4.9.6.3. Directions for Use

The direction is configured with full of drawings. Refer to the STMX, TRMX Block for detailed operation. Press stmGUI among the buttons of Manager.

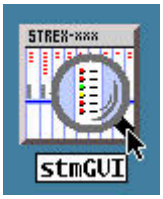

Fig. 4.9-16 stmGUI Start Icon

Then the following screen is displayed.

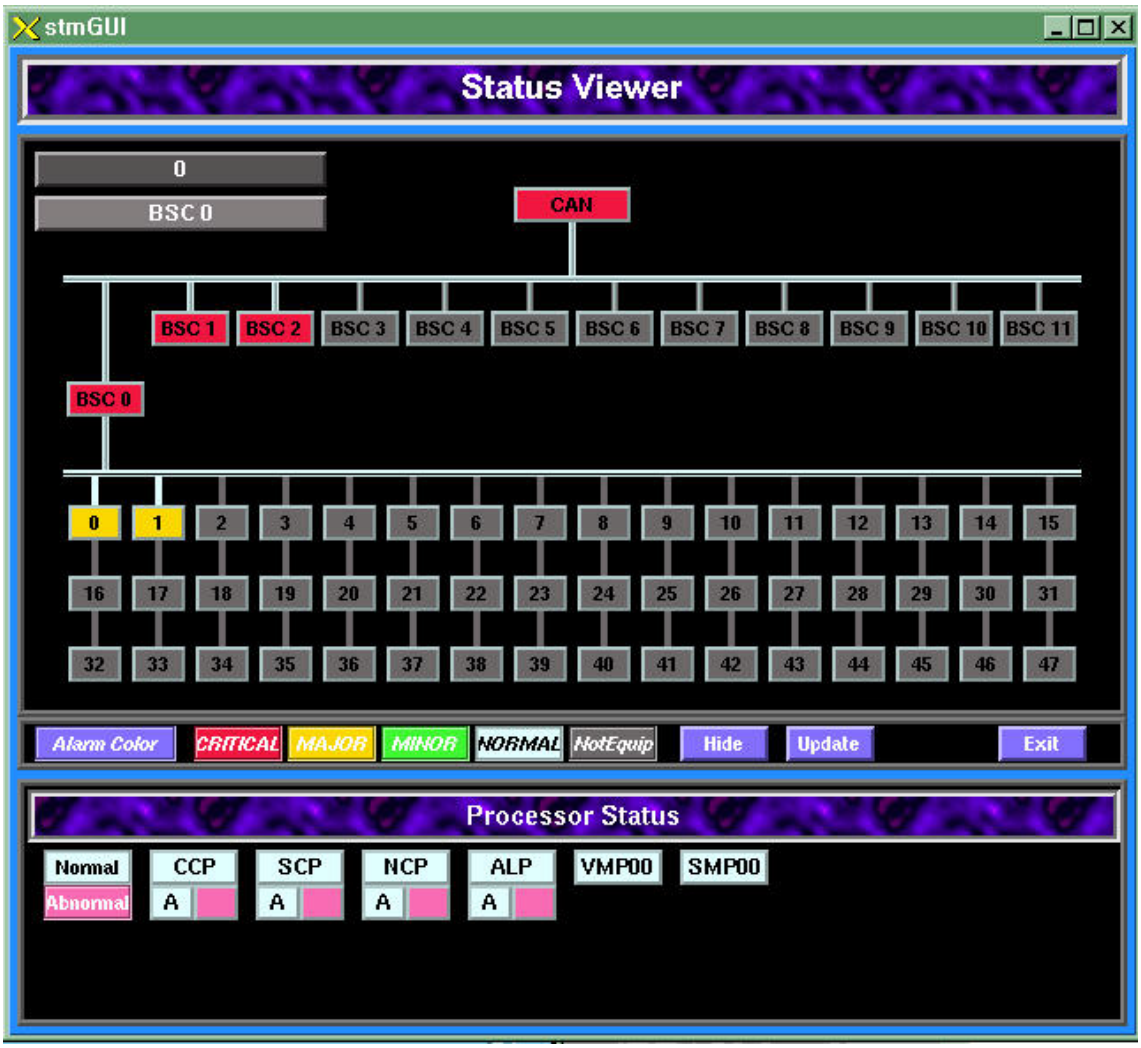

Fig. 4.9-17 stmGUI Main Screen

The figure above shows the status that the highest-grade alarm of the BSC0 is the critical alarm and the highest alarm of the BTS0, major alarm, is generated.

4.9.6.3.1. BTS Name Display.

Fig. 4.9-18 Display Screen of BTS Name.

e.g.) On the figure above, ghjeong is the real name of the BTS and BTS 0 is the BTS ID.

4.9.6.3.2. Main Menu

Fig. 4.9-19 Main Menu

Hide : It is used when hiding RACK and SHELF simultaneously from the screen.

Update : It is used in compulsory loading of initial value upon deletion and extension by MMC.

Exit : It ends the program.

4.9.6.3.3. Color by the Alarm Grade

Fig. 4.9-20 Alarm Color

Red : Critical

Orange : Major

Green : Minor

Azure : Normal

Gray : BTS Is Not Equipped

4.9.6.3.4. Status Color.

Fig. 4.9-21 Status Color Tone

4.9.6.3.5. Processor Status

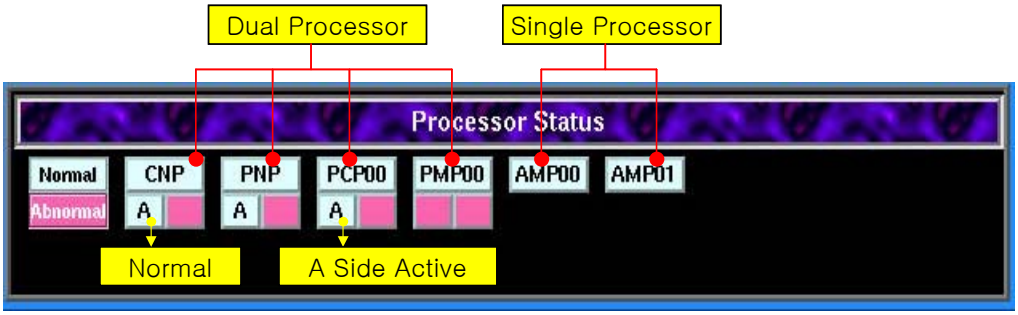

Fig. 4.9-22 Processor Status (CAN)

Fig. 4.9-23 Processor Status (BSC)

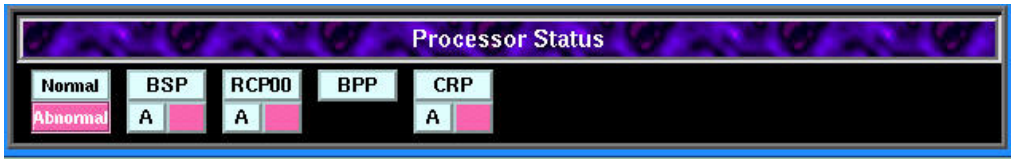

Fig. 4.9-24 Processor Status (BTS)

4.9.6.3.6. Rack View

To see the shape of BSC/BTS one should press the corresponding button.

Select a BSC.

Fig. 4.9-25 BSC Selection

Select a BTS.

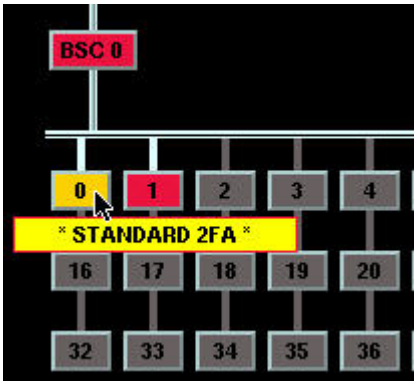

Fig. 4.9-26 BTS Selection

.

4.9.6.3.7. Rack Shape Diagram.

The following shape appears if CAN, BSC or BTS is chosen.

4.9.6.3.7.1. CAN Rack

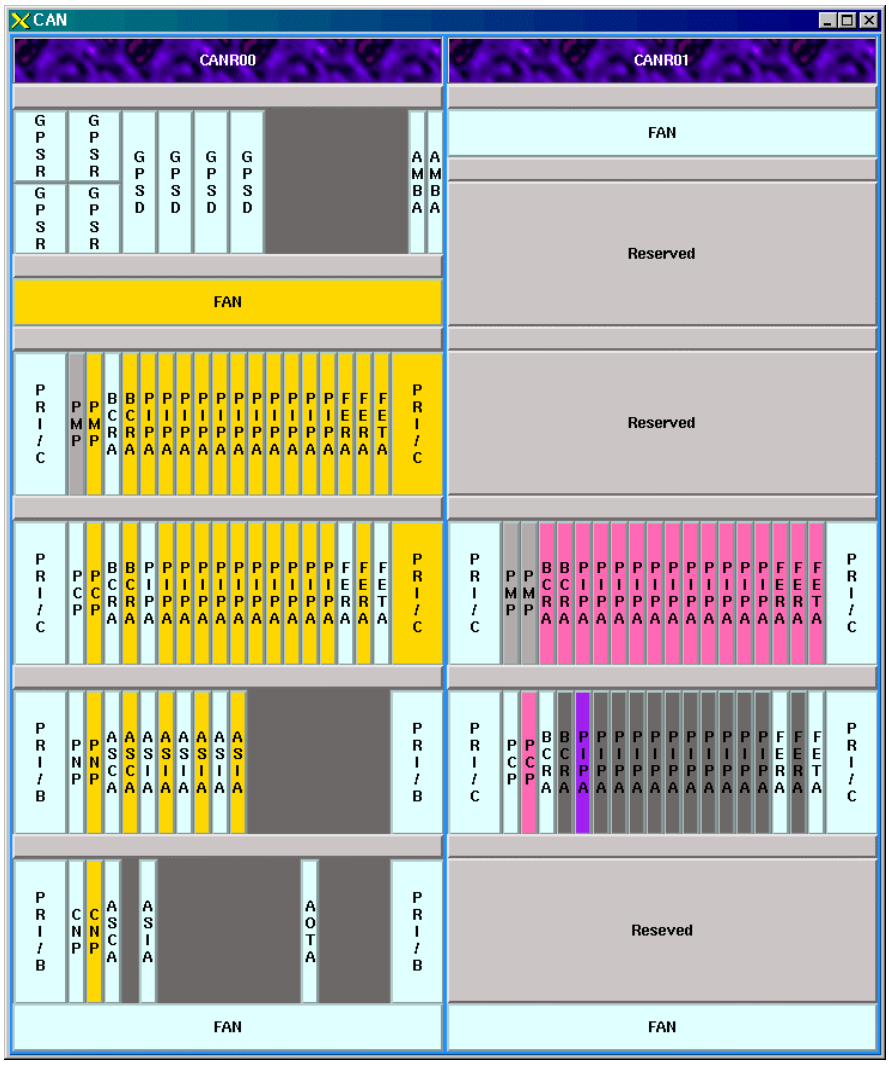

Fig. 4.9-27 CAN Rack Shape.

The color of each slot manifests the alarm information of equipped cards. For example, the yellow color of BCRA, PIPA and FERA in the 4th shelf of the left side shows that the alarm is generating at Major status.

4.9.6.3.7.2. BSC Rack

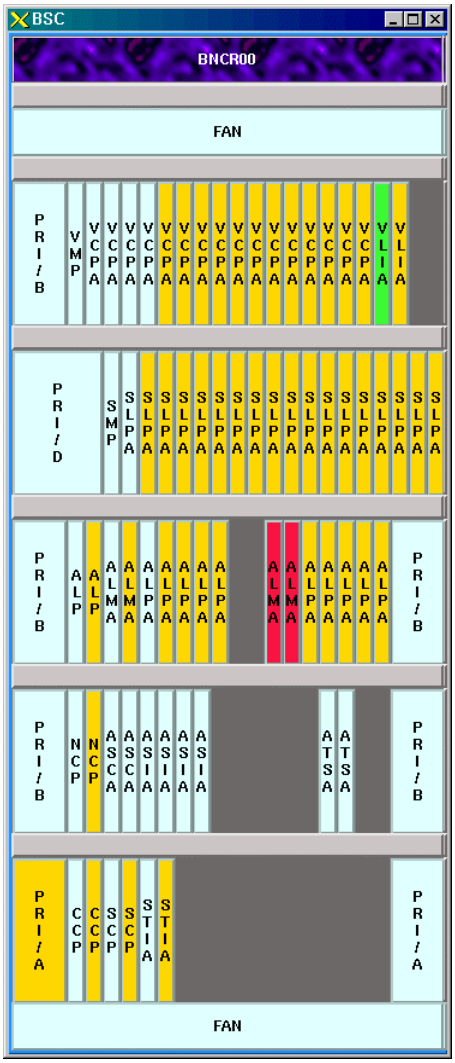

Fig. 4.9-28 BSC Rack

4.9.6.3.7.3. BTS Rack

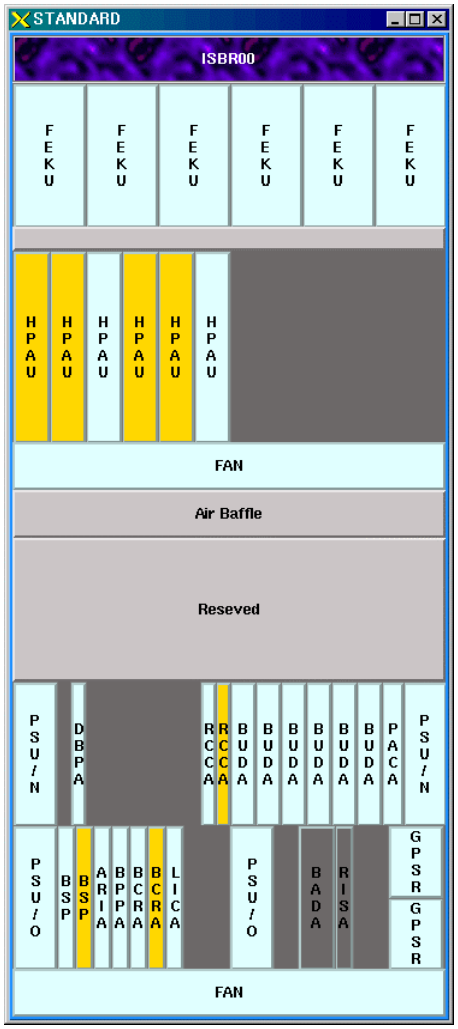

Fig. 4.9-29 BTS Rack

4.9.6.3.7.4. Slot Shape Diagram.

The corresponding dialog box is displayed upon clicking slot in the rack shape diagram.

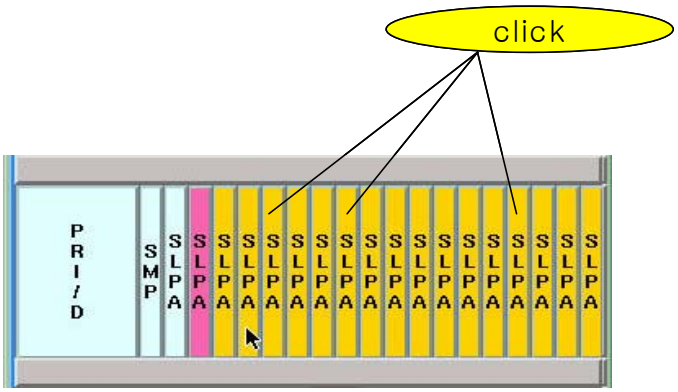

Fig. 4.9-30 card click example.

The following dialog box appears upon clicking SLPA card above.

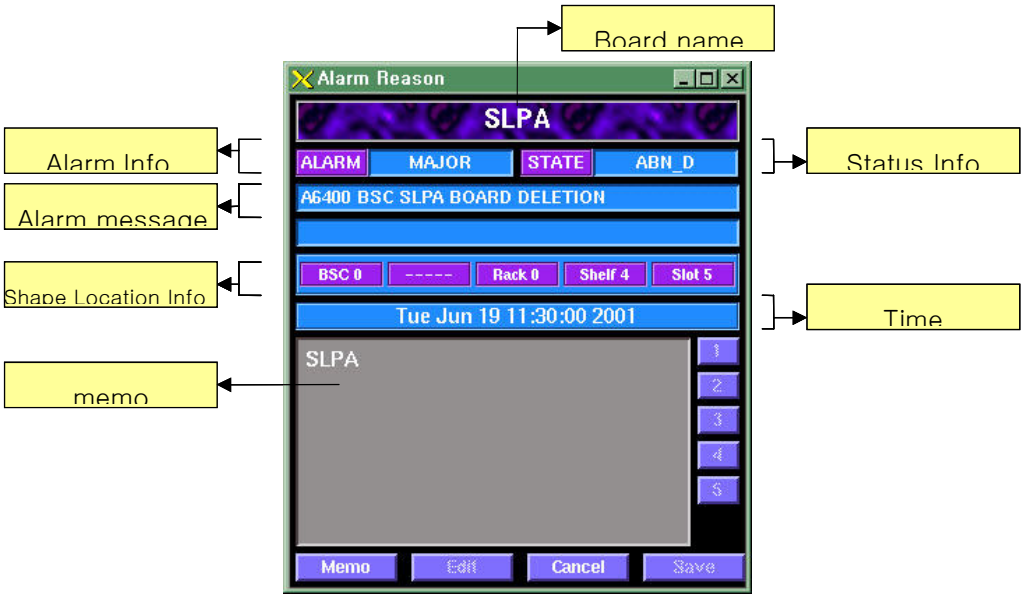

Fig. 4.9-31 e.g.)Dialog box- card Information

Memo: Stores the edited results temporarily.

Edit: Edit button

Cancel: End button

Save: Stores the edited.

1,2,3,4,5 button: The memo is stored in numerical order.

Click numbers in right side(1,2,3,4,5) to see the memo.

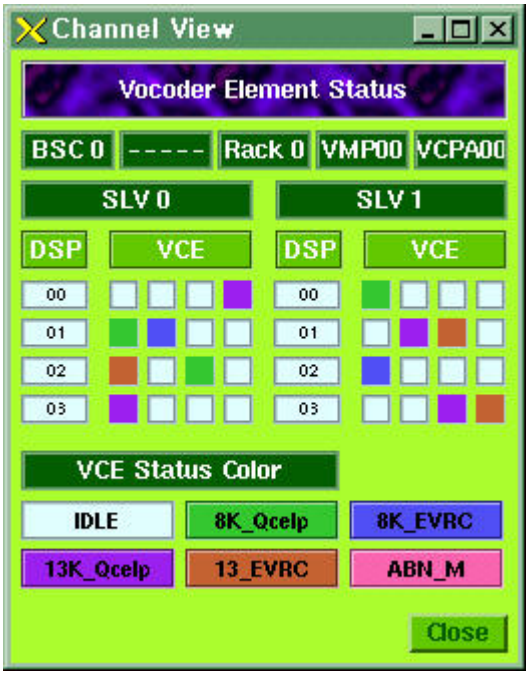

Fig. 4.9-32 e.g.)Dialog box-Vocoder Element Status

For example, the SK_Qcelp type call in the VCE0 of DSP1 is in busy status.

Fig. 4.9-33 e.g.)Dialog box-DBPA Chip Status

4.9.6.3.7.5. Status Display

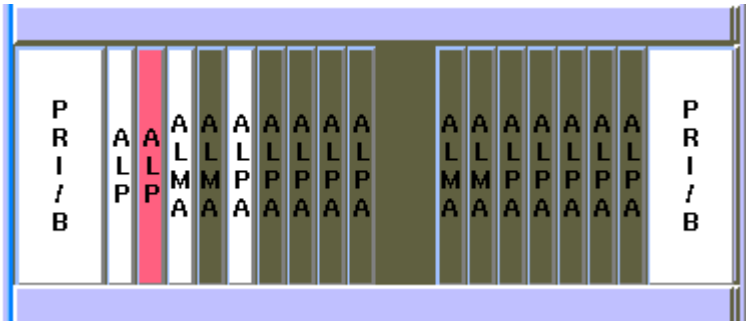

Fig 4.9-34 Display Status by Board

4.9.6.3.7.6. Alarm Display

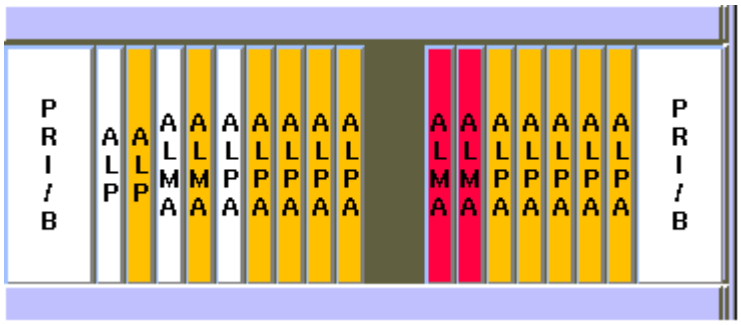

Fig. 4.9-35 Alarm Display by Board.

4.9.6.4. Suggestions on Operation.

4.9.6.4.1. Status Management

The status and alarm are displayed in turn at 2-minute intervals in managing each board.

If there is no Alarm it displays the status color.

4.9.6.4.2. The Order of Priority

The stmGUI receives the process results of the status block (STMX) and fault block (TRMX) to reprocess them. Therefore, both of the two blocks should be normally operated for the normal operation. If the initial data setup of STMX has not been done while BSM is running, stmGUI may display undefined values. In this case, press update

button to initialize the value again.

4.9.6.4.3. End

Use Exit button in the main screen to end the program. It is undesirable using command kill or xkill. Proper procedure is recommended.

4.9.7. Neighbor Control Window (neighbor)

4.9.7.1. Overview.

Graphic neighbor is a tool that helps addition and deletion of the information related to the BTS neighbor. User can view, add and delete the information related to neighbor using the existing MMC but it requires the user to input lots of data. Therefore, graphic neighbor minimize the input amount of user for user's convenience.

4.9.7.2. Environment Setup.

Refer to the environment setup of stmGUI.

4.9.7.3. Directions for Use

Most of the directions are constituted of drawings and refer to the CDMX for detailed operation.

Press neighbor among the buttons of Manager to start.

Fig. 4.9-36 Neighbor Start Icon

The following initial screen appears.

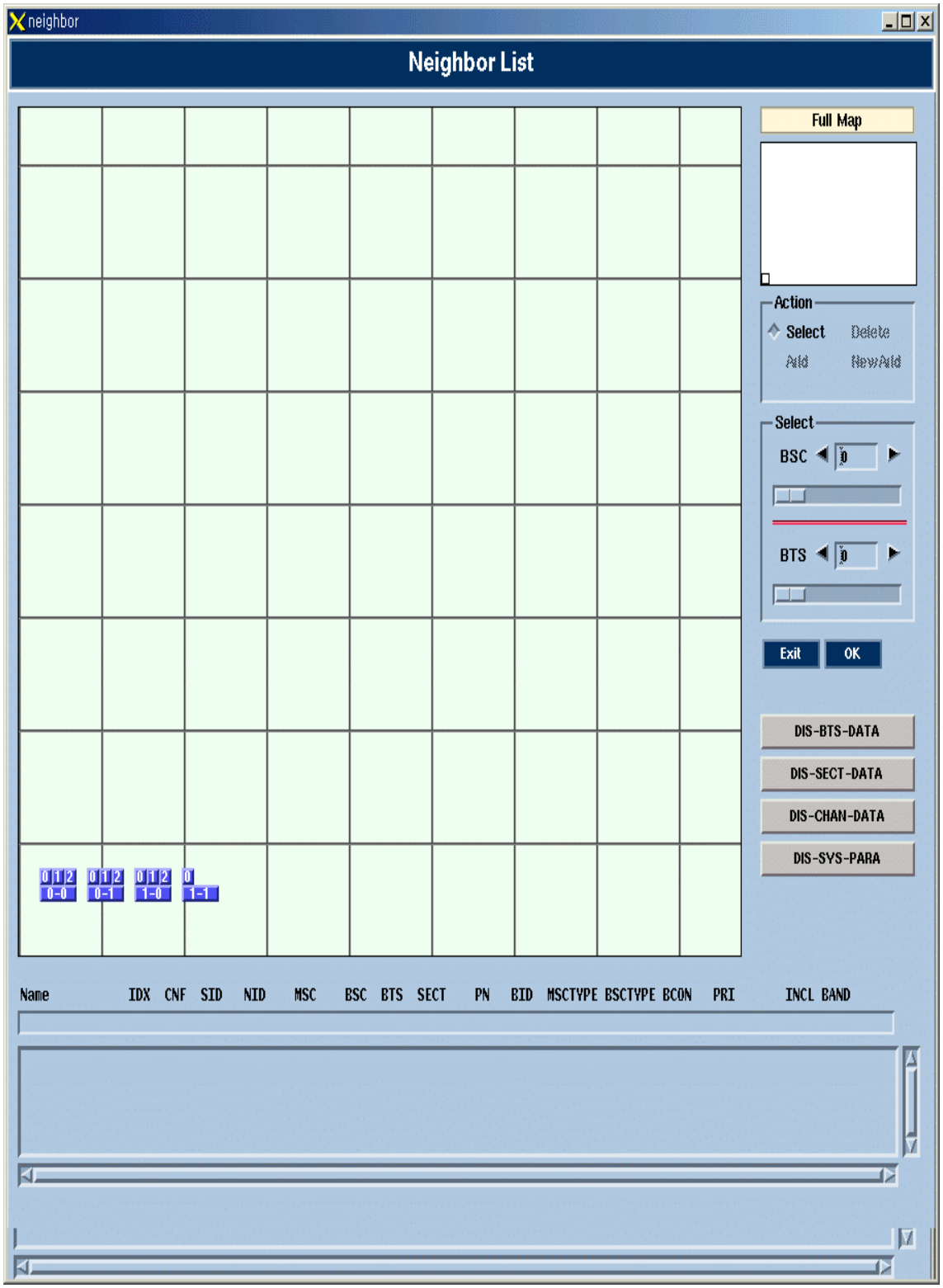

Fig. 4.9-36 Neighbor Initial Screen

4.9.7.3.1. Main Menu

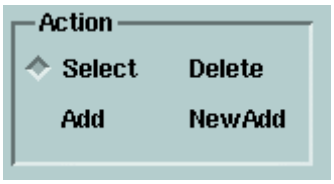

Fig. 4.9-37 Main Menu Screen

User can select a function in this screen.

Select : select or change the BTS or sector. For selection, select a BTS first and then select a sector in the BTS.

Delete : delete the neighbor in the presently selected sector. Press sector to be deleted after selection.

Add : add neighbor into the presently selected sector. Press a sector to be added after selection.

NewAdd : add a neighbor of other MSC into the presently selected sector. Input information into the window field appeared after selection.
(There is no default value)

4.9.7.3.2. BTS Selection

There are two methods for selecting BTS.
Surely, the BTS subjected to the MSC of the presently operating system can be selected.

4.9.7.3.2.1. Method using Map.

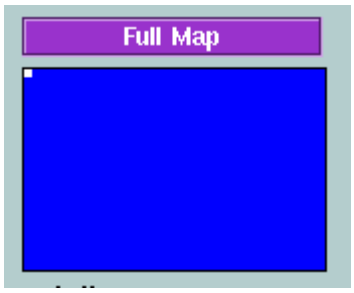

Fig. 4.9-38 Full Map

Dragging mouse can search the desired location here. Click BTS (label : x-y) in the

desired location with this method and press the sector of the BTS to select.

4.9.7.3.2.2. Selection Method by BTS ID.

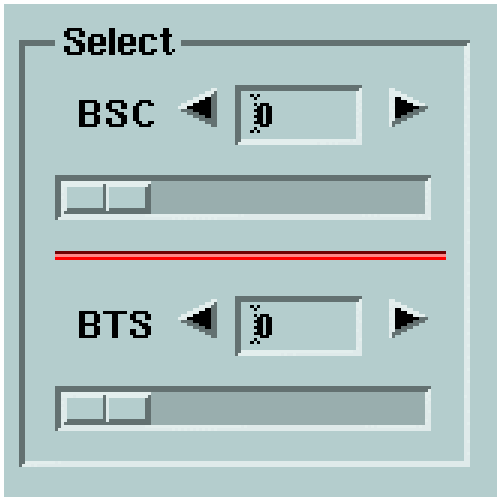

Fig. 4.9-39 Random BTS Selection

BSC : It is the BSC to which the BTS belongs.

BTS : It is the BTS ID of the BTS.

Press OK button to complete the selection.

4.9.7.3.2.3. Selection Example.

Fig.4.9-40 Initial Screen (Before selecting BTS)

Fig. 4.9-41 After selecting BTS.

Fig. 4.9-42 After selecting Sector(Green: neighbor).

4.9.7.3.3. Neighbor Information

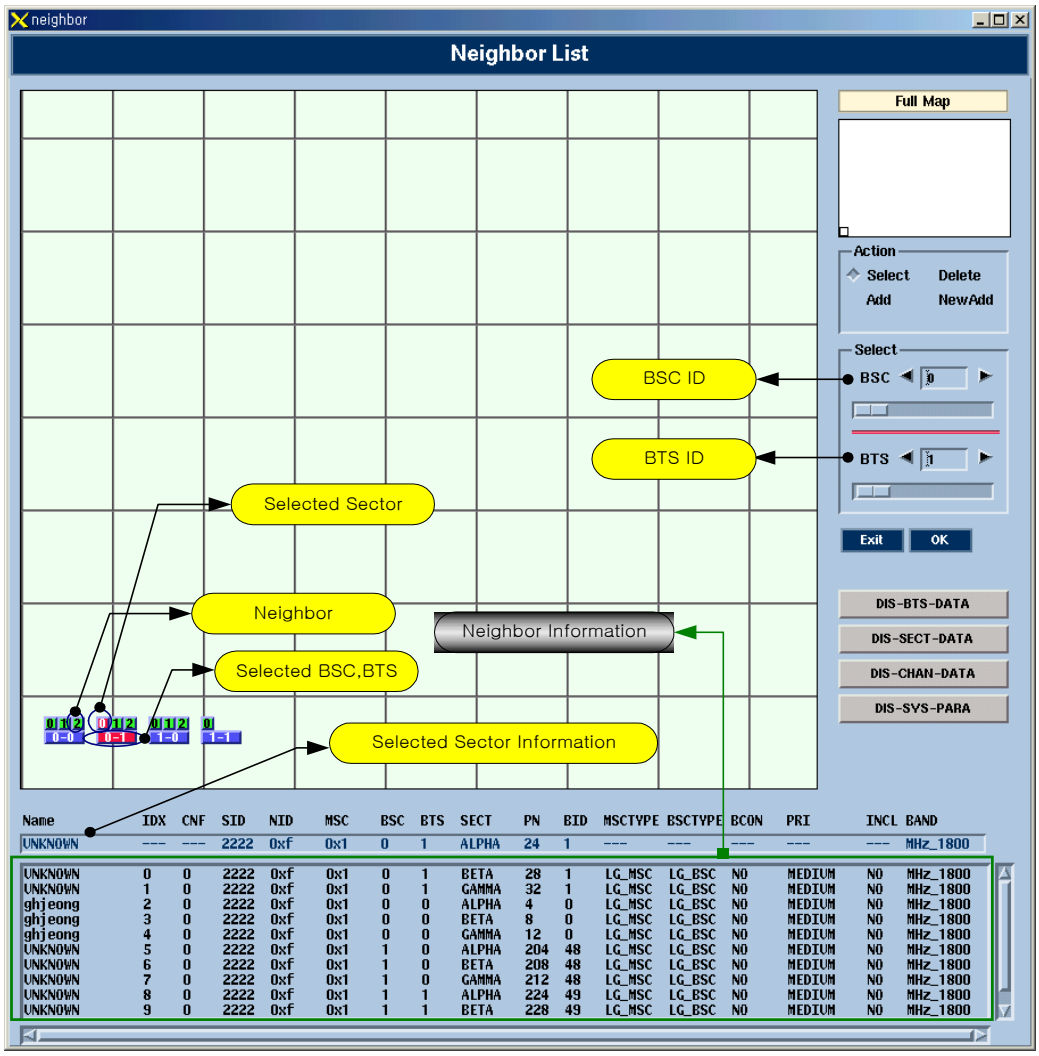

Fig. 4.9-43 Neighbor Information Screen

The own neighbor list checking is possible through the information in the lower part or the green tinted sector.

4.9.7.3.4. Neighbor Addition

The following window appears after selecting neighbor to be added.

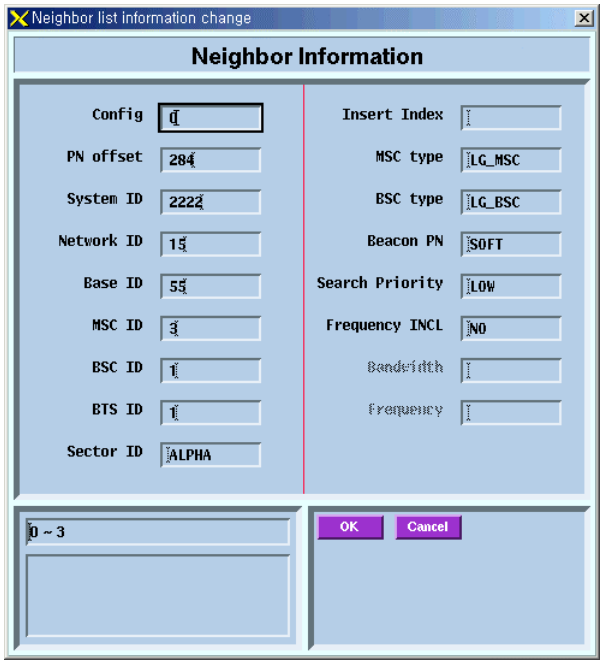

Fig. 4.9-44 Inputting neighbor belongs to mother MSC

Adding neighbor belongs to the mother MSC requires the user to input just 4~6 fields.

Fig. 4.9-45 Inputting neighbor belongs to other MSC

Adding neighbor belongs to other MSC requires the user to input all the information.

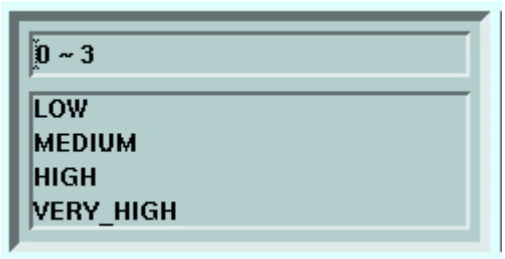

Fig. 4.9-46 Default Value upon Input

Select a field to be input then the system shows the default values. To select a value input the value onto the corresponding input space or select one among the values in the lower part with mouse. Press OK after the input is done or press Cancel to return to the Main screen.

4.9.7.3.5. Neighbor Deletion

Deletion can be completed with two kinds of method.
Press the corresponding line in the lower part or press the BTS sector button.

4.9.7.4. Suggestions in Operation

4.9.7.4.1. The order of priority

Graphic Neighbor is a tool for adding/deleting neighbors. Therefore, performing extension or deletion with MMC can bring out a wrong result while the Graphic Neighbor is being used. And if it is performed the user should run the Graphic Neighbor once again. The neighbor intercommunicates with the configuration block (CDMX) through MMI block. Consequently, the two blocks should be in normal operation.

4.9.8. Call Trace Window

4.9.8.1. Overview.

Call Trace Window is a tool that shows all kinds of call trace information for a specific for a specific MS onto the GUI (Graphic User Interface) screen of the user's terminal. Call trace command can be executed and the results can be checked through the existing MMC or dedicated window for call trace. The user can set time as long as he want with Timer for the maximum of two MS to trace calls.

4.9.8.2. Environment Setup

Refer to the environment setup of stmGUI

.

4.9.8.3. Directions for Use.

Most of the directions are constituted of drawings and refer to the TSMX Block for detailed operation.

Press call among the buttons of Manager to start.

Fig. 4.9-47 Call Trace Start Icon

Then the following screen appears.

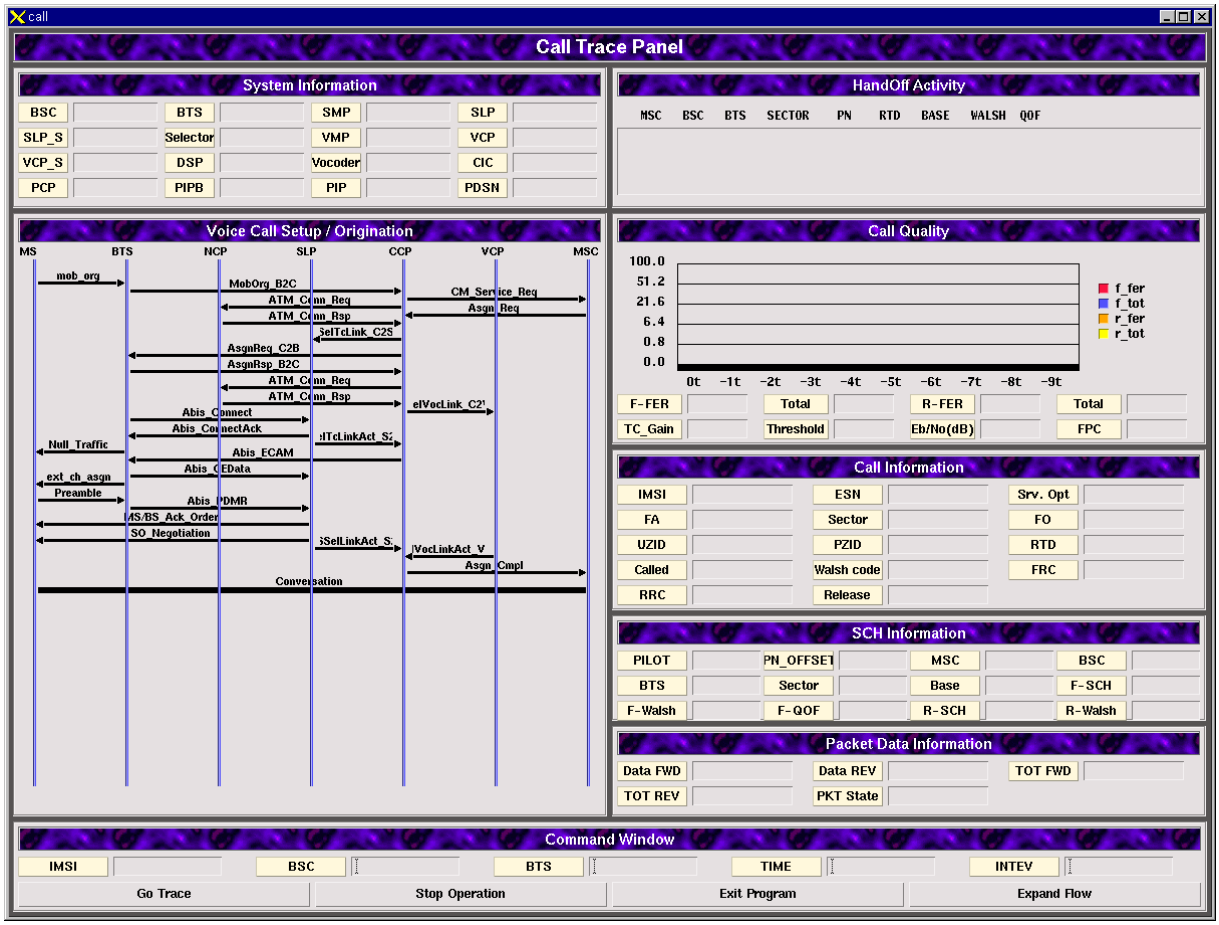

Fig. 4.9-48 Call Trace Initial Screen

4.9.8.3.1. Sub Menu.

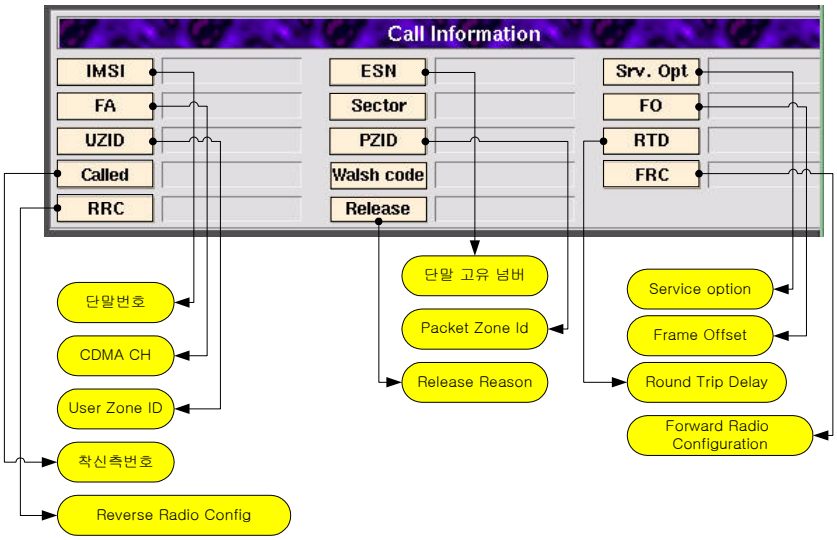

Fig. 4.9-49 Call Information.

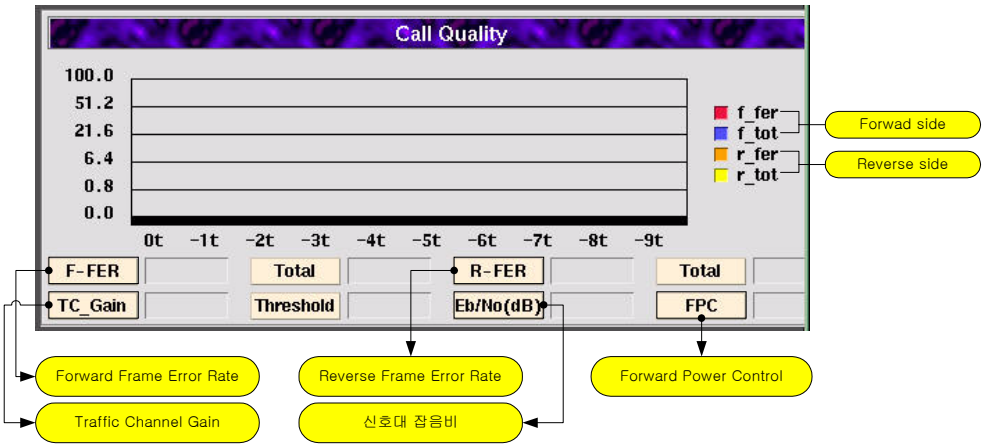

Fig. 4.9-50 Call Quality

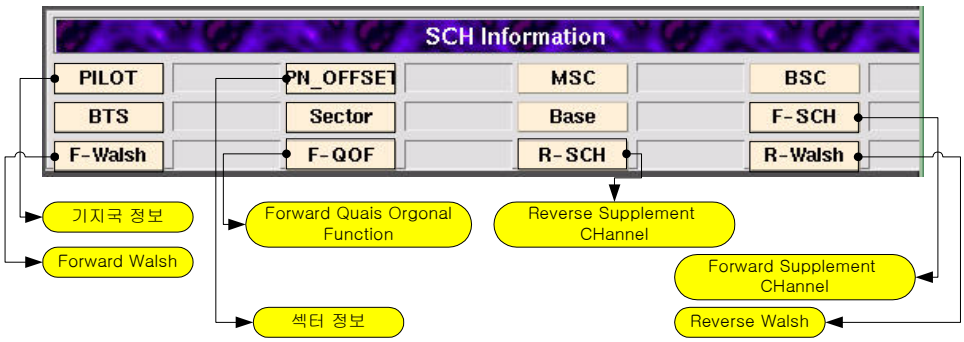

Fig. 4.9-51 SCH Information

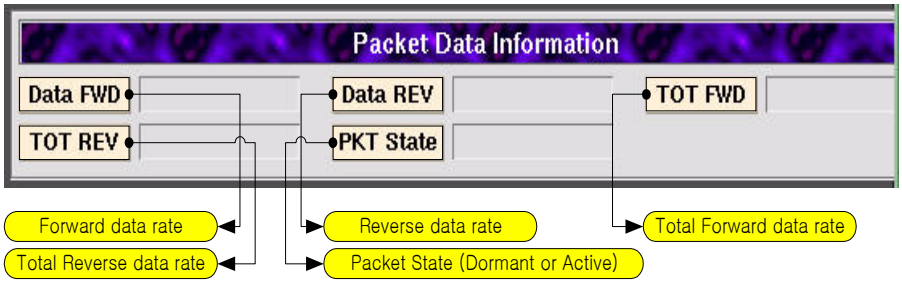

Fig. 4.9-52 Packet Data Information

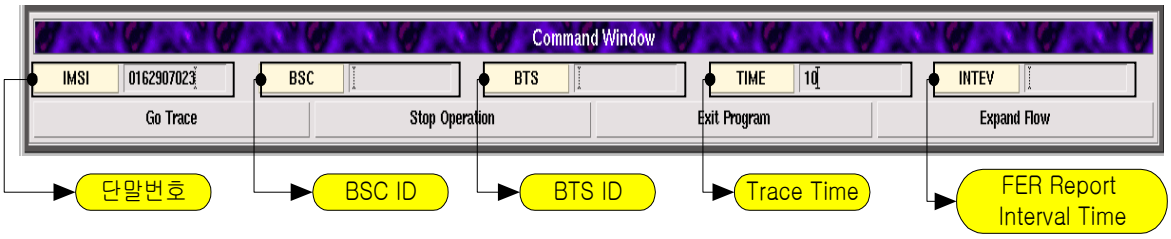

Fig. 4.9-53 Command Window

Input MS number (IMSI), BSC ID, BTS ID, Trace Time and FER Report Interval Time into the command window of [Fig. 4.8-53], and press Go Trace button below, then the call trace starts. Press Stop Operation beside Go Trace button to stop the process during the operation and press Exit Program to end call trace program. The Expand Flow shows the flow to the PDSN upon clicking it.

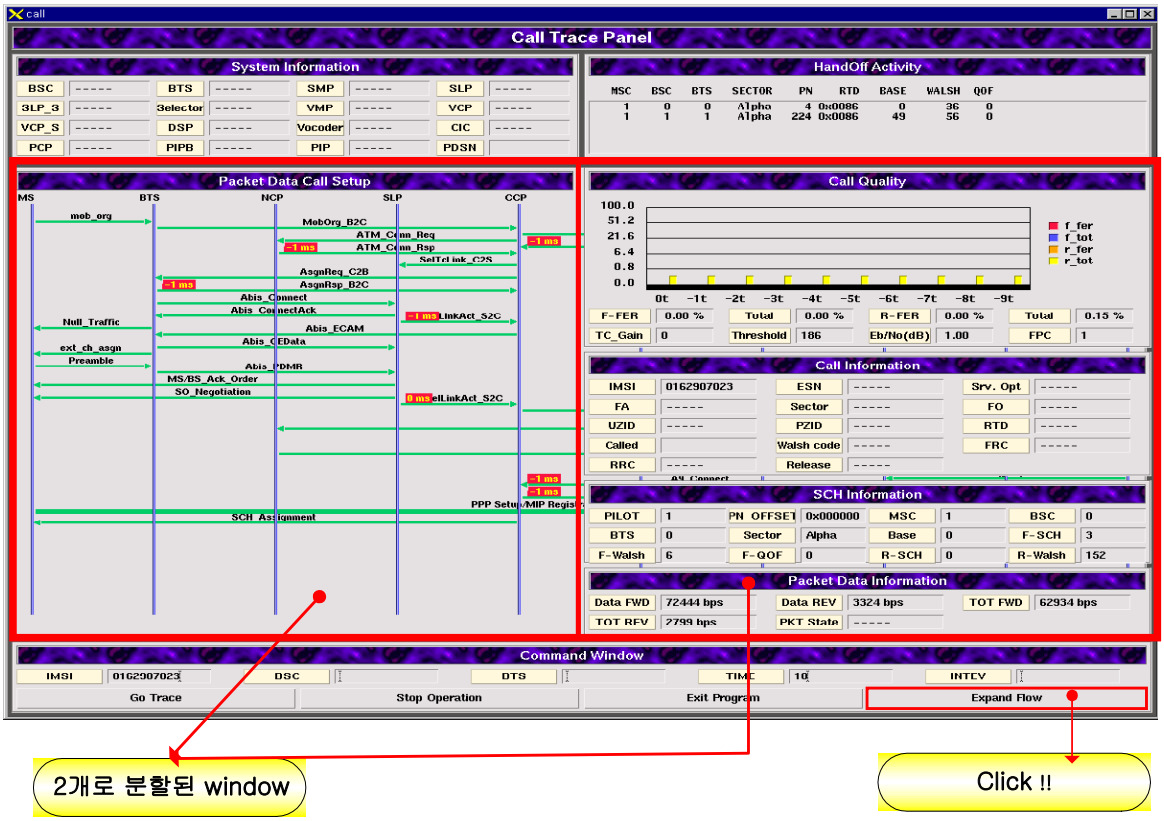

Fig. 4.9-54 Example of Expand Flow Button

If the user wants to see the expand flow hidden by the window at the right side after call test, click Expand Flow button to see the expand flow.

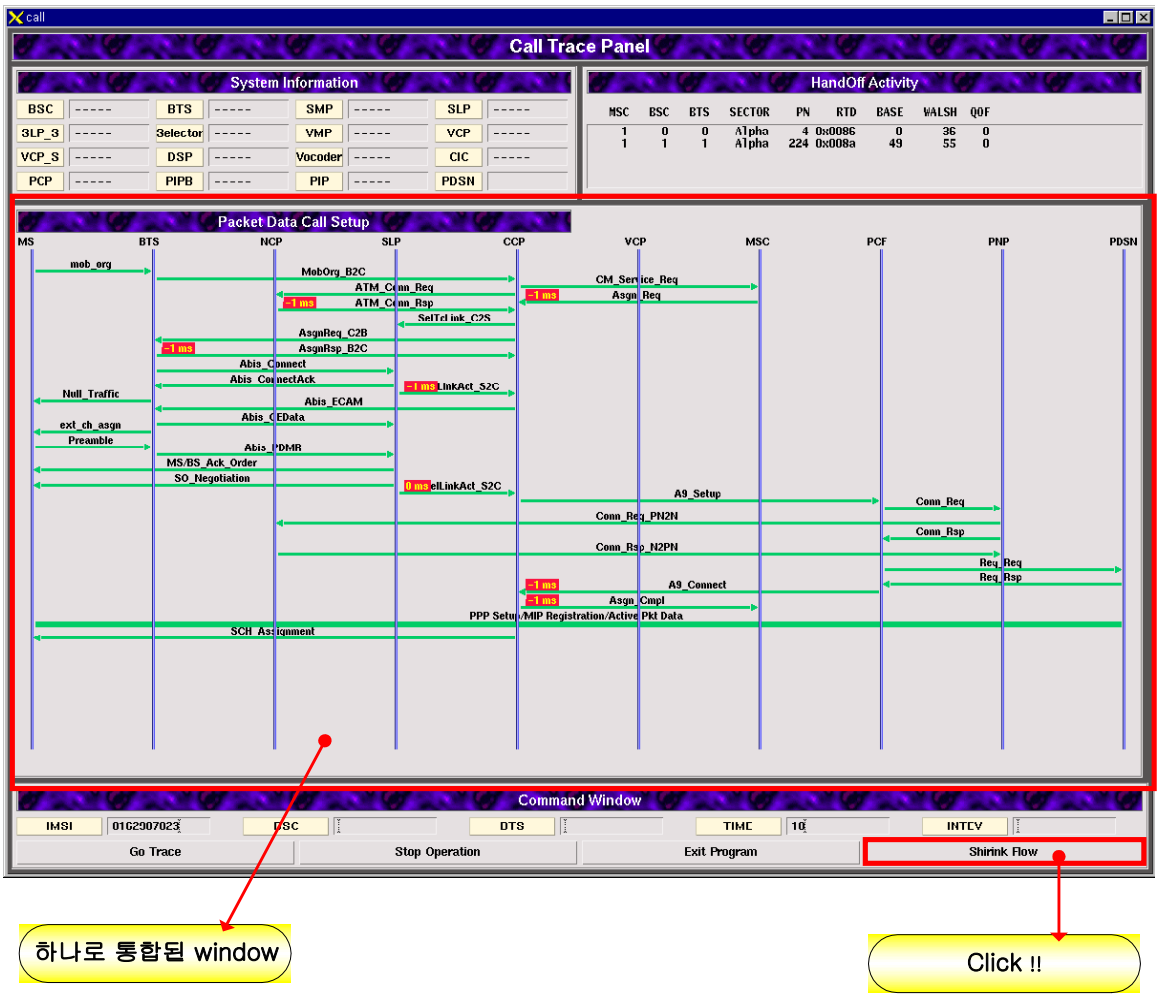

Fig. 4.9-55 Example of Shrink Flow Button

To see the hidden window (Call Information, Call Quality, Handoff Activity at the right) click Shrink Flow button.

4.9.8.3.2. Voice Call

4.9.8.3.2.1. Origination Call (Voice Call Setup / Origination)

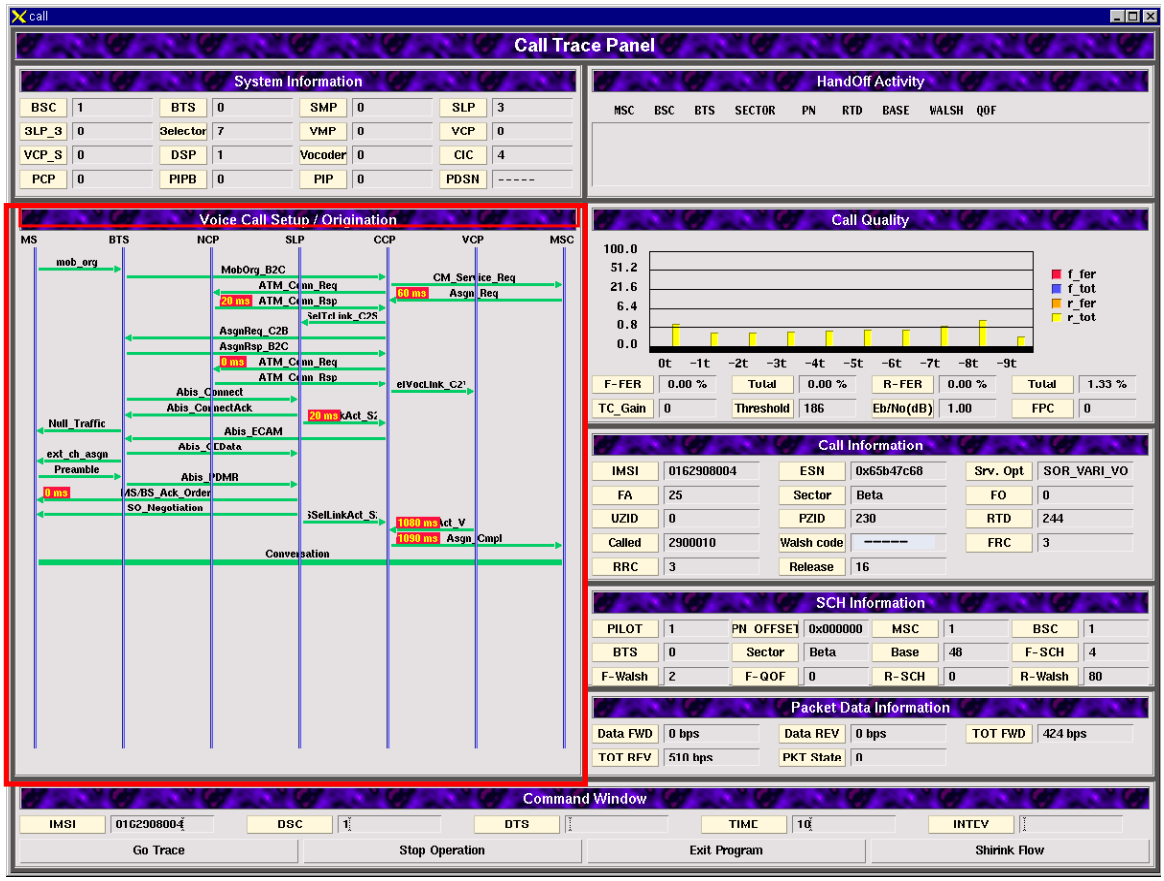

Fig. 4.9-56 Voice Call Setup / Origination

It is FLOW that shows voice originating call process procedure and System Information, Call Information and Call Quality Information are represented on it. The handoff information is also represented when the handoff is generated.

4.9.8.3.2.2. Termination Call.(Voice Call Setup / Termination)

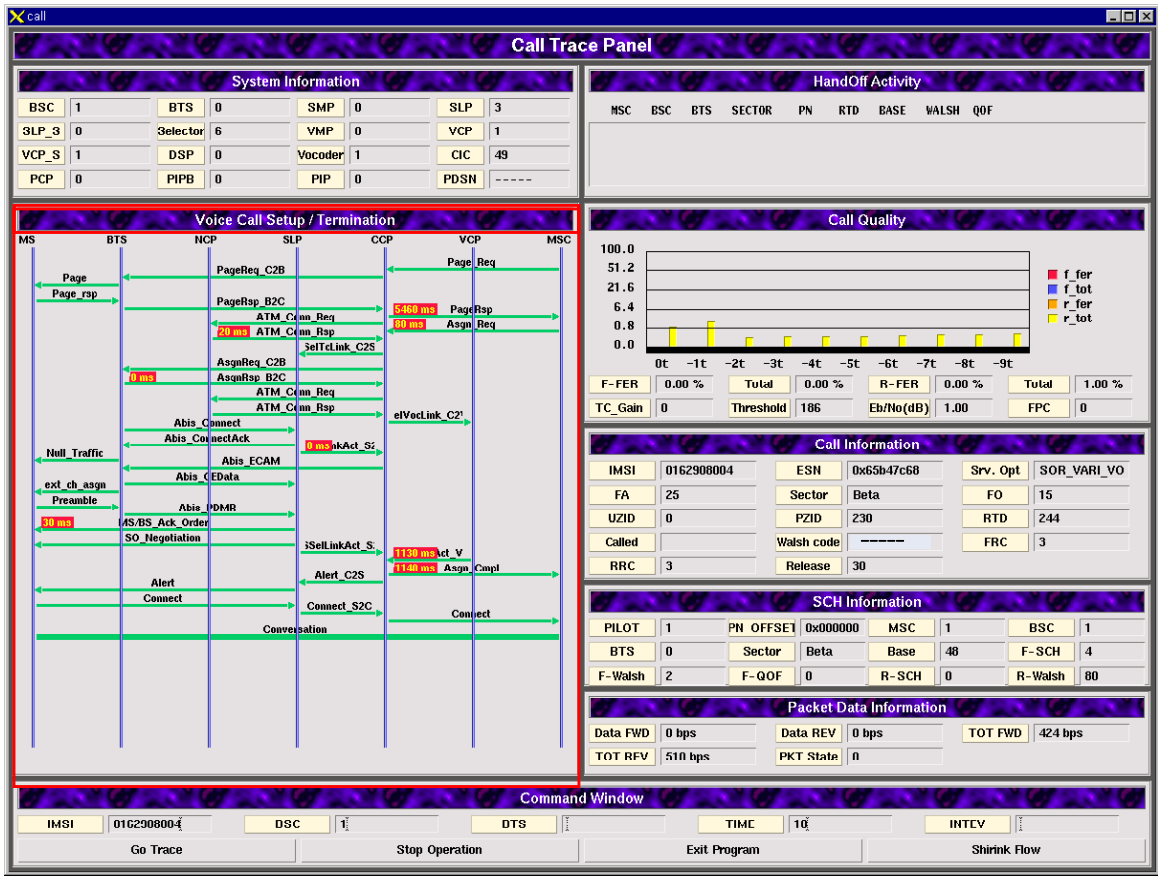

Fig. 4.9-57 Voice Call Setup / Termination

It is FLOW that shows the voice originating call process procedure, and System Information, Call Information and Call Quality Information are represented on it. The handoff information is also represented when the handoff is generated.

4.9.8.3.3. Data Call

4.9.8.3.3.1. Packet Data Call Setup

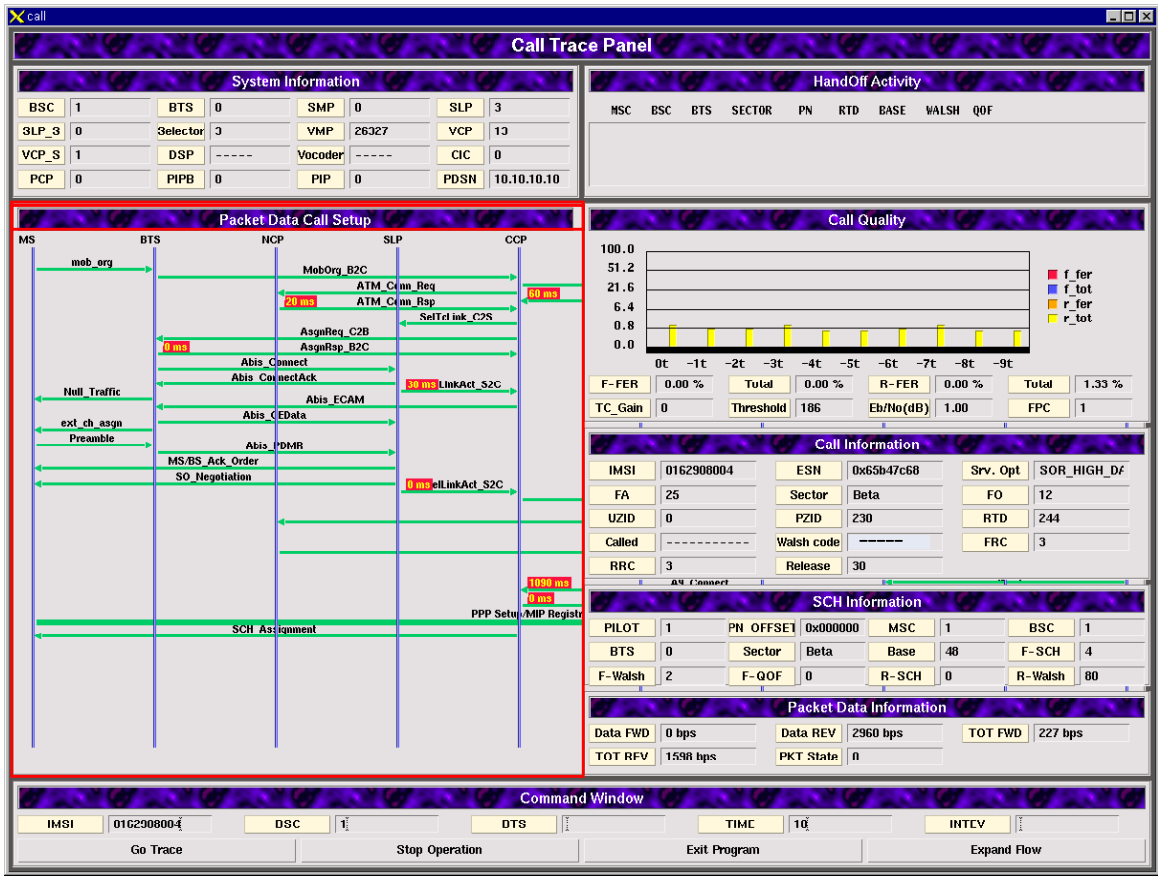

Fig 4.9-58 Packet Data Call Setup

It is FLOW that shows packet data call processing procedure and the System Information, Call Information, Call Quality, Supplemental Channel Information and Packet Data Information are represented on it. The handoff information is also represented on it when the handoff is generated.

4.9.8.3.3.2. Packet Data Call Reactivation / Network Initiated

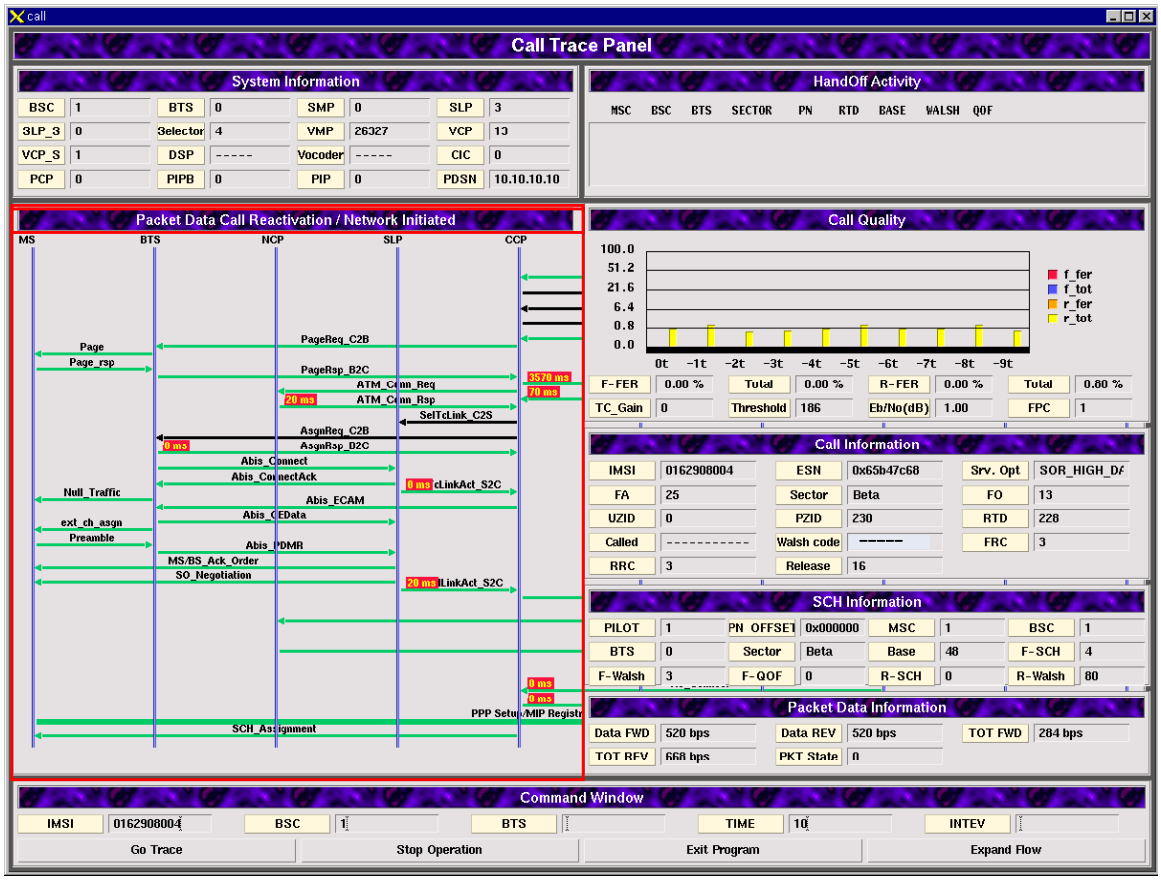

Fig. 4.9-59 Packet Data Call Reactivation / Network Initiated

It is FLOW that shows processing procedure of the packet data call which fell into the dormant status and then be reactivated by the network side. The System Information, Call Information, Call Quality, Supplemental Channel Information and Packet Data Information are represented. The handoff information is also represented on it when the handoff is generated.

4.9.8.3.3.3. Packet Data Call Reactivation / MS Initiated

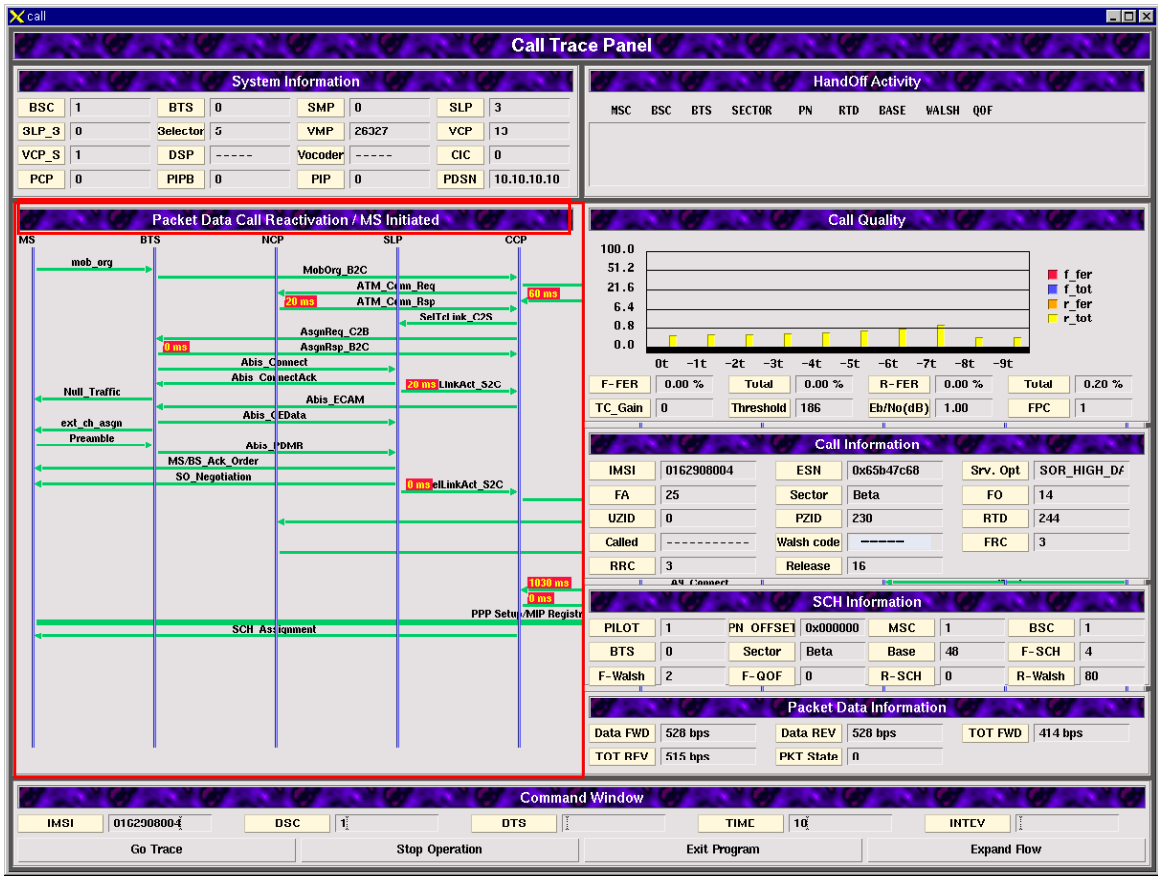

Fig. 4.9-60 Packet Data Call Reactivation / MS Initiated

It is FLOW that shows the process procedure of packet data call which fell into the dormant status and then reactivated by the MS; the System Information, Call Information, Call Quality, Supplemental Channel Information and Packet Data Information are represented on it. The handoff information is also represented on it when the handoff is generated.

4.9.9. BTS Address Search Window.

4.9.9.1. Overview.

The BTS address search program provides the following functions: 1) it can search the corresponding BTS name and address with BSC and BTS number. 2) it can search BSC and BTS number and address with BTS name. 3) it can search BSC and BTS number and name with BTS address.

4.9.9.2. Environment Setup.

It use Solaris 2.7 and Informix 7.3.1 as OS.

4.9.9.2.1. Data Files

bts_name.info : the file contains BTS name and address

4.9.9.3. Directions for Use.

The initial condition is scheduled to configure in the future.

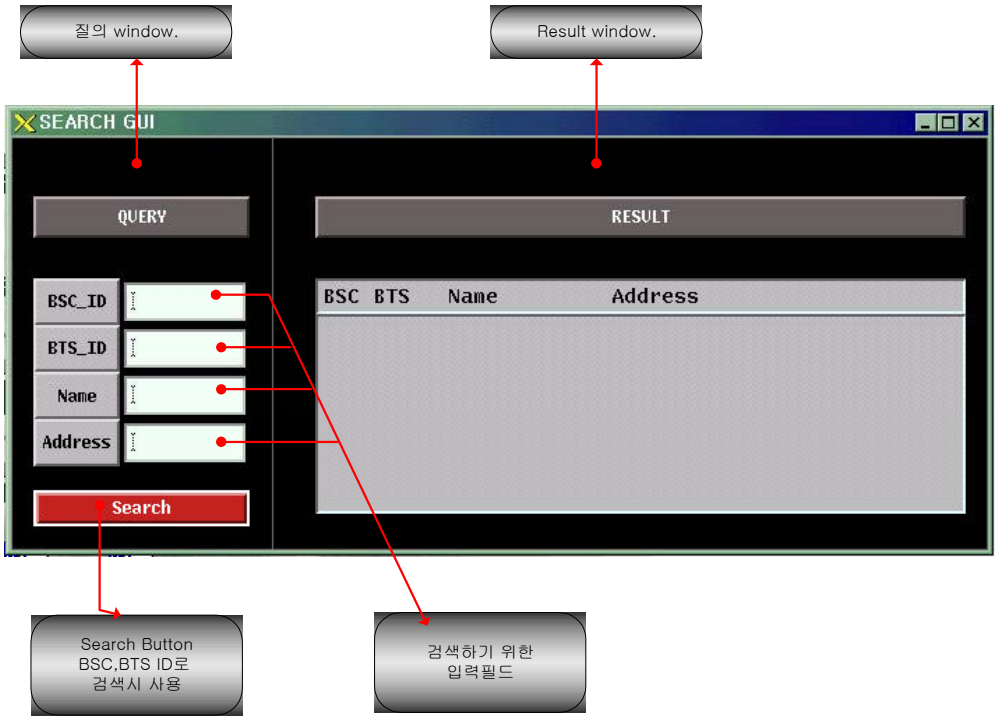

Fig. 4.9-61 BTS Address Search Window Initial Screen

4.9.9.3.1. File Information Display

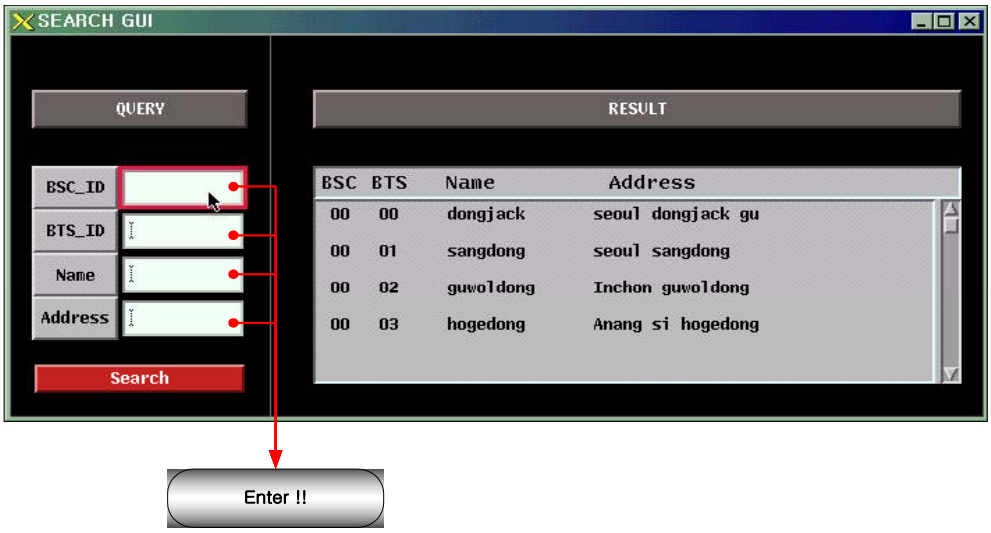

Fig. 4.9-62 File Information Display

Press Enter key on any place of the input field to display the file information on the result window.

4.9.9.3.2. Searching with BSC ID.

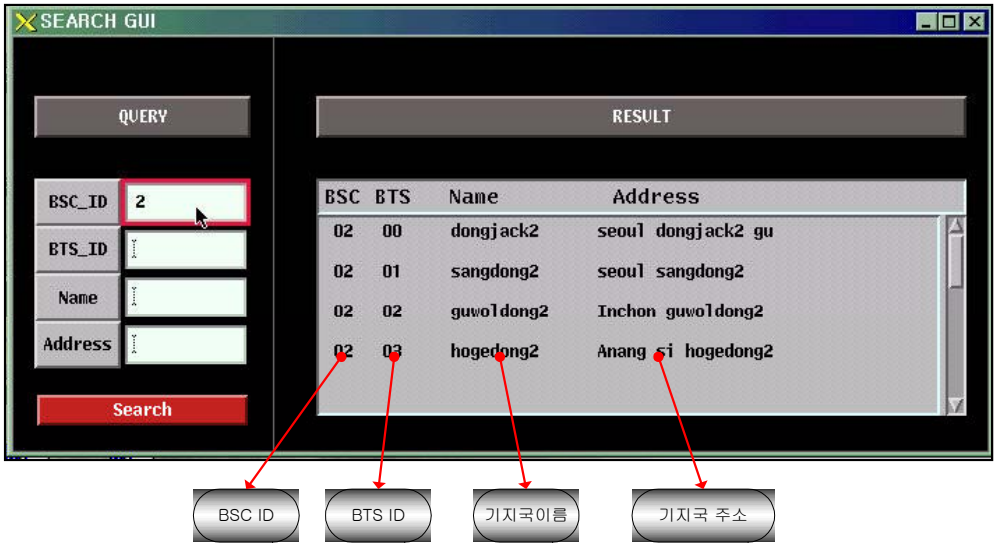

Fig. 4.9-63 Searching with BSC

Input desired BSC number and press Enter key to display the result on the result window when searching with BSC_ID.

4.9.9.3.3. Searching by BTS ID.

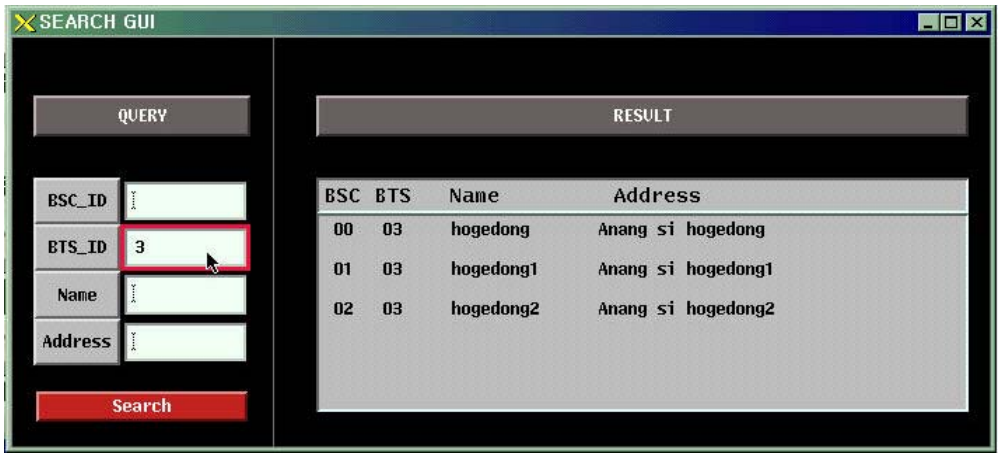

Fig. 4.9-64 Searching by BTS

Input desired BTS number and press Enter key to display the result on the result window when searching with BTS_ID.

4.9.9.3.4. Searching with BTS name.

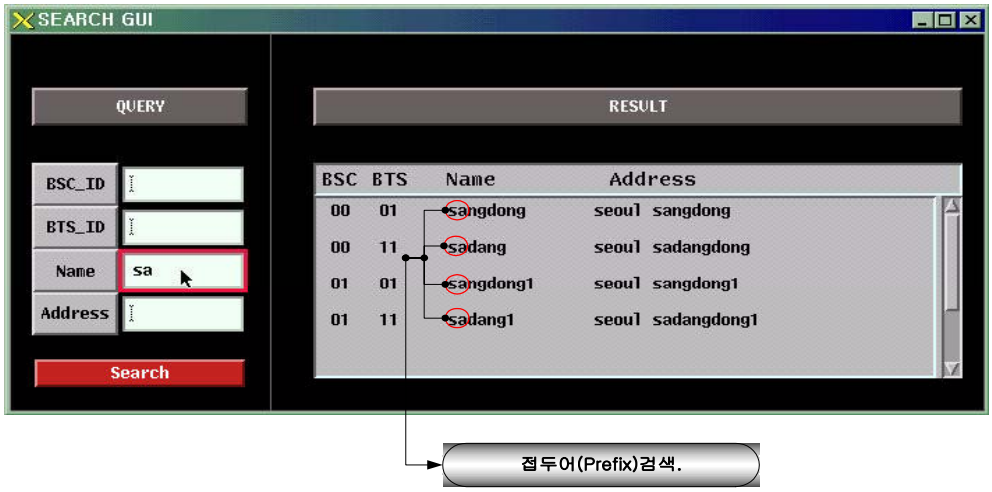

Fig. 4.9-65 Searching with BTS name-1

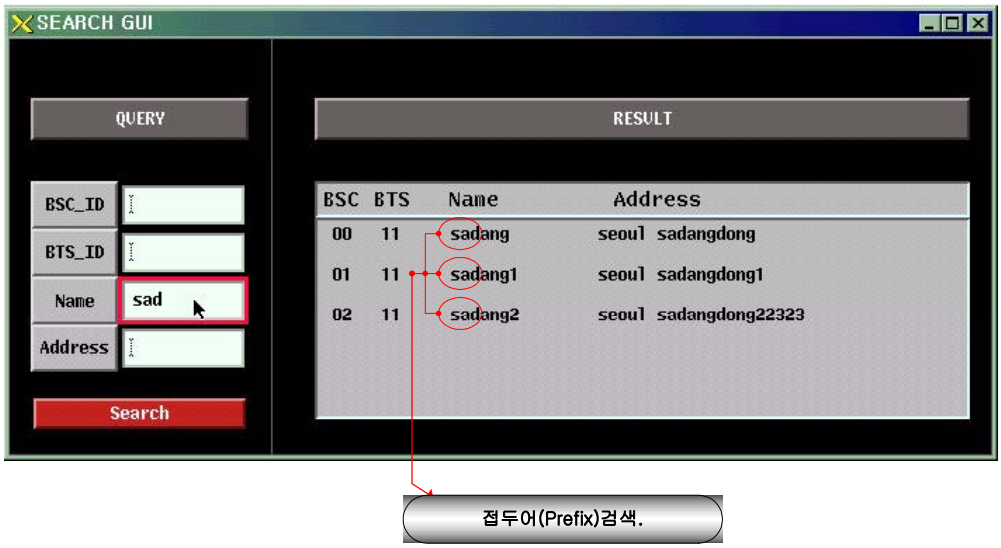

Fig. 4.9-66 Searching with BTS name-2

If the user input name into the name input field when searching with BTS name, the searching is performed with real-time prefix. For example, the names start with “s” are displayed upon inputting “s”, the names start with “sad” are displayed upon inputting “sad”.

4.9.9.3.5. Searching with BTS address.

Fig. 4.9-67 Searching with BTS Address-1

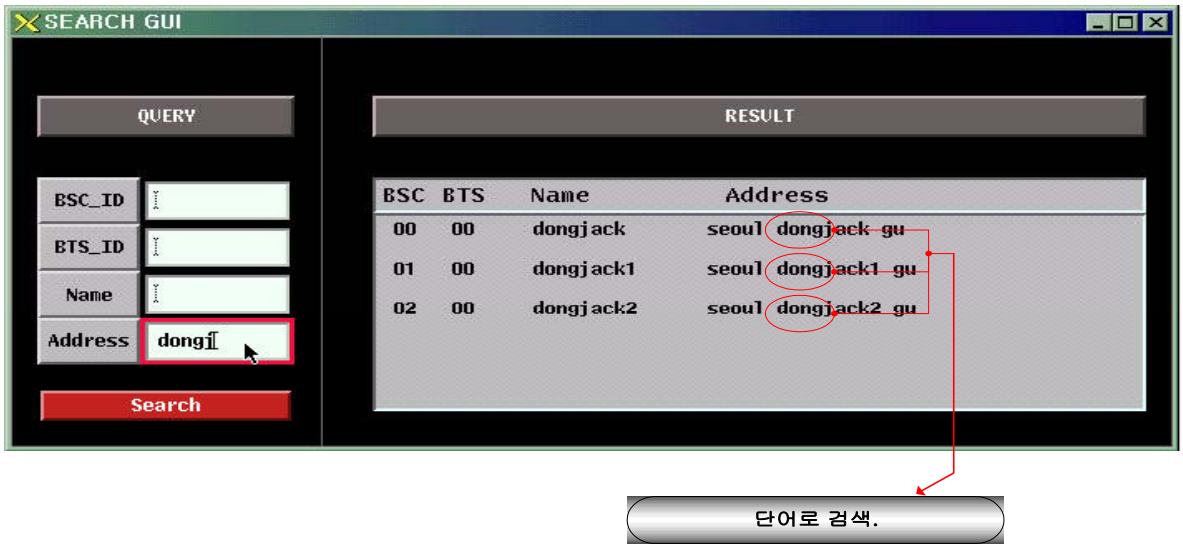

Fig. 4.9-68 Searching with BTS Address-2

The BTS addresses are searched with real-time words upon inputting address into the address input field when searching with BTS address. For example, the addresses start with “dong” are displayed upon inputting “dong”, and the addresses start with

“dongj” are displayed upon inputting “dongj”.

4.9.9.3.6. Searching with Search Button.

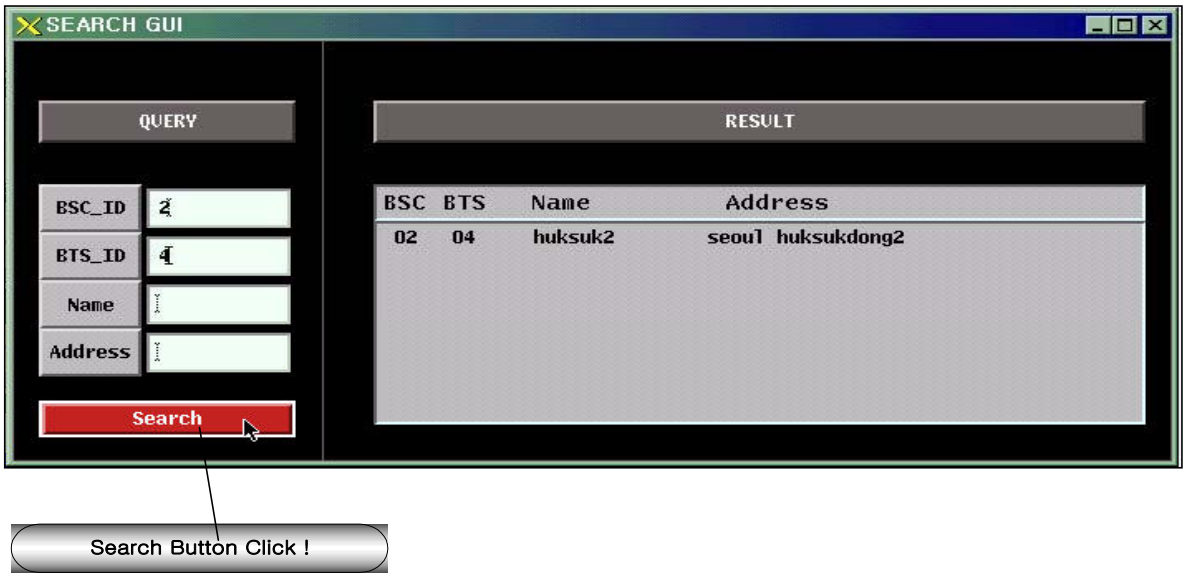

Fig. 4.9-69 Searching with Search Button.

Search Button provides the following functions: 1) simultaneous searching for BSC_ID and BTS_ID 2) single searching for BSC_ID or BTS_ID

4.9.9.4. Suggestions for Operation.

4.9.9.4.1. The Order of Priority.

BTS address searching program is a graphic tool that provides the following function: 1) searching BTS name and address with BSC ID and BTS ID, 2) searching BSC ID, BTS ID, and address with name, 3) searching BSC ID, BTS ID, and name with address. The address search program should be rerun when inserting, deleting or modifying the data of the bts_name.info file that includes BTS information.
The Informix should be normally run because the Informix db is used for searching.