

# CDMA Gateway Series

CDMA Gateway Test for  
Indonesia CDMA Operator



**AddPac**

**AddPac Technology**

2011, Sales and Marketing

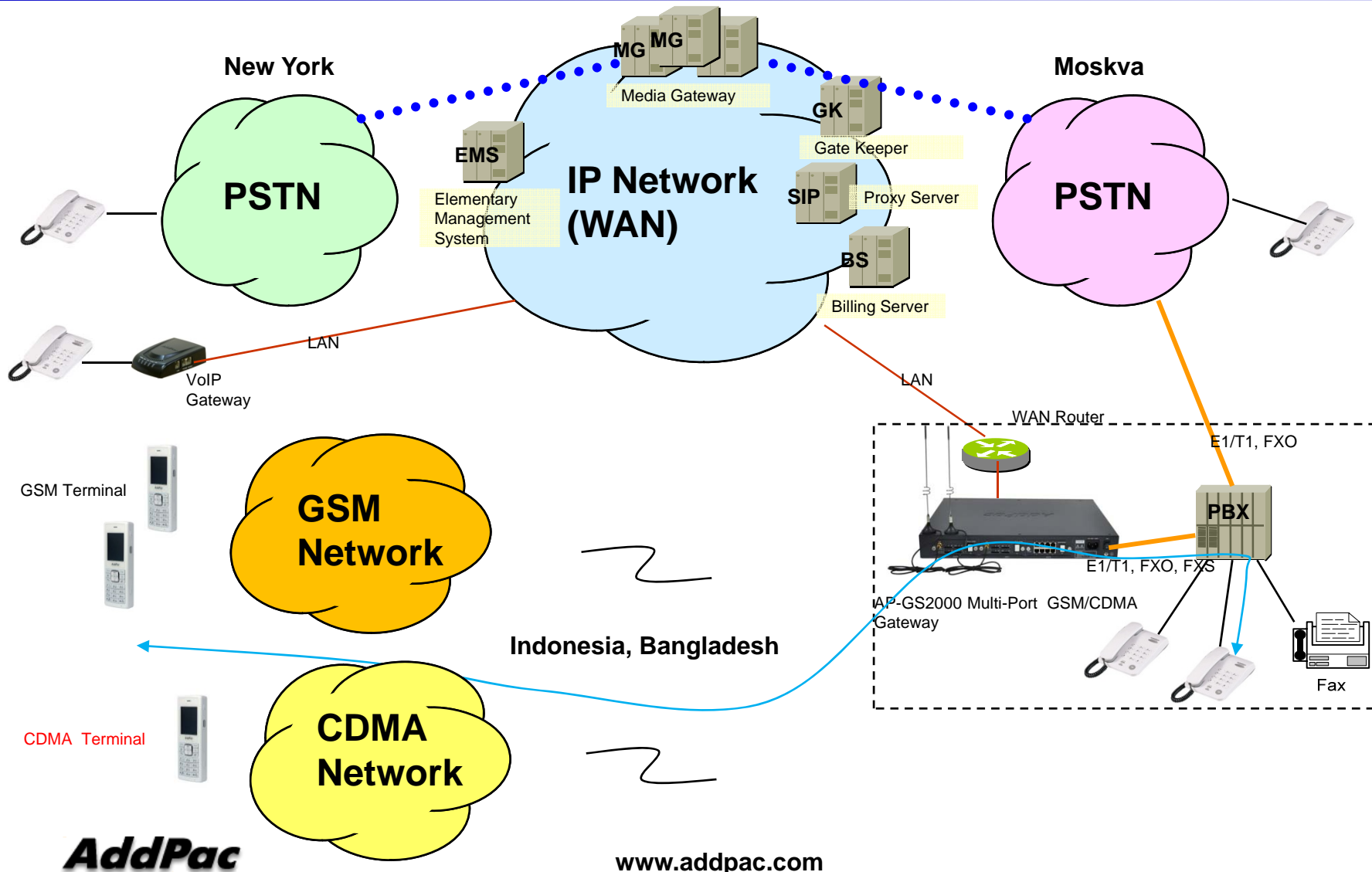
[www.addpac.com](http://www.addpac.com)

# Contents






- CDMA Gateway Service Diagram
- AddPac CDMA Gateway Comparison Table
- Indonesia CDMA Operator List
- CDMA Gateway Function Test Overview
  - CDMA Outbound Call
  - CDMA Inbound Call
  - VoIP to CDMA Outbound Call
  - VoIP to CDMA Inbound Call
  - CDMA Inbound Black / White list
  - VoIP to CDMA Black / White list
  - WEB Callback Service
  - Callback Service
  - LCR(Least Cost Routing)
  - Messaging Service
  - Radius Server Interoperability



# CDMA Gateway Service Diagram



# GSM/CDMA Gateway Comparison Table

Model	AP-GS1500	AP-GS2000	AP-GS2500	AP-GS3000	AP-GS3500
					
Available Modules	AP-N1-GSM4 <b>AP-N1-CDMA4</b> AP-N1-FXS8 AP-N1-FXO8 AP-N1-FXS4O4	AP-N1-GSM4 <b>AP-N1-CDMA4</b> AP-N1-FXS8 AP-N1-FXO8 AP-N1-FXS4O4 AP-N1-E1	AP-N1-GSM4 <b>AP-N1-CDMA4</b> AP-N1-FXS8 AP-N1-FXO8 AP-N1-FXS4O4 AP-N1-E1	AP-N1-GSM4 <b>AP-N1-CDMA4</b> AP-N1-FXS8 AP-N1-FXO8 AP-N1-FXS4O4 AP-N1-E1	AP-N1-GSM4 <b>AP-N1-CDMA4</b> AP-N1-FXS8 AP-N1-FXO8 AP-N1-FXS4O4 AP-N1-E1
GSM/CDMA Channel	Up to 8 Channel	Up to 12 Channel	Up to 16 Channel	Up to 36 Channel	Up to 36 Channel
GSM/CDMA Antenna	One(1) / 4 Channel GSM/CDMA Module	One(1) / 4 Channel GSM/CDMA Module	One(1) / 4 Channel GSM/CDMA Module	One(1) / 4 Channel GSM/CDMA Module	One(1) / 4 Channel GSM/CDMA Module
Module Slot	Two(2) Module Slots for GSM/CDMA	Three(3) Module Slots for GSM/CDMA	Four(4) Module Slots for GSM/CDMA	Nine(9) Module Slots for GSM/CDMA, E1/T1 Module Slot	Nine(9) Module Slots for GSM/CDMA, E1/T1 Module Slot
LAN Port	2	2	2	2	2
Console	1	1	1	1	1
Power	Single PSU	Single PSU	Single PSU	Single PSU	<b>Dual PSU (module)</b>

# Indonesia CDMA Operator List

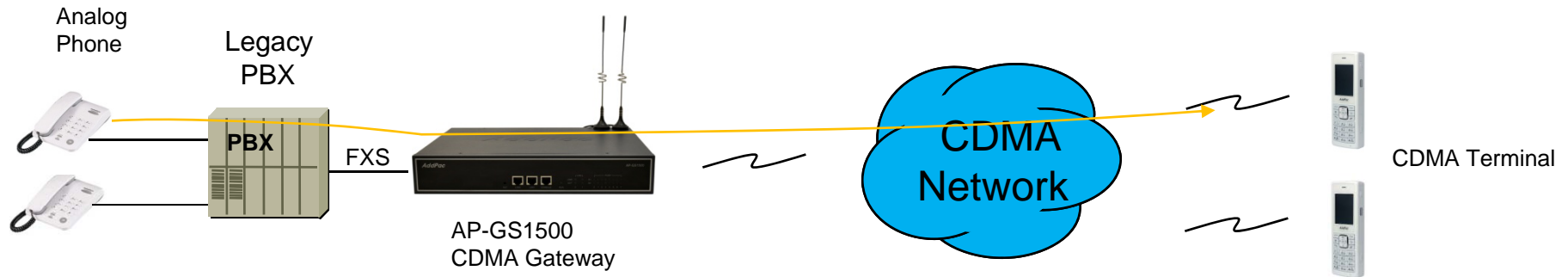
Operator	Brand	Frequency	Licensed Area
PT. Telkom Indonesia	Flexi	830.415 - 834.105 / 875.415 - 879.105	Jakarta and surroundings (Jakarta, Banten, Jawa Barat)
		824.265 - 829.185 / 869.265 - 874.185	Nationwide except Jakarta and surroundings (Jakarta, Banten, Jawa Barat)
PT. Bakrie Telecom	Esia	824.265 - 829.185 / 869.265 - 874.185	Jakarta and surroundings (Jakarta, Banten, Jawa Barat)
		830.415 - 834.105 / 875.415 - 879.105	Nationwide except Jakarta and surroundings (Jakarta, Banten, Jawa Barat)
PT. Smart Telecom	Smart	1903.125 - 1910 / 1983.125 – 1990	Nationwide
PT. Mobile-8 Telecom (Merged with Smart )	Smart Fren	835.905 - 840.825 / 880.905 - 885.825	Nationwide
PT. Indosat	Starone	842.055 - 844.515 / 887.055 - 889.515	Nationwide
PT. Sampoerna Telecom (Not Supported)	Ceria	450 - 457.5 / 460 - 467.5	Nationwide



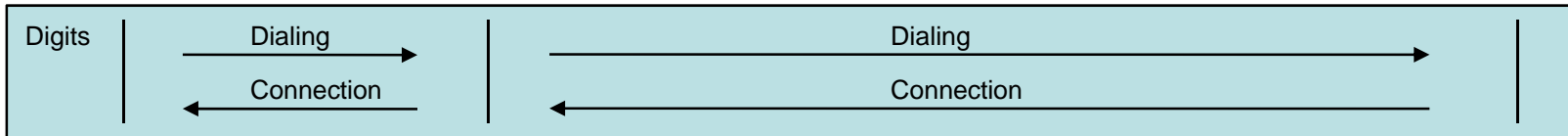
# CDMA Gateway Function Test Overview

Test Model : AP-GS1500 (4-Port CDMA Module, 8-Port FXS Module)

# CDMA Outbound Call



## One(1) Stage Call



## Two(2) Stage Call



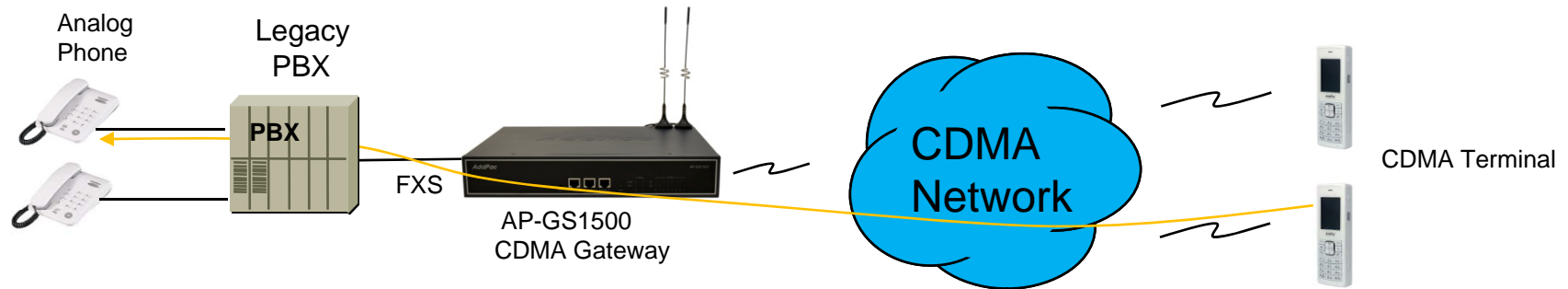
### Outbound Call (1 Stage)

: Making call to mobile phone from analog phone connected to FXS directly.

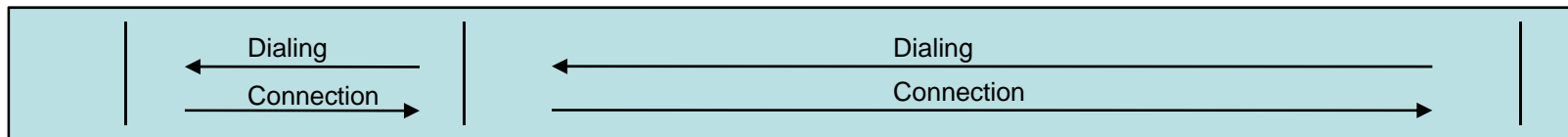
### Outbound Call (2 Stage)

: Making call to mobile phone from analog phone connected to FXS after hearing of 2<sup>nd</sup> dial tone from AddPac CDMA Gateway

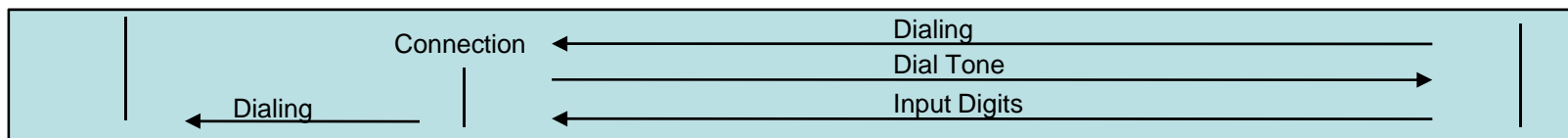
# CDMA Inbound Call



## 1 Stage Call (Baby Call)



## 2 Stage Call



Inbound Call (1 Stage) – Baby Call

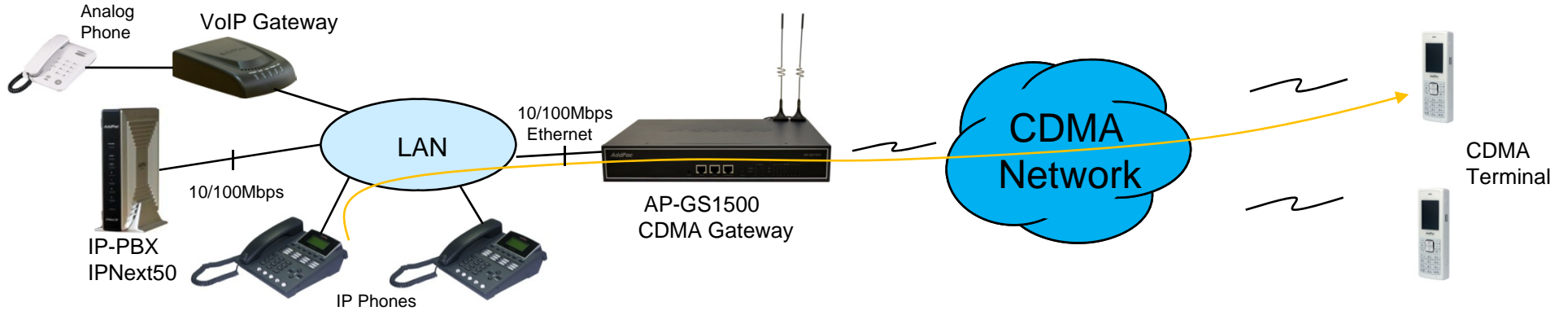
: Making call to analog phone connected to FXS directly

Inbound Call (2 Stage)

: Making call to analog phone connected to FXS after hearing of 2<sup>nd</sup> dial tone from AP-GS1500



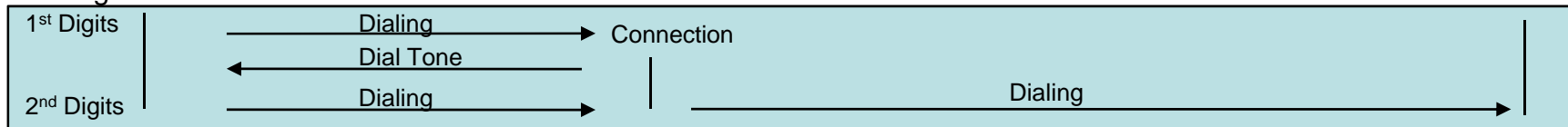
# VoIP to CDMA Outbound Call



## 1 Stage Call



## 2 Stage Call



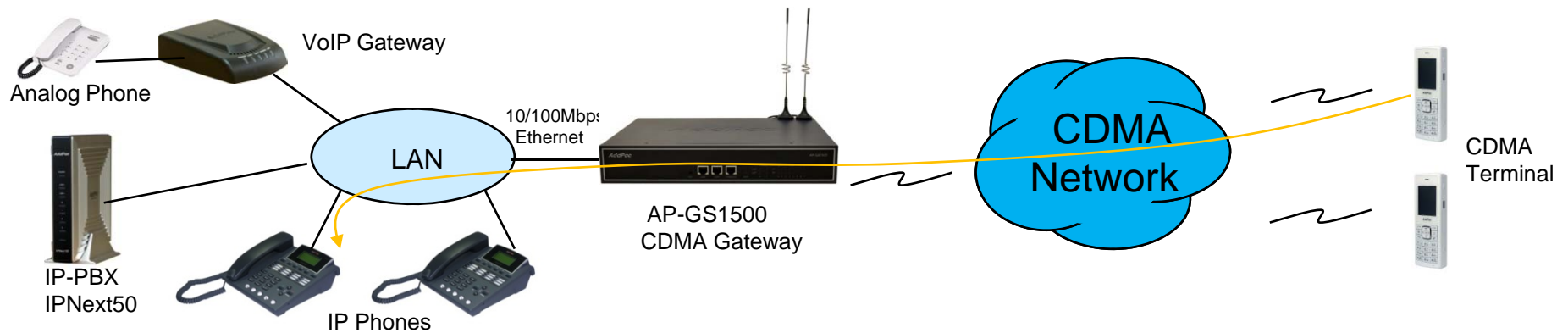
### Outbound Call (1 Stage)

: Making call to mobile phone from analog phone connected to VoIP gateway or IP Phone directly

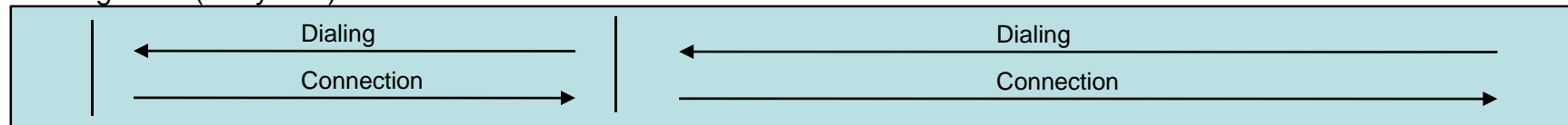
### Outbound Call (2 Stage)

: Making call to mobile phone from analog phone connected to VoIP gateway after hearing of 2<sup>nd</sup> dial tone from CDMA Gateway

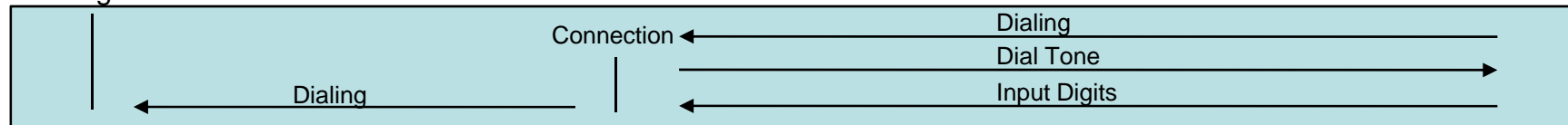
# VoIP to CDMA Inbound Call



## 1 Stage Call (Baby Call)



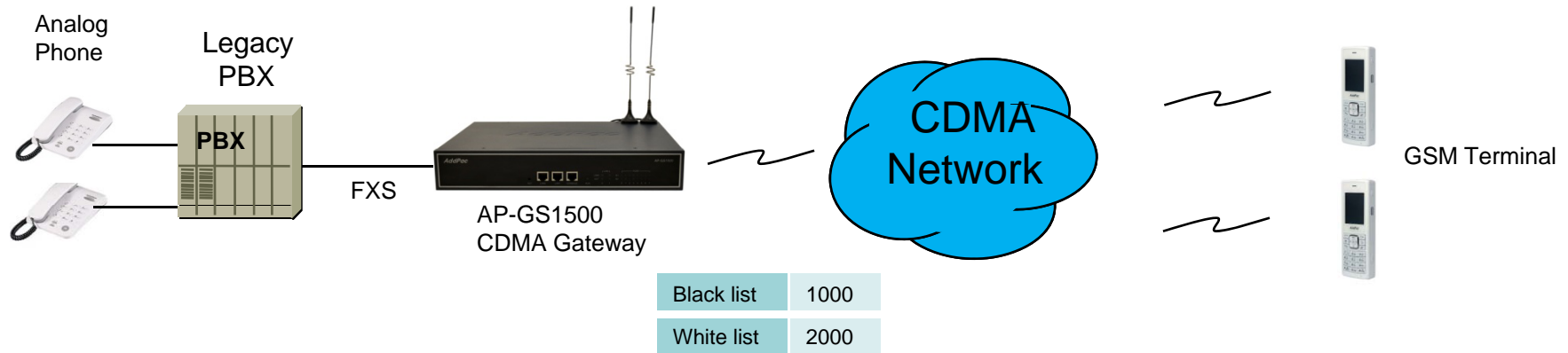
## 2 Stage Call



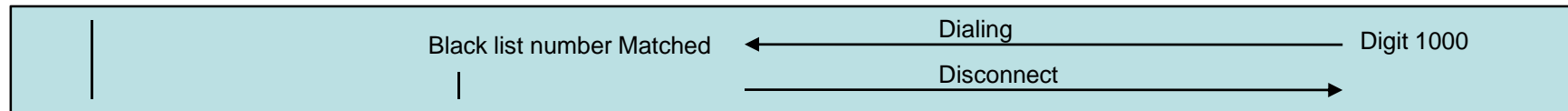
Inbound Call (1 Stage) – Baby Call  
: Making call to IP phone in VoIP network directly.

Inbound Call (2 Stage)  
: Making call to IP phone in VoIP network after hearing of 2<sup>nd</sup> dial tone from CDMA Gateway

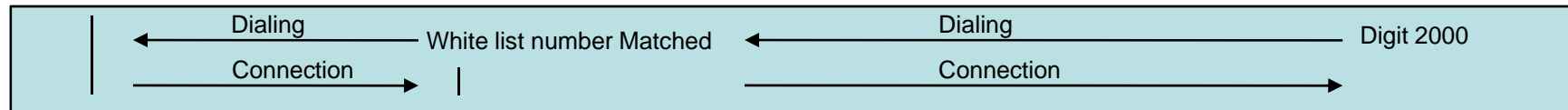
# CDMA Inbound Call Black / White list



## Black list



## White list



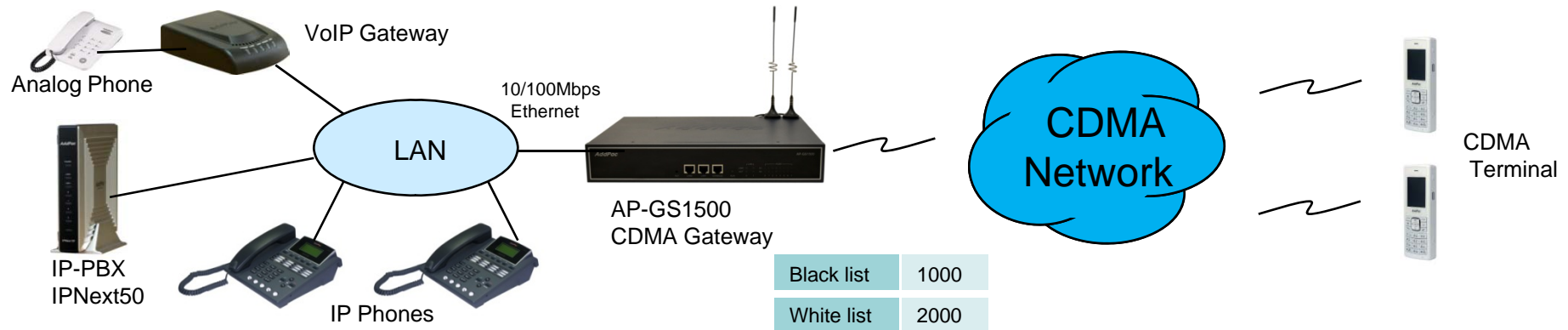
## Black list

: The number on black list is restricted to receive call.

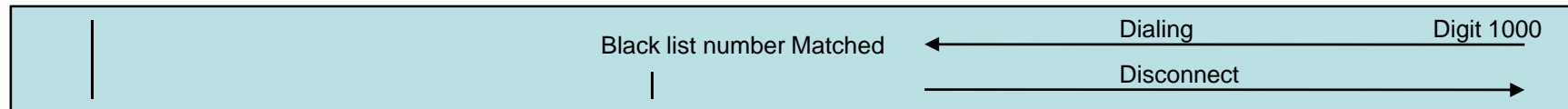
## White list

: The only number on white list is allowed to receive call

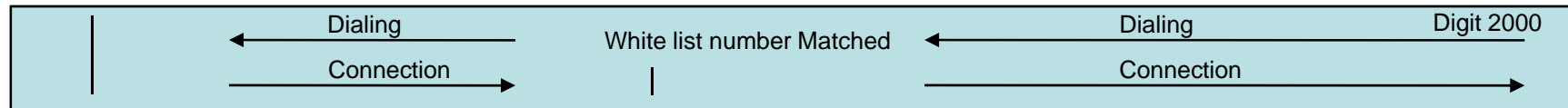
# VoIP to CDMA Black / White list



## Black list



## White list



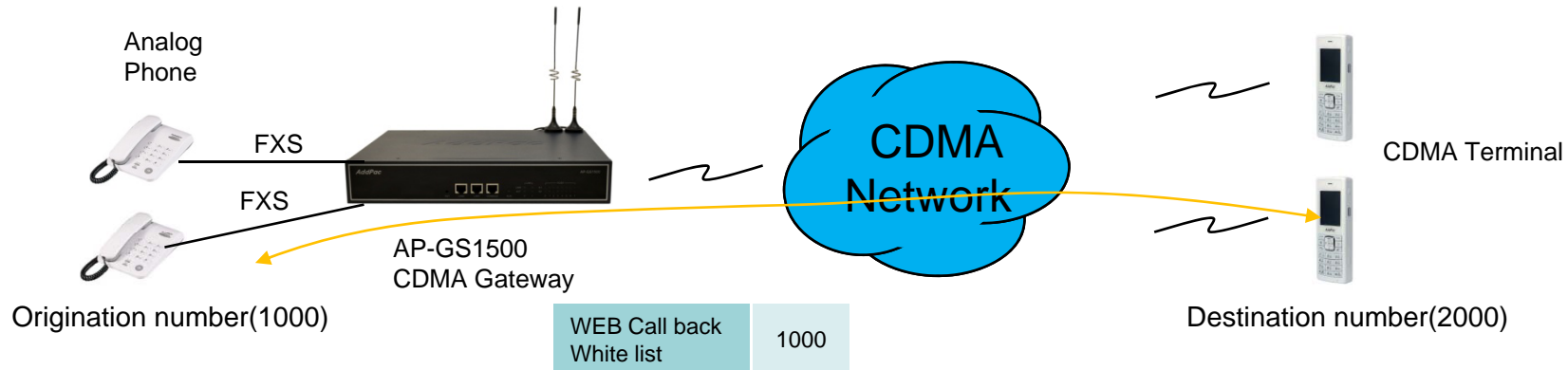
## Black list

: The number on black list is restricted to receive call.

## White list

: The only number on white list is allowed to receive call

# WEB Callback Service



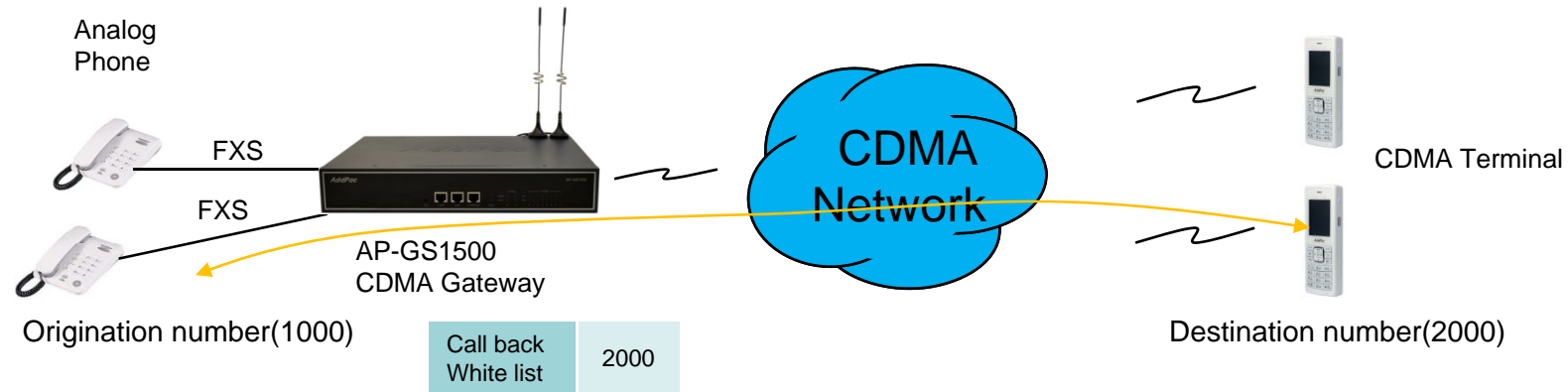
## WEB Callback Service



## WEB Callback Service

- : The remote call is made by user's control by WEB Interface.
- The WEB callback number on white list must be the same of source number.

# CDMA Callback Service



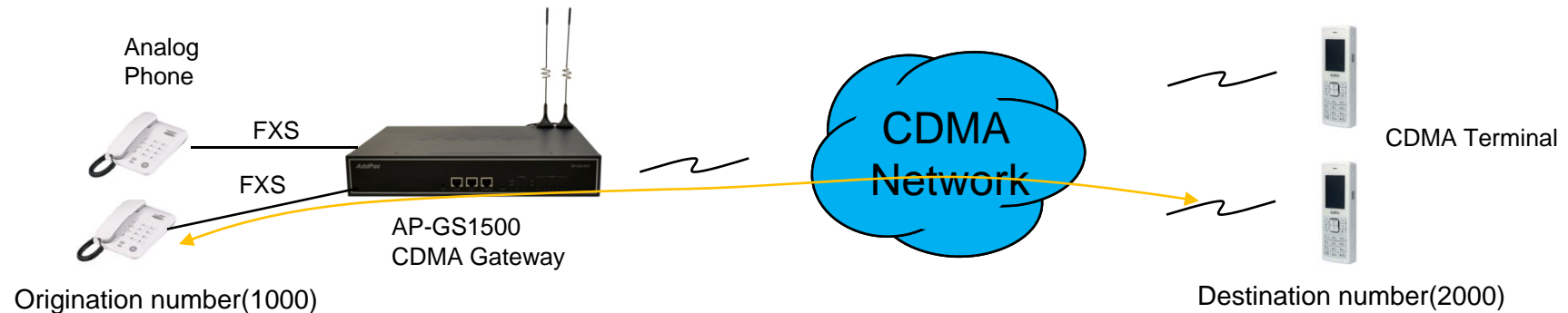
## CDMA Callback Service



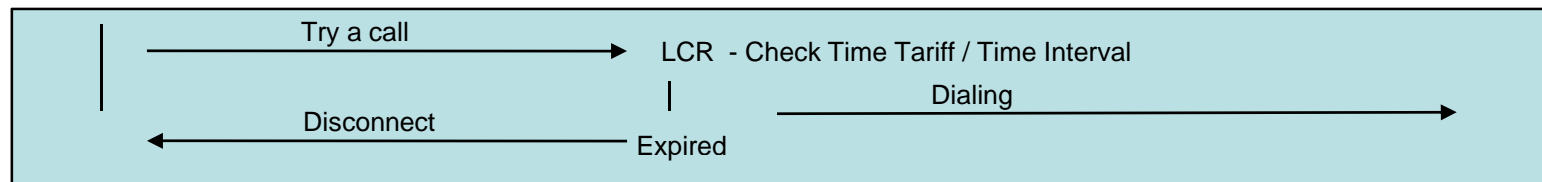
## CDMA Callback Service

: When the user on the callback white list makes call, GSM Gateway disconnects it and makes call back to the user

# LCR(Least Cost Routing)



LCR(Least Cost Routing)



LCR Time Interval

: The only registered user is allowed to use CDMA call in the rule of date, week, and time

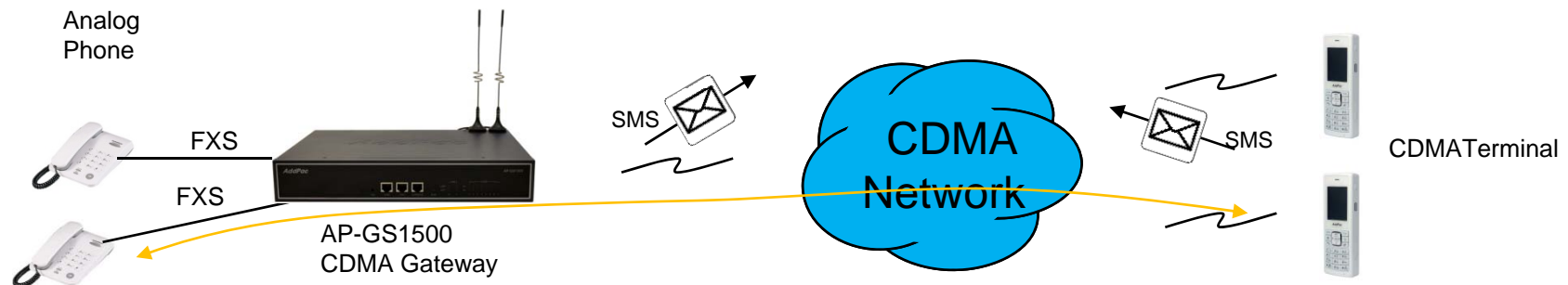
LCR Time Tariff

: User is able to check remained time, used time listed on LCR, etc

LCR Simulator

: CDMA Gateway supports virtual call simulation used on WEB

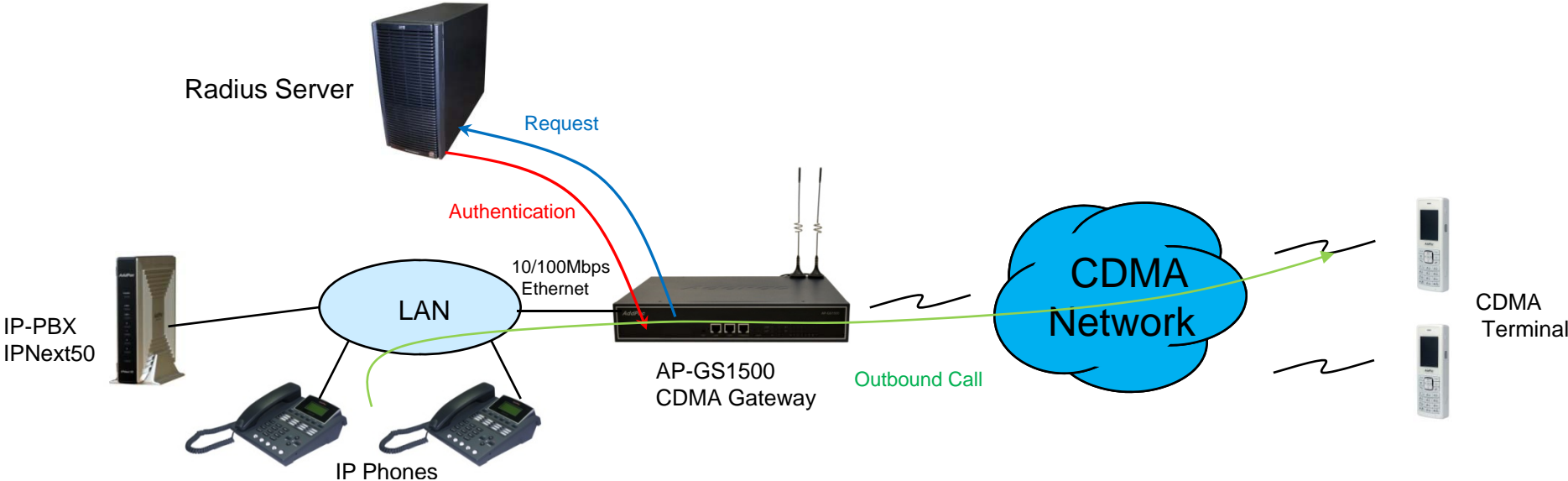
# CDMA Messaging Service



- CDMA Messaging Service
- : SMS is able to send and receive by CDMA Gateway's WEB Interface
- : English



# Radius Server Interoperability



Radius Server Interoperability  
: When billing system is required, CDMA gateway supports radius server interoperability

# CDMA Gateway Series

# Thank you!

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