserved		
5	Fixed Line	1,000 10,000	Fixed line allocation should be allowed in blocks of numbers
6/7	Mobile	100,000	Mobile allocation should be allowed in blocks of numbers
8	Reserved		
9	IP Telephony	1,000 10,000	IP Telephony allocation should be allowed in blocks of numbers