

# HOW TO CONFIGURE DUG FOR MIXMODE G9 RRU 2219 ( AYAM VERSION !)

By : Prof. Tahir

## FIRST THING TO DO

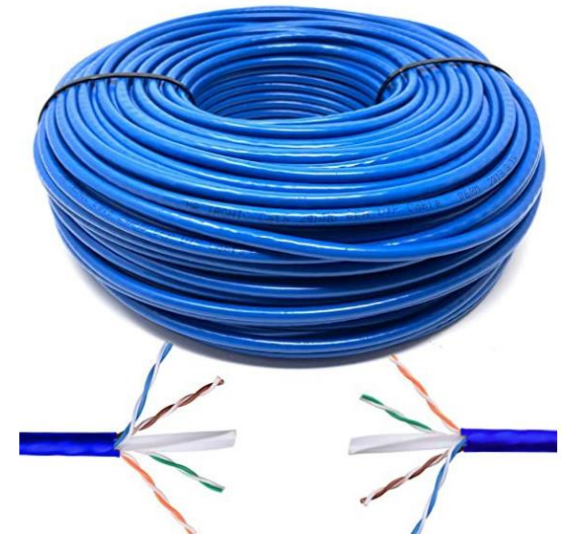
1. Baca Doa Agar Di Permudahkan , Bukan isap rokok ja !!
2. Ready all cable connection as below
3. Tools cable connection
  - R232 9 PIN CABLE
  - DB 9 PIN CONNECTOR & RJ45 Connector , Cat 6 cable



<https://shopee.com.my/HL-340-USB-to-RS232-9Pin-CH340-Serial-Port-Adapter-Cable-PDA-9Pin-80cm-i.33287405.464045402>



<https://shopee.com.my/DB9-RS232-Male-Female-Connector-Back-Side-Nut-COM-Transfer-Free-Solder-Terminals-i.136112367.6216868927>

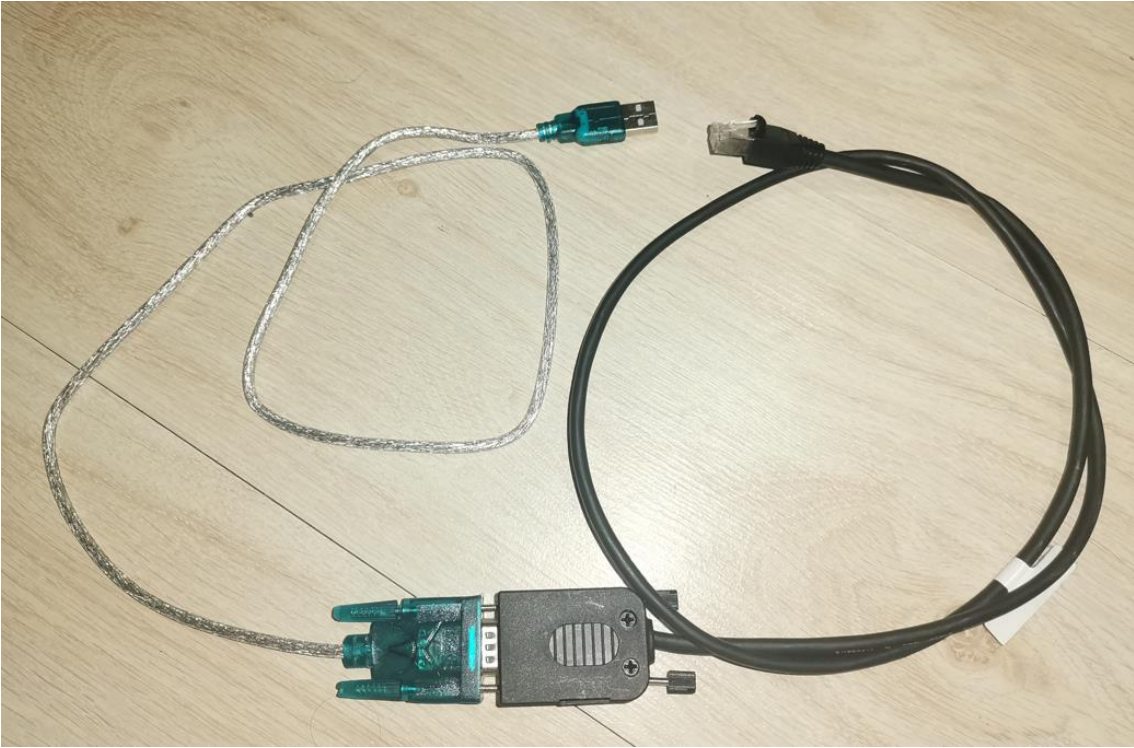
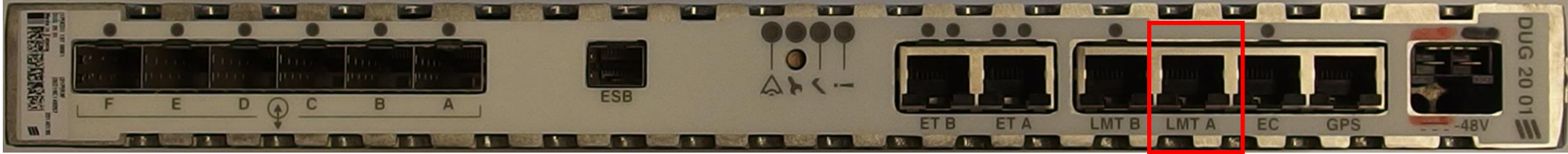


CAT 6 CABLE



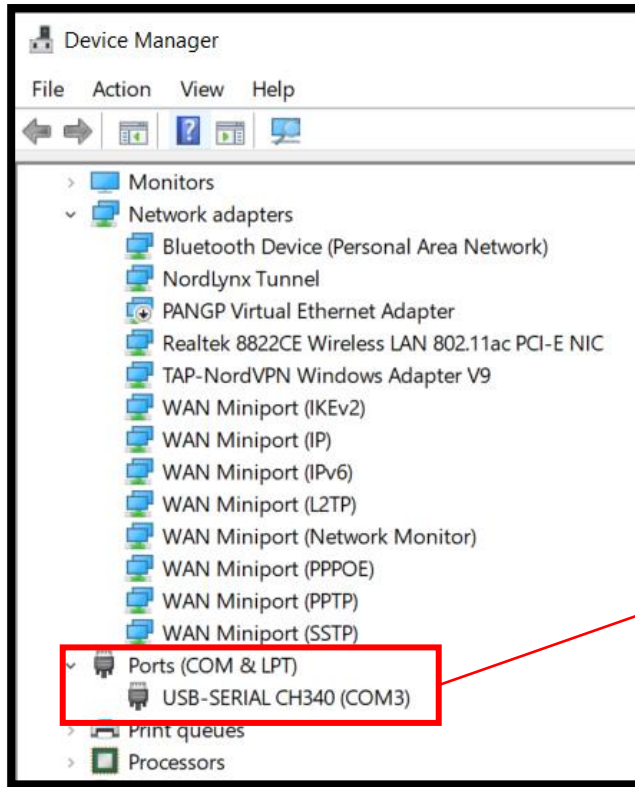
RJ45 CONENCTOR

# CONNECTION FROM DUG TO 9 PIN CABLE

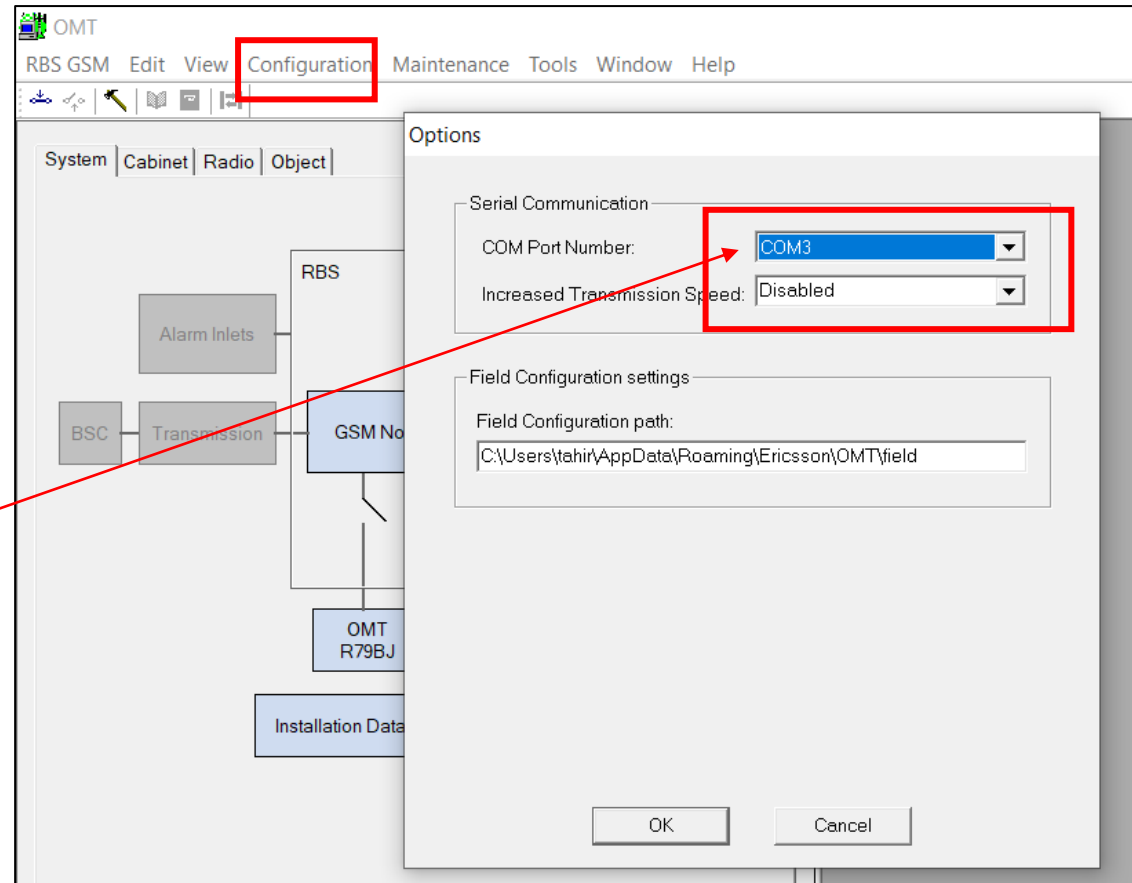


## Set connection cable from PC to software

- 1 . Inset USB 9 pin cable to PC  
- Go to device manager , & check port com



- 1 . Open OMT software
2. Go to tools – option , set com number follow pc , makesure transmission speed disable



# 1 Login OMT , Connect DUG

OMT - KGNABUTAN G900

RBS GSM Edit View Configuration Maintenance Tools Window Help

System Cabinet 0 Radio Object

SAU SCU PDU RUS 01 RUS 01 RUS 01 DUG

Connected

ERICSSON

2

## Read IDB

The screenshot displays the OMT software interface. The main window shows a network diagram with the following components and connections:

- System** (selected tab) | Cabinet | Radio | Object
- RBS** (Radio Base Station) box containing:
  - Alarm Inlets** (connected to RBS)
  - GSM Node** (connected to RBS)
- BSC** (Base Station Controller) connected to **Transmission**, which is connected to the **GSM Node**.
- OMT R79BJ** connected to the **GSM Node**.
- Installation Data Base** connected to the **OMT R79BJ**.

A **Read IDB** dialog box is open in the foreground, displaying:

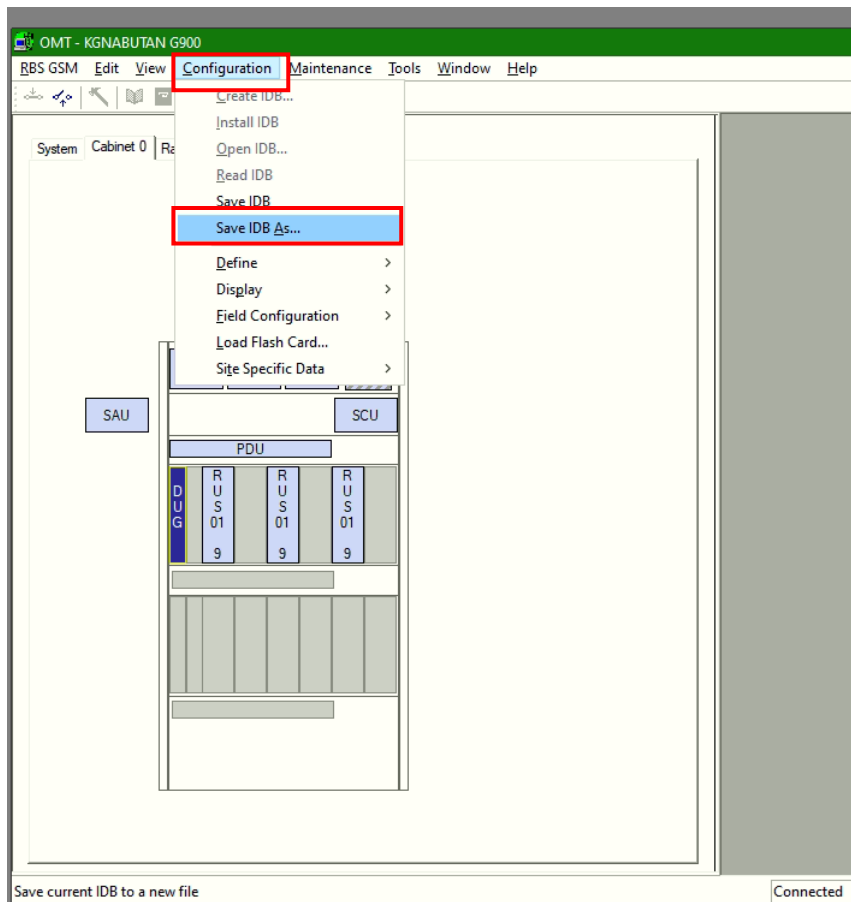
- Read IDB
- Reading IDB...
- A progress bar consisting of 15 blue segments.
- A **Cancel** button.

The status bar at the bottom of the window shows:

- Reading IDB...
- Connected (No IDB)
- ERICSSON logo

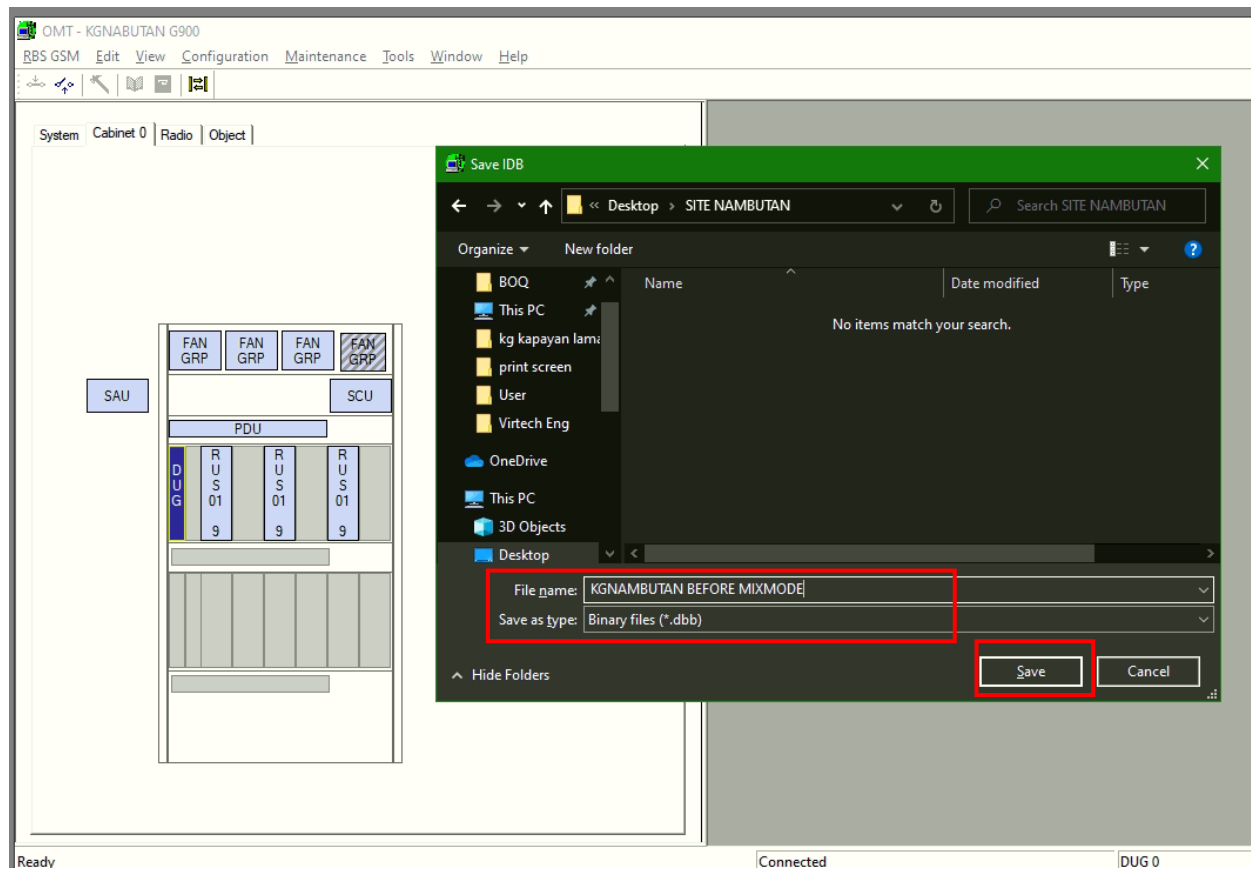
3

Save existing IDB , ( Configuration – save IDB as )

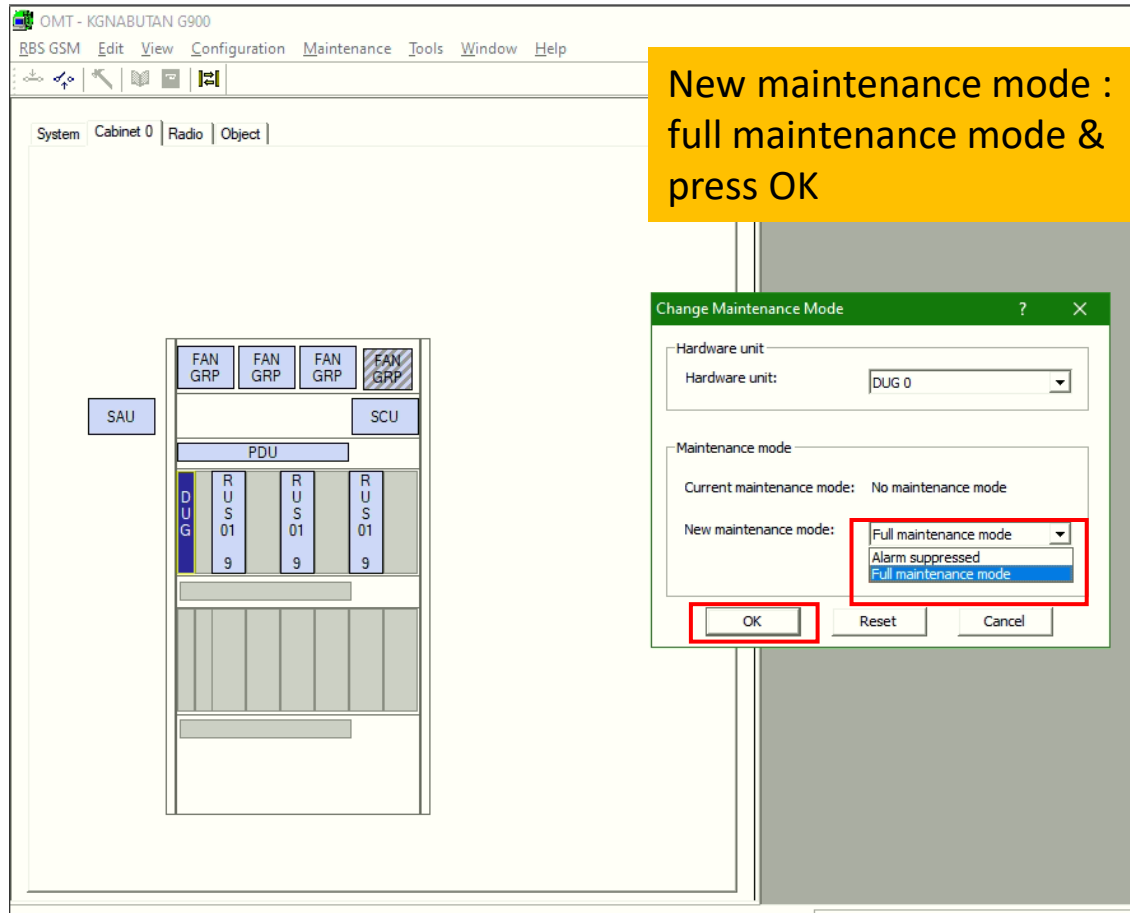
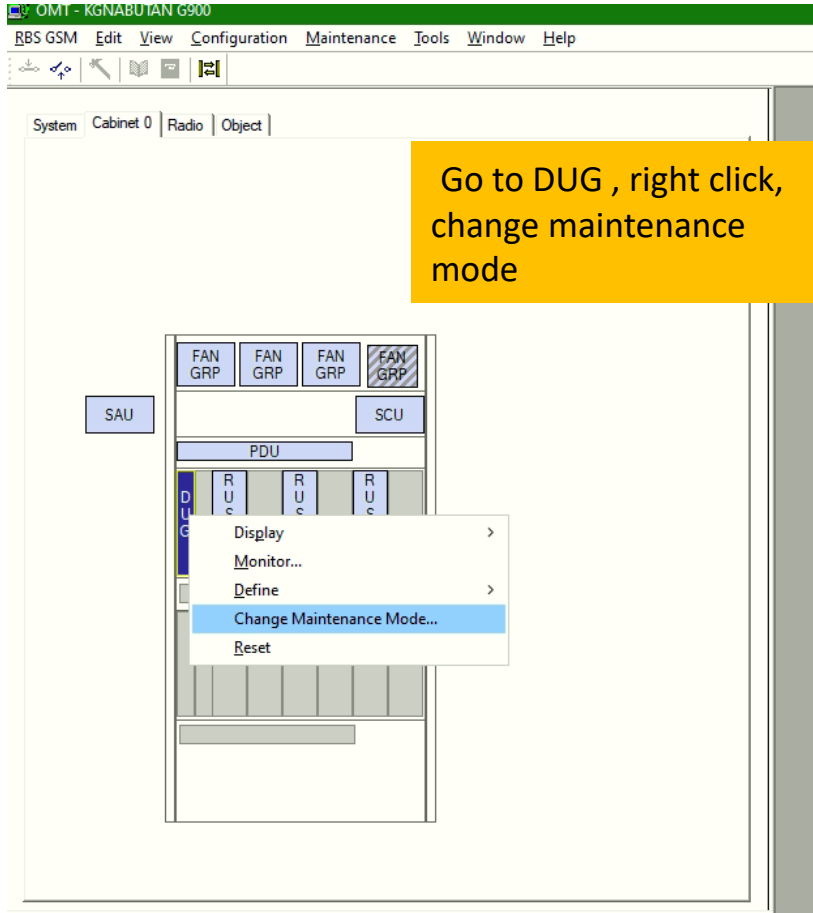


4

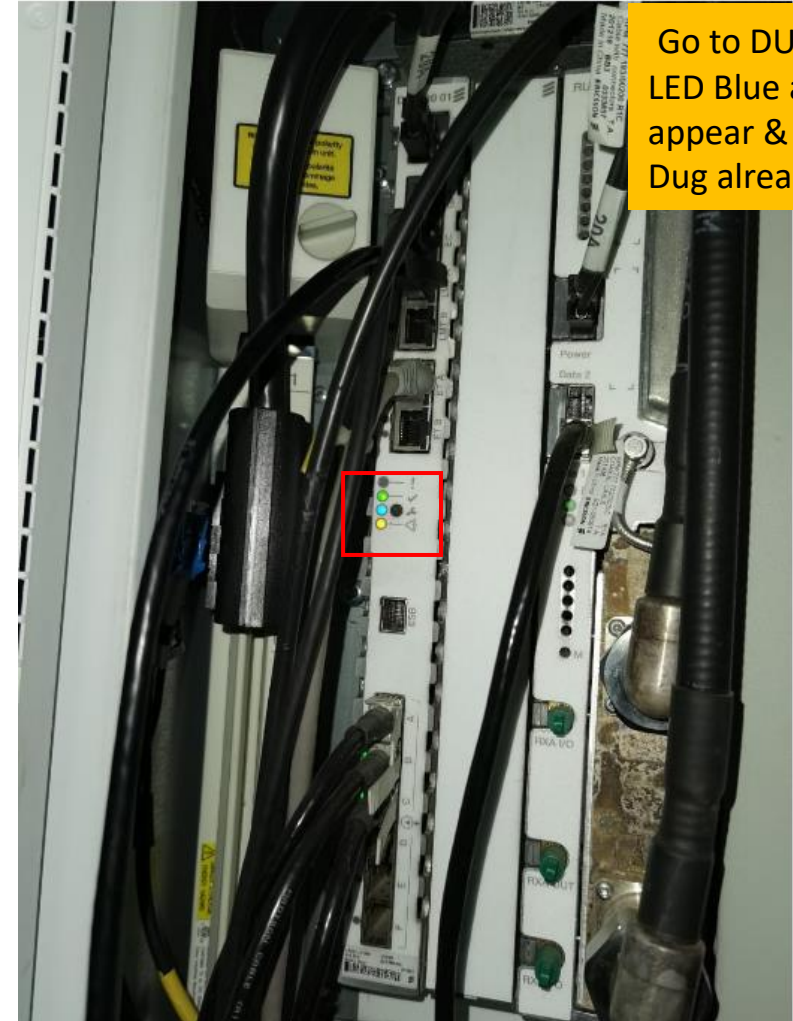
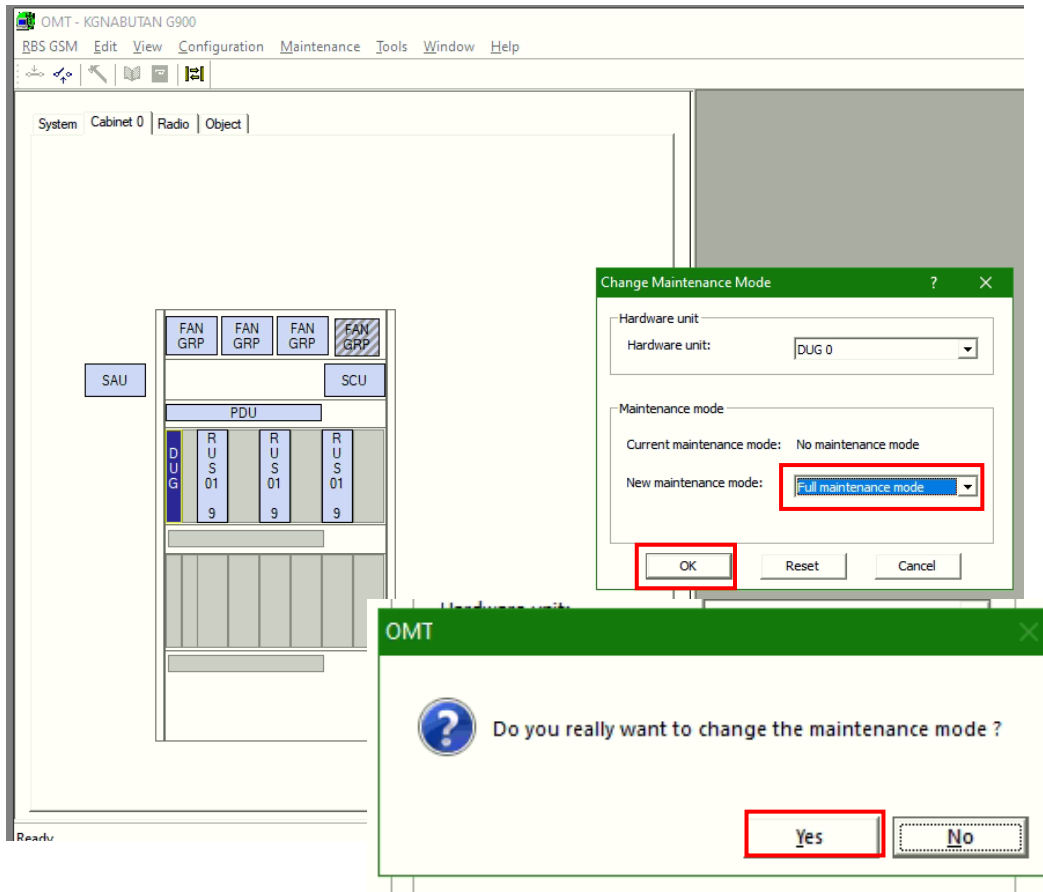
Save IDB at new folder



# 5 lock DUG



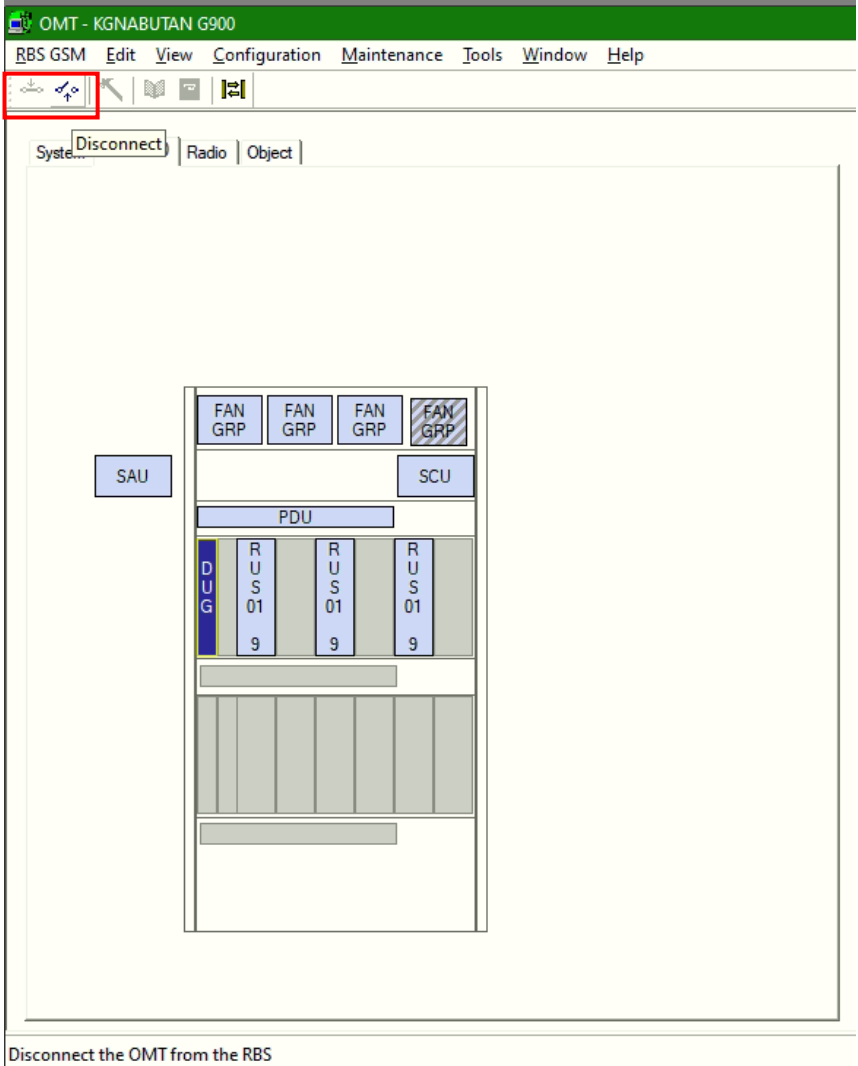
5 Click YES



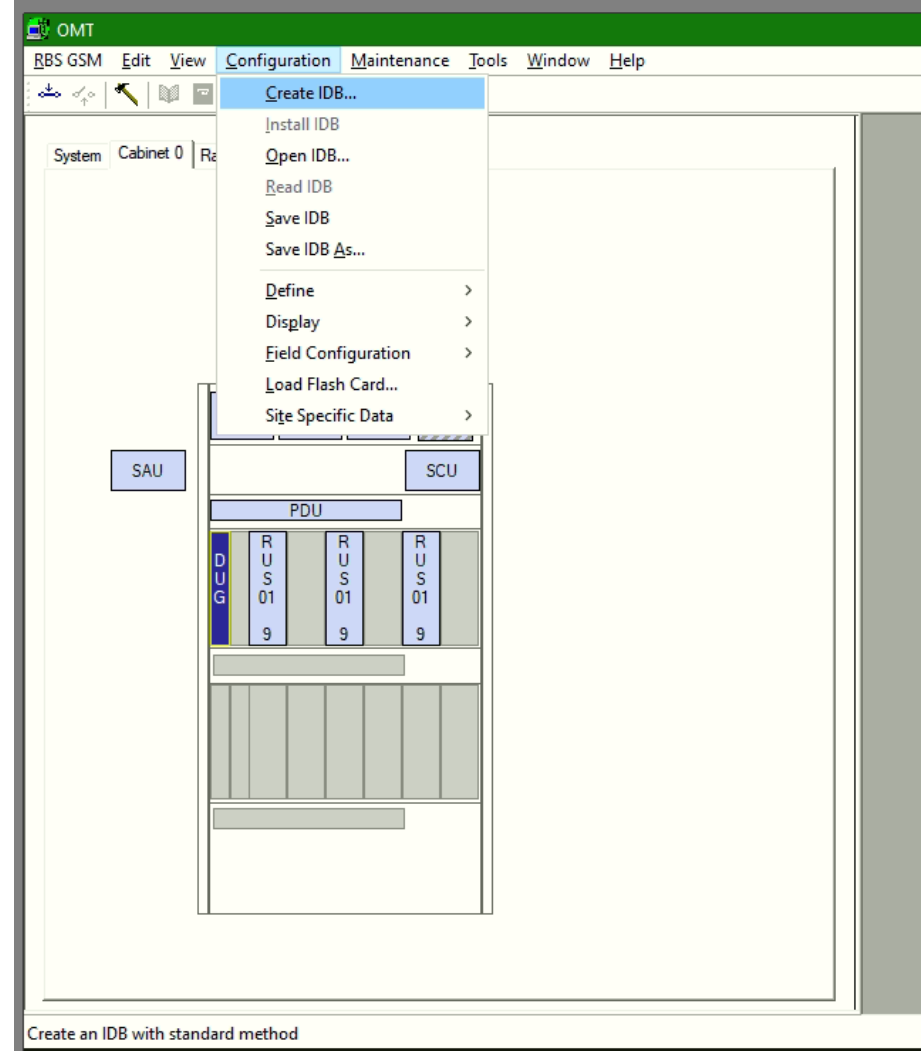
Go to DUG Physical , if LED Blue already appear & stay , means Dug already locked



## 6 Disconnect OMT NOW



## 7 Create New IDB , ( Configuration – Create IDB )



# 8 Click current IDB & modify

The screenshot displays the OMT software interface for configuring a radio system. The main window shows a cabinet layout with components like SAU, SCU, PDU, and RUS. A 'Create IDB' dialog box is open, allowing configuration of the current IDB. The 'Select Present Setup' section has 'Current IDB' selected. The 'Antenna Sector Setup' table lists three sectors, with the first one selected. The 'Modify' button for this sector is highlighted. The 'Transmission Setup' section shows 'STN Equipment' set to 'SIU' and 'RBS Transmission Interface' set to 'E1'. An 'UltraViewer 6.2 - Free' window is also visible in the foreground.

**Create IDB**

Select Present Setup  
Default Values:  Previously Created IDB  **Current IDB**

Cabinet Setup

No.	Type	Power System	Climate System
0	6201 RUS	-48 VDC(PDU without ECM)	Standard

Antenna Sector Setup

Sector	Frequency	RX Diversity	RX Share	RUS	TMA	Mixed Mode	RBB
0	GSM 300 (B0/B8)	2-Way	No	1	No	Single	RBB 12 1a
1	GSM 900 (B0/B8)	2-Way	No	1	No	Single	RBB 12 1a
2	GSM 900 (B0/B8)	2-Way	No	1	No	Single	RBB 12 1a

No. of Ant. 3x2 Port Setup No External Cascaded RBB DBB DBB 10 01 DBB Config

Transmission Setup  
STN Equipment: SIU RBS Transmission Interface:  E1  T1  Internal  
Display Detected HW Information OK Cancel

Ready DUG 0 ERICSSON

9

define as 3 sector , follow below , click RE setup

The screenshot displays the OMT software interface with the 'Antenna Sector Setup' dialog box open. The dialog is titled 'Antenna Sector Setup' and has a green header. It contains the following fields and options:

- Number of Sectors:** A dropdown menu set to '3', highlighted with a red box.
- Frequency:** A dropdown menu set to 'GSM 900 (B0/E)', highlighted with a red box.
- RX diversity:** A dropdown menu set to '2-Way'.
- Antenna Sharing:** A dropdown menu set to 'No'.
- RE:** A dropdown menu set to '1'.
- TMA:** A dropdown menu set to 'No'.
- Internal Cascaded RBB:** A dropdown menu set to 'No'.
- Ring RBB:** A dropdown menu set to 'No'.
- Analog Cross Connect:** A dropdown menu set to 'NA'.
- RBB:** A dropdown menu set to 'RBB 12 1a'.

At the bottom of the dialog, there are three buttons: 'RE Setup' (highlighted with a red box), 'OK', and 'Cancel'. The background interface shows a network diagram with components like SAU, PDU, and DUG. The status bar at the bottom indicates 'Ready', 'Local IDB', 'DUG 0', and the 'ERICSSON' logo.

10 define as below if use RRU 2219 B8 , click ok

The screenshot shows the Ericsson OMT (Operation and Maintenance Terminal) interface. The main window displays the 'Radio Equipment Setup' dialog box, which is used to configure radio equipment (RE) for a radio system. The dialog box has a green title bar and a table with the following columns: RE Type, Number of TX, Number of RX, Radio Mode, Term RE, RE Port, and MCTR mode (A, B, C, D). The rows are labeled RE 0 through RE 5. The first three rows (RE 0, RE 1, RE 2) are highlighted with a red box, indicating the configuration for RRU 2219 B8. The OK button is also highlighted with a red box.

RE Type	Number of TX	Number of RX	Radio Mode	Term RE	RE Port	MCTR mode				
						A B C D				
Sector 0 Ring N/A RE 0	Radio 2219	2	2	Mixed	No	Data 2	Mixed	Mixed	NA	NA
Sector 1 Ring N/A RE 1	Radio 2219	2	2	Mixed	No	Data 2	Mixed	Mixed	NA	NA
Sector 2 Ring N/A RE 2	Radio 2219	2	2	Mixed	No	Data 2	Mixed	Mixed	NA	NA
RE 3										
RE 4										
RE 5										

Transmission Setup

STN Equipment: SIU RBS Transmission Interface:  E1  T1  Internal

Display Detected HW Information Clear All OK Cancel



# 12 Check All & click ok

System Cabinet 0 Radio Object

OMT  
RBS GSM Edit View Configuration Maintenance Tools Window Help

Create IDB

Select Present Setup  
Default Values:  Previously Created IDB  Current IDB

Cabinet Setup

No.	Type	Power System	Climate System
0	6201 RUS	-48 VDC(PDU Without ECM)	Standard

Antenna Sector Setup

Sector	Frequency	RX Diversity	RX Share	RUS	TMA	Mixed Mode	RBB
0	GSM 900 (B0/B8)	2-Way	No	1	No	Mixed	RBB 22 1b
1	GSM 900 (B0/B8)	2-Way	No	1	No	Mixed	RBB 22 1b
2	GSM 900 (B0/B8)	2-Way	No	1	No	Mixed	RBB 22 1b

No. of Ant. 3x2 Port Setup No External Cascaded RBB DBB DBB 10 01 DBB DBB Config

Transmission Setup  
STN Equipment: SIU RBS Transmission Interface:  E1  T1  Internal

Display Detected HW Information Clear All **OK** Cancel

Ready Local IDB DUG 0 ERICSSON

13 Check ,click ok

The screenshot shows the OMT interface with the 'Final Configuration Selection' dialog box open. The dialog contains the following sections:

**Selected Parameters**

Cabinet Setup:

No	Type	Power	Climate	Cable
0	6201 RUS	-48 VDC(PDU Without ECM)	Standard	..

Antenna Sector Setup:

Sector	Frequency	RX Diversity	RX Share	RUS	TMA	Mixed Mode	RBB
0	GSM 900 (B0/B8)	2-Way	No	1	No	Mixed	RBB 22 1b
1	GSM 900 (B0/B8)	2-Way	No	1	No	Mixed	RBB 22 1b
2	GSM 900 (B0/B8)	2-Way	No	1	No	Mixed	RBB 22 1b

Select Configuration:

No. of Ant.  
3x2

Run RBS configuration wizard

OK Cancel

The 'OK' button is highlighted with a red box.

Ready Local IDB DUG 0 ERICSSON

13 Check ,click ok

OMT  
RBS GSM Edit View Configuration Maintenance Tools Window Help

System Cabinet 0 Radio Object

SAU

FAN GRP FAN GRP FAN GRP FAN GRP

SCU

PDU

DUG RUS RUS RUS

9 9 9

Final Configuration Selection

Selected Parameters

Cabinet Setup:

No	Type	Power	Climate	Cable
0	6201 RUS	-48 VDC(PDU Without ECM)	Standard	--

Antenna Sector Setup:

Sector	Frequency	BX Diversity	BX Share	RUS	TMA	Mixed Mode	BBB
0	GSM 900 (B0/B8)	OMT					BB 22 1b
1	GSM 900 (B0/B8)						BB 22 1b
2	GSM 900 (B0/B8)						BB 22 1b

Do you want to re-use the data in the previous configuration?

Yes No

Select Configuration

No. of Ant.  
3x2

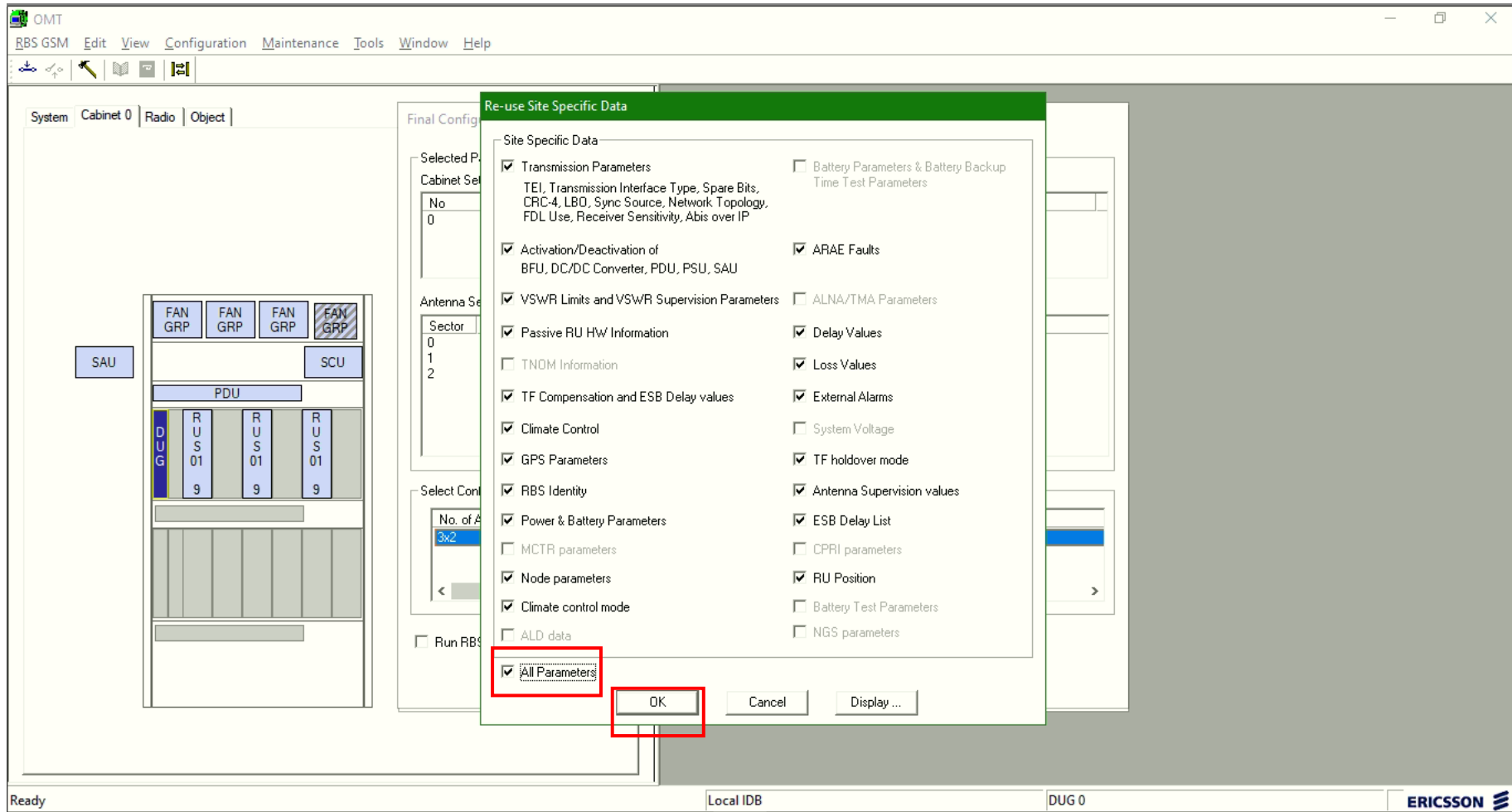
Run RBS configuration wizard

OK Cancel

Ready Local IDB DUG 0 ERICSSON



14 tick All parameter ,click ok

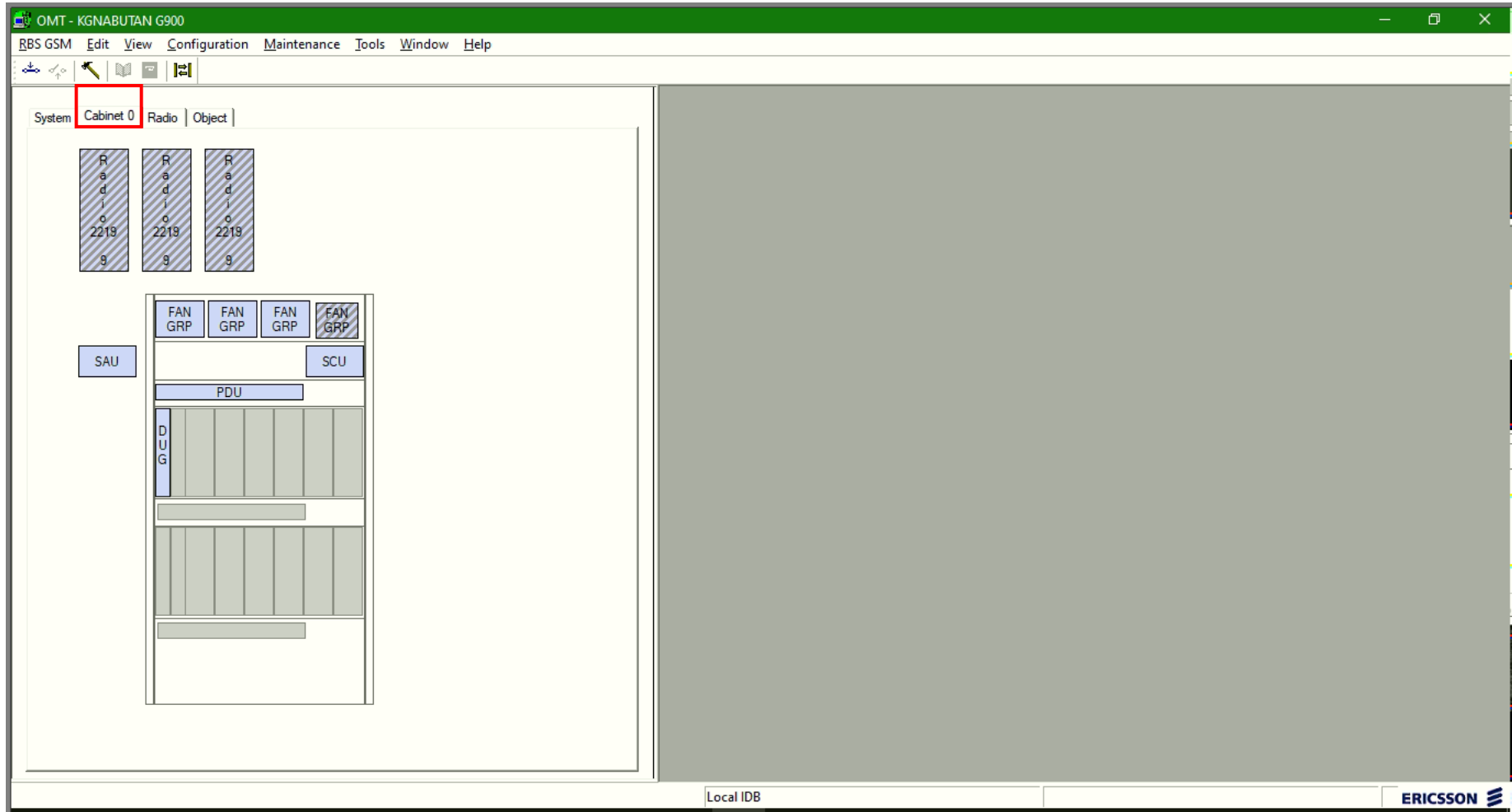


15 tick YES ,click ok

The screenshot shows the RBS GSM configuration interface. The 'Final Configuration Selection' window is open, displaying 'Selected Parameters' for Cabinet Setup and Antenna Sector Setup. A dialog box titled 'OMT' is overlaid on the interface, asking: 'Do you really want to overwrite the IDB data in the OMT?'. The 'Yes' button is highlighted with a red box. The 'No' button is also visible. The background interface shows a rack layout with SAU, SCU, PDU, and various RUS units. The status bar at the bottom indicates 'Ready' and 'Local IDB'.

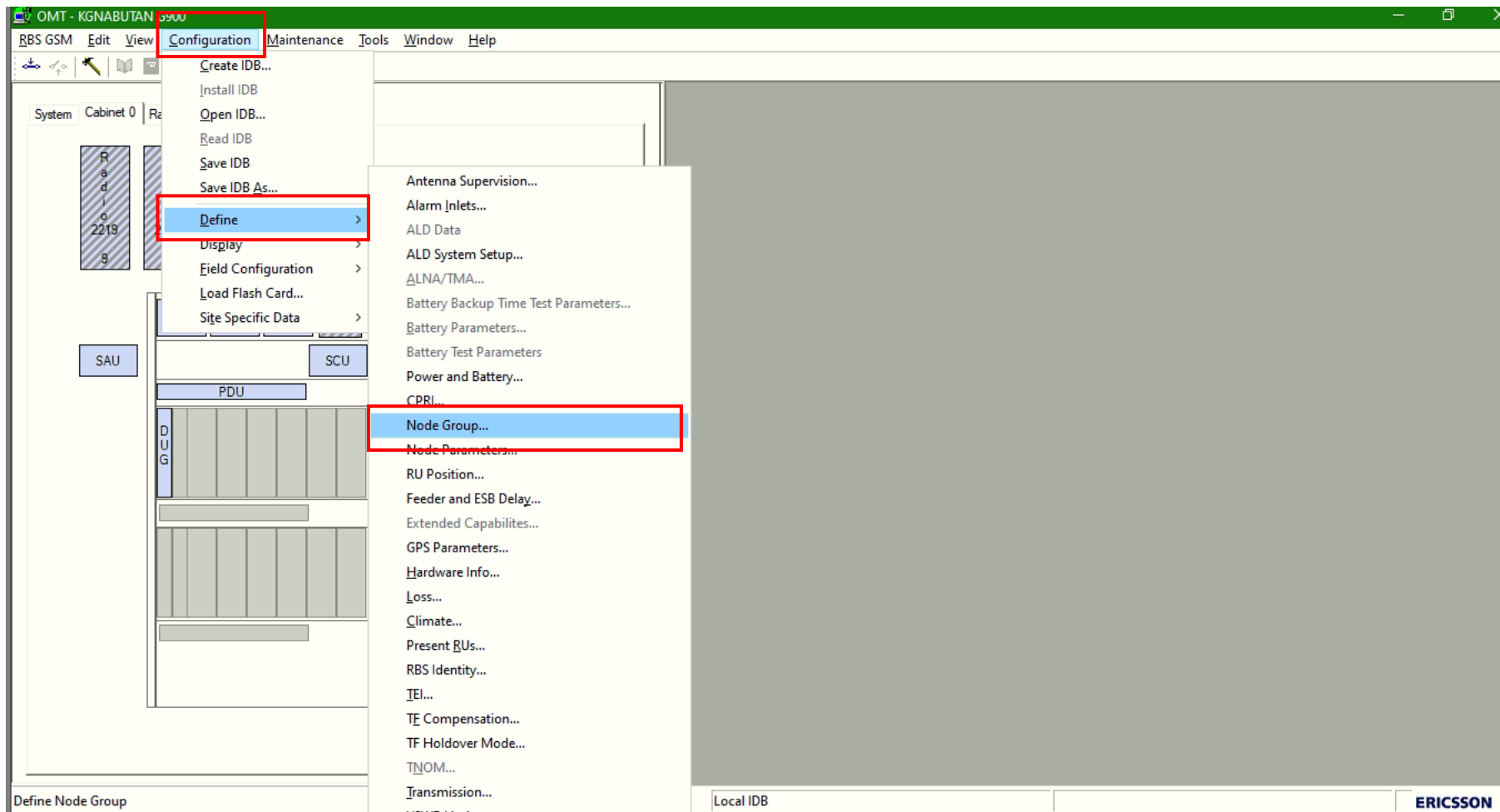
The screenshot shows the RBS GSM configuration interface after the 'Yes' button was clicked. A warning dialog box is displayed, stating: 'The new IDB contains parameters that did not exist in the previous IDB. Default values are set to these parameters.' The 'OK' button is highlighted with a red box. The background interface remains the same as in the previous screenshot, showing the rack layout and configuration windows. The status bar at the bottom indicates 'Ready' and 'Local IDB'.

16 GO to cabinet & check diagram if ok



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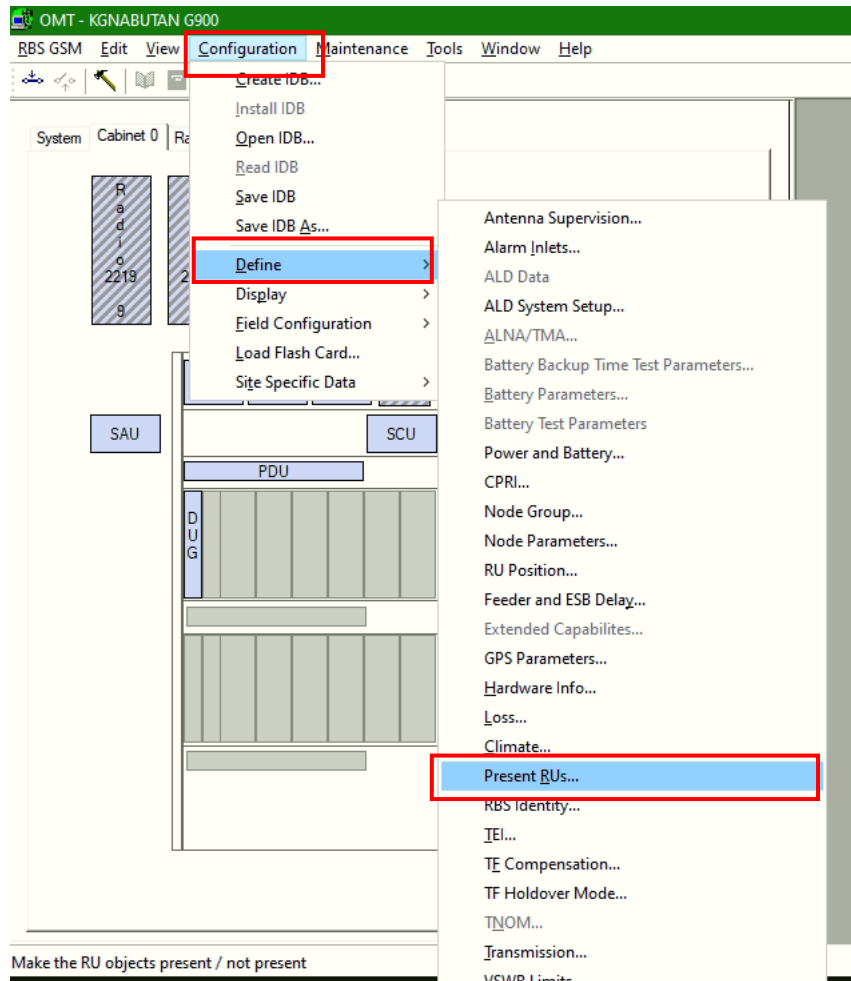
Create NGS , go to configuration > define > Node group



18 Set NGS > Basic NGS > Sync Priority 5 > defined all port ABC > click OK

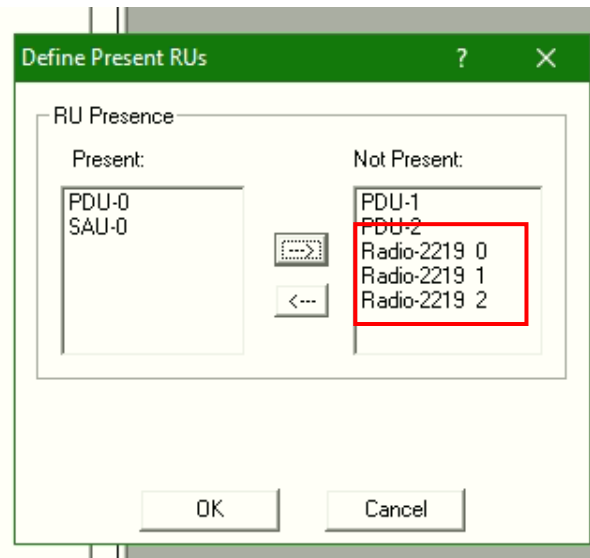
The screenshot displays the Ericsson OMT (Operation and Maintenance Terminal) interface for a KGNABUTAN G900 system. The main window shows a configuration tree with 'System', 'Cabinet 0', 'Radio', and 'Object' views. A 'Define Node Group Synchronization' dialog box is open, allowing configuration of NGS (Node Group Synchronization) parameters. The 'NGS Mode' is set to 'Basic NGS', 'DU Mode' is empty, and 'Synch Node Priority' is set to '5'. The 'Candidate RI Port List' section shows a list of 'Defined' ports: 'A', 'B', and 'C'. The 'OK' button is highlighted with a red box, indicating the final step in the configuration process.

Ready Local IDB ERICSSON

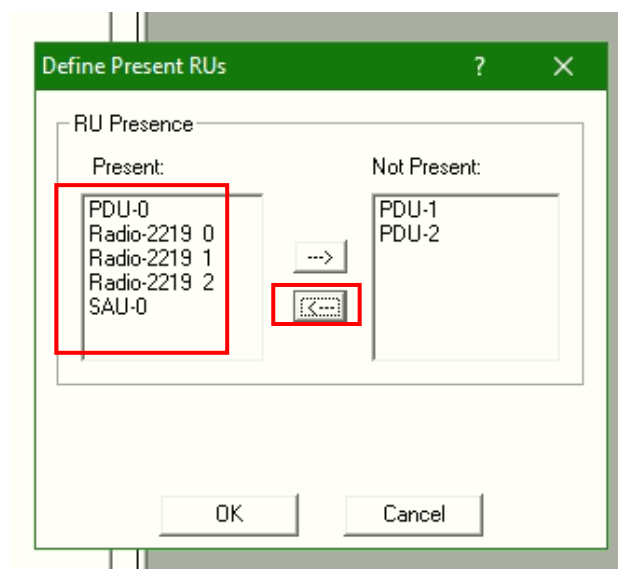


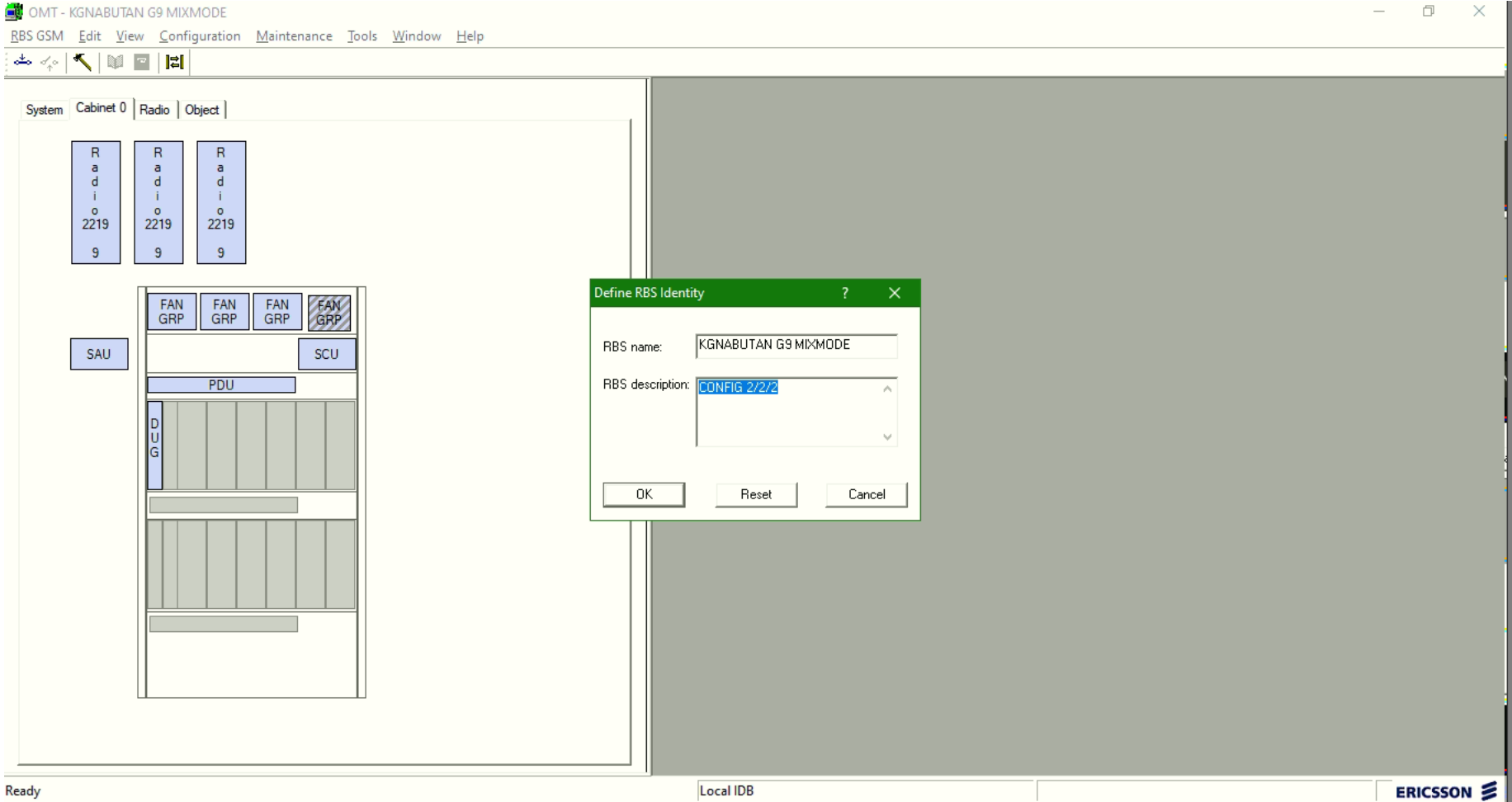
Present All RRU , preset how many PDU foolw on site & Preset SAU Installed at site

BEFORE



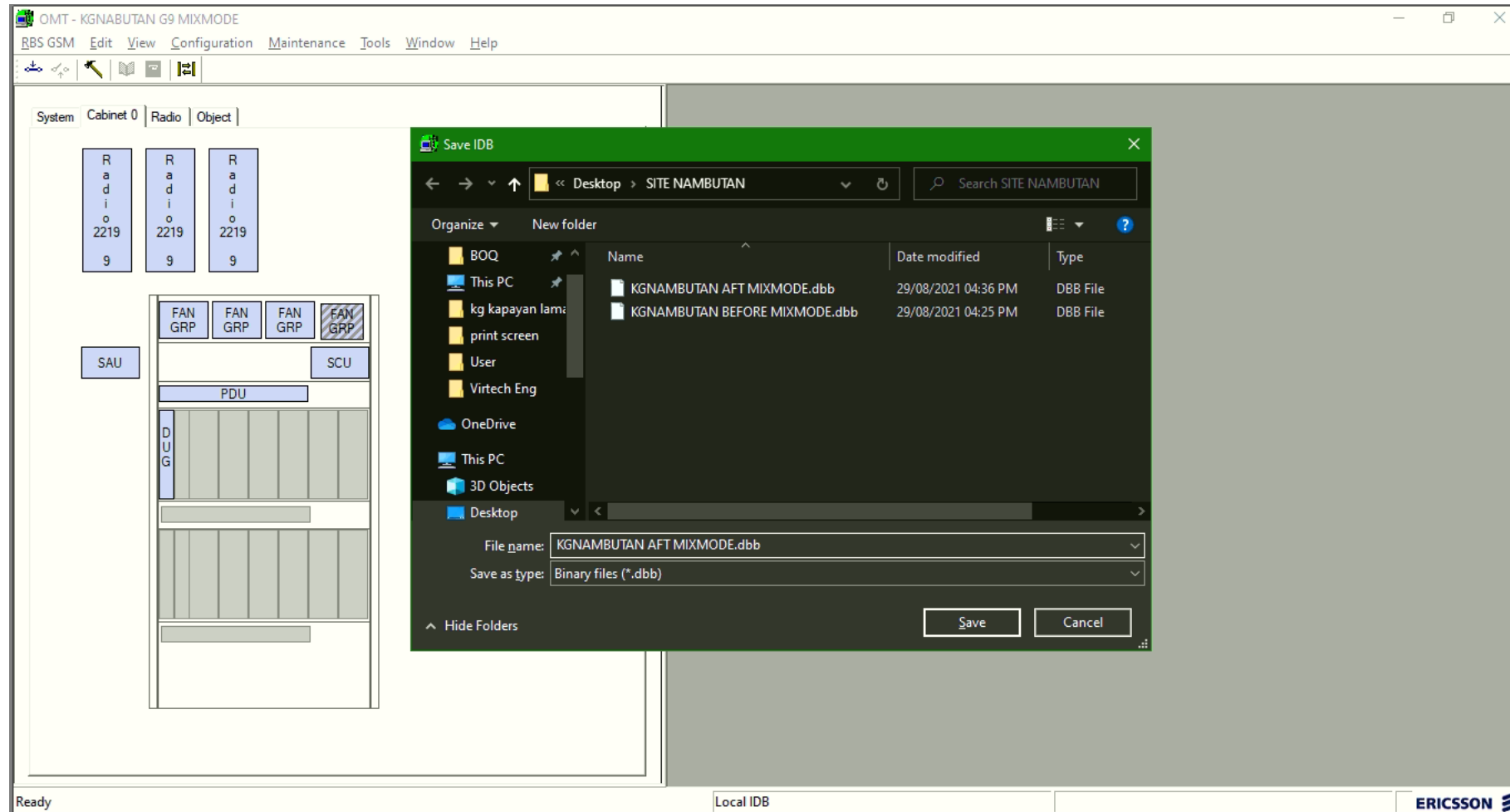
AFTER





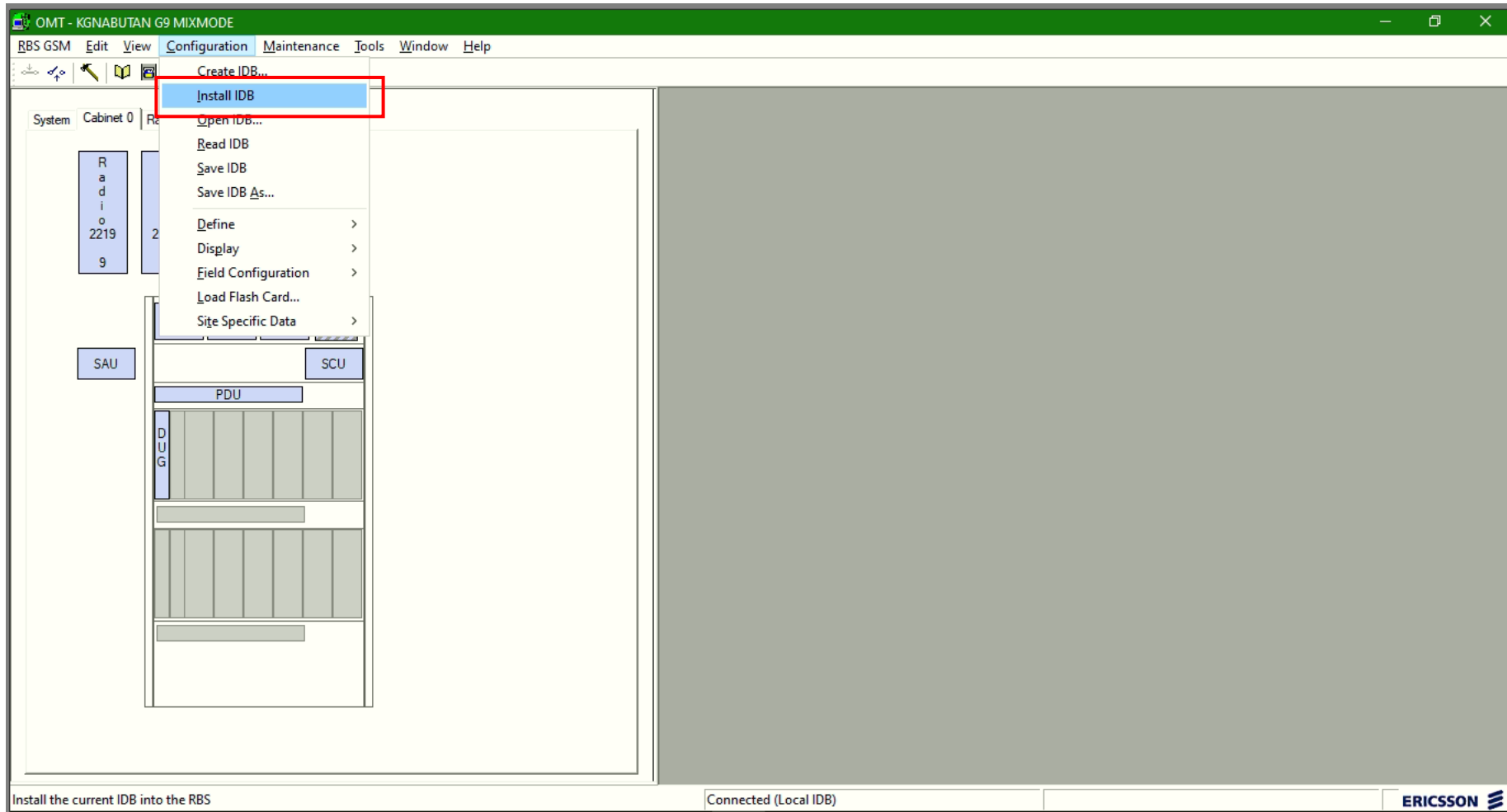
21

save idb , configuration , Save IDB as





The screenshot displays the Ericsson OMT (Operation and Maintenance Terminal) software interface. The window title is "OMT - KGNABUTAN G9 MIXMODE". The menu bar includes "RBS GSM", "Edit", "View", "Configuration", "Maintenance", "Tools", "Window", and "Help". A toolbar with various icons is located below the menu bar. The main workspace is divided into two panes. The left pane, titled "Connect", shows a network diagram with the following components: three "Radio 2219 9" blocks, a "SAU" block, a "SCU" block, a "PDU" block, and a "DUG" block. The right pane is currently empty. At the bottom of the window, there is a status bar with the text "Connect the OMT and the RBS", "Local IDB", and the Ericsson logo.



The screenshot shows the Ericsson OMT (Operation and Maintenance Terminal) interface. The main window displays a configuration tree for 'System Cabinet 0' with components like Radio, SAU, SCU, PDU, and DUG. A dialog box titled 'OMT' is open, displaying a warning message: 'The RBS will do an automatic reset after the IDB has been installed.' Below this, it shows the 'IDB and HW Comparison Status' with three warnings: 'Warning \* RRU 2219 900 0 is defined in IDB but was not found in HW.', 'Warning \* RRU 2219 900 1 is defined in IDB but was not found in HW.', and 'Warning \* RRU 2219 900 2 is defined in IDB but was not found in HW.' It also lists 'OK' status for 'Number of DUG is 1.', 'Number of SCU is 1.', 'Number of SAU is 1.', and 'Number of PDU is 1.'. At the bottom of the dialog, it asks 'Do you really want to overwrite the IDB data in the RBS ?' with 'Yes' and 'No' buttons. The 'Yes' button is highlighted with a red box. The status bar at the bottom shows 'Ready', 'Connected (Local IDB)', and the Ericsson logo.

OMT - KGNABUTAN G9 MIXMODE

RBS GSM Edit View Configuration Maintenance Tools Window Help

System Cabinet 0 Radio Object

Radio 2219 9

Radio 2219 9

Radio 2219 9

FAN GRP FAN GRP FAN GRP FAN GRP

SAU SCU

PDU

DUG

OMT

? The RBS will do an automatic reset after the IDB has been installed.

IDB and HW Comparison Status:

Warning \* RRU 2219 900 0 is defined in IDB but was not found in HW.

Warning \* RRU 2219 900 1 is defined in IDB but was not found in HW.

Warning \* RRU 2219 900 2 is defined in IDB but was not found in HW.

OK \* Number of DUG is 1.

OK \* Number of SCU is 1.

OK \* Number of SAU is 1.

OK \* Number of PDU is 1.

Do you really want to overwrite the IDB data in the RBS ?

Yes No

Ready Connected (Local IDB) ERICSSON

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WAIT UNTIL FINISH

The screenshot shows the Ericsson OMT (Operation and Maintenance Terminal) software interface. The window title is "OMT - KGNABUTAN G9 MIXMODE". The menu bar includes "RBS GSM", "Edit", "View", "Configuration", "Maintenance", "Tools", "Window", and "Help". The toolbar contains icons for navigation and editing. The main workspace is divided into two panes. The left pane shows a network configuration diagram for "Cabinet 0" with tabs for "System", "Radio", and "Object". The diagram includes three "Radio 2219 9" blocks, a "SAU" block, four "FAN GRP" blocks (one with a hatched pattern), a "SCU" block, a "PDU" block, and a "DUG" block. The right pane is a large grey area. A modal dialog box titled "Install IDB" is open in the center, displaying "Resetting & reconnecting..." with a progress bar and a "Cancel" button. The status bar at the bottom shows "Resetting & reconnecting..." on the left, "Connected (Local IDB)" in the middle, and the "ERICSSON" logo on the right.

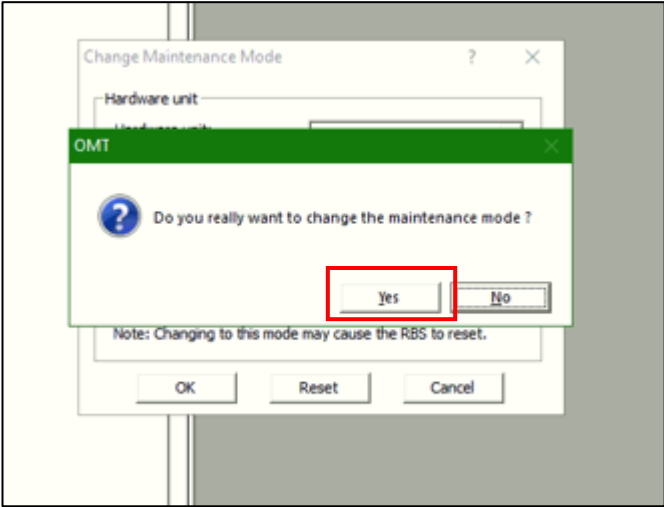
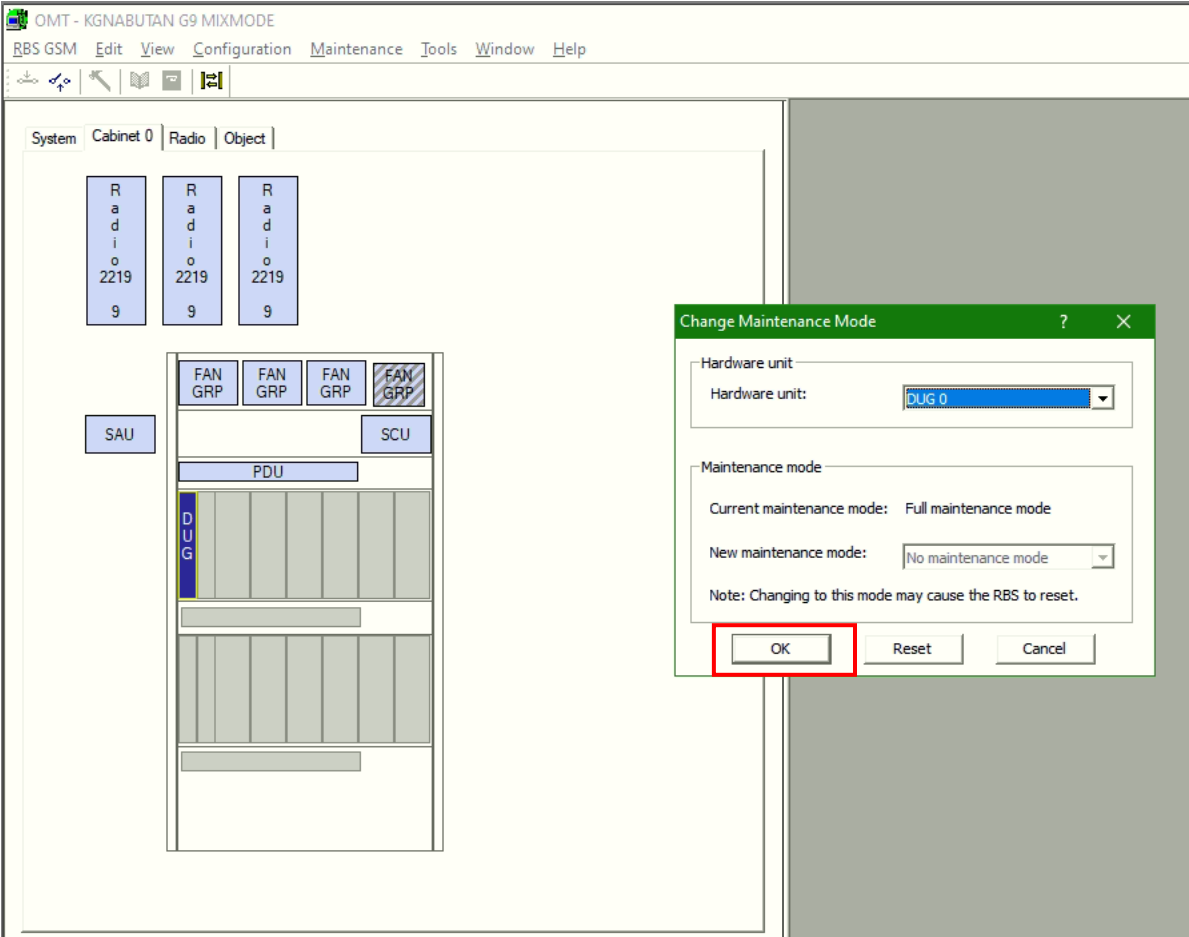
The screenshot displays the OMT (Operation and Maintenance Terminal) interface for a KGNABUTAN G9 MIXMODE system. The window title is "OMT - KGNABUTAN G9 MIXMODE" and the menu bar includes "RBS GSM", "Edit", "View", "Configuration", "Maintenance", "Tools", "Window", and "Help". A toolbar with various icons is visible below the menu bar. The main workspace is divided into two panes: a left pane showing a cabinet configuration and a right pane which is currently greyed out. The left pane has tabs for "System", "Cabinet 0", "Radio", and "Object". The "Radio" tab is active, showing a schematic of a radio cabinet. At the top of the cabinet are three "Radio 2219 9" units. Below them are four "FAN GRP" units, with the rightmost one shaded. Further down are "SAU" and "SCU" units, followed by a "PDU" unit. The bottom section of the cabinet contains two rows of "DUG" (Distributed Unit Group) slots, each with five slots. The status bar at the bottom shows "Ready" on the left, "Connected" in the middle, and the "ERICSSON" logo on the right.

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GO TO DUG , right click , change maintenance mode

The screenshot displays the OMT - KGNABUTAN G9 MIXMODE software interface. The window title is "OMT - KGNABUTAN G9 MIXMODE" and the menu bar includes "RBS GSM", "Edit", "View", "Configuration", "Maintenance", "Tools", "Window", and "Help". The main workspace shows a hierarchical tree view with "System", "Cabinet 0", "Radio", and "Object" tabs. Under "Radio", there are three "Radio 2219 9" components. Below them are "SAU", "FAN GRP", "SCU", and "PDU" components. A right-click context menu is open over a "DUG" component, with the "Change Maintenance Mode..." option highlighted in blue. The status bar at the bottom indicates "Changes the RBS Maintenance mode", "Connected", "DUG 0", and the ERICSSON logo.

Current maintenance mode ( dug still locked ) click ok for unlock - yes



The screenshot shows the Ericsson OMT (Operation and Maintenance Terminal) interface for an RBS GSM system. The window title is "OMT - KGNABUTAN G9 MIXMODE". The menu bar includes "RBS GSM", "Edit", "View", "Configuration", "Maintenance", "Tools", "Window", and "Help". The toolbar contains icons for navigation and configuration. The main area displays a hierarchical tree view of the system components, including "Radio", "SAU", "SCU", "PDU", and "DUG". A context menu is open over the "DUG" component, with the "Reset" option highlighted. The status bar at the bottom shows "Reset", "Connected", "DUG 0", and the Ericsson logo.



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After reset , GO TO rru , right click , press monitor VSWR , if can read vswr means all ok , ASK GSC to proceed integration 2G

The screenshot displays the OMT - KGNABUTAN G9 MIXMODE interface. The main window shows a configuration tree with 'Radio 2219 9' selected and highlighted with a red box. Below the tree are components like SAU, FAN GRP, SCU, PDU, and DUG. An inset window on the right shows a yellow banner with the text 'ALL CONFIGURATION DONE , PLS ASK GSC TO PROCEED'. At the bottom of the inset window are 'Stop Monitor' and 'Show Setup' buttons. The status bar at the bottom indicates 'Ready', 'Connected', 'Radio 2219 1', and the ERICSSON logo.



KEEP

CALM

AND SAY

ALHAMDULILLAH

*Prof Tahir*