Frequency Setting Procedures ("Tune Up" Procedures)

AW96/AW10 Series IP-RAN Base Stations

1 BSM Management

The AW-96/AW-10 series base stations are normally managed by the centrally located BSM (Base Station Manager) system which communicates with the AW-96 or AW-10 over an IP connection.

The BSM will download system software and configuration information which includes the physical FA (Frequency Assignment) for each base station. The base station will tune to the correct frequency as defined by the BSM configuration files.

Refer to the BSM operations manual for instructions on base station remote configuration.

No other tuning procedures are required since AW-96/AW-10 series base stations frequency sources are digitally derived and locked to a GPS timing source.

2 Local FA Setting

It may required to set the AW-96/AW-10 series base station physical FA (frequency assignment) locally for specialized test purposes or when the BSM connection is unavailable (for example during early BTS installations). This can be done using the local MMI (Man Machine Interface) port and a local PC.

The configuration data downloaded from the BSM will override local settings when BSM connections are established.

Refer to the MMI instruction manual for further information on other commands.

2.1 MMI Connection

Connect the serial port of the PC to the "BTS MMI" port on the AW-96/AW-10 front panel. Use the cable described in section 8.3.1 and the following port settings:

9600 baud

8 bit

No Parity

1 stop bit

No flow control



2.2 FA Change Procedure

The following menu driven commands will permit local change of the FA.

Step 1

At the prompt enter the following:

> pn3383 // this will take you to the menu screen which looks like this:

- 1. Tx Test
- 2. Rx Test
- 3. ParameterSetup
- 4. Rf Gain Display
- 5. xcvbSetup
- 6. ampSetup
- 7. Normal Gain Display
- 8. MakeTestCall
- 9. callClear
- 10. Overhead Calibration Control
- 11. Test Phone Setup (619 2221001)
- 12. Handoff Test
- 0. Exit

Select Number ===>

Step 2

Enter the following:

Select number => 5 // it will take you to the below menu screen.

- 1. Change Ch
- 2. Tx On
- 3. Tx Off
- 4. Rx_Main_AGC ON
- 5. Rx_Main_AGC OFF
- 6. Rx_Sub_AGC ON
- 7. Rx_Sub_AGC OFF
- 8. Set RxMain ATT
- 9. Set RxSub ATT
- 10. Set Tx Att
- 11. Xcvb Status
- 12. showXcvrAttGain

0. Exit

Select Input Number ====>

Step 3

Enter the following:

Select Input Number => 1 // choosing 1 will take you to the below menu.

ALPHA : xcvrChangeCh Num [001 ~ 1500] [1175] [/0:Exit]==>

Step 4

From the above menu, type the new channel desired (CDMA channels from 1 to 1500) and 0 to exit. Note that for 3 sector base stations Step 3 must be repeated for each sector (alpha, beta, and gamma).

Note that only standard CDMA channel numbers within the designated band capability of the radio will be accepted by the base station.