Neda Numbering Plan

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Contents

Chapter 1

Objectives

The objectives of this document is to define a name and numbering plan which will be able to uniquely identify all of the mailboxes which a Neda subscriber may have, based on digit-based addressing.

1.1 Background

As illustrated in Figure 1.1, there are few pieces of information which are guaranteed to be known to a service provider. First there are, and will continue to be, a number of ”types” of agents which users will utilize to originate messages. Probably the most common of these devices has a digit-only based keyboard (e.g. an ordinary telephone). Similarly, there are, and will continue to be, a number of ”types” of agents to receive messages. Second, not only will there be a high number of users using all of these agents, but there will also be a very high number of users who will utilize multiple agents. The third piece of information which is known is that most of these agents have their own unique ”style” of addressing. Without special processing, these unique addressing styles are not compatible with each other.

1.2 Major Objectives

The main objectives for devising a new name/numbering scheme:

- Enable devices with digit-only origination capability to participate in the global

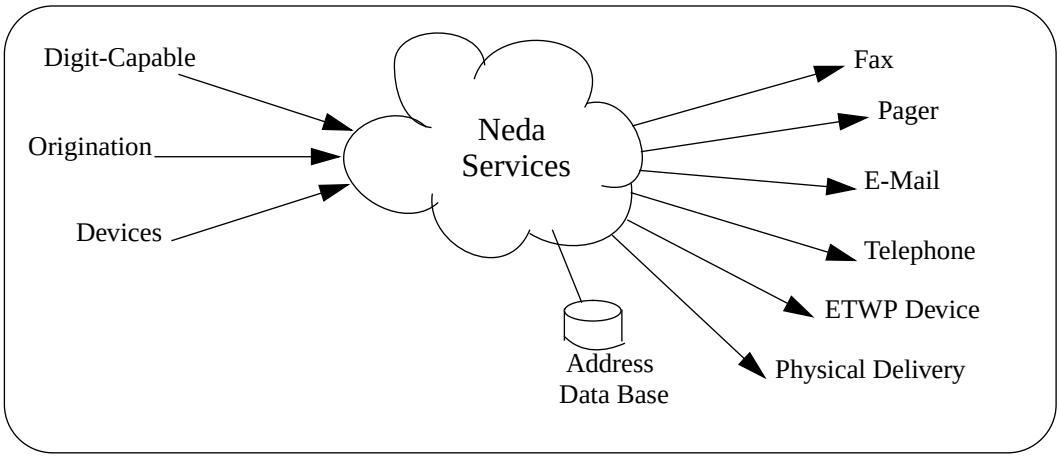

Figure 1.1: Field Of Play

messaging environment.

- Identify an Originator or Recipient of a message based on pure digits.
- Associate digit-based addressing with existing mail boxes based on the owner's existing identifier.

Chapter 2

Neda Numbering Plan

The Neda Numbering Plan (NNP) is a three part address which all users to send messages from most messaging devices to most any other device, anywhere in the world.

The NDBMA (Neda Digit-Based Messaging Address) can be used as an originator or recipient address of messages.

2.1 AFI

The AFI (Authority Format Identifier) is a single digit, with acceptable values of the integers 0-9. These values are described in Table 2.2

This value will identify the type of format of the subsequent field, the Authority Specified Format.

```
+-----------------------------------------------------+
| AFI |      Authority Specific Format          | AUS |
+-----------------------------------------------------+
```

Table 2.1: Neda Digit-Based Messaging Address

#	Definition
0	Reserved
1	Neda Subscriber
2	Neda Subscriber Error Correction
3	International Phone Numbering Plan
4	North American Phone Numbering Plan
5	Subscriber Assigned
6-9	Reserved

Table 2.2: AFIs

#	Subdomain
000-100	Reserved
101-200	Reserved
201-300	Mr. Amini Assigned
301-999	Reserved

Table 2.3: Neda Subscriber Assignment

2.2 Authority Specified Format

The Authority Specified Format (ASF) could be any length. It contains a digital address of the recipient. The address is in the form of a Neda Subscriber ID, a phone number or some sort of PIN (Personal Id Number). The type of address it is will be identified by the AFI.

2.2.1 Neda Subscriber

The Neda Subscriber Number assignment consists of two sets of three digits. The first set of three identifies the Neda Subdomain. The second set will be sequential.

#	AUS Definitions
0	Default
1	E-Mail
2	Fax
3	Pager
4	Voice Mail
5	ETWP
6	Physical Delivery
7-9	Reserved

Table 2.4: AUSs

2.2.2 Neda Subscriber Error Correction

2.2.3 International Phone Numbering Plan

2.2.4 North American Phone Numbering Plan

2.2.5 Subscriber Assigned

2.3 AUS

The AUS (Access Unit Selector) is a single digit, with acceptable values of the integers 0-9.These values are described in Table 2.4.

This value identifies which type of agent the sender would like the recipient to receive the message. A value of zero means that it will be delivered to the mailbox which the recipient has identified as their preferred mailbox.

2.4 Using the Interactive Voice Response (IVR) System

The Interactive Voice Response System (IVR) allows you to send an e-mail, FAX, page, or ETWP message to any PCCS subscriber using a standard touchtone telephone.

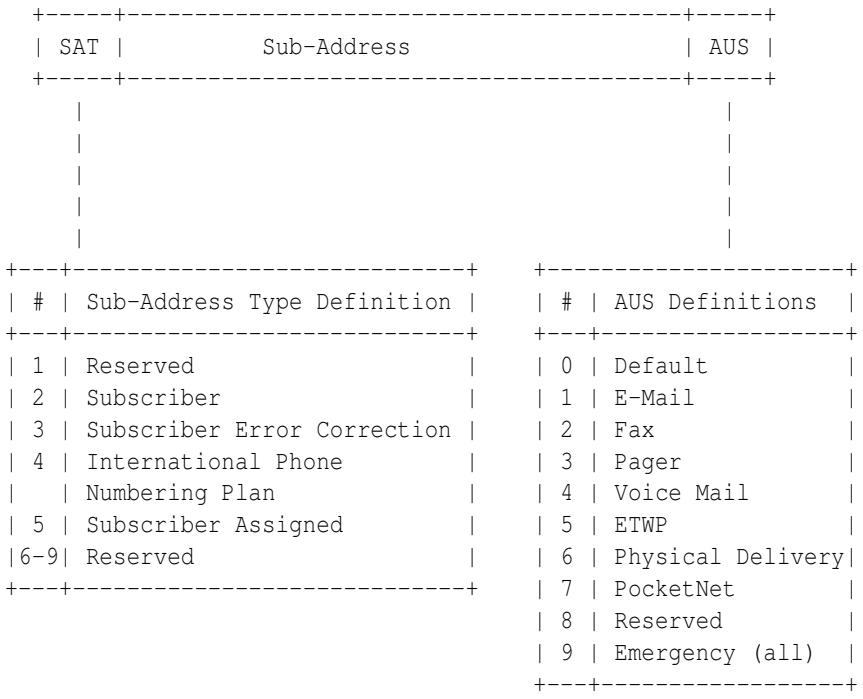

Figure 2.1: IVR System

2.4.1 Addressing

To send an IVR message, you must identify yourself with the IVR system. You can do this using your subscriber ID, international telephone number, or telephone number. You must also identify the subscriber(s) to whom you are sending the message. The subscriber ID is entered in the following format: (see Figure 2.1)

For example, to send message to subscriber ID 201-001 using the subscriber's default message delivery type, the destination address is entered as 1 201 001 0:

```
1 Sub-address type is subscriber.
201 001 The subscriber ID.
0 Send a message using the default delivery type.
```

The subscriber can select and change the default delivery system at any time. You should use the default destination to ensure the recipient receives the message in a timely manner.

2.4.2 Message Types

You can send the following types of messages using the IVR system:

```
0 Default Message Type
1 E-Mail
2 Fax
3 Pager
4 Reserved
5 ETWP
6 Physical Delivery
7 PocketNet
8 Reserved
9 Emergency
```

2.4.3 Defined Messages

The following messages are defined in the IVR system:

```
1 Will be late
2 Got Message
3 Yes, can do
4 No, cannot do
```

This list will be expanded in the future. The complete list of current messages is available on the IVR system.

2.4.4 Sending a Message

Before you begin you should decide three things:

- Choose the subscriber to whom you wish send a message.
- Decide which Address Format you wish to you use to address the recipient.
- Decide which access unit (e.g. mailbox) you'd like the recipient to receive your message.

To create an IVR Message

1. Call the appropriate Neda IVR phone number.
2. Enter a digit to tell the system how you will identify yourself, then enter your sub-address. For examle, entering ”1 201 003” would tell the system that I am Steve Farowich, identified by my Subscriber Number. Terminate the instruction by entering a Pound Sign ”#”.
3. Enter a series of digits to tell the system how you will identify the recipient, then enter the subsriber’s sub-address, followed by the desired access unit (e.g. mailbox). For example, entering ”1 201 001 1” would tell the system that I wish to send a message to Mohsen Banan’s e-mailbox. Terminate the instruction by entering a Pound Sign ”#”.
4. Choose the appropriate message to send. For example, entering ”2” will choose the message ”I got your message.”
5. Enter whether to review the message (”1”), add recipients (”2”) or to send the message (”3”).

2.4.5 Example IVR Message

Mark Taylor sends a message to Mohsen Banan’s email, saying that he can do what Mohsen had requested.

```
Dial 644-2972          << Enter the IVR System >>
Enter "1 201 032#"      << Originator identified as Mark Taylor >>
Enter "1 201 001 1#"    << Recipient is Mohsen Banan's e-mail box >>
Enter "3"               << Choose"Can do" message >>
Enter "3"               << Send message and exit >>
```

2.5 Examples

By combining the three values found in the found in the AFI, ASF and the AUS, a user can send a message from most a digit-only-based origination agent to a user who may be using most any agent.

Let’s look at some examples. An originator calls me and connects to the Neda IVR system. They can originate an email message to 320664480261. Since the AFI is 3, the system knows that there will be 10 digits containing the North American Numbering Plan phone number of the recipient. The final digit is the AUS. Since the value is 1, the

system knows that it should deliver the message to my e-mail box. By simply changing the last digit to a 2 (so the TO: address would be 320664480262), the system would know to deliver the message to my fax machine.

In this second example, let's suppose that the sender knows that I am a subscriber of Neda Services. I have told them that my Neda identification number is 201-666. The originator again calls me and connects to the Neda IVR system. The the sender would know that I'm not at my desk, but may not know if I'm even in town. The sender can enter a message and address it to 12016660. The one in the AFI spot indicates to the system that the next 6 digits will specify the Neda subscriber. The zero in the MBS spot allows the system to determine which mail box I have identified as my current default mailbox and deliver the message to that mailbox.

Chapter 3

Presentation to Users

Chapter 4

Canonical Format of Subscribers ProfileNNP at a Glance

Some Acronyms,

- NNP = Neda Numbering Plan
- AUA = Access Unit Address
- Nanp = North American Numbering Plan

Here is the cononical representation of essential fields of an entry.

```
--------------------
Full Name:
Subscriber Password:
NNP-Subscriber:
NNP-SubscriberErrorCorrected:
NNP-InternationalPhone:
NNP-Nanp:
NNP-SelfAssigned:
Default-AUA:
Email-AUA:
```

```
Pager-AUA:
Fax-AUA:
Lsm-AUA:
VoiceMail-AUA:
PhisicalDelivery-AUA:
Originating-Reply-To:
Originating-From:
Postal Address:
City:
State:
Zip:
Comments:
--------------------
```

And here is full example.

```
---------------------
Full Name: Mohsen Banan
Subscriber Password: 1234
NNP-Subscriber: 201-001
NNP-SubscriberErrorCorrected: 201-001-00
NNP-InternationalPhone: 1-206-644-8026
NNP-Nanp: 206-644-8026
NNP-SelfAssigned:
Default-AUA: Mohsen Banan <mohsen@neda.com>
Email-AUA: mohsen@neda.com
Pager-AUA: Pager Mohsen <18007596366/1882263@pager.neda.com>
Fax-AUA: Fax Mohsen <mohsen/5629591@fax.neda.com>
Lsm-AUA: 4.206.644.8026@lsm.neda.com
VoiceMail-AUA:
PhisicalDelivery-AUA:
Originating-Reply-To: mohsen@neda.com
Originating-From: mohsen@neda.com
Postal Address:
City:
State:
Zip:
Comments:
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```

Appendix A

NNP at a Glance

A.1 Neda Numbering Plan

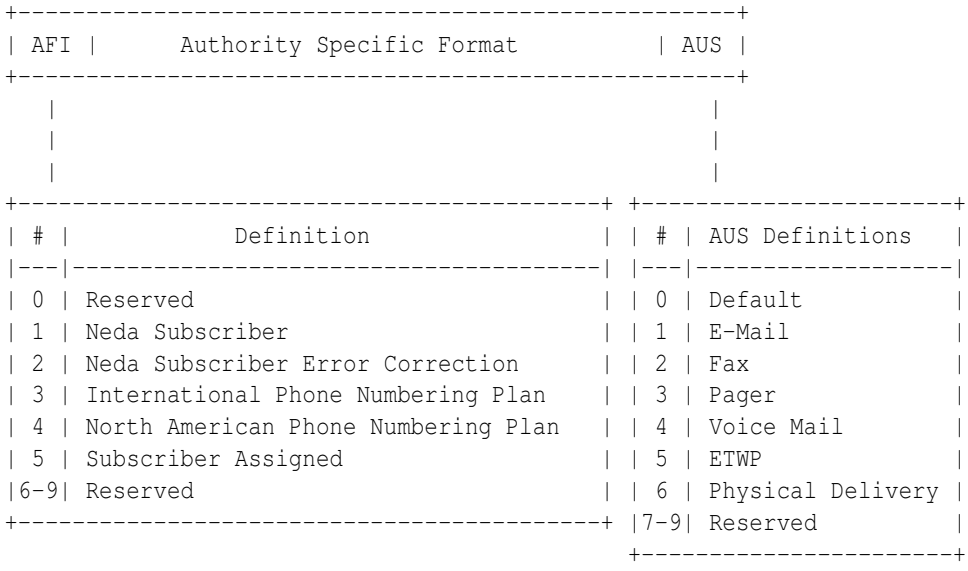

Table A.1: Neda Numbering Plan