St. Maarten National Numbering Plan 2015

Bureau Telecommunications and Post St. Maarten

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Introduction:

In 1998 the Executive Council of the Island Territory of St. Maarten adopted its first Telecommunications Policy ever in anticipation of the assumption of tasks and authorities in this area due to the impending dismantling of the country The Netherlands Antilles. In preparation for the establishment of country Sint Maarten within the Kingdom, the Executive Council of the Island Territory of St. Maarten decided to seek entry into the North American Numbering Plan to attain a country code and dialing code which would identify the new country Sint Maarten within the Global telecom community. In line with the due execution of its authority and tasks the Government of country Sint Maarten obligated to provide a comprehensive and supportive environment in which the establishment of country Sint Maarten as an independent entity within the Global telecom community could be attained and the further development of the telecom industry would be guaranteed.

The Government of St. Maarten duly obtained a country- and dialing code for St. Maarten within the North American Numbering Plan, with the assignment of 1-721.

In the further execution of its authorities and tasks in this area the Government of St. Maarten realized that a due implementation of the new country- and dialing code required the introduction of a new numbering plan for country St. Maarten. The existing numbering plan which through transitory law would remain in effect after the dismantling of the Netherlands Antilles until a new numbering plan was adopted was found incompatible with the rules and regulations applicable for participants within the North American Plan.

In close cooperation and consultation with the participants within the telecommunications industry on St. Maarten, the Government of St. Maarten initiated the phased introduction of the new country- and dialing code. Whilst the telecommunications infrastructure- and service providers worked towards a due implementation and seamless transition into the North American Numbering Plan, the Government worked on its numbering plan to create the basis that would support the use of numbering resources in compliance with rules and regulations set by the North American Numbering Association. Even though compliance with said rules and regulations is a pre-requisite for participation within the North American Numbering plan, the Government of St. Maarten designed a product catered to the local needs while ensuring measures of transition.

Further decisions were undertaken to ensure an independent, transparent and effective management of numbering resources; at all times falling under the regulatory supervision of the Government. The Minister appointed ACTIS NV as the numbering administrator for St. Maarten.

The Numbering Plan for St. Maarten 2012 was the first ever to address the allocation and management of numbering resources, including but not limited to numbers, carrier codes, short codes, 1-800 numbers etc.

The expenses related to the participation within the North American Numbering Plan and the fulfillment of applicable requirements for code acquisition, reporting and compliance

requirements and assignments to telecom operators on St. Maarten, are deemed part of the costs related to the regulatory task execution of the telecommunications industry in St. Maarten.
Numbering is deemed a scarce resource, the allocation and management of which must be conducted with care and in a non-discriminatory manner.
The assignment of resources enabling telecommunications infrastructure and service providers the means to operate and provide services is executed by the Minister tasked with Telecommunications.
The legal basis for the competence of the Minister in this regard is set forth in the National Ordinance on Telecommunications facilities (AB 2013, GT 769 namely article 2 section 1 and article 7 section 2 a-d), the stipulations set forth in concessions issued relating to the need, application, assignment and use of numbers by concession holders in the provisioning of their services and article 10 of the National decree on dedicated telecommunication services (AB 2013, GT 771). In light of developments in the Telecommunications Industry an actualization of the 2012 National Numbering Plan is deemed required. The 2012 National Numbering plan for St. Maarten shall therefore be deemed replaced by the decree issued by the Minister of Tourism, Economics Affairs Transport and Telecommunications of St. Maarten as of the date of publication as of this numbering plan.

1.0 Scope and Overview

This numbering plan is construed fully in accordance with the North American Numbering Plan (NANP), in which St Maarten participates. The North American Numbering Plan Administration (NANPA) approved St. Maarten's request on September 30th, 2009 and assigned as per request 721 as the area code. The NANP is a standardized system of numbering plan areas that has evolved over the years into a code consisting of a three-digit area code (NPA) and a seven-digit subscriber number. The system was developed in the 1940s and first implemented by AT&T in 1951. Currently the NANP encompasses 24 countries and territories, these nations share the country code 1 under the International Telecommunication Union (ITU-T) recommendation E.164.

This document defines the standard, format and values of numbering resources used in the telecommunications industry on St. Maarten. The document shall be referred to as the St. Maarten National Numbering Plan (NNP). The NNP contains a dialing plan and information on other numbering resources required to enable among others telephony services. The purpose of this document is to consolidate all numbering resources into one document facilitating the dissemination of information in the industry and to other stakeholders.

A Numbering Plan specifies the format and structure of numbers including any segments used for identification, routing and charging capabilities (Country Code, Area Code, and CO Codes used for geographic routing and distance sensitive charges). In St. Maarten the CO is not used for geographic routing and or distance sensitive charges.

A Dialing Plan is the combination of digits and additional information that defines the method by which the Numbering Plan is used and may include prefixes, suffixes and additional information supplemental to the Numbering Plan required to complete the call (dialing the prefixes “0”, “1”, and “011” for operator assistance, direct dialing within a Country Code and direct dialing between Country Codes).

2.0 Introduction

The NNP is the policy that governs the management of numbering resources. The available numbering resources for telecommunications services are finite. Efficient and effective management of these numbering resources are one of the most important responsibilities of the telecommunications administration, BTPSXM. As Numbering resources are a finite resource, the management of said numbering resources should be open and transparent to ensure that the administration of the numbers is executed in an independent manner, with expertise, in the public interest, and consistent with all applicable rules and regulations. In line with the approach in other jurisdictions, the government of St. Maarten has decided to appoint a third party to manage the numbering resources for St. Maarten. BTPSXM will remain the responsible organization for developing policies, rules and regulations for the management of the numbering resources on behalf of the Minister and shall oversee the functioning of the Numbering Administrator.
The numbering resources set forth in the NNPS must adhere to the international standards as outlined by the ITU or NANP principles. The St. Maarten international numbering resources are in compliance with all relevant ITU-T recommendations. In order to guarantee service continuity the previous Netherlands Antilles Island territories agreed to share and maintain some essential telecommunications network related numbering resources.

3.0 International Numbering Standards and Conventions

This chapter provides an overview of all the international numbering standards and conventions that are applicable for the NNP.

3.1 ITU-T Recommendation E.190

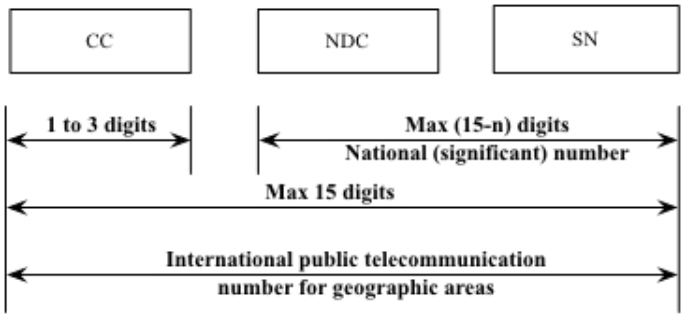
The ITU-T Rec. E.190 is the principle on which the management of the St. Maarten international Numbering Resources is based. This is done to guarantee consistent, independent and fair management and assignment of relevant E-Series numbering resources. All relevant stakeholders, the resource administrator, the resource applicant and the resource assignee, should utilize the management principles, as outlined in the ITU-T Rec. 190. In line with the ITU-T E.190 recommendation BTPSXM defines administrator, applicant and assignee as follows:

The Numbering Administrator (NA) is the organization entrusted with the administration of a resource derived from the NNP. It is the responsibility of the NA to perform all

administrative functions in a timely manner, including the validation and processing of applications, numbering resource reclamation procedures when appropriate and periodically publishing of an up-to-date list of assignments and recoveries. The NA must also be prepared to accept and handle proprietary information in a confidential manner. The NA handles numbering resource requests, issues available number resources, invoices and collects the costs related to the number resources assigned. The NA reports to the BTPSXM on all number resources assigned. The NA conducts its administration in accordance with the applicable local laws. The NA falls under the regulatory oversight of the BTPSXM.

The applicant is a petitioner applying for the assignment of a resource derived from the NNP. The applicant must comply with the assignment criteria. This includes adherence to all ITU-T recommendations and NANP principles relative to each service and the specific numbering resource being applied for. The applicant must also ensure that they are entitled, per the appropriate domestic regulations to operate in the area(s) they intend to provide service.

The assignee is the applicant to whom E-Series international numbering resources, NANP numbering resources or other NNP numbering resources have been assigned. The assignee is responsible for the effective and efficient management and use of that part of the resource that is under their purview. They must also ensure that the numbering resource they are assigned is only used for the purpose stated. All numbering resource must be returned if there is no longer a recognized need or if the resource is being used in a manner, which differs from the stated purpose.



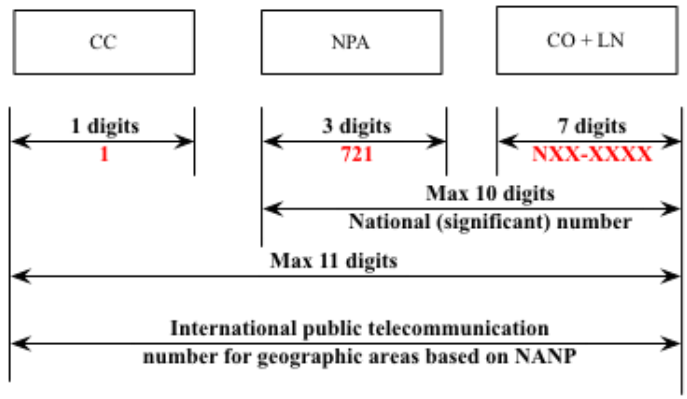
3.2 ITU-T Recommendation E.164

There are three (3) categories of numbers used for international public telecommunications. These numbers relate to geographical services, global service and networks. The ITU-T E.164 Rec. provides structure and functionality for the different numbers categories. The numbering resources used for international public telecommunication in the NNP are based on the ITU-T E.164 Rec. The recommendations detail the components of the numbering structure and the digit analysis required to successfully route the calls. The structure of international public telecommunications numbers as recommended by the ITU-T E.164 Rec.

Figure 1: International Public Telecommunication Numbering Structure

is illustrated in figure 1.

CC: Country Code for geographical areas



NDC: National Destination Code (optional)
SN: Subscriber Number
N: Number of digits in the country code

As St. Maarten made the transition into the NANP, the structure for international public telecommunications was modified to comply with the NANPA principles. The NANP currently uses an 11-digit code for its international public telecommunications number. The NANP international public telecommunications number consists of a single digit Country Code and a 10-digit National Significant Number (NSN). In the NANP the NSN consists of a 3-digit Numbering Plan Area (NPA) and a 7-digit subscriber number. The structure of the NANP based international public telecommunications number is illustrated in figure 2.

In the NANP, the NPA is equivalent to the NDC contained in the ITU-T Rec. E.164 and the Central Office Code (CO) and Line Number (LN) are equivalent to the SN. The NANP based structure for the International Public Telecommunications Numbers is in compliance with the ITU-T Rec. E.164. The combination CO+LN is referred to as the subscriber number.

3.3 ITU-T Recommendation E.212

The ITU-T Rec. E.212 is a recommendation that establishes the structure used to uniquely identify mobile terminals and mobile users. This is required in order to enable terminals and users to roam among public networks that offer mobility services. The identification is done through the International Mobile Subscriber Identity (IMSI). The IMSI is required for a visited

Figure 2: NANP International Public Telecommunications Numbering Structure

network to be able to identify a roaming mobile terminal or mobile user. This recommendation describes an international identification plan for mobile terminals or mobile users of public c networks enabling roaming capabilities. It also establishes procedures for the assignment of International Mobile Subscriber Identities (IMSIs) to the mobile terminals and mobile users of such networks. The recommendation also describes

Figure 3: ITU-T E.212 Structure and Format for IMSI

the format of the IMSI. The structure and format of the IMSI is illustrated in figure 3.

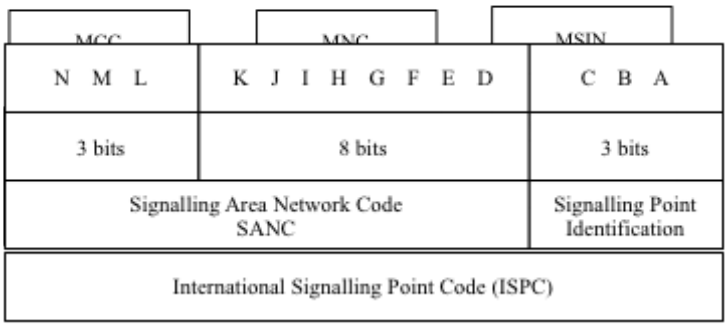
MCC: Mobile Country Code
MNC: Mobile Network Code
MSIN: Mobile Subscriber Identification Number.
IMSI: International Mobile Subscriber Identity.

In order to guarantee service continuity, St. Maarten decided to share the MCC with other entities of the former Netherlands Antilles. The MCC as assigned to the former Netherlands Antilles is 362. St. Maarten uses a 2-digit code MNC. The MNC related to the 362 MCC are shared among the entities of the former Netherlands Antilles. As the MNC is a shared numbering resource, the allocation and reservation of said numbers is subject to and issued in accordance with the terms and conditions set forth in the agreement executed in this regard between the entities of the former Netherlands Antilles.

3.4 ITU-T Recommendation Q.708 and 704

The ITU-T Rec's Q.708 and Q.704 provide the structure and format used for the International and the National Signaling Point Codes'. These codes formerly assigned to the country the Netherlands Antilles are divided and shared among the entities of the former Netherlands Antilles, Bonaire, Saba and St. Eustatius (currently identified as the BES islands), Curacao, and St. Maarten. Based on the pertinent agreement these resources are available for assignment and continued use.

International Signaling Point Codes' (ISPC) are to identify the international signaling points in international signaling networks, operating with ITU-T No.7 signaling system (SS7). The ISPC structure is in compliance with the ITU-T Rec. Q.708. The length of the ISPC is 14 bits and it's divided into three parts of 3, 8 and 3 bit length, respectively, as shown in Figure 4. The first two parts shall define the Signaling Area Network Code (SANC) allocated by the



ITU. The third part shall be the Signaling Point Identification, which shall be available for

allocation in its full capacity comprising eight points.
National Signaling Point Code (NSPC) is used to identify a signaling point in the national signaling network operating in compliance with the ITU-T SS7. The NSPC structure is in compliance with the ITU-T Rec. Q.704. The NSPC is14 bits long and is divided into two parts of 7 bit each. The first part (A) is the number of the administrative area and the second part (B) is the number of the signaling point within the administrative area, as shown in Figure 5.

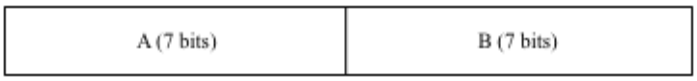


Figure 5: ITU-T Rec. Q.704 Structure and Format for NSPC

3.5 Misuse of NNPS numbering resources

Figure 4: ITU-T Rec. Q.708 Structure and Format for ISPC

Telephone numbers are government resources that are considered a public resource and are not owned by the assignees. Consequently, the resources cannot be sold, brokered, bartered or leased by the assignee for a fee or other considerations. The numbering resources assigned based on the principles in this numbering plan are expected to be used in conformance with this guideline. Misuse of numbering resources as defined in ITU-T E.156 “Guidelines for ITU-T action on reported misuse of E.164 number resources” or otherwise should be reported to the BTPSXM.

3.6 Shared Numbering Resources

Guidelines for the allocation and management of all numbers that are shared between the entities of the former Netherlands Antilles are in place and are set forth in a separate covenant.

4.0 St. Maarten International Public Telecommunications Numbers

Numbers are an indispensable means for identifying subscribers and directing calls and connections through interconnected telecommunications networks. As indicated in the previous chapter, St. Maarten is a participating country in the NANP and that the structure and format of its international public telecommunications numbers are based on the ITU-T Rec. E.164.The international public telecommunications number consists of an ITU-TSB assigned Country Code “1”, NANPA assigned area code “721” and a 7-digit Subscriber Number. The 7-digit subscriber number identifies a particular subscriber or telephone line. The range of numbers available to St. Maarten are defined by 721-NXX-XXXX, were N= 2-9 and X=0-9. In line with the NANP the St. Maarten telephone number is a ten-digit number,

when written or printed the digits should be visually separated by dashes, spaces or periods in accordance with the ITU-T Rec. E.123.

4.1 St. Maarten National Numbering Plan Resources

The NNP consists of ITU, NANPA and Non-NANPA/ITU resources. This chapter specifies guidelines for the assignment of NXX codes used in conjunction with the "721" NPA code for individual carriers.

4.1.1 NANPA Resources

It is the intention of the St. Maarten number administrator to maintain the numbering resources as used in its jurisdiction in line with the principles of the NANPA. The following NANPA resources are administered by BTPSXM: Central Office Codes (CO), N11 Codes, N00 Codes, Vertical Service Code (VSC) and 555 Codes.

4.1.2 Subscriber Numbers

Effective and efficient assignment, management and use of subscriber numbers, is of utmost importance to prevent premature exhaust of the NPA "721" and all consequences thereof. The former Netherlands Antilles number administrator made the current St. Maarten subscriber number allocations. As the allocations for subscriber numbers were made while St. Maarten was part of the Netherlands Antilles within that numbering plan, all St. Maarten based subscriber numbers started with number "5". One purpose of this new numbering plan is to introduce a clear structure for assignment of numbers to operators. The numbering plan should also provide a distinction between geographical, non-geographical numbers and different toll free and premium service numbers. In order to achieve this objective some of the previously allocated subscriber numbers were revoked and others assignments were made to the operators.

Wireless	Wireline	Long Distance	LBS and M2M	OTT Voice	Unallocated	Operator	Additional Info
					200-319		All N11 and 456 are reserved
					320-399		Reserved for LBS and M2M
					420-499		Reserved for OTT-voice
					500-519		
520-524						TelCell	
	525					Telem	
526-529						TelCell	
					530-539		Reserved for wireless service
	540-549					Telem	
550						TelCell	

551-554							Reserved for wireless service
					555		Reserved
556-557						TelCell	
					558		Reserved for wireless service
559						TelCell	
					560-579		Reserved for wireless service
580-581						Radcomm	
					582-583		
584-588						Radcomm	
					589		
		590				Antelecom	
					591-594		International in and outbound
		595-596				Smitcoms	International in and outbound
					597-599		International in and outbound
					600-999		All N11 reserved.911 Emergency number

Table 1: First 3 digits of the Subscriber Number

In close cooperation with the operators the necessary changes were made to the numbering resources assignments. With the proposed changes St. Maarten established a basis on which to effectively and efficiently manage its NSN resources and assignments in accordance with NANP.

4.1.3 VAS numbering

Value Added Services

Formally value added services refer to non-core services, which are offered to the customers apart from the core, or basic services being offered by a telecommunications operator. Core services traditionally were services such as voice calls and fax transmission. In the mobile industry mobile value added services (MVAS) are constantly evolving with the introduction of new mobile applications beyond the basic services, such as voice and short message service (SMS).

VAS in general consists of four components, which are;

1. A content/application owner who develops and owns the original copyrighted content and applications that are provided to the customers as a VAS;
2. A aggregators that, aggregate content and aggregate the application from third parties and distribute an application adapted to suit the customer's needs while also

managing IVR, quality control, billing, and accounting for the aggregated contents and applications;
3. Software developers that, develop the applications;
4. Technology enablers who provide a platform that connects to the network and acts as a bridge between the aggregator and the network operator.

Based on the previous a VAS provider is a person or organization that engages in the provision of value added mobile/fixed services. In order to provide the intended VASs the VAS provider will have to sign a contract with a network operator enabling the provision of such services. There are four entities that are required to provide VAS to end users/consumers these are; The VAS provider, the application providers, the VAS aggregators, and the network operators. By this definition, therefore, a VAS provider could combine the role of the first three and leverage this on the infrastructure of the network operator to the service.
Some of the services that could fall under this category include but are not limited to the following;

1. Text messages, Picture messages, Ring tones, Graphics, Games, Mobile Internet Sites, Videos, Multimedia etc.;
2. All Services using or needing Short Codes;
3. M-Commerce;
4. Mobile Banking;
5. Prepaid Calling Card;
6. Location Based Services;
7. Special Numbering Services;
8. Machine-2-Machine.

Of the different VASs mentioned in the list above the Location Based Services (LBS) and Machine-2-Machine (M2M) are the ones that are trending most. Not mentioned as is VAS are Voice offer IP (VoIP) services, but considering that most telecommunications infrastructures are transitioning from traditional circuit switched networks to broadband networks voice services could be considered as a VAS on a primary data network.

Location Based Services

For the wireless service provider the knowledge of the location of the subscriber is already very vital and an important asset. If they can use this information the service provider can offer new value added services to subscribers. Services that are based on the location of a subscriber are known as Location Based Services (LBS). Some of these services are, location based information, location sensitive billing, emergency services, and tracking. The technology behind LBS is “positioning” and the identification of the position of a consumer is mostly achieved through the use of Global Positioning System (GPS), Geolocation IP-address, and Cel ID. In the past E.164 numbers were also used on GSM (2G) networks but because these networks have proven to be insecure the industry is moving away from these practices.

M2M

The M2M applications can be either for fixed or moving locations. However, there is a tendency that most M2M service providers deploy their business models on mobile infrastructure even for fixed locations. Some examples of mobile location applications are car pool monitoring, person monitoring, logistical supply chain control or automatic remote paying systems. Fixed location applications are for example remote surveillance and monitoring of buildings and homes.
Numbering and addressing alternatives for M2M applications are dependent of the access method chosen by the service provider. The access options that are available to the M2M service provider are fixed and mobile. Fixed access can be divided into PSTN and IP-based networks. When the SP choses to make use of PSTN access it is obvious that the use of E.164 numbering resources is required. In IP-based fixed networks the IP-addresses are used either in IPv4 or IPv6 format. Although IP-connection with IP-addresses is possible with 3G/UMTS and 4G/LTE mobile networks these options are not available in our networks yet. Therefore, for mobile access E.164 numbers are the natural choice for the time being.

The most popular M2M services as they relate to households are smart metering systems (electricity and water), security systems, and car systems. Based on studies it has been established that in the future 75% of households will have at least two smart metering systems, 25% of households will have a security system, and one car (50%) in a household will use a M2M application. The numbering resources required for the example presented here are:

Smart metering: 0.75 x households x 3
Security: 0.25 x households
Cars: 0.5 x households x 2

The total number of needed numbering resources would be equal to the sum of the above equations.

VoIP Services
Over the past years packet switched voice services have gain a substantial part of the voice market. These services are mostly referred to as Voice over IP (VoIP) services. There are different forms of VoIP services and as the services mature they are even considered as a substitute for traditional voice services (PSTN, ISDN, GSM, etc.). As a result of the mentioned developments interoperability with traditional voice services is critical and this means that these services need adequate access to numbers for their subscribers.
From a commercial perspective there are several approaches at the disposal of a service provider to bring its services in the market. They can aim at the consumer market or the business market, a substitute for PSTN or just a secondary service, a fixed location service or a nomadic-type of service. Possible VoIP services descriptions are; voice service over broadband connection as a substitute for PSTN, Nomadic voice service over broadband connection as secondary voice service, and mobile voice service over a packet switched mobile network just to mention a few. As it relates to VoIP services these could be provided by licensed operators but also by so called over the top (OTT) service providers like Magic-Jack, Viber, Skype, and others. The OTT services could be provided in cooperation with local

operators or without the intervention of the local operator. In order to terminate traffic on the local networks, fixed and mobile, the OTT providers would require interconnection and E.164 numbers. The target market could be the local population or the St. Maarten native living abroad.
In consideration of the need for VAS numbering resources allocations have been made as follows:
1] 320-399 for LBS and M2M, and
2] 420-499 for OTT-voice.

4.1.4 Dialing Plan Format

The dialing plan that St. Maarten will adopt will use the following format:

1. Local call origination from a wireline network will consist of the 7-digits subscriber number;
2. Local call origination from a wireless network can take on one of the two following formats:
    a. The dialed numbers will consist of the 7-digits subscriber number.
    b. The dialed numbers will consist of 11-digits, the 1-digit CC, the 3-digit NPA, the 7-digit subscriber number.
3. For mobile networks the international dialing scheme +CC-NSN should be available for local and international calls.
4. An international call within the NANP will consist of 11-digits, the 1-digit CC, the 3-digit NPA, and the 7-digit subscriber number. This format applies to all customers that have made a decision as to which carrier will handle all outgoing international calls for them, Carrier Pre-Select (CPS).
5. An international call outside of the NANP will consist of up to 13-digits. The dialed numbers will consist of the 3-digit International Direct Dialing Prefix (IDD) “011”, the CC and the National Significant Number (NSN). This format applies to all customers that have made a decision as to which carrier will handle all outgoing international calls for them, Carrier Pre-Select (CPS).
6. For those that don’t pre-select a carrier to handle their international calls or perform a Carrier Pre-Select Override (CPSO), the international call will be 4-digits longer. Calls inside the NANP would be 4 plus 11 is 15-digits and calls outside NANP will be 4 plus 13 is 17-digits long.

4.1.5 Carrier Pre-Select and Carrier Select

Carrier Pre-Selection (CPS) is a service that enables consumers to choose a different long distance carrier to carry their international calls without having to dial a Carrier Access Code (CAC). Carrier Select (CS) is a service that enables consumers to use a different long distance carrier on a call-by-call basis to carry their international calls. In order to use the service of an alternative long distance carrier the consumer needs to dial the carriers CAC before the intended called number. The CS service is used when a consumer did not pre-select a long distance carrier or when over-riding its pre-selection.

Carrier Pre-Select and Carrier Select services will only apply to international telephony services. In St. Maarten the Carrier Access Codes will comply with one of two formats. The initial CAC is assigned according to a local format and should only be used locally.

The CAC for local use consists of 4-digits of the following format; 01AX were "A" equals "2, 3, 4, 6, 9" and "X" equals "3, 4, 5, 6, 7, 8, 9".

In addition to the CAC for local use the carriers operating in other NANP areas are allowed to use a CAC that is based on the NANP format. The format of a NANP based assignment is either 101-XXXX or 950-XXXX, where the XXXX is the Carrier Identification Code (CIC). A CIC is assigned based on NANP geographical area from a single pool of numbers.
The CIC consists of a 4-digit code that uniquely identifies a service provider. The CAC 101-XXXX is used as a prefix to the normal dialing sequence for an international call. The CAC 950-XXXX requires secondary dialing that includes an authorization code and the called number.

4.1.6 N11 Codes

In accordance to the NANP it is not allowed to assign geographic NPA and CO codes in the N11 format. The N11 format numbers are allocated for 3-digit dialing for public information and referral services. N11 codes will be harmonized with NANP allocations and use. All operators providing public local telephony services are obligated to make N11 allocated codes available to the general public at no extra cost.

N11 Codes	Assigned Use
211	To be assigned
311	To be assigned
411	Directory Assistance
511	To be assigned
611	Telco Repair Service
711	To be assigned
811	To be assigned
911	Emergency

Table 2: N11 Allocations

In addition to the harmonized N11 abbreviated codes, the following 3-digit abbreviated 91X codes are also used in St. Maarten were X equals 0-9.These 3-digit codes are currently in operation. All operators providing public local telephony services are obliged to make 91X allocated codes available to the general public at no extra cost.

91X Codes	Assigned Use in St. Maarten

91X Codes	Assigned Use in St. Maarten
910	Medical Centre
912	Ambulance Service
913	Coast Guard
918	Child Telephone
919	Fire Alarm

Table 3: 91X Allocations

4.1.7 N00 Codes

N00 codes are NPA codes classified as Easily Recognized Codes. Their uses are assigned by the Alliance for Telecommunications Industry Solutions' (ATIS) Industry Numbering Committee. Current assignments are listed in table 5.

ERC	Status of Use of Code
200	Future
300	Future
400	Future
500	Personal Communications Services
600	Assigned to Canada
700	IXC Services
800	Toll Free Numbers Access
900	Premium Services

Table 4: Easily Recognized Codes Allocations

4.1.8 Vertical Service Code

Vertical service code (VSC) is a customer-dialed code that provides access to features and services provided by public telecommunications concession holders and service providers. The type of services that are provided through VSC are call forwarding, automatic call-back, customer originated trace and others.

Vertical service codes were not regulated under the previous administration. The current administration aims to harmonize the use of VSC between local telecommunications service providers in line with other NANP jurisdictions. The use of different VSCs can be confusing for consumers who decide to change operators. All telecommunications concession holders and service providers in St. Maarten will use standard VSCs to minimize consumer confusion and provide a standard service access approach for features and service with the different individual networks. A list of suggested VSC's and their recommended NANPA use is provided on page 32.

4.1.9 Short Codes

Mobile marketing is becoming an important tool for businesses looking to communicate with consumers directly, efficiently and effectively. It offers exceptional reach and much easier access to end-consumers. Common Short Codes (CSCs) represent a means for operators to be in direct communication with subscribers, anytime and anywhere through a common medium. In this specific case the medium is Short Message Service (SMS) commonly referred to as "texting." CSCs are phone numbers used by content-providers, usually four to six digits, to provide mobile phone subscribers access to information like, sports scores, weather alerts, or to participate in contests and receive electronic coupons. The subscribers are required to send a SMS in order to activate the service. By making it fast and convenient for mobile users to select and receive information, CSCs greatly increase consumer response to advertising and marketing promotions.

In addition to the abovementioned arguments CSCs puts the mobile subscriber in control of their information needs because they can decide what type, when, and from whom they want to receive information. That ability is important because under most rate plans, users pay for incoming SMS messages. By giving mobile subscribers a way to specify exactly what they want to receive, when, and from whom, CSCs improve the chances that consumers participate in SMS-based campaigns.

CSCs are provided and managed by the NA in the case of St. Maarten this appointment will follow at a later stage. Any company can use a CSC, but the code must be obtained from the NA through a series of steps, which include applying for a CSC and submitting the CSC-based campaign to mobile operators for review and testing. Common Short Code assignments shall be 4, 5, or 6 digits in length in the format NXXX, NXXXX, or NXXXXX, where N is any number between 1 and 9 and X is any number between 0 and 9. The 4-digit range NXXX is held in reserve for future use. The Short Codes (SC) in the range 4XXXX and 4XXXXX shall be considered Private Short Codes (PSC) for the internal use of mobile operators. CSCs outside the ranges NXXX, NXXXX, and NXXXXX are not covered by these guidelines and are deemed to be PSCs and may be used by individual mobile operators for their own purposes.

Common and Private Short Codes Allocation	
4 Digits	
1,000 – 3,999	Common Short Codes
4,000 – 4,999	Private Short Codes
5,000 – 9,999	Common Short Codes
5 Digits	
10,000 – 39,999	Common Short Codes
40,000 – 49,999	Private Short Codes
50,000 – 99,999	Common Short Codes
6 Digits	
100,000 – 399,999	Common Short Codes
400,000 – 499,999	Private Short Codes

Common and Private Short Codes Allocation	
500,000 – 999,999	Common Short Codes

Table 5: Common and Private Short Codes Allocations

Common Short Code assignments shall be made for periods of 1-year. A CSC is automatically renewed for additional terms so long as the assignee remains in compliance with the guidelines. Assignments will be made on a first come, first served basis and there will be no reservation of CSCs. CSCs will be assigned from the available unassigned numbers. The Administrator will attempt to match a number assignment with a specific number request. CSCs are not to be used to identify initial destination addresses in the public switched telephone network (PSTN).

A Common Short Code assigned in accordance with the NNP must be placed into service and remain in service, within the time limits specified herein. Otherwise, the CSC will be subject to reclamation. Information that is requested of applicants in support of CSC assignment shall be kept to a minimum and shall be uniform for all applicants. Information received by the Administrator shall be treated as confidential as appropriate and adequately safeguarded. CSCs shall be assigned in a fair and impartial manner to any applicant who meets the criteria for assignment. Applicants for CSCs must comply with all applicable laws, rules, and regulations relative to the services they wish to provide.

4.2 Non NANPA / ITU Numbering Resources

This paragraph identifies the different network related codes used in St. Maarten that are regulated by the Minister or an entity identified by the Minister to do so. The codes described in this paragraph are mostly technology related or ITU based numbering resources.

4.2.1 GSM Network Codes

A Mobile Country Code (MCC) is used in combination with a Mobile Network Code (MNC) (also known as a "Home Network Identifier (HNI)") to uniquely identify a mobile phone operator/carrier using the GSM, UMTS, LTE, CDMA and TETRA public land mobile networks (PLMN) and some satellite mobile networks. The ITU-T Recommendation E.212 defines mobile country codes. According to ITU-T Rec. E.212 the Director of the ITU Telecommunication Standardization Bureau (TSB) is responsible for the management of the MCC while the responsibility for management of the MNC lay with the local number administrator. The former Netherlands Antilles was assigned MCC “362” by the ITU TSB. The MCC “362” and available MNCs are shared between the BES islands, Curacao and St. Maarten. A list of MNCs available for use in St. Maarten is provided in table 6.

MNC (2-digits)	Status
50	Available

MNC (2-digits)	Status
51	Assigned and in use
52	Assigned
53	Available
54	Assigned
55	Available
56	Available
57	Available
58	Available
59	Assigned
60	Assigned
80 - 89	Reserved

Table 6: MNC Allocations

Prior to October 10th, 2010 the Netherlands Antilles Telecommunications Authority allowed mobile operators licensed in the Netherlands Antilles to share network resources. This concept was called integrated networks. Operators that were part of an integrated network were allowed to use the same MNC throughout the network on different island territories. As a result of this policy one operator could use MNC "91" on St. Maarten, whilst MNC "91" was assigned to an operator licensed in Curacao.

Operators that, based on the previous policy of integrated networks, are using a common MNC that is not allocated to St. Maarten must use the Mobile Subscriber Identification Number (MSIN) to differentiate between St. Maarten subscribers and others. A list of allocated MSIN must be presented to the Numbering Administrator upon request.

4.2.3 Base Station Identity Code

The Base Station Identity Code (BSIC) is a code used in GSM PLMNs to uniquely identify a base station. The code is needed because it is possible that mobile stations (MS) receive the broadcast channel of more than one base station on the same frequency. This is due to frequency re-use in a cellular network. The BSIC is defined in GSMA specification 03.03. The BSIC is composed of a 3-bit Network Color Code (NCC) and a 3-bit Base station Color Code (BCC). Figure 6 provides a presentation of the GSMA Spec. 03.03 BSIC format.

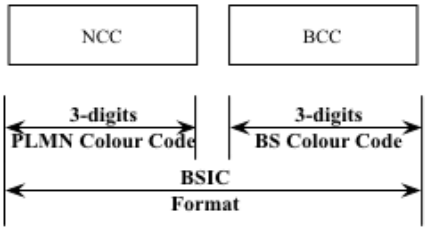


Figure 6: GSMA Spec. 03.03 Format for BSIC

The NCC is assigned to each network provider so the MS can sort out which base-stations it is allowed to connect with. The NCC of different providers must be different, also in national border-areas. There must be coordination of NCC between the national telecommunications authorities of Anguilla, St. Martin and St. Maarten. The NCCs used in St. Maarten are listed below.

NCC	Status
0	Used
7	Used

Table 7: NCC Allocations

There is no official record of assignments made to operators by the former administration. Based on information presented in the document named *"Agreement between the Administrations of Anguilla, France and the Netherlands Antilles concerning the Spectrum Coordination of Land Mobile Radio-communication Networks in the Frequency Range 820 MHz to 2170 MHz"* operators in St. Martin and St. Maarten are using NCC 0. This is an issue that needs to be addressed by the proper authorities.

4.2.4 UMTS Scrambling Code

UMTS networks CDMA scrambling codes are used to differentiate between operators in international border areas. The scrambling codes are paramount to guarantee optimal operation of UMTS networks in border areas. The use of the scrambling codes is of importance for St. Maarten considering the closeness of Anguilla, St. Martin, and St. Maarten. International coordination is necessary to guarantee proper operation of UMTS networks in all 3 jurisdictions. The coordination of UMTS scrambling codes is done based on the European Radio-communications Committee (ERC) recommendations 01-01. UMTS scrambling codes for both Frequency Division Duplex (FDD) and Time Division Duplex (TDD) networks are defined in respectively 3GPP TS 25.213 and 25.223.

	Set A	Set B	Set C	Set D	Set E	Set F
Neighbour Country 1	0..4	5..10	11..15	16..20	21..26	27..31
Border 1-2	■	■				■
Zone 1-2-3	■	■				
Border 1-3	■	■	■			
Zone 1-2-4	■					■
Border 1-4	■		■			■
Zone 1-3-4	■					

	Set A	Set B	Set C	Set D	Set E	Set F
Neighbour Country 2	0..4	5..10	11..15	16..20	21..26	27..31
Border 2-1			■	■	■	
Zone 2-3-1			■	■		
Border 2-3		■	■	■		
Zone 2-1-4			■	■		
Border 2-4			■	■		■
Zone 2-3-4			■	■		

	Set A	Set B	Set C	Set D	Set E	Set F
Neighbour Country 3	0..4	5..10	11..15	16..20	21..26	27..31
Border 3-2	■				■	■
Zone 3-1-2					■	■
Border 3-1				■	■	■
Zone 3-1-4					■	■
Border 3-4			■		■	■
Zone 3-2-4					■	■

	Set A	Set B	Set C	Set D	Set E	Set F
Neighbour Country 4	0..4	5..10	11..15	16..20	21..26	27..31
Border 4-1		■		■	■	
Zone 4-1-2		■			■	
Border 4-2	■	■			■	
Zone 4-2-3	■	■				
Border 4-3	■	■		■		
Zone 4-3-1		■				

	Set A	Set B	Set C	Set D	Set E	Set F
Neighbour Country 1	0..10	11..20	21..31	32..42	43..53	53--63
Border 1-2	■	■				■
Zone 1-2-3	■	■				
Border 1-3	■		■			
Zone 1-2-4	■					■
Border 1-4	■		■			
Zone 1-3-4	■					

	Set A	Set B	Set C	Set D	Set E	Set F
Neighbour Country 2	0..10	11..20	21..31	32..42	43..53	53--63
Border 2-1			■	■	■	
Zone 2-3-1			■	■		
Border 2-3		■	■	■		
Zone 2-1-4			■	■		
Border 2-4			■	■		■
Zone 2-3-4			■	■		

	Set A	Set B	Set C	Set D	Set E	Set F
Neighbour Country 3	0..10	11..20	21..31	32..42	43..53	53--63
Border 3-2	■				■	■
Zone 3-1-2					■	■
Border 3-1				■	■	■
Zone 3-1-4					■	■
Border 3-4			■		■	■
Zone 3-2-4					■	■

	Set A	Set B	Set C	Set D	Set E	Set F
Neighbour Country 4	0..10	11..20	21..31	32..42	43..53	53--63
Border 4-1		■		■	■	
Zone 4-1-2		■			■	
Border 4-2	■	■				
Zone 4-2-3	■	■				
Border 4-3	■	■		■		
Zone 4-3-1		■		■		

■	Preferential code
	Non-preferential code

In accordance with the *"Agreement between the Administrations of Anguilla, France and the Netherlands Antilles concerning the Spectrum Coordination of Land Mobile Radio-communication Networks in the Frequency Range 820 MHz to 2170 MHz"*, St. Maarten was assigned code group of country 2 this is for both FDD and TDD UMTS PLMNs.

4.2.5 Signaling Point Codes

Signaling Point Codes (SPCs) are signaling addresses used in a signaling network using common channel Signaling System No.7 (SS7) to set-up calls. SS7 based switches are interconnected using SPC. International Signaling Point Codes (ISPCs) are 14-bit binary codes used to establish an interconnection link between overseas networks based on SS7. National Signaling Point Codes (NSPCs) are 14-bits binary codes used to establish interconnection links between local networks using SS7. Signaling Point Codes format is based on the ITU-T Recs. Q.708 and 704.ISPC and NSPC are assigned to the appropriate licensed telecommunications infrastructure operators. This is a resource that is shared between the BES islands, Curacao and St. Maarten.

4.2.5.1 International Signaling Point Codes

For the allocation of ISPC the ITU divided the world in 6 zones. The allocation of ISPCs to the different countries is done based on the zones. The former Netherlands Antilles was part of zone 3. The format of these numbers is: Signaling Area Network Codes (SANC) + D, where D is one digit to identify the relevant switch D equals "0-7". The Netherlands Antilles has been allocated the following SANCs: 3-124, 3-125 and 3-126.Each ISPC block consists of 8 codes. In total the Netherlands Antilles had 24-codes at its disposal. As indicated previously after the split of the Netherlands Antilles ISPCs are one of the numbering resources that are to be shared among the BES islands, Curacao and St. Maarten. The following table gives an overview of the allocations and availability of ISPCs for St. Maarten.

ISPC	Status
3-124-1	Assigned
3-124-7	Assigned
3-125-5	Assigned
3-125-7	Assigned
3-126-0	Assigned
3-126-1	Assigned
3-126-7	Available

Table 8: ISPC Allocations

4.2.5.2 National Signaling Point Codes

NSPCs are assigned by BTPSXM and used by operators to connect internal and external network elements. Operators are assigned different NSPCs for internal and external use. Operators may allocate their own designations to signaling points, which have no interconnection with external networks, but they shall keep full records of all such designations, available for inspection by BTPSXM, should that be necessary at any time. NSPCs used for signaling between different operator's networks shall only be used if allocated by BTPSXM. In addition to format A-B as illustrated in figure 5 page 5, the NSPC may be represented by a number which equals decimal or hexadecimal numeric value of all 14 bits, i.e. it may have a numeric value from 0 to 16 383 (0 to 3FFF) equal to 0-0-0 to 7-255-7 dashed. As indicated previously after the split of the Netherlands Antilles NSPCs are also one of the numbering resources that are to be shared among the BES islands, Curacao and St. Maarten. The following table gives an overview of the allocations and availability of NSPCs for St. Maarten.

National Signaling Point Codes			
Decimal	Hexadecimal	Dashed	Status
8192-10239	2000-27FF	4-0/255-0/7	Available SXM
10240-10639	2800-298F	5-0/49-0/7	Assigned SXM
10640-10719	2990-29DF	5-50/59-0/7	Assigned BES islands
10720-10799	29E0-2A2F	5-60/69-0/7	Not Assigned
10800-10879	2A30-2A7F	5-70/79-0/7	Assigned BES islands
10880-10959	2A80-2ACF	5-80/89-0/7	Not Assigned
10960-11039	2AD0-2B1F	5-90/99-0/7	Assigned SXM
11040-11119	2B20-2B6F	5-100/109-0/7	Not Assigned
11120-11199	2B70-2BBF	5-110/119-0/7	Assigned BES islands
11200-11279	2BC0-2C0F	5-120/129-0/7	Not Assigned
11280-11359	2C10-2C5F	5-130/139-0/7	Assigned SXM

National Signaling Point Codes			
Decimal	Hexadecimal	Dashed	Status
11360-11439	2C60-2CAF	5-140/149-0/7	Not Assigned
11440-11519	2CB0-2CFF	5-150/159-0/7	Assigned CUR
11520-12287	2D00- 2FFF	5-160/255-0/7	Not Assigned
12288-14335	3000-37FF	6-0/255-0/0	Available SXM

Table 9: NSPC Allocations

5.0 Numbering Resources Guidelines

ITU numbering resources are allocated, assigned and revoked based on the relevant ITU recommendations and guidelines. All numbering resources that are based on the ITU guidelines are allocated and reclaimed based on the procedures prescribed by the ITU-T E.190 recommendation and other relevant ITU-T regulation or guidelines pertaining to the allocation of numbering resources. If required BTPSXM can publish additional rules pertaining to numbering resources allocation on behalf of the Minister.

As it relates to the NANP numbering resources, numbers will be allocated, assigned and revoked based on the guidelines implemented by the appropriate numbering resource administrator when applicable. At this time the following are the NANP numbering resources assignment guidelines that form the bases for numbering assignment:

- 9YY-NXX Code Assignment Guidelines, ATIS-0300060;
- 555-NXX Assignment Guidelines, ATIS-0300048;
- 800-855 Number Assignment Guidelines, ATIS-0300047;
- Vertical Service Codes Assignment Guidelines, ATIS-0300058;
- Common Short Codes

6.0 St. Maarten Dialing Procedures

The dialing procedures as used in St. Maarten after the full transition to the NANP should comply with the schemes as presented in tables 10 and 11.

Overview of Dialing Procedures
All call possibilities with are based consumer being a pre-selected to a LD carrier

X=0,1,2,3,4,5,6,7,8,9 N=2,3,4,5,6,7,8,9						
	Local outbound 7-digits	Local outbound international format	Dutch Caribbean outbound	International outbound NANP	International outbound Non-NANP	International inbound
St. Maarten Fixed	NXX-XXXX		011-(CC)-National Significant Number	1-NPA-NXX-XXXX	011- (CC)-National Significant Number	1-721-NXX-XXXX
St. Maarten Mobile	NXX-XXXX	+1-721-NXX-XXXX	+(CC)-National Significant Number	1-NPA-NXX-XXXX or +1-NPA-NXX-XXXX	+(CC)-National Significant Number	1-721-NXX-XXXX

Table 10: St. Maarten Dialing Procedures

Outgoing calls with Carrier Select Code		
X=3,4,5,6,7,8,9 A=2,3,4,6,9		
Carrier select	International outbound Non-NANP	International outbound NANP
Carrier Pre-select	011-(CC)- National Significant Number	1-NPA-NXX-XXXX
4-digit Pre-Select Override / Carrier Select	01AX-011-National Significant Number	01AX-1-NPA-NXX-XXXX
7-digit Pre-Select Override / Carrier Select	101/950-XXXX-011-National Significant Number	101/950-XXXX-1-NPA-NXX-XXXX

Table 11: Outbound Dialing with Carrier Select Code

7.0 Information for Transition

Under the regime of the previous Netherlands Antilles numbering policy different numbers were issued that do not fit within the NANP. In addition to the numbering mismatch, St. Maarten policy makers have the objective to harmonize St. Maarten's new numbering plan and synchronize same as much as possible with the NANP. As a result of this approach, some numbering schemes of the previous administration have to change. The following numbering resources that have changed are:

- 080Xtoll-free numbers both 8 and 12-digit must change into 1-8XX-XXX-XXXX toll-free numbers;
- 090X numbers premium numbers both 8 and 12-digit must change into 1-9XX-XXX-XXXX premium numbers;

Toll free numbers must be obtained from SMS-800, which can solely be done through an entity certified by SMS-1800 as a RESPORG. The number administrator is the SMS-800 RESPORG in St. Maarten.

The 92XX and 93XX short public and commercial numbers will be upheld, as they don't pose a major conflict with the NANP. No 99XX numbers were issued in St. Maarten, as such the use of these numbers will be discontinued.

In total 108, 080X and 090X toll-free and premium short and long numbers were issued in St. Maarten. The use of 080X and 090X are forbidden in St. Maarten. In total 13, 92XX and 93XX numbers were issued in St Maarten. A detailed list is provided in table 13.

92XX and 93XX Numbers issued in St. Maarten		
	Numbers	Numbers Holder
1.	9200	I Can Foundation
2.	9207	Prayer Line Ministry
3.	9211	Emergency 24
4.	9221	Genesis Taxi Transportation Services 24/7 Association
5.	9222	Info BTPSXM
6.	9229	Nature Foundation St. Maarten
7.	9247	St. Maarten Taxi Services
8.	9250	Telem
9.	9260	Telem
10.	9277	Safe Haven Foundation
11.	9292	Armorguard Patrol & Technical Services
12.	9299	Telem
13.	9300	Korps Politie St. Maarten
14.	9311	Sheriff Security Force N.V.
15.	9333	Safe Haven Foundation
16.	9368	Safe Haven Foundation
17.	9377	St. Maarten Roadside Service
18.	9393	St. Maarten Amateur Radio Club

Table 12: 92XX and 93XX Allocations

8.0 Tariff Structure

Number Category	One time set up / registration Fee	Yearly Recurring Fee for Direct use	Reservation Fee
Carrier Access Code 01AX	$ 1,500.00	$ 1,500.00	$ 1,000.00 per year
Carrier Access Code 101-XXXX	$ 1,500.00	$ 1,500.00	$ 1,000.00 per year
Carrier Access Code 950-XXXX	$ 1,500.00	$ 1,500.00	$ 1,000.00 per year
True 800 numbers	$ 200.00	$ 100.00	$ 50.00 per month
Toll-Free Numbers 1-800 (888, 877, 866, 855)	$ 50.00	$ 100.00	$ 50.00 per month
Premium Numbers 1-900	$ 100.00	$ 100.00	$ 50.00 per month
Vanity numbers (800 and 900)	$ 100.00	$ 100.00	$ 50.00 per month
National Significant Numbers NXX-XXXX (10,000)	$ 1,000.00	$ 1,000.00	$ 750.00 per year
Mobile Network Code	$ 2,000.00	$ 2,000.00	$ 1,000.00 per year
International Signaling Point Code	$ 200.00	$ 200.00	NA per year
National Signaling Point Codes	$ 500.00	$ 500.00 (0-7)	NA per year
4-digit Common Short Code	$ 1,000.00	$ 1,500.00	NA per year
5-digit Common Short Code	$ 1,000.00	$ 1,000.00	NA per year
6-digit Common Short Code	$ 1,000.00	$ 500.00	NA per year
92XX Short Dialing Codes	$ 1,000.00	$ 1,000.00	$ 500.00 per year
93XX Short Dialing Codes	$ 1,000.00	$ 1,000.00	$ 500.00 per year
VAS numbering LBS/M2M	$500.00 *	$ 500.00 *	NA
VAS numbering OTT-voice	$ 1,000.00	$ 1,000.00	NA

Table 13: Numbering Fee Structure

* Fees are on the basis of blocks of 5,000 numbers at an unit fee of $0.10.

9.0 Vertical Short Codes

Code Assignment	Code Definition
*57	Customer Originated Trace
*60	Selective Call Rejection Activation
*61	Distinctive Ringing/Call Waiting Activation
*62	Selective Call Waiting
*63	Selective Call Forwarding Activation
*64	Selective Call Acceptance Activation
*65	Calling Number Delivery Activation
*66	Automatic Callback Activation
*68	Calling forwarding Busy Line/Don't Answer Activation
*69	Automatic Recall Activation
*70	Cancel Call Waiting
*71	Usage Sensitive Three-way calling
*72	Call Forwarding Activation
*73	Call Forwarding Deactivation
*74	Speed Calling 8 – Change List
*75	Speed Calling 30 – Change List
*76	Advanced Call Waiting Deluxe
*77	Anonymous Call rejection Activation
*78	Do Not Disturb Activation
*79	Do Not Deactivation
*80	Selective Call rejection Deactivation
*81	Distinctive Ringing/Call Waiting Deactivation
*82	Line Blocking Deactivation
*83	Selective Call Forwarding Deactivation
*84	Selective Call Acceptance Deactivation
*85	Calling Number Delivery Deactivation
*86	Automatic Callback Deactivation
*87	Anonymous Call rejection Deactivation
*88	Call Forwarding Busy Line/Don't Answer Deactivation
*89	Automatic Recall Deactivation
*94	Reserved For Local Assignment
*95	Reserved For Local Assignment
*96	Reserved For Local Assignment
*97	Reserved For Local Assignment
*98	Reserved For Local Assignment
*99	Voicemail Access

Table 14: Vertical Short Codes

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