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# COMMISSIONING : NOKIA FLEXI EDGE BTS

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## Requirements

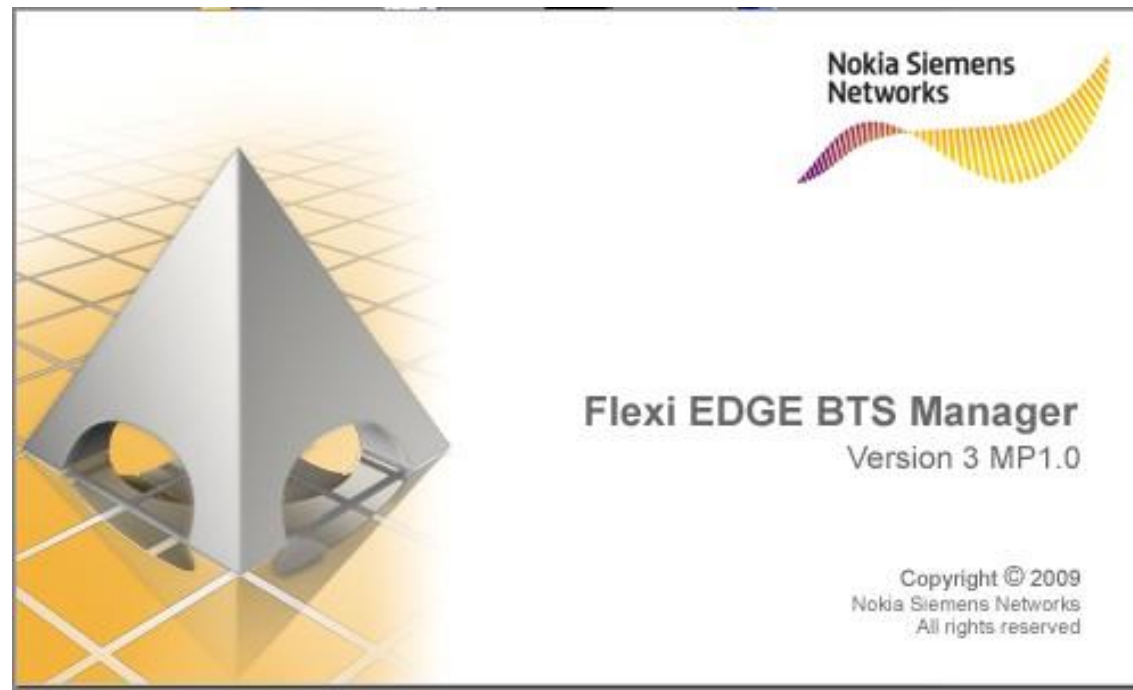
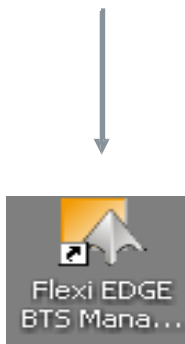
**Software :** Nokia Flexi EDGE BTS Manager

**Hardware :** Login cable ( Ethernet cable )

**Documents :** Abis Plan

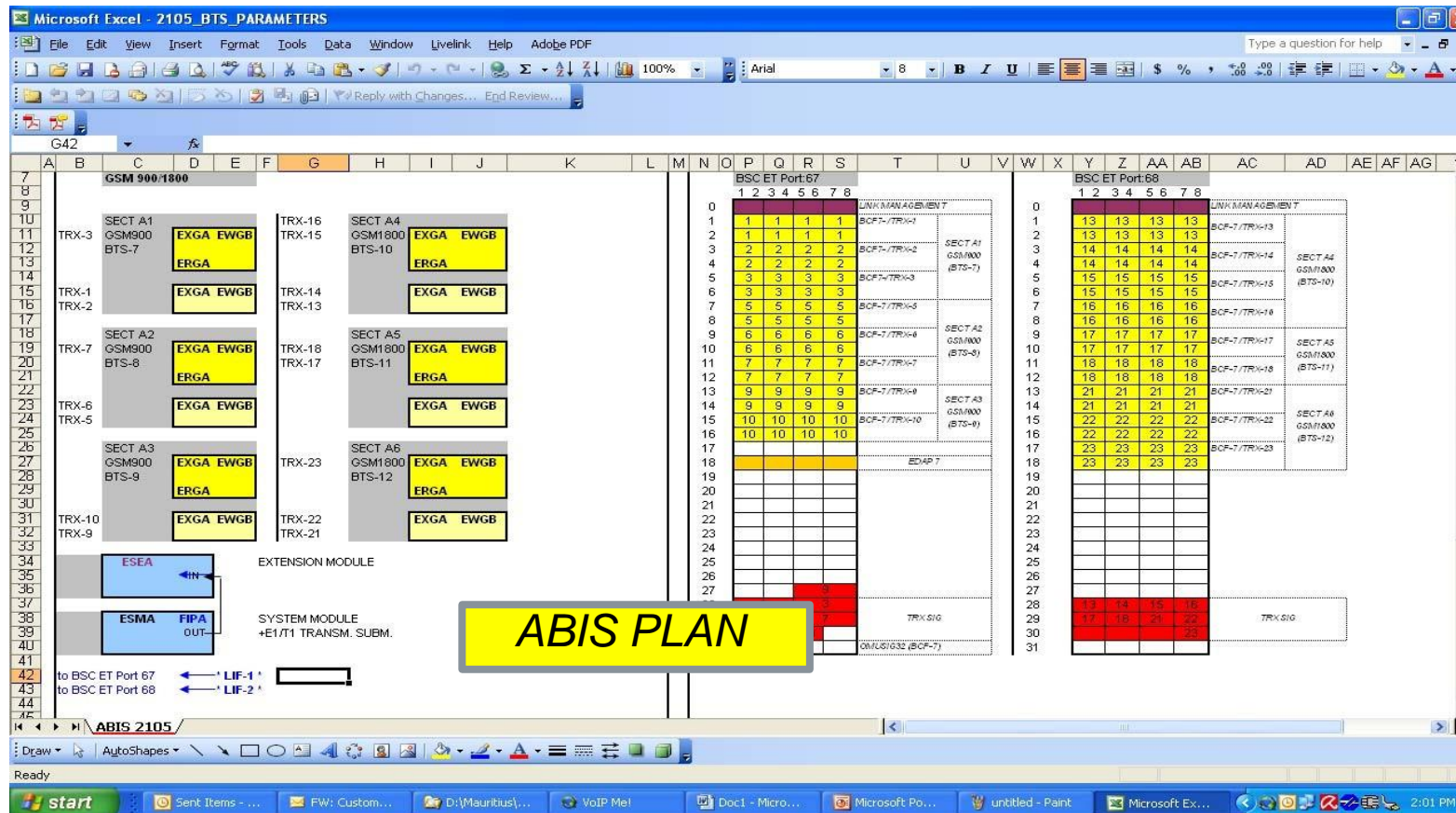
# Login

Ensure that you have the correct BTS Manager as per the BSC software installed. Double click on BTS manager icon to start application.



# Required documents:

Ensure that you have the latest updated Abis plan for the specific BTS site you will commission



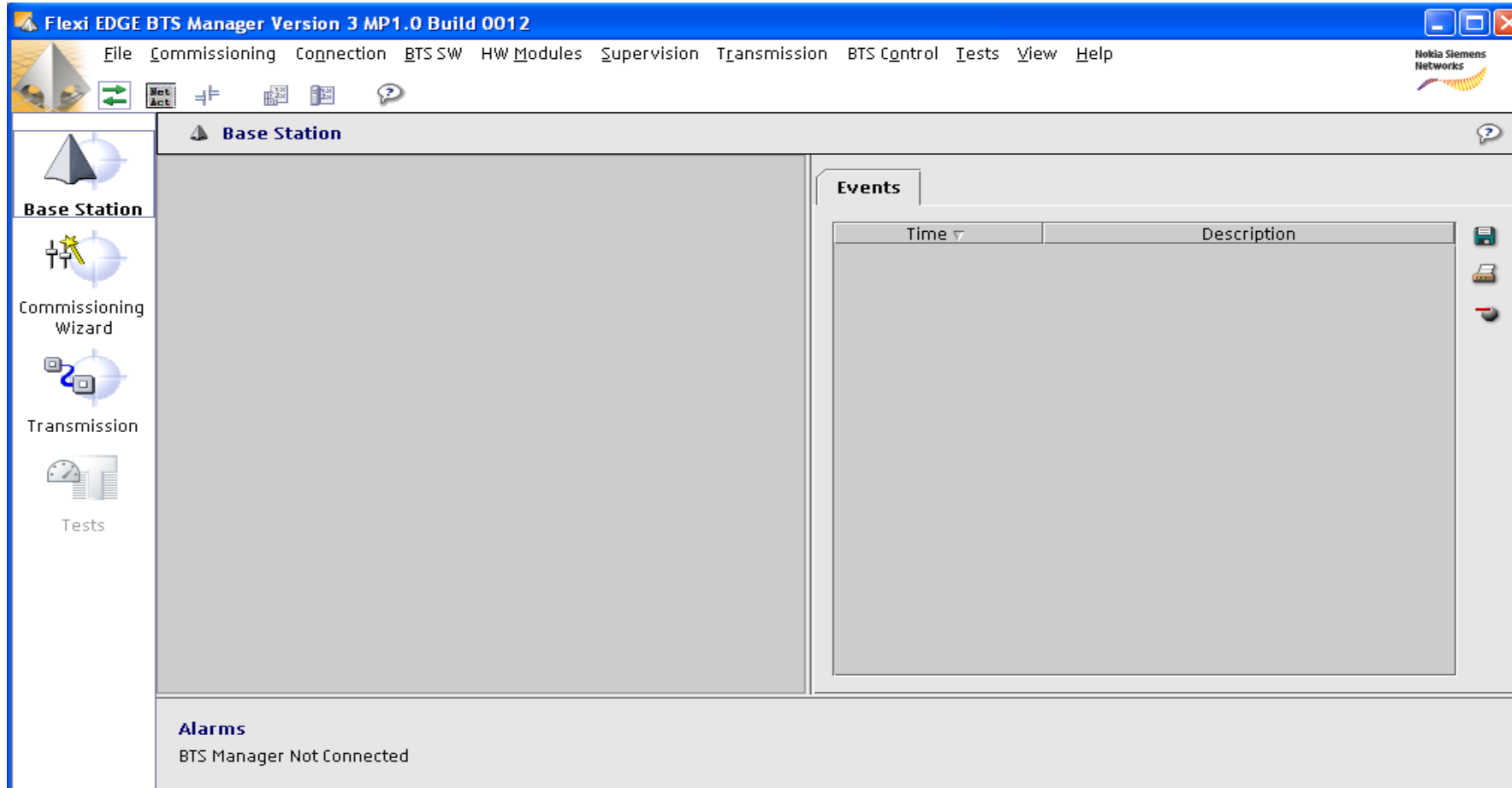
The screenshot displays an Excel spreadsheet titled "Microsoft Excel - 2105\_BTS\_PARAMETERS". The spreadsheet is organized into columns for different components of a BTS site:

- Columns A-M:** GSM 900/1800 parameters, including sectors (SECT A1-A6) and trunks (TRX-1 to TRX-10). Each sector/trunk entry includes fields for "EXGA", "EWGB", and "ERGA".
- Columns N-S:** BSC ET Port 67 parameters, including a table with columns 1-8 and rows 0-16, and a "LINK MANAGEMENT" section.
- Columns T-V:** BSC ET Port 68 parameters, including a table with columns 1-8 and rows 0-16, and a "LINK MANAGEMENT" section.
- Columns W-X:** Extension and system modules, including "ESEA" (EXTENSION MODULE) and "ESMA" (SYSTEM MODULE +E1/T1 TRANSM. SUBM.).
- Columns Y-AG:** Additional parameters and connections, including "LIF-1" and "LIF-2" connections to BSC ET ports.

A yellow box with the text "ABIS PLAN" is overlaid on the spreadsheet, indicating the document's purpose.

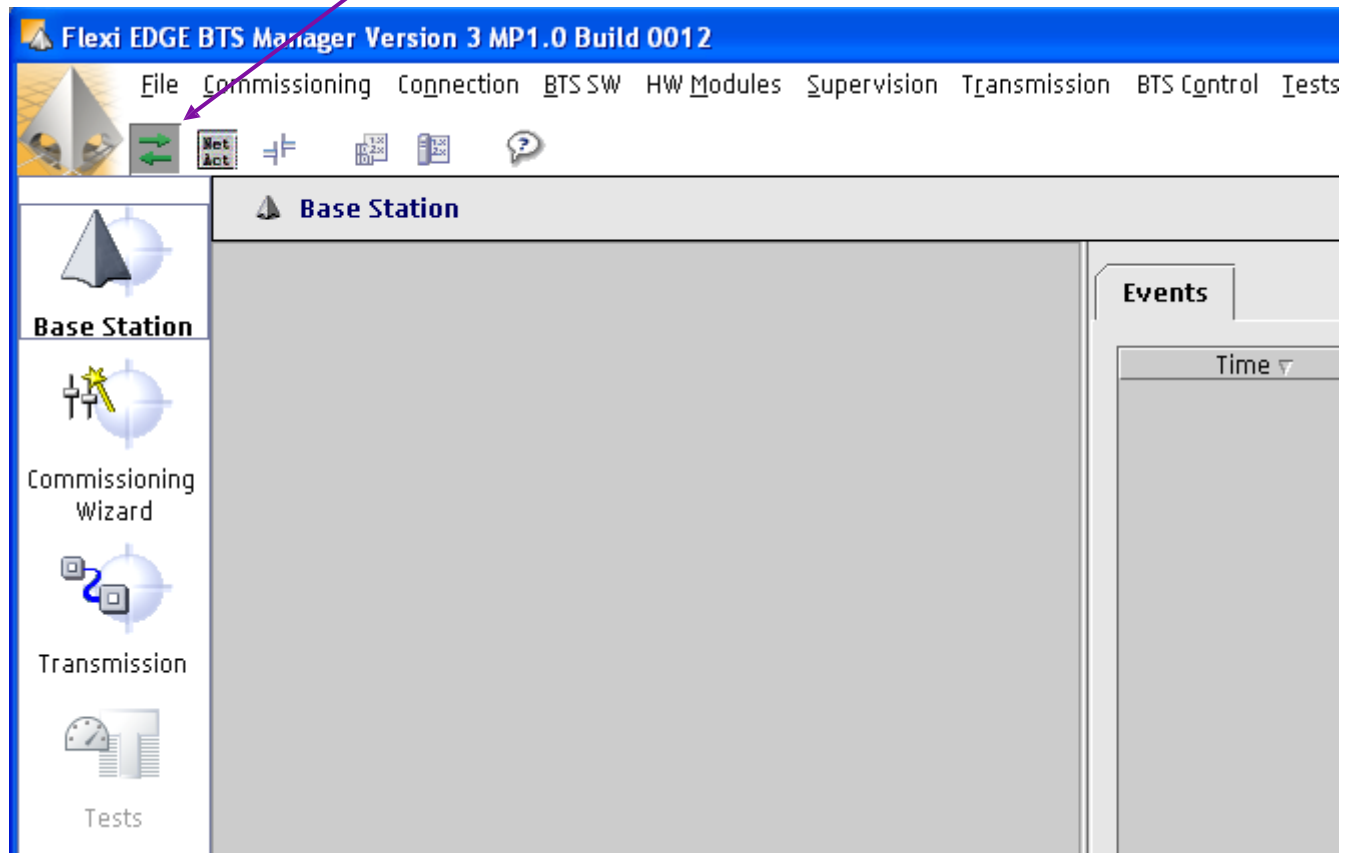
# Login

Wait until BTS Manager has started up complete



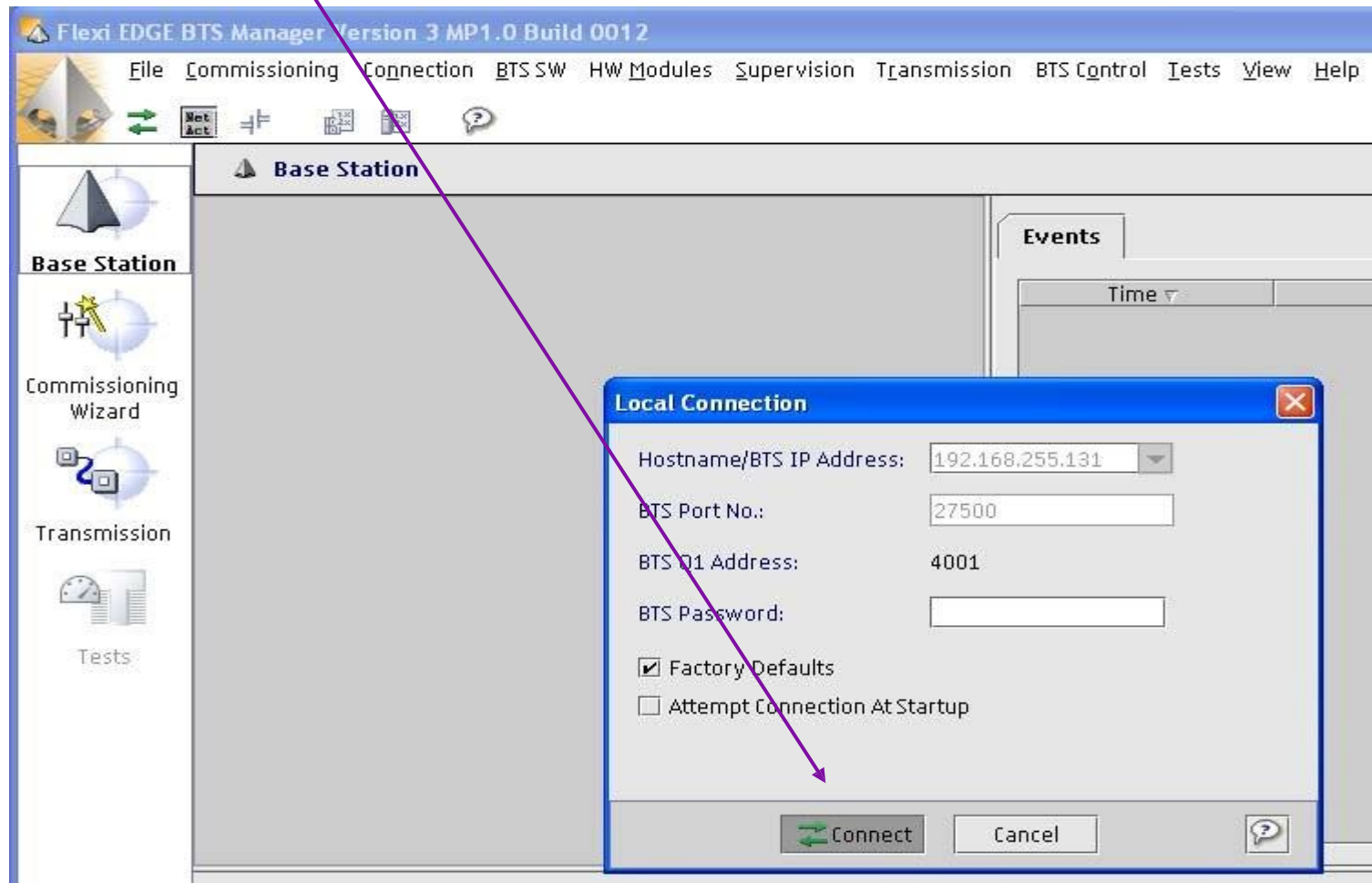
# Login

Click on the Green Arrows for local login



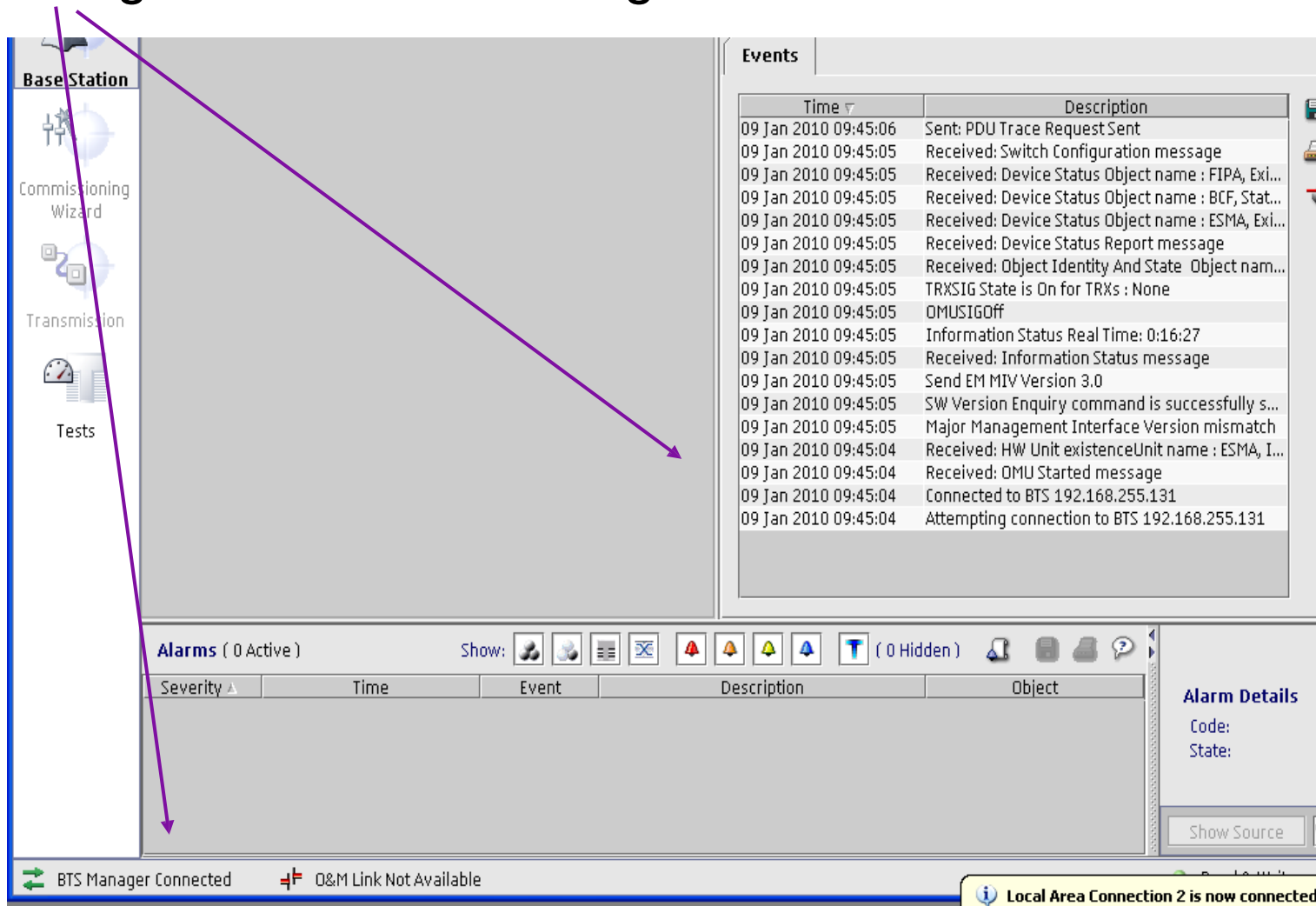
# Login

Click on Connect



# Login

BTS Manager is now connecting to BTS



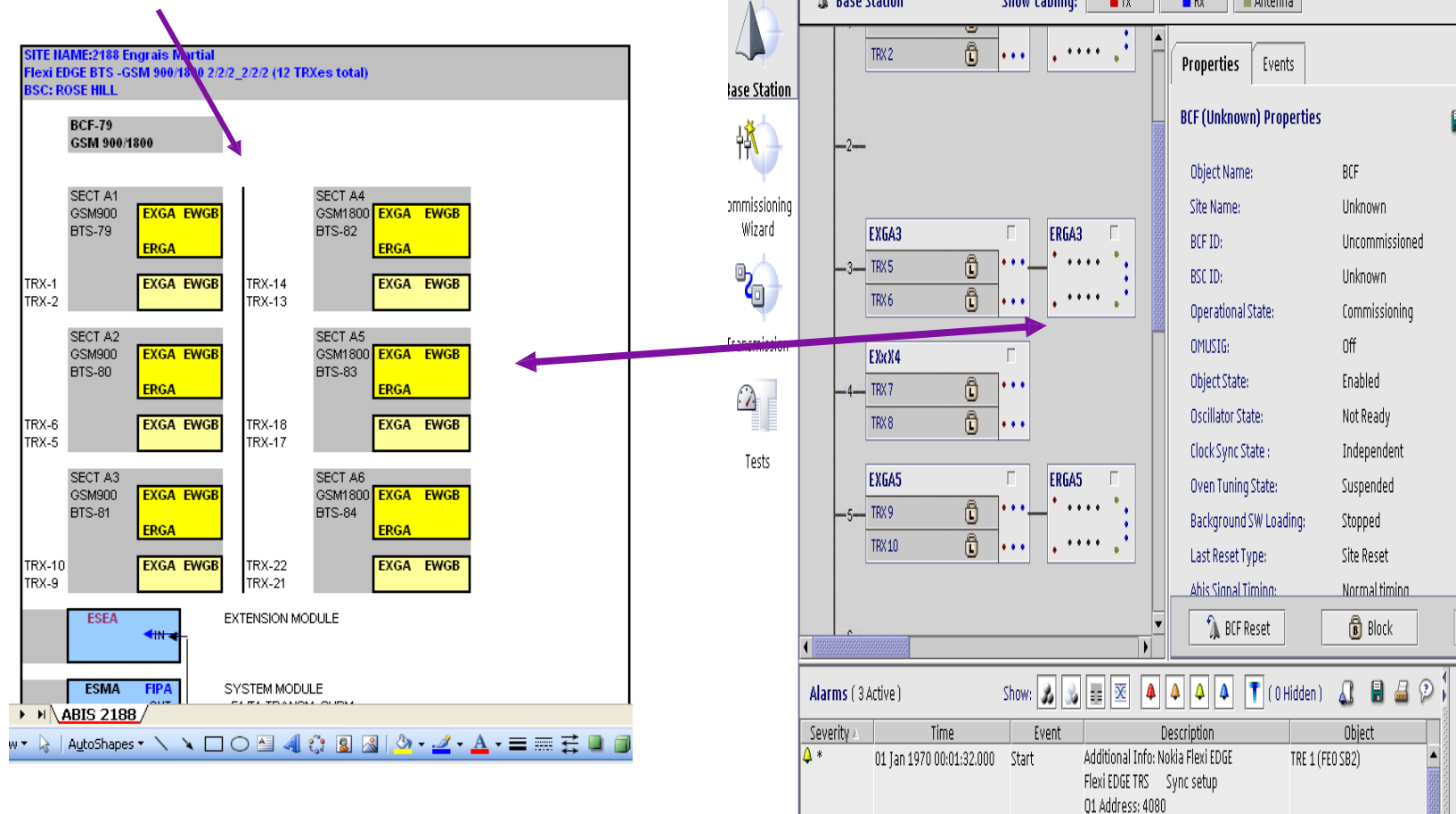
The screenshot displays the BTS Manager software interface. On the left, there is a navigation pane with options: Base Station, Commissioning Wizard, Transmission, and Tests. The main area is divided into two panes: 'Events' and 'Alarms (0 Active)'. The 'Events' pane shows a list of system events with columns for Time and Description. The 'Alarms' pane is currently empty. At the bottom, a status bar shows 'BTS Manager Connected' with a green arrow icon, 'Q&M Link Not Available' with a red flag icon, and a system notification 'Local Area Connection 2 is now connected'.

Time	Description
09 Jan 2010 09:45:06	Sent: PDU Trace Request Sent
09 Jan 2010 09:45:05	Received: Switch Configuration message
09 Jan 2010 09:45:05	Received: Device Status Object name : FIPA, Exi...
09 Jan 2010 09:45:05	Received: Device Status Object name : BCF, Stat...
09 Jan 2010 09:45:05	Received: Device Status Object name : ESMA, Exi...
09 Jan 2010 09:45:05	Received: Device Status Report message
09 Jan 2010 09:45:05	Received: Object Identity And State Object nam...
09 Jan 2010 09:45:05	TRXSIG State is On for TRxs : None
09 Jan 2010 09:45:05	OMUSIGOff
09 Jan 2010 09:45:05	Information Status Real Time: 0:16:27
09 Jan 2010 09:45:05	Received: Information Status message
09 Jan 2010 09:45:05	Send EM MIV Version 3.0
09 Jan 2010 09:45:05	SW Version Enquiry command is successfully s...
09 Jan 2010 09:45:05	Major Management Interface Version mismatch
09 Jan 2010 09:45:04	Received: HW Unit existenceUnit name : ESMA, I...
09 Jan 2010 09:45:04	Received: OMU Started message
09 Jan 2010 09:45:04	Connected to BTS 192.168.255.131
09 Jan 2010 09:45:04	Attempting connection to BTS 192.168.255.131



# Verify all TRX's are detected by BTS

Take Abis plan and verify  
All TRX's and Sectors are seen



The image displays two software interfaces used for verifying TRX detection by a BTS. On the left is the 'ABIS 2188' plan, and on the right is the 'Base Station' configuration window.

**ABIS 2188 Plan (Left):**

- SITE NAME:** 2188 Engrais Martial
- Flexi EDGE BTS - GSM 900/1800 2/2/2\_2/2/2 (12 TRXes total)**
- BSC:** ROSE HILL
- BCF-79 GSM 900/1800** (indicated by a purple arrow)
- Sectors:** SECT A1, SECT A2, SECT A3, SECT A4, SECT A5, SECT A6. Each sector contains EXGA, EWGB, and ERGA TRXs.
- TRXs:** TRX-1, TRX-2, TRX-5, TRX-6, TRX-9, TRX-10, TRX-13, TRX-14, TRX-17, TRX-18, TRX-21, TRX-22.
- Modules:** ESEA (EXTENSION MODULE), ESMA, FIPA (SYSTEM MODULE).

**Base Station Configuration (Right):**

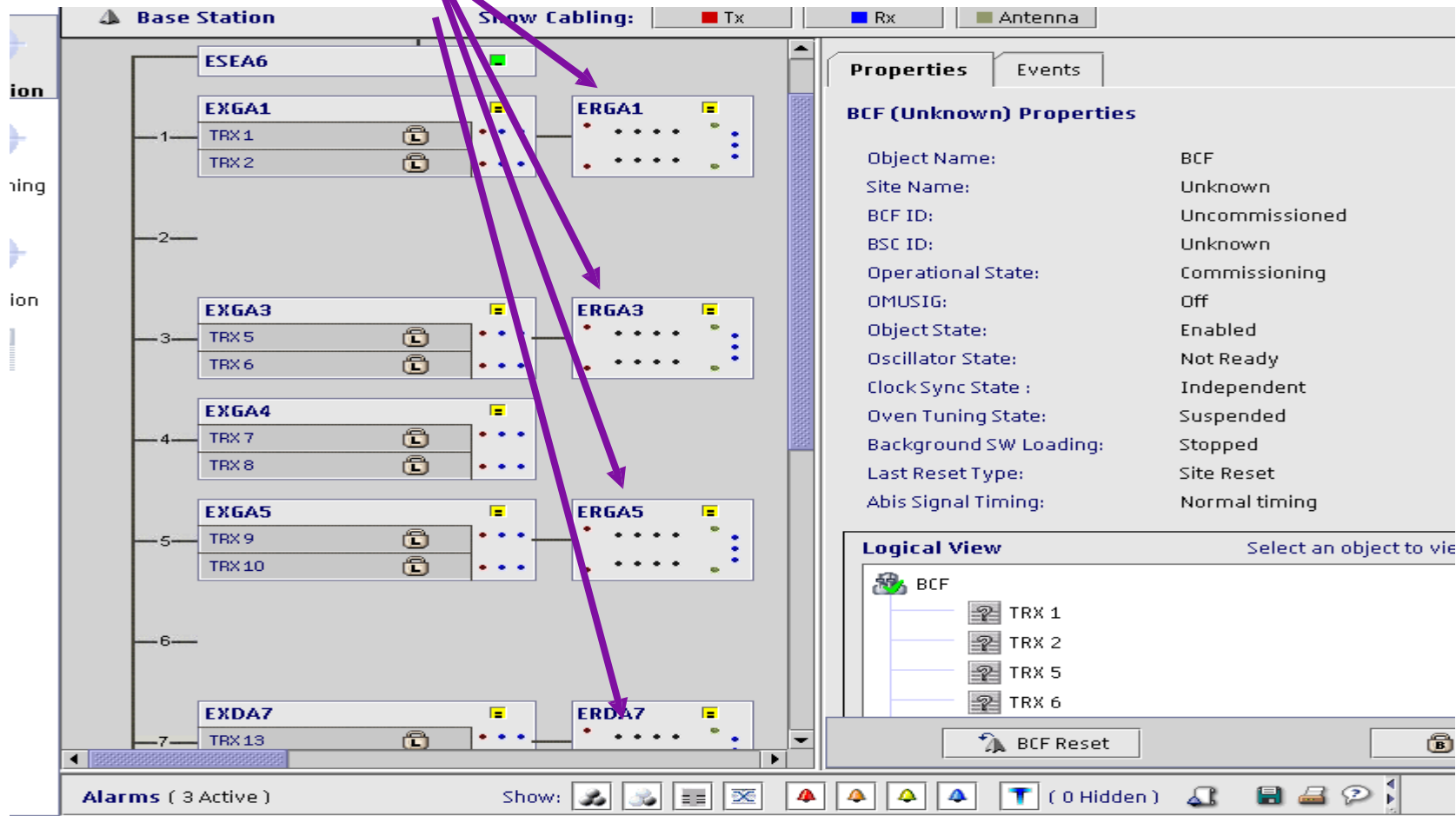
- Base Station:** BCF (Unknown) Properties
- Object Name:** BCF
- Site Name:** Unknown
- BCF ID:** Unknown
- BSC ID:** Unknown
- Operational State:** Commissioning
- Object State:** Enabled
- Oscillator State:** Not Ready
- Clock Sync State:** Independent
- Oven Tuning State:** Suspended
- Background SW Loading:** Stopped
- Last Reset Type:** Site Reset
- Abis Signal Timing:** Normal H/min

**Alarms (3 Active):**

Severity	Time	Event	Description	Object
Warning	01 Jan 1970 00:01:32.000	Start	Additional Info: Nokia Flexi EDGE Flexi EDGE TRS Sync setup Q1 Address: 4080	TRE 1 (FE0 SB2)

# Verify All TRX's are detected by BTS

If 6 sector site then 6 duplexers must be seen



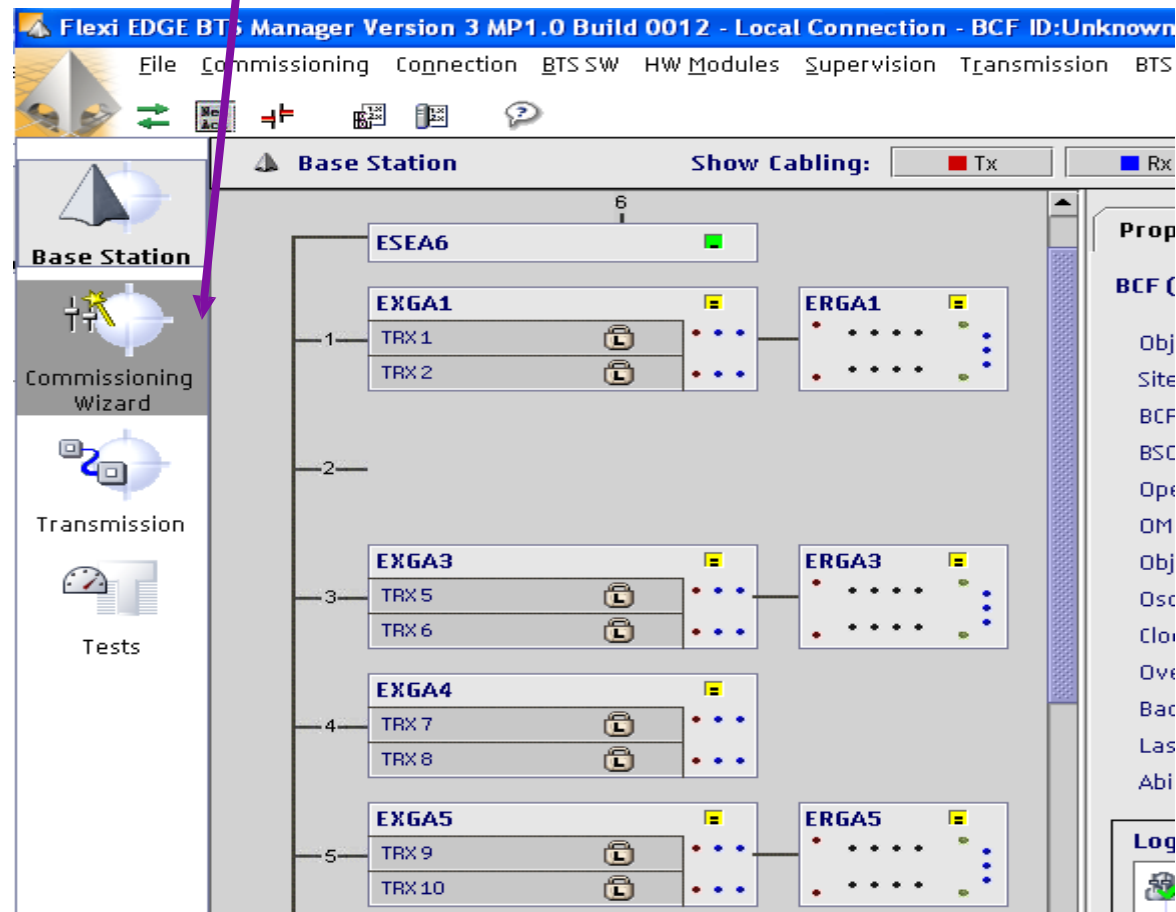
The screenshot shows a Base Station configuration window with the following components:

- Show Cabling:** Tx (red), Rx (blue), Antenna (green)
- Base Station:**
  - ESEA6** (Green status)
  - EXGA1** (TRX 1, TRX 2)
  - EXGA3** (TRX 5, TRX 6)
  - EXGA4** (TRX 7, TRX 8)
  - EXGA5** (TRX 9, TRX 10)
  - EXDA7** (TRX 13)
- Duplexers:** ERGA1, ERGA3, ERGA5, ERDA7
- Properties Panel:**
  - BCF (Unknown) Properties:**

Object Name:	BCF
Site Name:	Unknown
BCF ID:	Uncommissioned
BSC ID:	Unknown
Operational State:	Commissioning
OMUSIG:	Off
Object State:	Enabled
Oscillator State:	Not Ready
Clock Sync State:	Independent
Oven Tuning State:	Suspended
Background SW Loading:	Stopped
Last Reset Type:	Site Reset
Abis Signal Timing:	Normal timing
  - Logical View:** Select an object to view
    - BCF
      - TRX 1
      - TRX 2
      - TRX 5
      - TRX 6
- Alarms:** ( 3 Active )
- Show:** [Icons for various views]
- Buttons:** BCF Reset, [B]

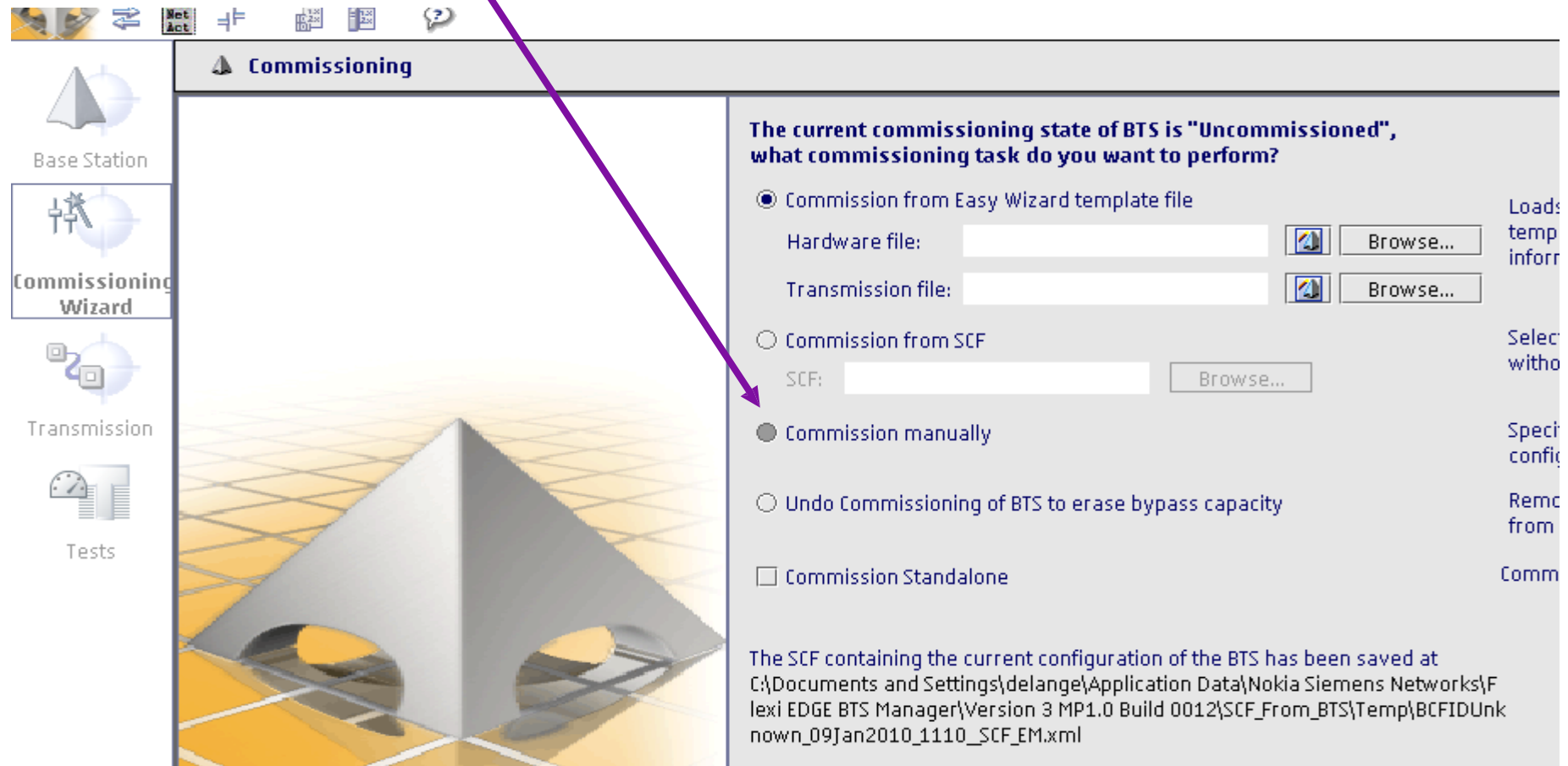
# Commissioning BTS

Click on Commissioning Wizard to start the commissioning



# Commissioning BTS

Click on Commission manually



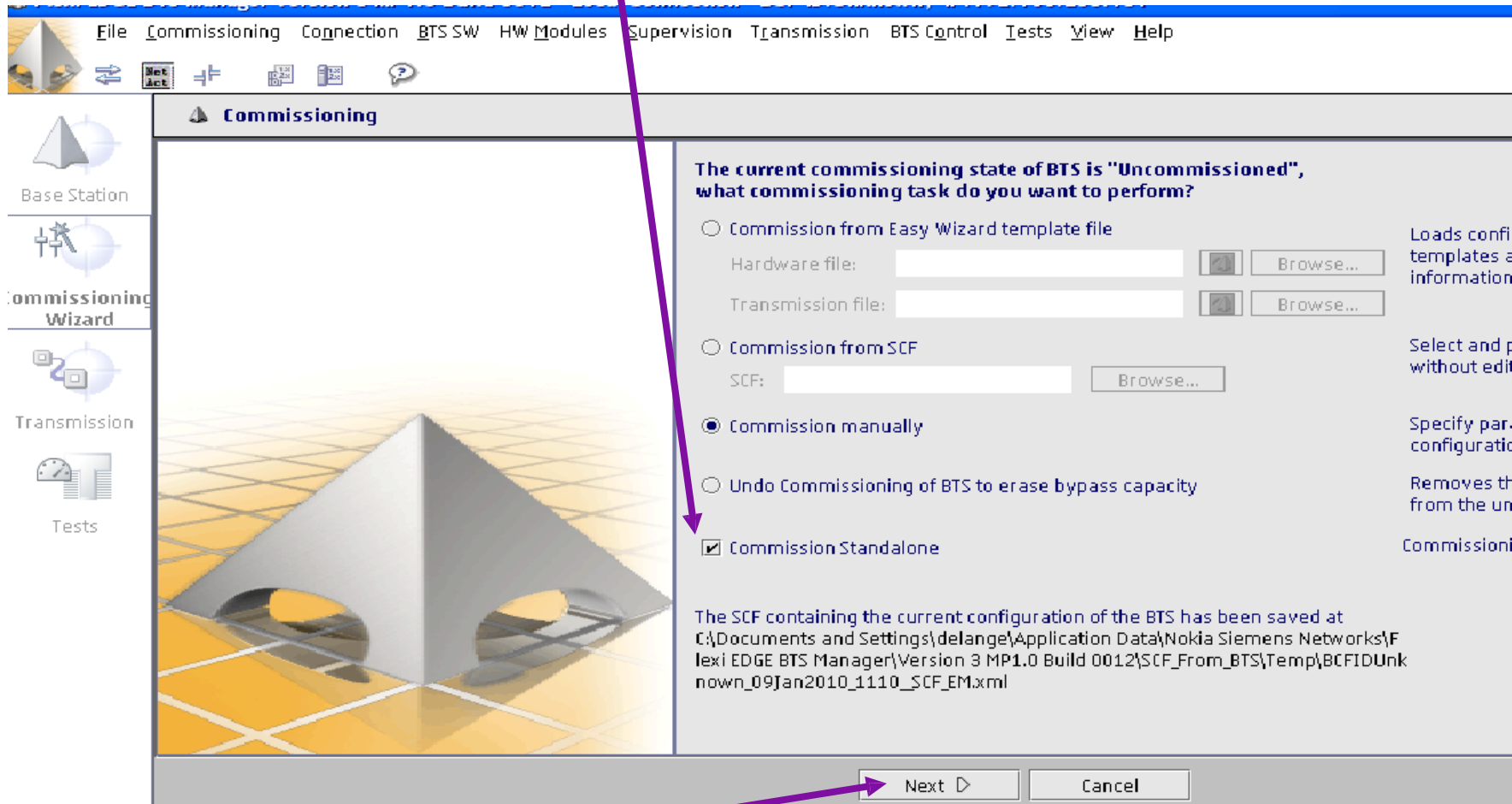
The screenshot shows the 'Commissioning Wizard' window. The left sidebar contains icons for 'Base Station', 'Commissioning Wizard' (highlighted), 'Transmission', and 'Tests'. The main area displays the following options:

- Commission from Easy Wizard template file
  - Hardware file:
  - Transmission file:
- Commission from SCF
  - SCF:
- Commission manually
- Undo Commissioning of BTS to erase bypass capacity
- Commission Standalone

Below the options, a message states: "The SCF containing the current configuration of the BTS has been saved at C:\Documents and Settings\delange\Application Data\Nokia Siemens Networks\Flexi EDGE BTS Manager\Version 3 MP1.0 Build 0012\SCF\_From\_BTS\Temp\BCFIDUnkown\_09Jan2010\_1110\_SCF\_EM.xml"

# Commissioning BTS

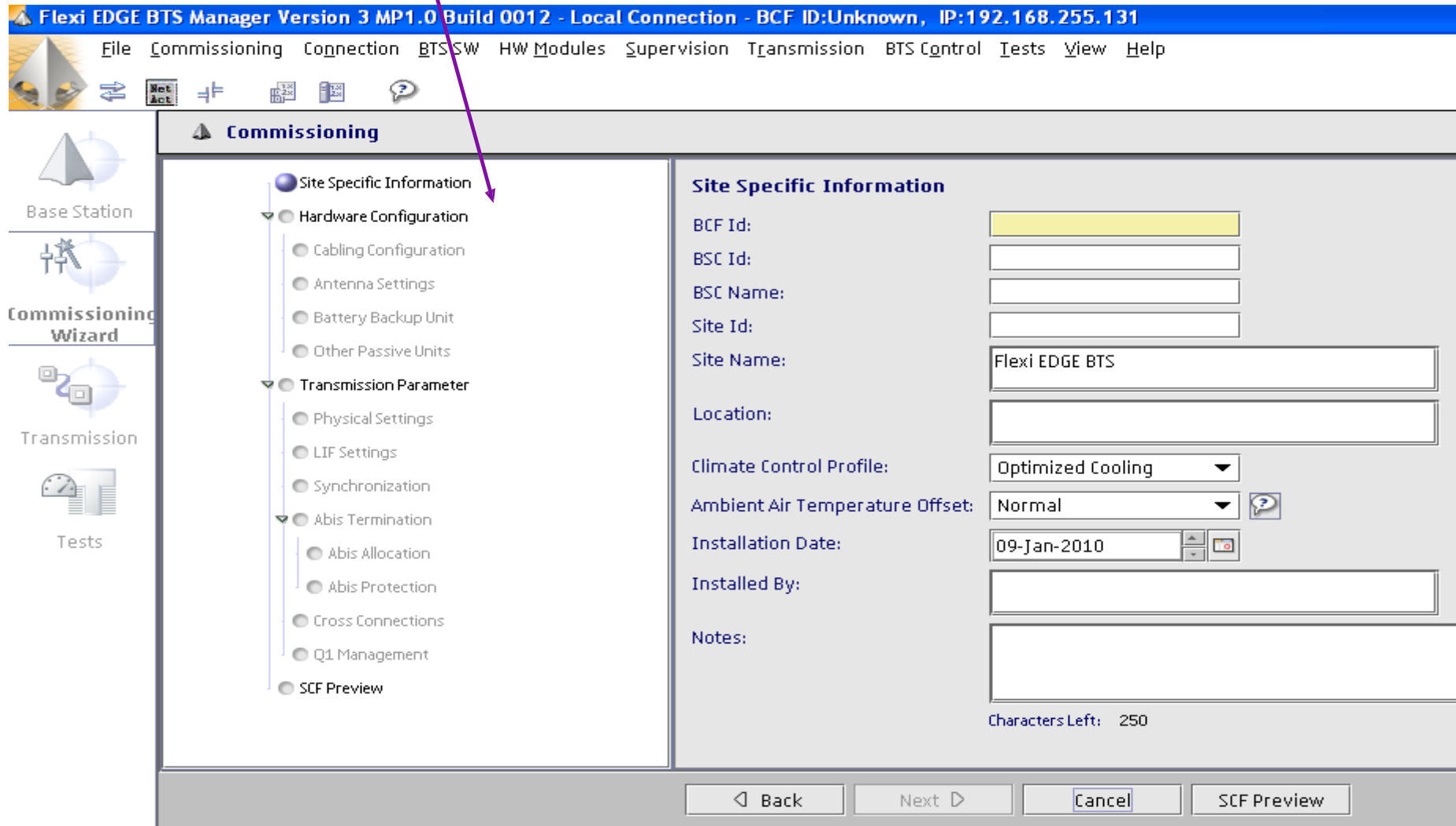
Click on Commission Standalone if no Transmission is available  
 But if Transmission is available just select Commission manually



*Click on next*

# Commissioning BTS

Following window comes up



The screenshot shows the 'Flexi EDGE BTS Manager' software interface. The title bar indicates 'Version 3 MP1.0 Build 0012 - Local Connection - BCF ID:Unknown, IP:192.168.255.131'. The menu bar includes 'File', 'Commissioning', 'Connection', 'BTS SW', 'HW Modules', 'Supervision', 'Transmission', 'BTS Control', 'Tests', 'View', and 'Help'. The toolbar contains icons for 'Net Act', a search icon, and a help icon. The left sidebar shows navigation options: 'Base Station', 'Commissioning Wizard' (selected), 'Transmission', and 'Tests'. The main window is titled 'Commissioning' and features a tree view on the left with the following categories:
 

- Site Specific Information (selected)
- Hardware Configuration
  - Cabling Configuration
  - Antenna Settings
  - Battery Backup Unit
  - Other Passive Units
- Transmission Parameter
  - Physical Settings
  - LIF Settings
  - Synchronization
- Abis Termination
  - Abis Allocation
  - Abis Protection
- Cross Connections
- Q1 Management
- SCF Preview

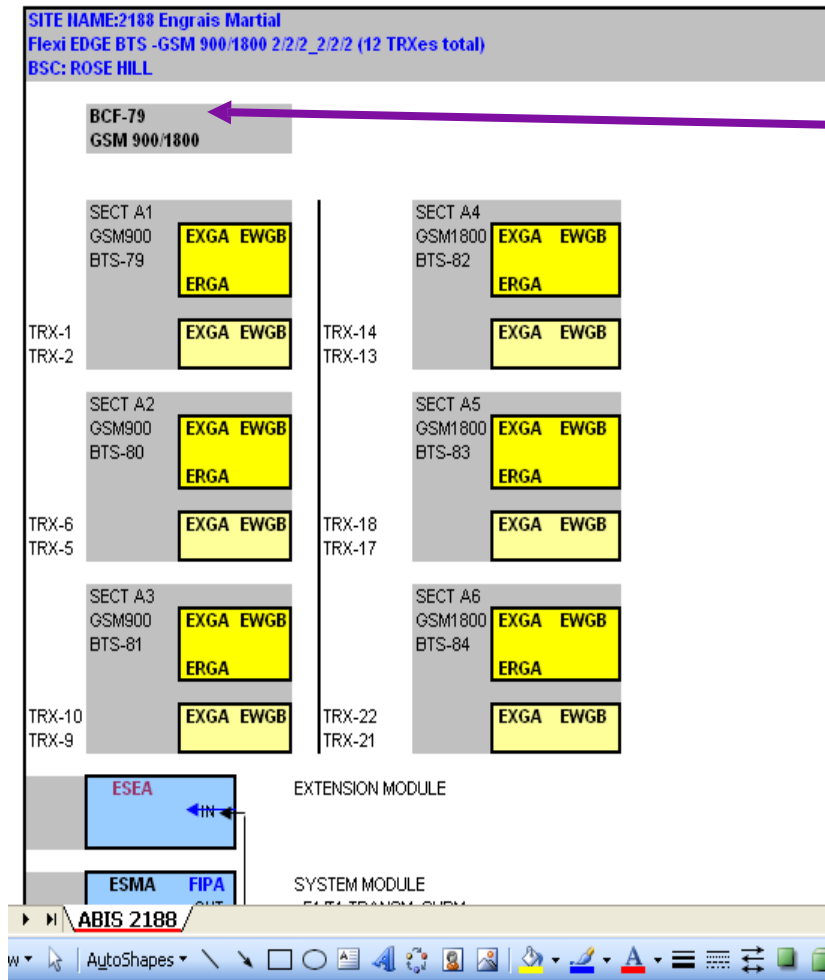
 The right pane displays the 'Site Specific Information' form with the following fields:
 

- BCF Id: (empty text box)
- BSC Id: (empty text box)
- BSC Name: (empty text box)
- Site Id: (empty text box)
- Site Name: Flexi EDGE BTS
- Location: (empty text box)
- Climate Control Profile: Optimized Cooling (dropdown menu)
- Ambient Air Temperature Offset: Normal (dropdown menu)
- Installation Date: 09-Jan-2010 (calendar icon)
- Installed By: (empty text box)
- Notes: (empty text area)

 At the bottom, there are four buttons: 'Back', 'Next', 'Cancel', and 'SCF Preview'. The text 'Characters Left: 250' is visible at the bottom right of the notes area. A purple arrow points from the text 'Following window comes up' to the 'Site Specific Information' category in the tree view.

# Commissioning BTS

**From the Abis plan of the specific site insert only the BCF ID**



Site Specific Information

BCF Id:

BSC Id:

BSC Name:

Site Id:

Site Name:

Location:

Climate Control Profile:

Ambient Air Temperature Offset:

Installation Date:

Installed By:



Notes:


Characters Left: 250

# Commissioning BTS

Any other field is Optional and is only for information and has no relevant on the working of the BTS

**Site Specific Information**

BCF Id:	<input type="text" value="79"/>
BSC Id:	<input type="text"/>
BSC Name:	<input type="text" value="ROSEHILL BSC"/>
Site Id:	<input type="text" value="2188"/>
Site Name:	<input type="text" value="Engrais Martial"/>
Location:	<input type="text" value="MAURITIUS"/>
Climate Control Profile:	<input type="text" value="Optimized Cooling"/>
Ambient Air Temperature Offset:	<input type="text" value="Normal"/> 
Installation Date:	<input type="text" value="09-Jan-2010"/> 
Installed By:	<input type="text"/>





# Commissioning BTS

Click on Next

**Site Specific Information**

BCF Id:

BSC Id:


BSC Name:


Site Id:

Site Name:

Location:

Climate Control Profile:

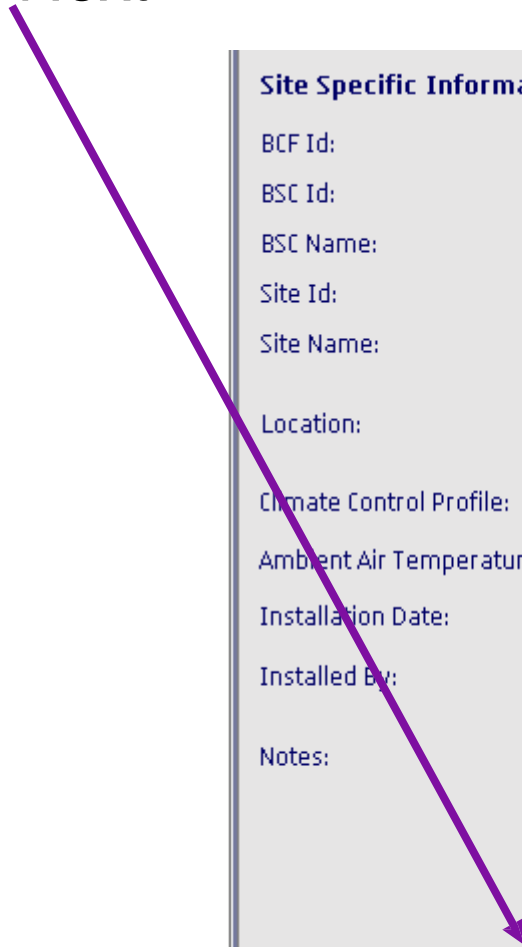
Ambient Air Temperature Offset:  

Installation Date:  

Installed By:

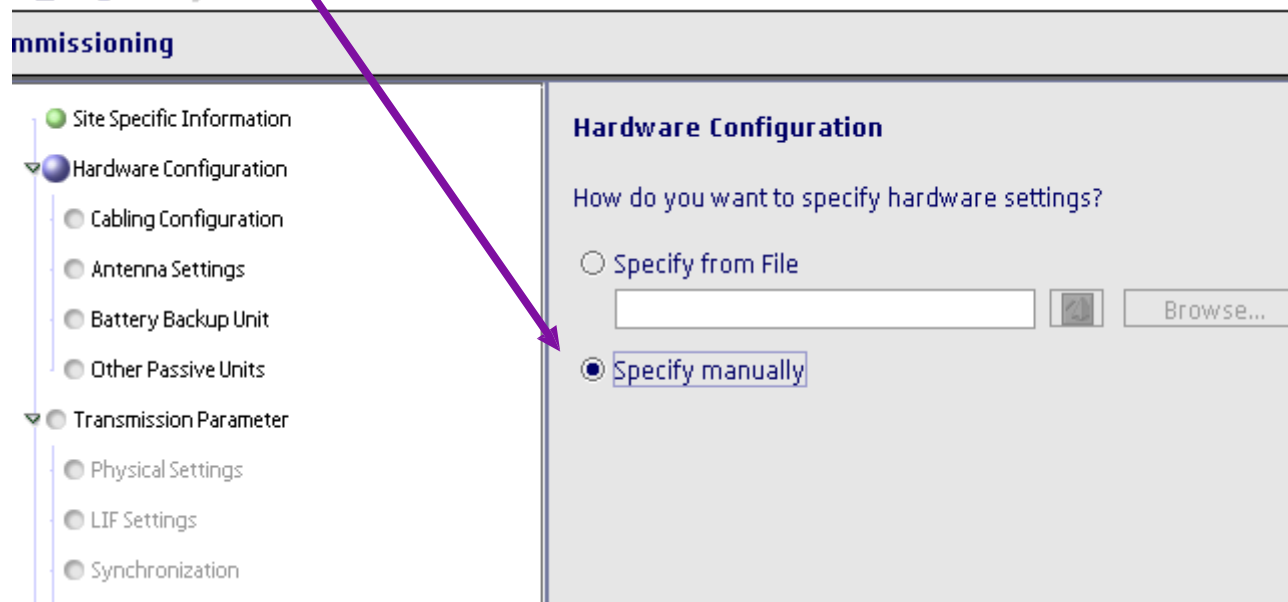
Notes:

Characters Left: 250



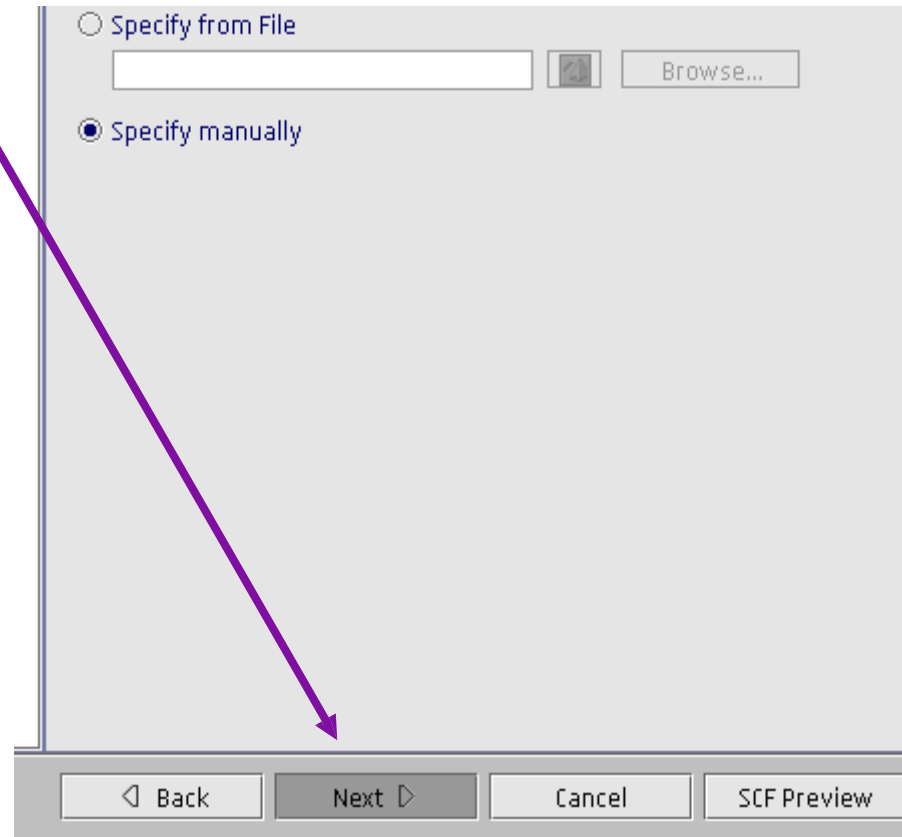
# Commissioning BTS

Click on Specify manually



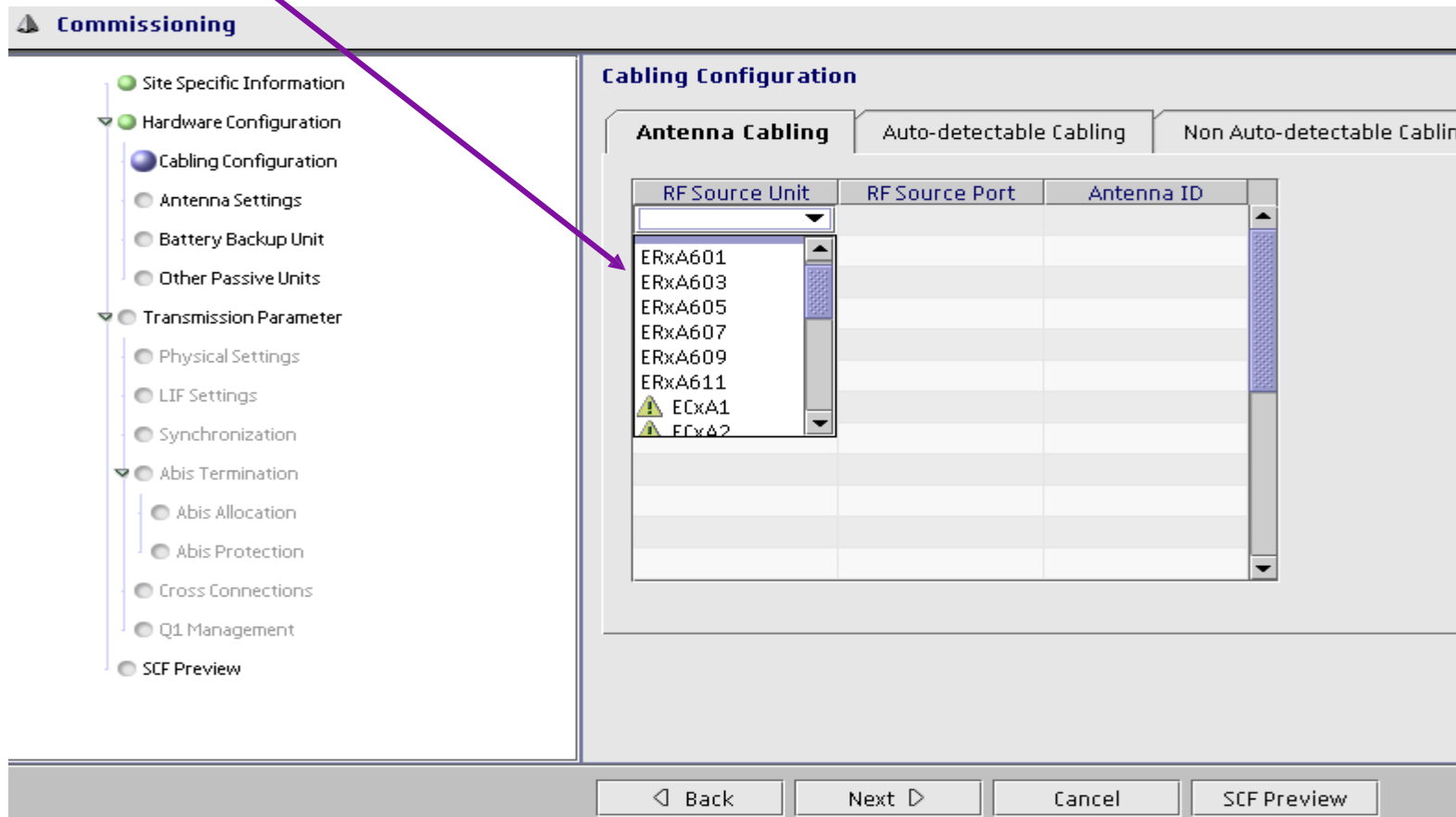
# Commissioning BTS

Click on Next



# Commissioning BTS

Specify the RF Source Unit according to the sectors of the site, if 6 sectors then 6 duplexers – ONLY SELECT UNITS THAT IS DETECTED



**Commissioning**

- Site Specific Information
- Hardware Configuration
  - Cabling Configuration
  - Antenna Settings
  - Battery Backup Unit
  - Other Passive Units
- Transmission Parameter
  - Physical Settings
  - LIF Settings
  - Synchronization
  - Abis Termination
    - Abis Allocation
    - Abis Protection
  - Cross Connections
  - Q1 Management
  - SCF Preview

**Cabling Configuration**

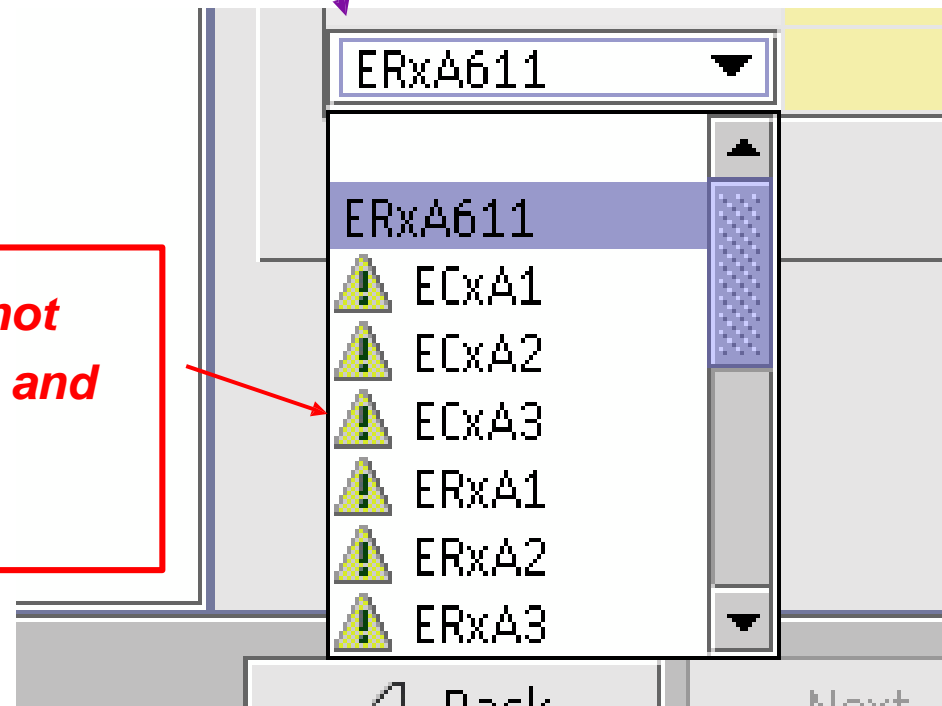
Antenna Cabling | Auto-detectable Cabling | Non Auto-detectable Cabling

RF Source Unit	RF Source Port	Antenna ID
ERxA601		
ERxA603		
ERxA605		
ERxA607		
ERxA609		
ERxA611		
⚠ ECxA1		
⚠ ECxA2		

Back | Next | Cancel | SCF Preview

# Commissioning BTS

Only select units that is detected and has no triangle in front



***These units are not Detected by BTS and CAN NOT BE ASSIGNED***

# Commissioning BTS

Assign Duplexer unit from first RF Source Unit to last unit detected

**Cabling Configuration**

Antenna Cabling    Auto-detectable Cabling    Non Auto-d

RF Source Unit	RF Source Port	Antenna ID
ERxA601		
<input type="text"/> <ul style="list-style-type: none"> <li>ERxA601</li> <li>ERxA603</li> <li>ERxA605</li> <li>ERxA607</li> <li>ERxA609</li> <li>ERxA611</li> <li>⚠ ECxA1</li> </ul>		

# Commissioning BTS

Select and assign all duplexer units, one duplexer unit for each antenna path – A-path and B-path

**Cabling Configuration**

Antenna Cabling | Auto-detectable Cabling | Non Auto-detectable Cabling

RF Source Unit	RF Source Port	Antenna ID
ERxA601		
ERxA601		
ERxA603		
ERxA603		
ERxA605		
ERxA605		
ERxA607		
ERxA607		
ERxA609		
ERxA609		
ERxA611		
ERxA611		

ERxA611

- ⚠ ECxA1
- ⚠ ECxA2
- ⚠ ECxA3
- ⚠ ERxA1
- ⚠ ERxA2
- ⚠ ERxA3

*ERxA601 is one complete sector*



# Commissioning BTS

Now start assigning the RF Source Ports, each duplexer has Ant A and Ant B

**Cabling Configuration**

Antenna Cabling    Auto-detectable Cabling    Non Auto-detectable Ca

RF Source Unit	RF Source Port	Antenna ID
ERxA601	<input type="text"/>	
ERxA601	<input type="text"/>	
ERxA603	AntA	
ERxA603	AntB	
ERxA605		
ERxA605		
ERxA607		
ERxA607		
ERxA609		
ERxA609		
ERxA611		
ERxA611		

◀ Back    Next ▶    Cancel    SCF Preview



# Commissioning BTS

Assign Ant B of duplexer

**Cabling Configuration**

Antenna Cabling    Auto-detectable Cabling    Non Auto-detectable Cabling

RF Source Unit	RF Source Port	Antenna ID
ERxA601	AntA	
ERxA601	<input type="text"/>	
ERxA603	<input type="text"/>	
ERxA603	AntB	
ERxA605		
ERxA605		
ERxA607		

# Commissioning BTS

Assign all the duplexer ports for all the duplexers detected

**Cabling Configuration**

Antenna Cabling    Auto-detectable

RF Source Unit	RF Source Port
ERxA601	AntA
ERxA601	AntB
ERxA603	AntA
ERxA603	AntB
ERxA605	AntA
ERxA605	AntB
ERxA607	AntA
ERxA607	AntB
ERxA609	AntA
ERxA609	AntB
ERxA611	AntA
ERxA611	AntB

# Commissioning BTS

Now assign a Antenna ID to the Antenna port selected starting from 1 and going down numerically

**Cabling Configuration**

Antenna Cabling    Auto-detectable Cabling    Non Auto-detectable

RF Source Unit	RF Source Port	Antenna ID
ERxA601	AntA	<input type="text"/>
ERxA601	AntB	<input type="text"/>
ERxA603	AntA	1
ERxA603	AntB	2
ERxA605	AntA	3
ERxA605	AntB	4
ERxA607	AntA	5
ERxA607	AntB	6
ERxA609	AntA	
ERxA609	AntB	
ERxA611	AntA	
ERxA611	AntB	

# Commissioning BTS

Assign Antenna ID numbers up to last duplexer port assigned

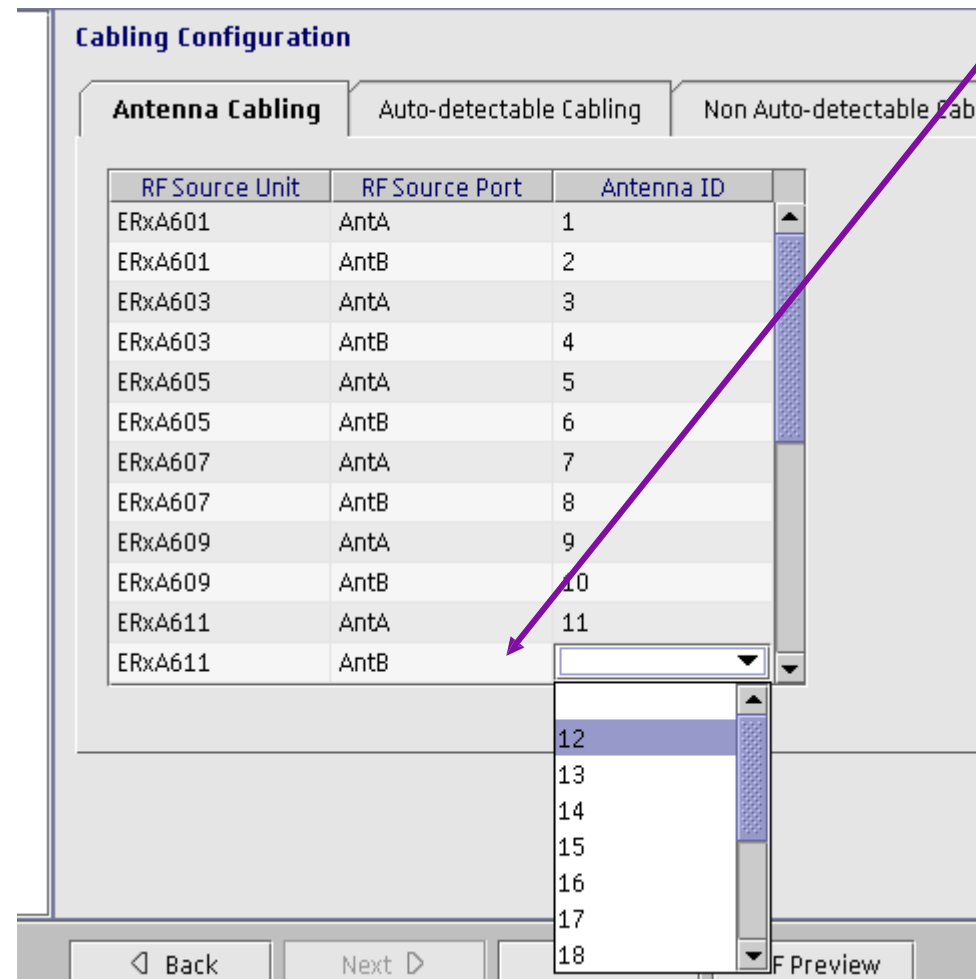
**Cabling Configuration**

Antenna Cabling    Auto-detectable Cabling    Non Auto-detectable Cabling

RF Source Unit	RF Source Port	Antenna ID
ERxA601	AntA	1
ERxA601	AntB	2
ERxA603	AntA	3
ERxA603	AntB	4
ERxA605	AntA	5
ERxA605	AntB	6
ERxA607	AntA	7
ERxA607	AntB	8
ERxA609	AntA	9
ERxA609	AntB	10
ERxA611	AntA	11
ERxA611	AntB	

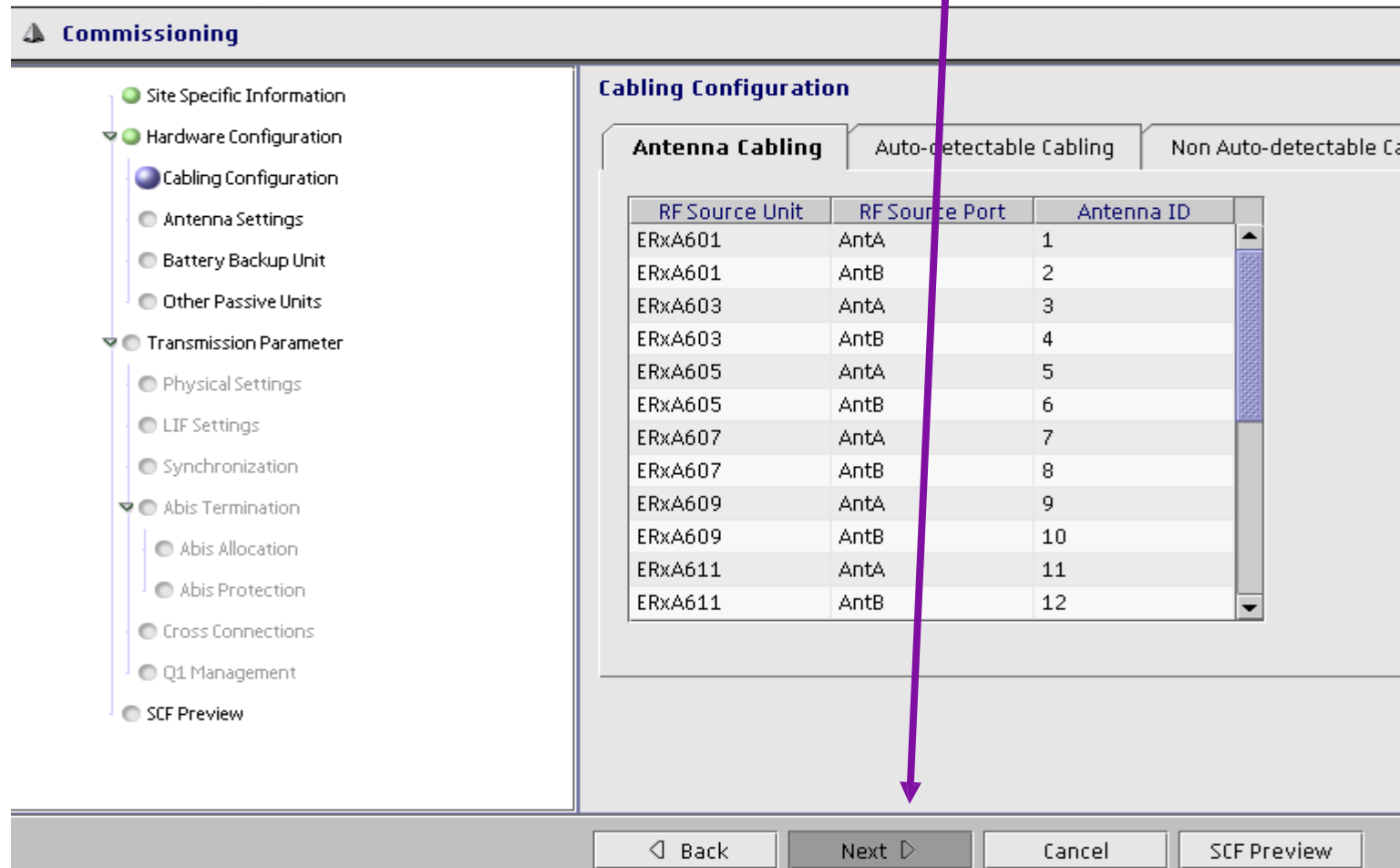
12  
13  
14  
15  
16  
17  
18

Back    Next    Preview



# Commissioning BTS

After assigning Antenna ID's, click on Next



**Commissioning**

- Site Specific Information
- Hardware Configuration
  - Cabling Configuration**
  - Antenna Settings
  - Battery Backup Unit
  - Other Passive Units
- Transmission Parameter
  - Physical Settings
  - LIF Settings
  - Synchronization
  - Abis Termination
    - Abis Allocation
    - Abis Protection
  - Cross Connections
  - Q1 Management
  - SCF Preview

**Cabling Configuration**

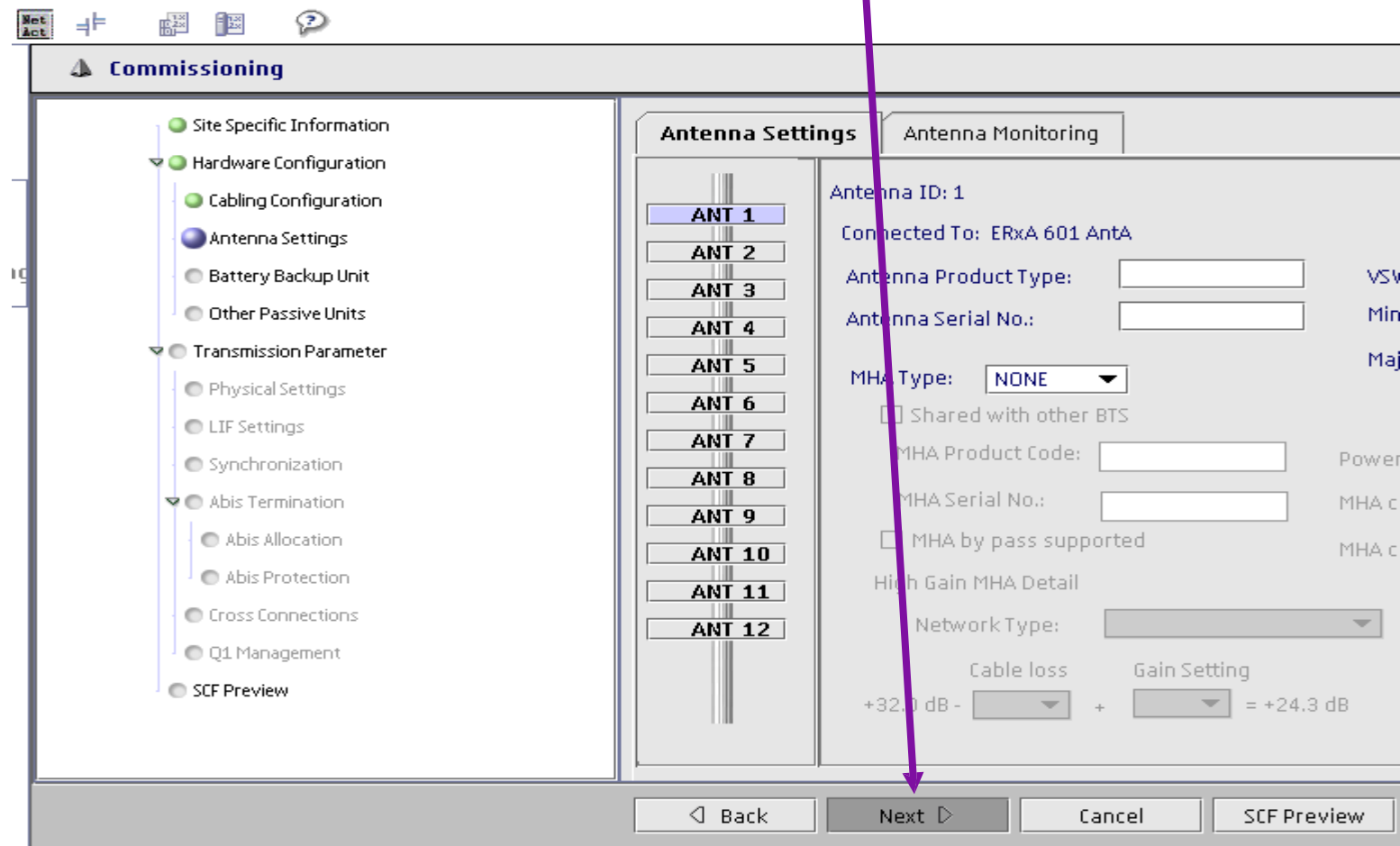
Antenna Cabling | Auto-detectable Cabling | Non Auto-detectable Ca

RF Source Unit	RF Source Port	Antenna ID
ERxA601	AntA	1
ERxA601	AntB	2
ERxA603	AntA	3
ERxA603	AntB	4
ERxA605	AntA	5
ERxA605	AntB	6
ERxA607	AntA	7
ERxA607	AntB	8
ERxA609	AntA	9
ERxA609	AntB	10
ERxA611	AntA	11
ERxA611	AntB	12

Navigation buttons: Back, Next, Cancel, SCF Preview

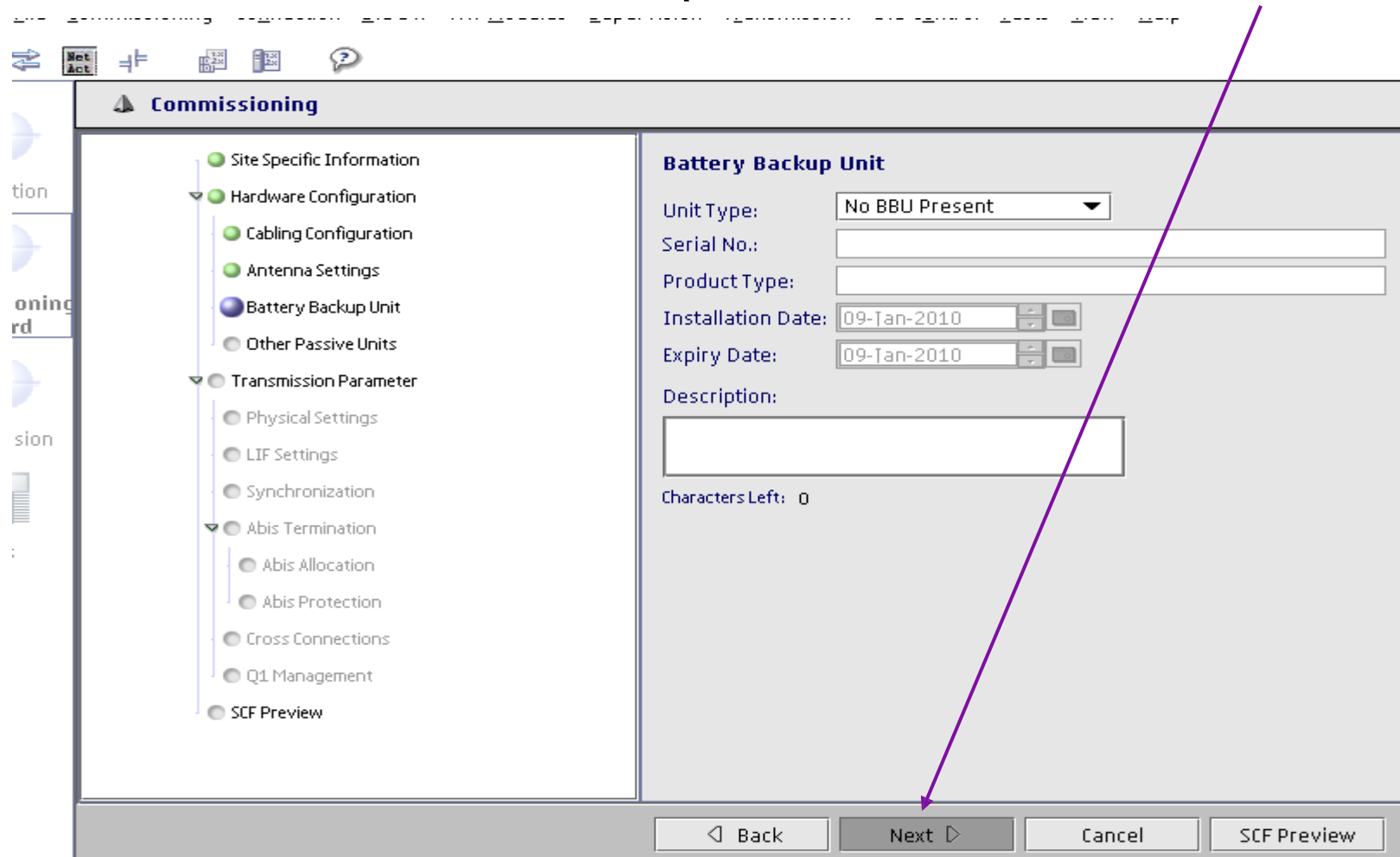
# Commissioning BTS

Antenna settings, if any type MHA is used this field will be completed. No MHA so then click Next



# Commissioning BTS

Battery Backup Units, if Nokia Siemens Networks BBU is used then this field needs to be completed. If none, then click next



The screenshot shows the 'Commissioning' software interface. On the left is a tree view with the following items:

- Site Specific Information
- Hardware Configuration
  - Cabling Configuration
  - Antenna Settings
  - Battery Backup Unit**
  - Other Passive Units
- Transmission Parameter
  - Physical Settings
  - LIF Settings
  - Synchronization
  - Abis Termination
    - Abis Allocation
    - Abis Protection
  - Cross Connections
  - Q1 Management
  - SCF Preview

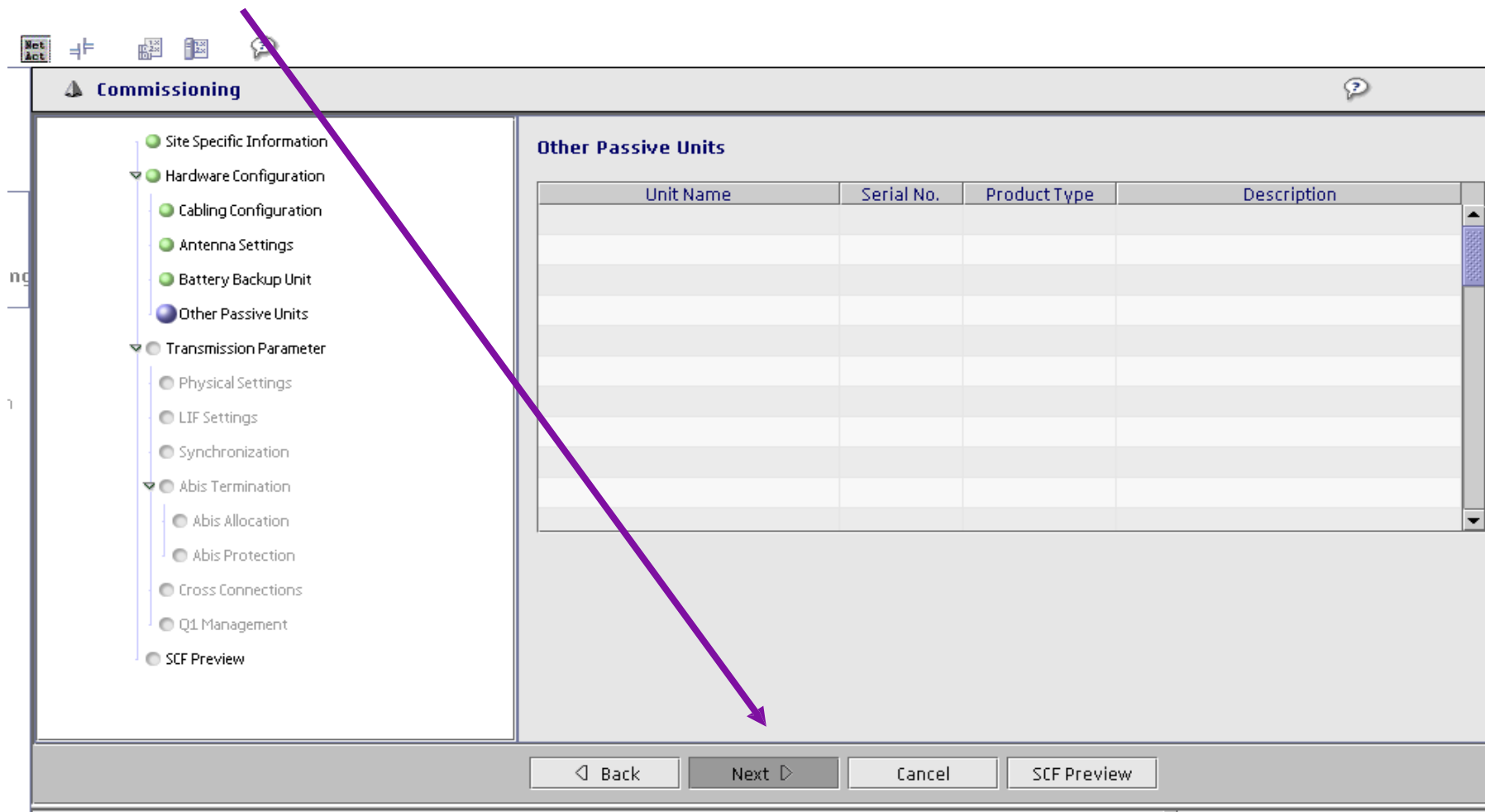
The main area is titled 'Battery Backup Unit' and contains the following fields:

- Unit Type: No BBU Present (dropdown menu)
- Serial No.: (text input field)
- Product Type: (text input field)
- Installation Date: 09-Jan-2010 (calendar picker)
- Expiry Date: 09-Jan-2010 (calendar picker)
- Description: (text input field)
- Characters Left: 0

At the bottom, there are four buttons: 'Back', 'Next', 'Cancel', and 'SCF Preview'. A purple arrow points from the top right towards the 'Next' button.

# Commissioning BTS

Other Passive Units – complete if other units to specify, if no click Next



The screenshot shows a software window titled "Commissioning". On the left is a tree view with the following items:

- Site Specific Information
- Hardware Configuration
  - Cabling Configuration
  - Antenna Settings
  - Battery Backup Unit
  - Other Passive Units**
- Transmission Parameter
  - Physical Settings
  - LIF Settings
  - Synchronization
  - Abis Termination
    - Abis Allocation
    - Abis Protection
  - Cross Connections
  - Q1 Management
  - SCF Preview

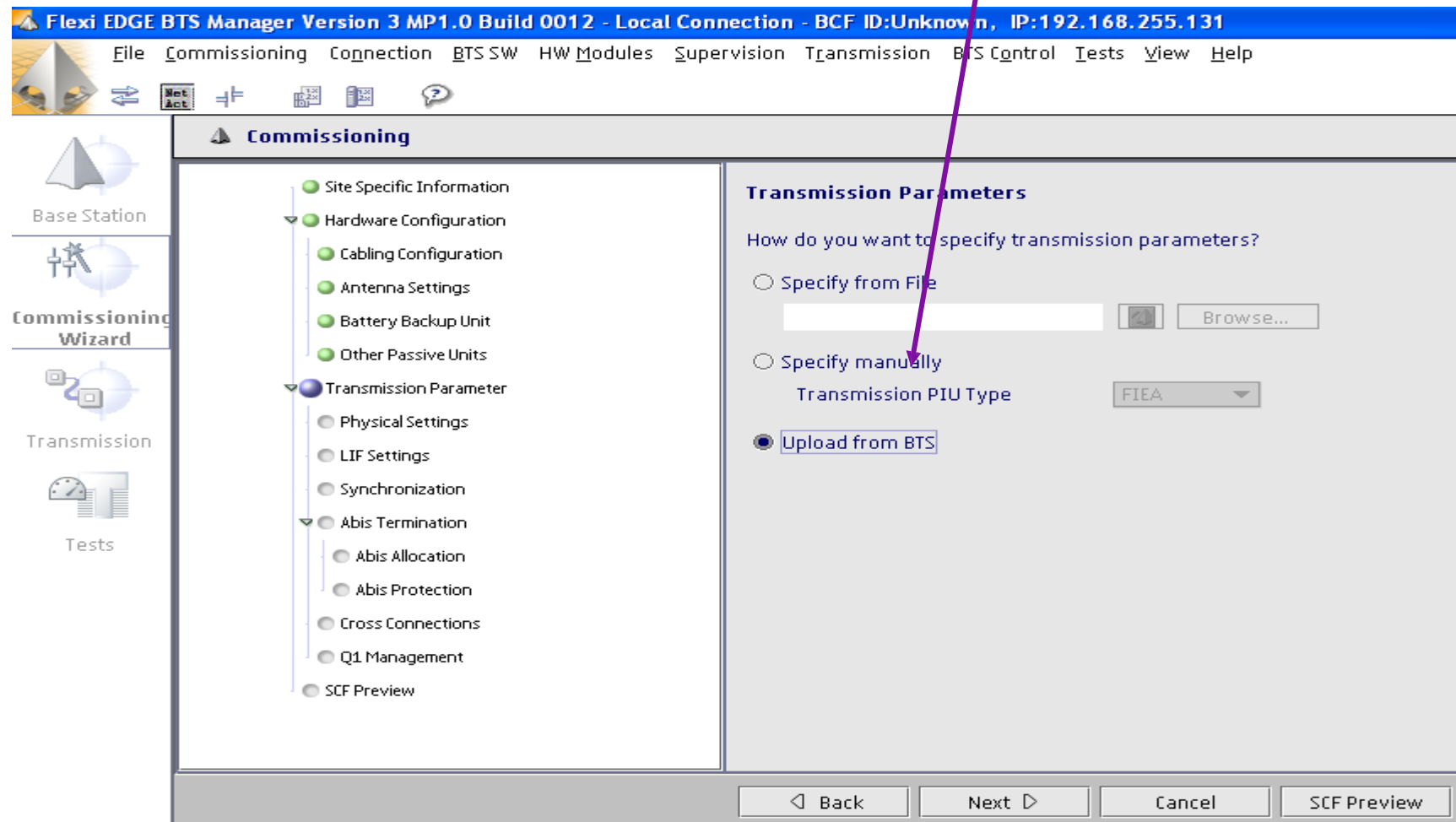
The main area on the right is titled "Other Passive Units" and contains a table with the following columns: Unit Name, Serial No., Product Type, and Description. The table is currently empty.

At the bottom of the window, there are four buttons: "Back", "Next", "Cancel", and "SCF Preview". A purple arrow points from the "Other Passive Units" menu item in the left sidebar to the "Next" button.



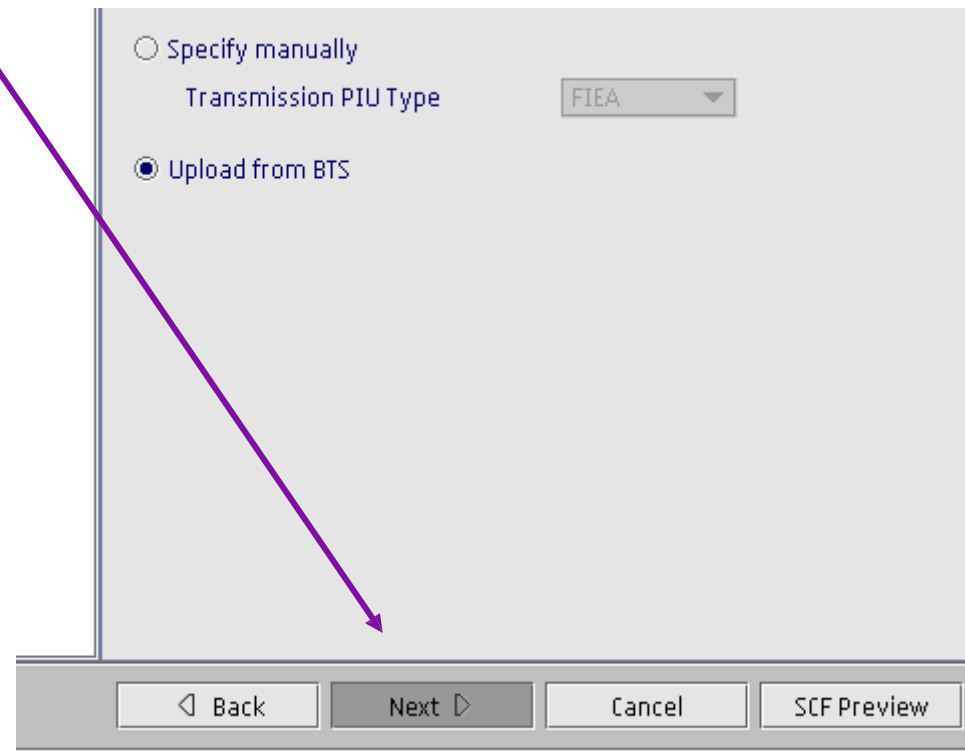
# Commissioning BTS

## Transmission Parameter – Select upload from BTS



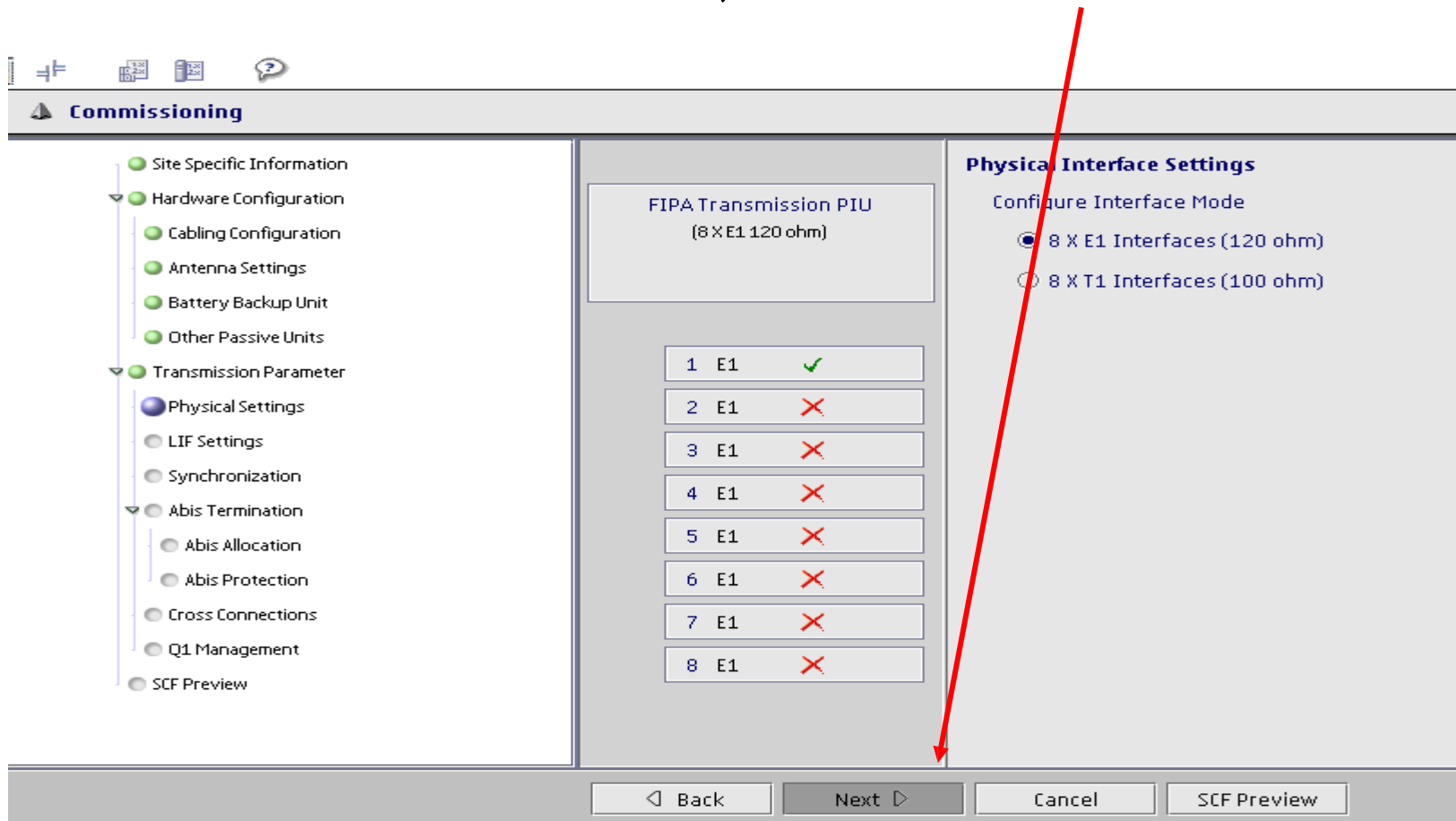
# Commissioning BTS

Click on Next

A screenshot of a software interface for commissioning BTS. The interface has a light gray background. At the top, there are two radio buttons: "Specify manually" (unselected) and "Upload from BTS" (selected). Below the "Specify manually" option, there is a label "Transmission PIU Type" and a dropdown menu showing "FIEA". At the bottom of the interface, there are four buttons: "Back" (with a left arrow), "Next" (with a right arrow), "Cancel", and "SCF Preview". A purple arrow points from the text "Click on Next" to the "Next" button.

# Commissioning BTS

Physical Settings – verify that BTS has detected the correct transmission module according to what was inserted, should be FIPA for normal E1 120 ohm, then click on Next



**Commissioning**

- Site Specific Information
- Hardware Configuration
  - Cabling Configuration
  - Antenna Settings
  - Battery Backup Unit
  - Other Passive Units
- Transmission Parameter
  - Physical Settings**
  - LIF Settings
  - Synchronization
  - Abis Termination
    - Abis Allocation
    - Abis Protection
  - Cross Connections
  - Q1 Management
  - SCF Preview

**FIPA Transmission PIU**  
(8 X E1 120 ohm)

1	E1	✓
2	E1	✗
3	E1	✗
4	E1	✗
5	E1	✗
6	E1	✗
7	E1	✗
8	E1	✗

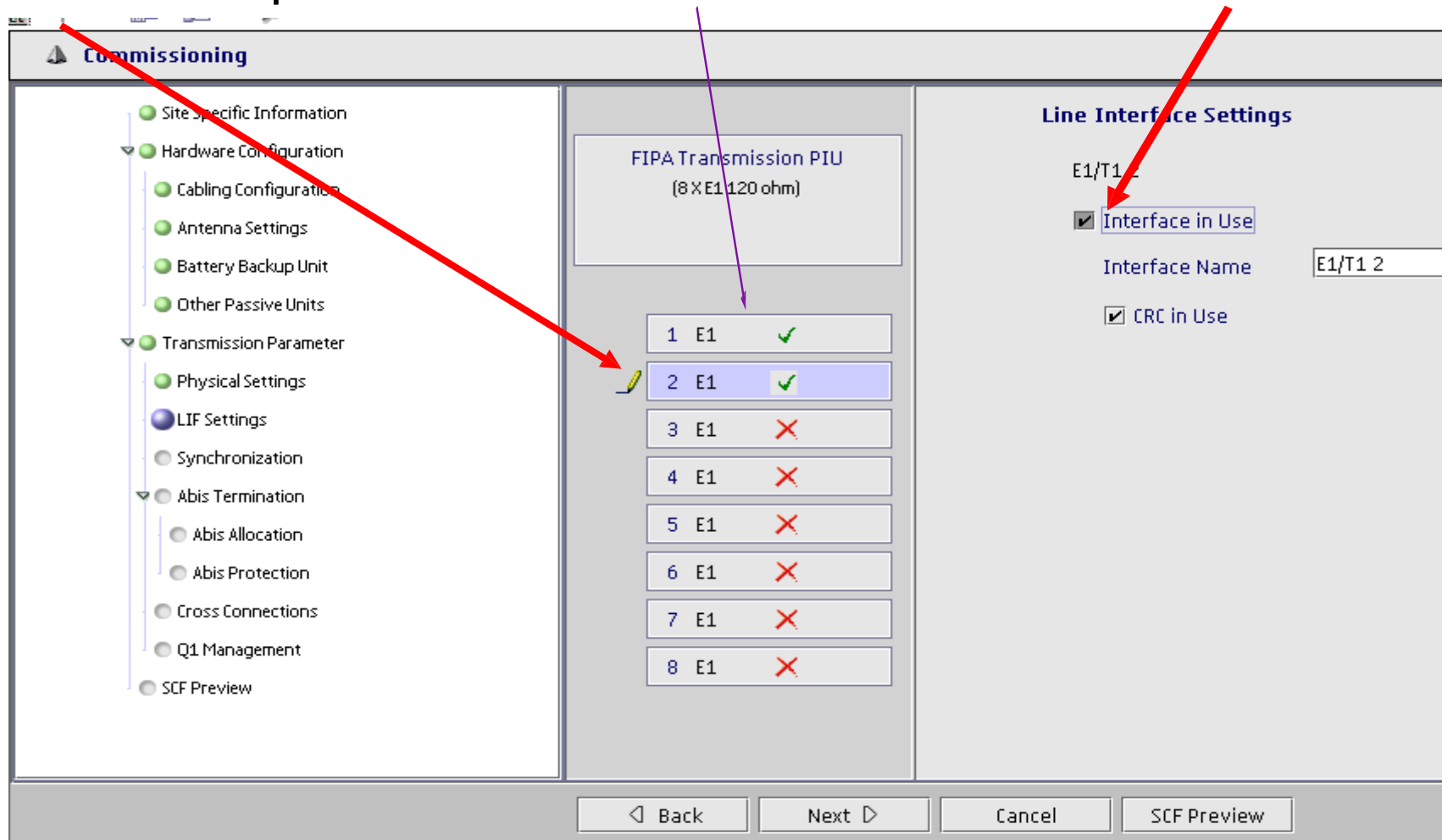
**Physical Interface Settings**  
Configure Interface Mode

- 8 X E1 Interfaces (120 ohm)
- 8 X T1 Interfaces (100 ohm)

Navigation: Back, Next, Cancel, SCF Preview

# Commissioning BTS

LIF settings – If only 1 x E1 required make sure it is in Use, if second is required click on 2 E1 and then select Interface in use



**Commissioning**

- Site Specific Information
- Hardware Configuration
  - Cabling Configuration
  - Antenna Settings
  - Battery Backup Unit
  - Other Passive Units
- Transmission Parameter
  - Physical Settings
  - LIF Settings**
  - Synchronization
  - Abis Termination
    - Abis Allocation
    - Abis Protection
  - Cross Connections
  - Q1 Management
  - SCF Preview

**FIPA Transmission PIU (8 X E1 120 ohm)**

1	E1	✓
2	E1	✓
3	E1	✗
4	E1	✗
5	E1	✗
6	E1	✗
7	E1	✗
8	E1	✗

**Line Interface Settings**

E1/T1 2

Interface in Use

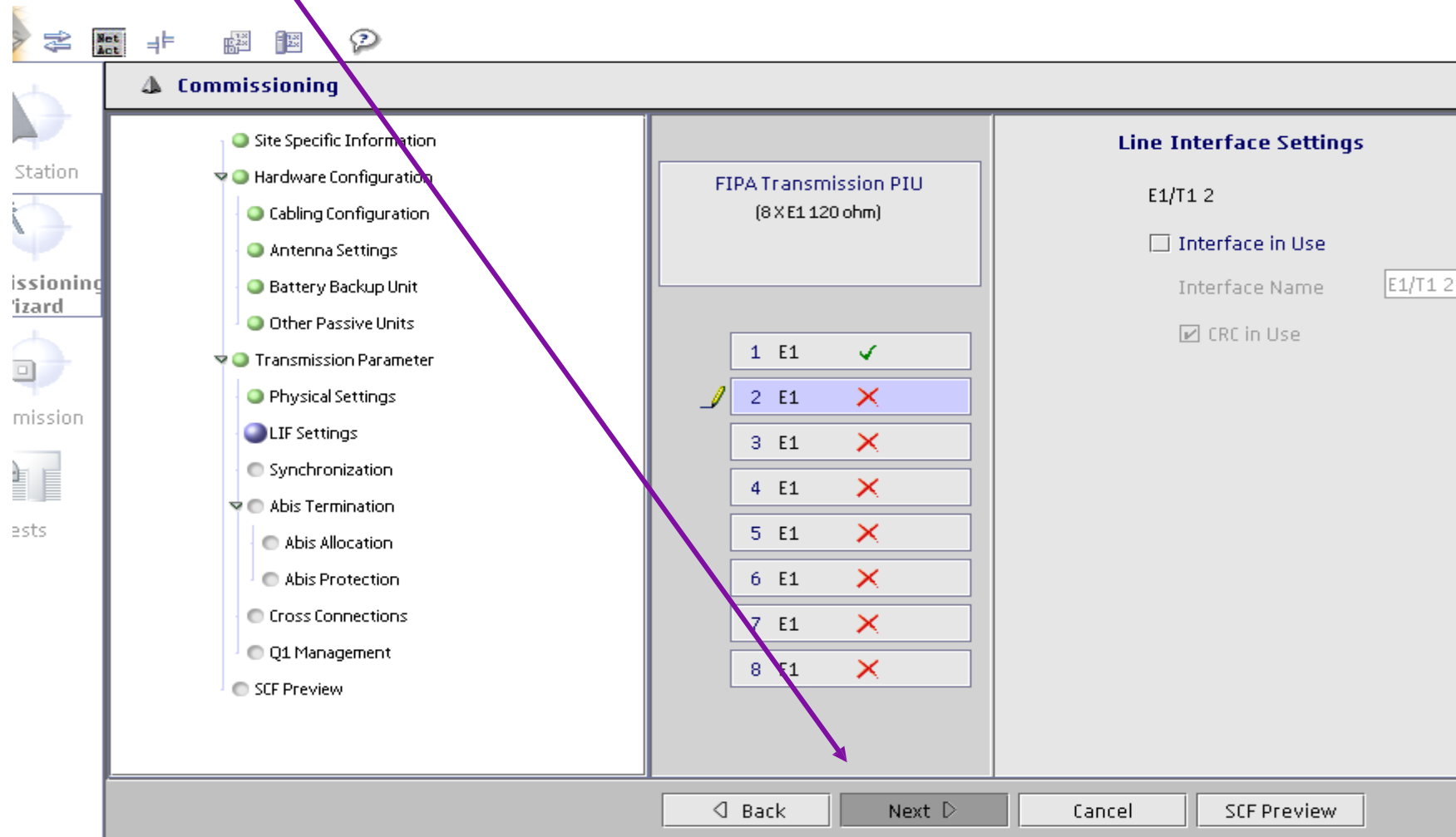
Interface Name: E1/T1 2

CRC in Use

Buttons: Back, Next, Cancel, SCF Preview

# Commissioning BTS

Click on Next



The screenshot shows the 'Commissioning' wizard interface. On the left is a tree view with categories like 'Hardware Configuration' and 'Transmission Parameter'. The main area is divided into three sections: 'FIPA Transmission PIU (8 X E1 120 ohm)', a table of E1 lines, and 'Line Interface Settings'.

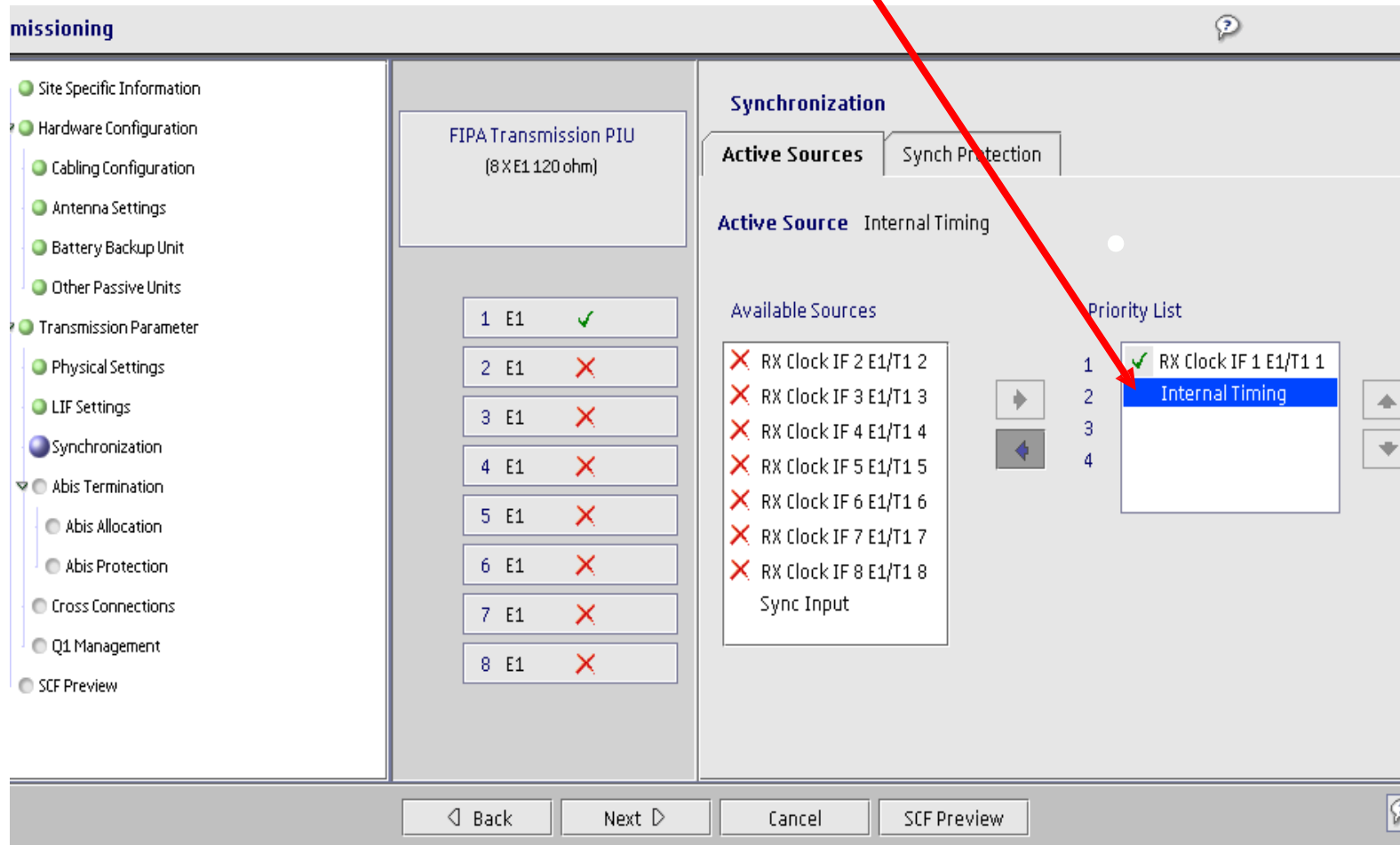
Line No.	Type	Status
1	E1	✓
2	E1	✗
3	E1	✗
4	E1	✗
5	E1	✗
6	E1	✗
7	E1	✗
8	E1	✗

The 'Line Interface Settings' section includes options for 'Interface in Use' (unchecked), 'Interface Name' (E1/T1 2), and 'CRC in Use' (checked).

At the bottom, there are four buttons: 'Back', 'Next >', 'Cancel', and 'SCF Preview'. A purple arrow points from the text 'Click on Next' to the 'Next >' button.

# Commissioning BTS

Synchronization – Select Internal Timing and move to Available Sources



The screenshot shows the 'Commissioning' software interface. On the left is a navigation tree with 'Synchronization' selected. The main area is divided into three sections:

- FIPA Transmission PIU (8 X E1 120 ohm):** A table showing the status of 8 E1 lines. Line 1 is active (green checkmark), while lines 2-8 are inactive (red X).
- Synchronization:** Contains two tabs: 'Active Sources' and 'Synch Protection'. Under 'Active Sources', 'Internal Timing' is selected.
- Available Sources:** A list of potential clock sources, all marked with a red X, including RX Clock IF 2 E1/T1 2 through 8, and Sync Input.
- Priority List:** A list where 'RX Clock IF 1 E1/T1 1' is selected with a green checkmark, and 'Internal Timing' is highlighted in blue. A red arrow points from the text above to this 'Internal Timing' option.

At the bottom, there are navigation buttons: 'Back', 'Next', 'Cancel', and 'SCF Preview'.

# Commissioning BTS

Internal Timing has now been moved from Priority list – This is a must for better BTS operations

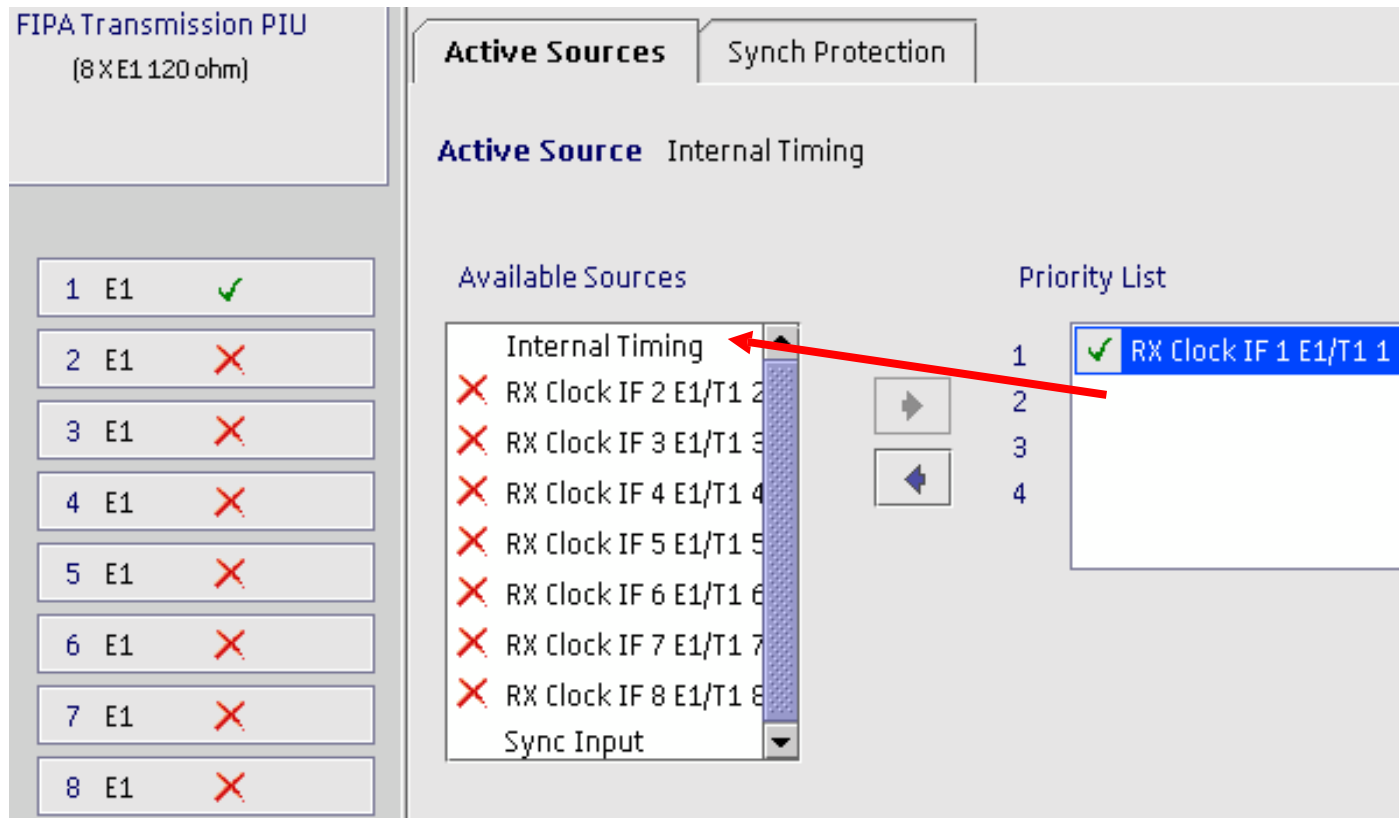
FIPA Transmission PIU  
(8 X E1 120 ohm)

1	E1	✓
2	E1	✗
3	E1	✗
4	E1	✗
5	E1	✗
6	E1	✗
7	E1	✗
8	E1	✗

**Active Sources**    Synch Protection

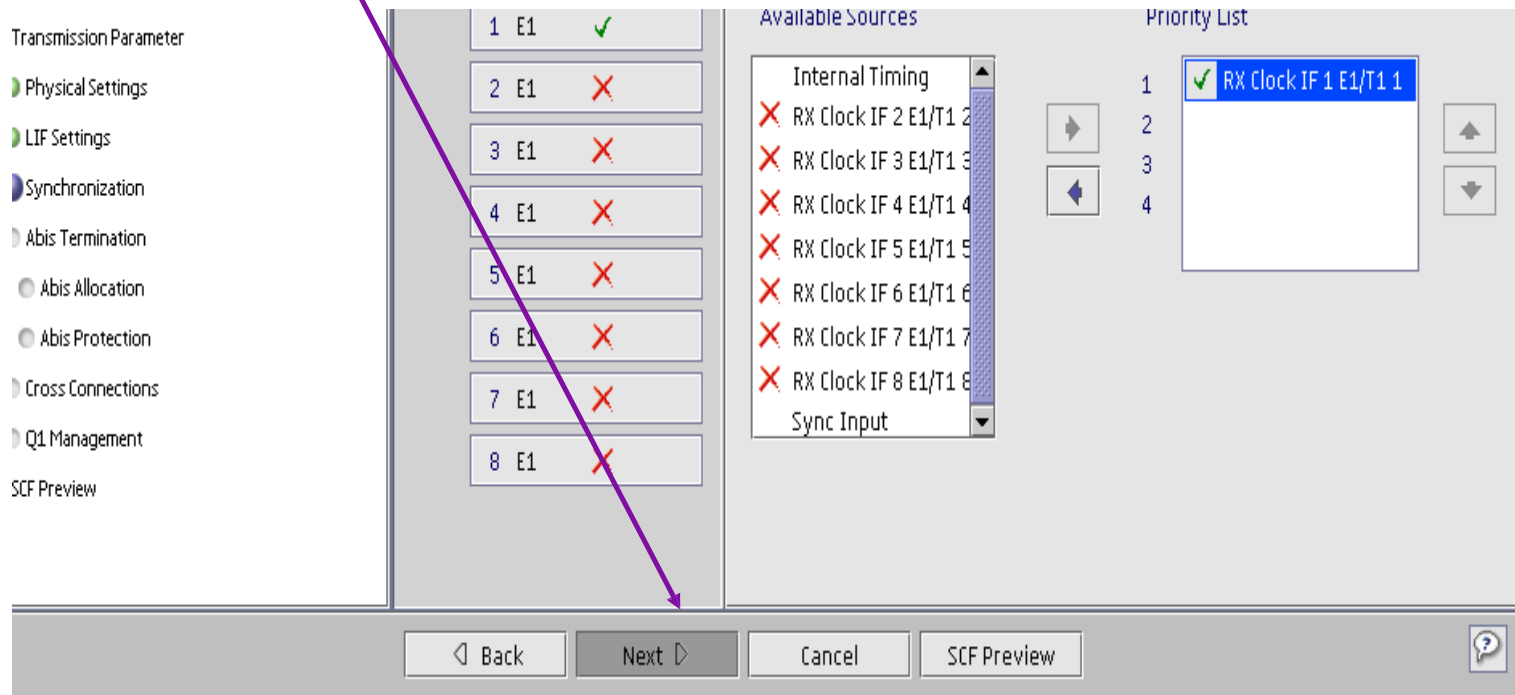
**Active Source** Internal Timing

Available Sources	Priority List
Internal Timing	1 ✓ RX Clock IF 1 E1/T1 1
✗ RX Clock IF 2 E1/T1 2	2
✗ RX Clock IF 3 E1/T1 3	3
✗ RX Clock IF 4 E1/T1 4	4
✗ RX Clock IF 5 E1/T1 5	
✗ RX Clock IF 6 E1/T1 6	
✗ RX Clock IF 7 E1/T1 7	
✗ RX Clock IF 8 E1/T1 8	
Sync Input	



# Commissioning BTS

Click on Next



Transmission Parameter

- Physical Settings
- LIF Settings
- Synchronization
- Abis Termination
- Abis Allocation
- Abis Protection
- Cross Connections
- Q1 Management
- SCF Preview

1	E1	✓
2	E1	✗
3	E1	✗
4	E1	✗
5	E1	✗
6	E1	✗
7	E1	✗
8	E1	✗

Available Sources

- Internal Timing
- ✗ RX Clock IF 2 E1/T1 2
- ✗ RX Clock IF 3 E1/T1 3
- ✗ RX Clock IF 4 E1/T1 4
- ✗ RX Clock IF 5 E1/T1 5
- ✗ RX Clock IF 6 E1/T1 6
- ✗ RX Clock IF 7 E1/T1 7
- ✗ RX Clock IF 8 E1/T1 8
- Sync Input

Priority List

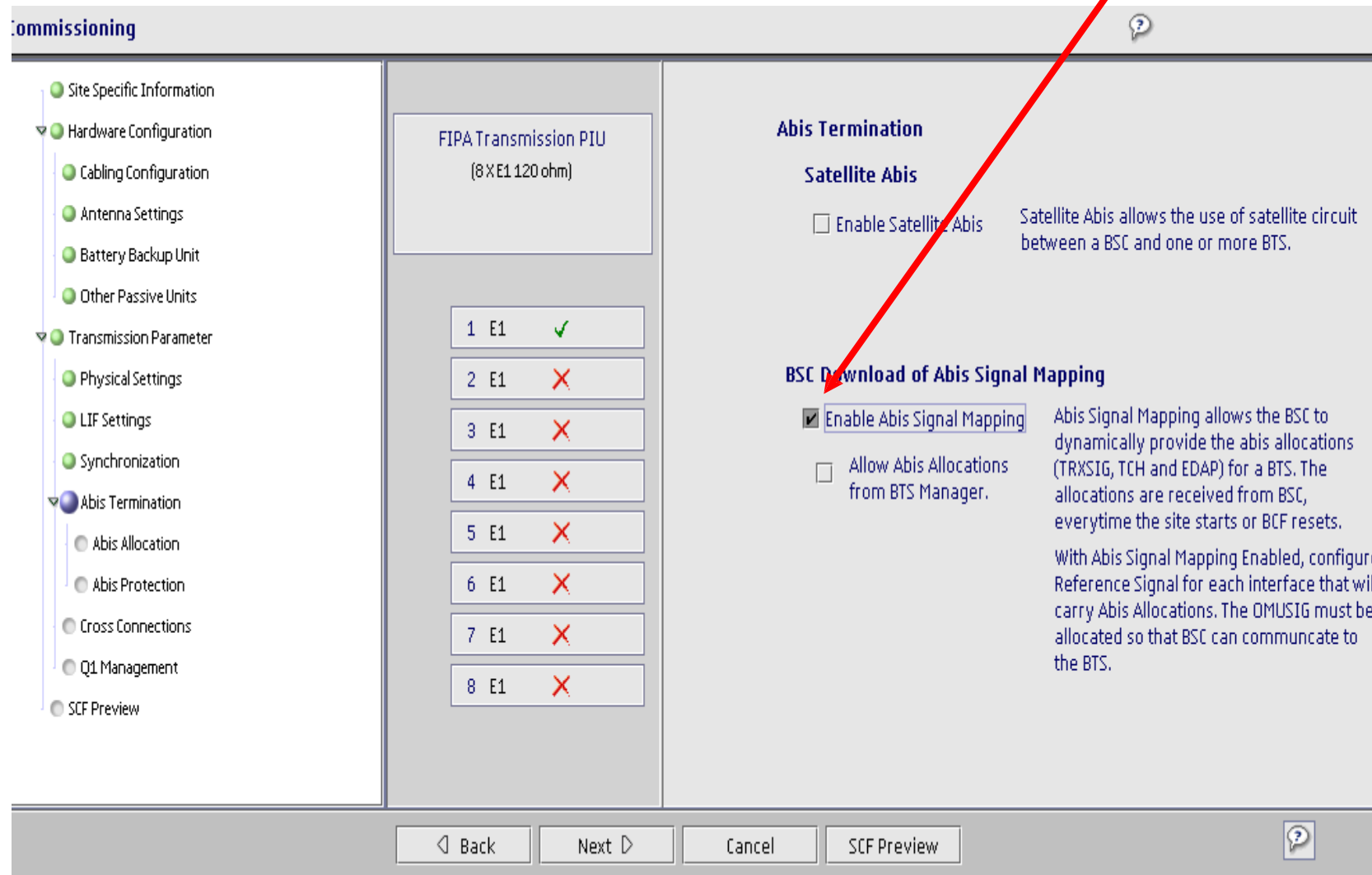
1	✓ RX Clock IF 1 E1/T1 1
2	
3	
4	

Navigation: Back, Next, Cancel, SCF Preview



# Commissioning BTS

Abis Termination – ONLY select “Enable Abis Signal Mapping”



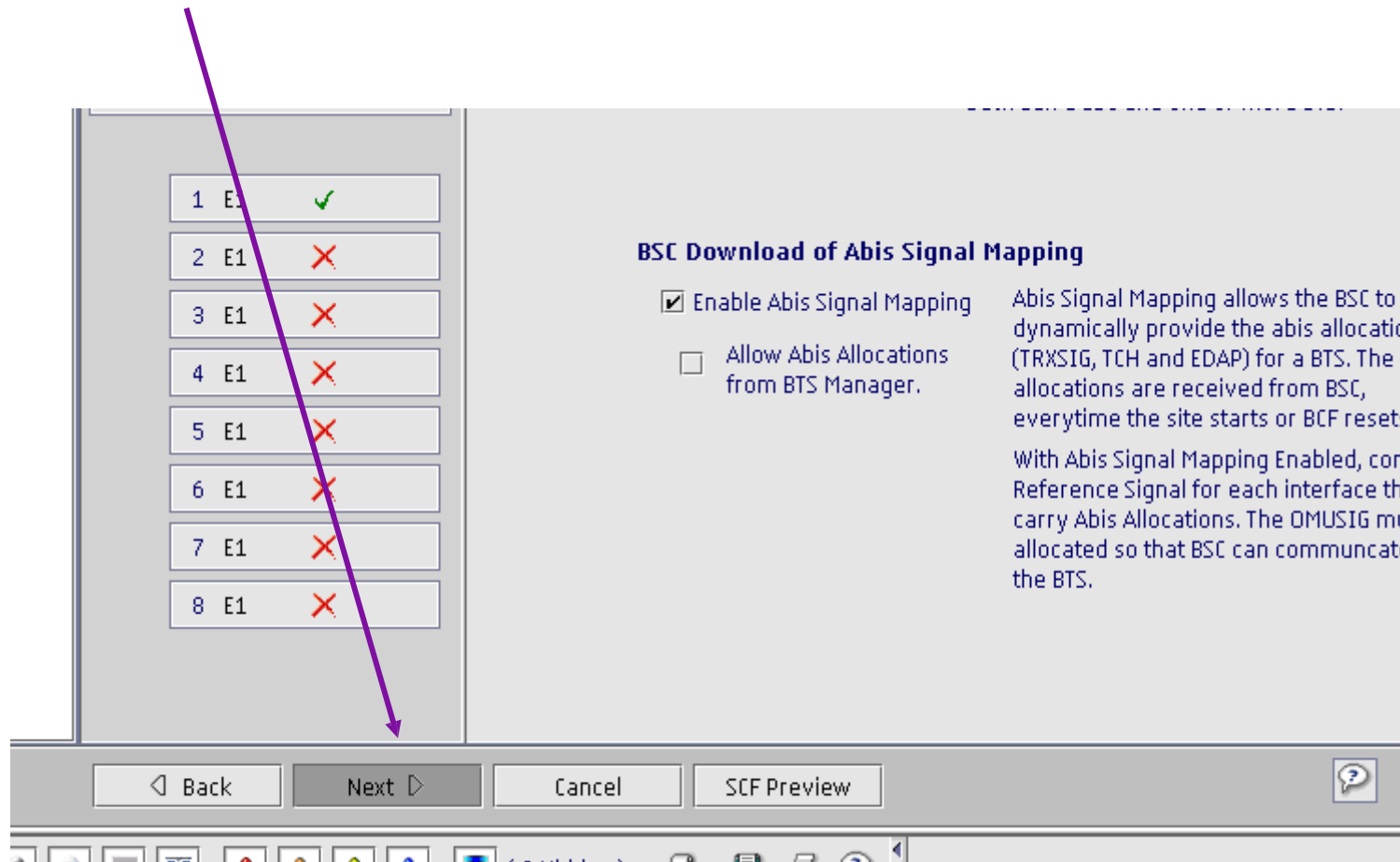
The screenshot shows the 'Commissioning' interface for a BTS. The left sidebar lists various configuration sections, with 'Abis Termination' selected. The main area is divided into three panels:

- FIPA Transmission PIU (8 X E1 120 ohm):** A table showing the status of 8 E1 lines. Line 1 is marked with a green checkmark, while lines 2 through 8 are marked with red X's.
- Abis Termination:** Contains the 'Satellite Abis' section with an unchecked checkbox for 'Enable Satellite Abis' and a descriptive text: 'Satellite Abis allows the use of satellite circuit between a BSC and one or more BTS.'
- BSC Download of Abis Signal Mapping:** Contains two checkboxes. The first, 'Enable Abis Signal Mapping', is checked and highlighted with a red box. The second, 'Allow Abis Allocations from BTS Manager', is unchecked. A descriptive text explains: 'Abis Signal Mapping allows the BSC to dynamically provide the abis allocations (TRXSIG, TCH and EDAP) for a BTS. The allocations are received from BSC, everytime the site starts or BCF resets. With Abis Signal Mapping Enabled, configure Reference Signal for each interface that will carry Abis Allocations. The DMUSIG must be allocated so that BSC can communicate to the BTS.'

At the bottom of the interface, there are navigation buttons: 'Back', 'Next', 'Cancel', and 'SCF Preview'. A help icon is visible in the top right corner.

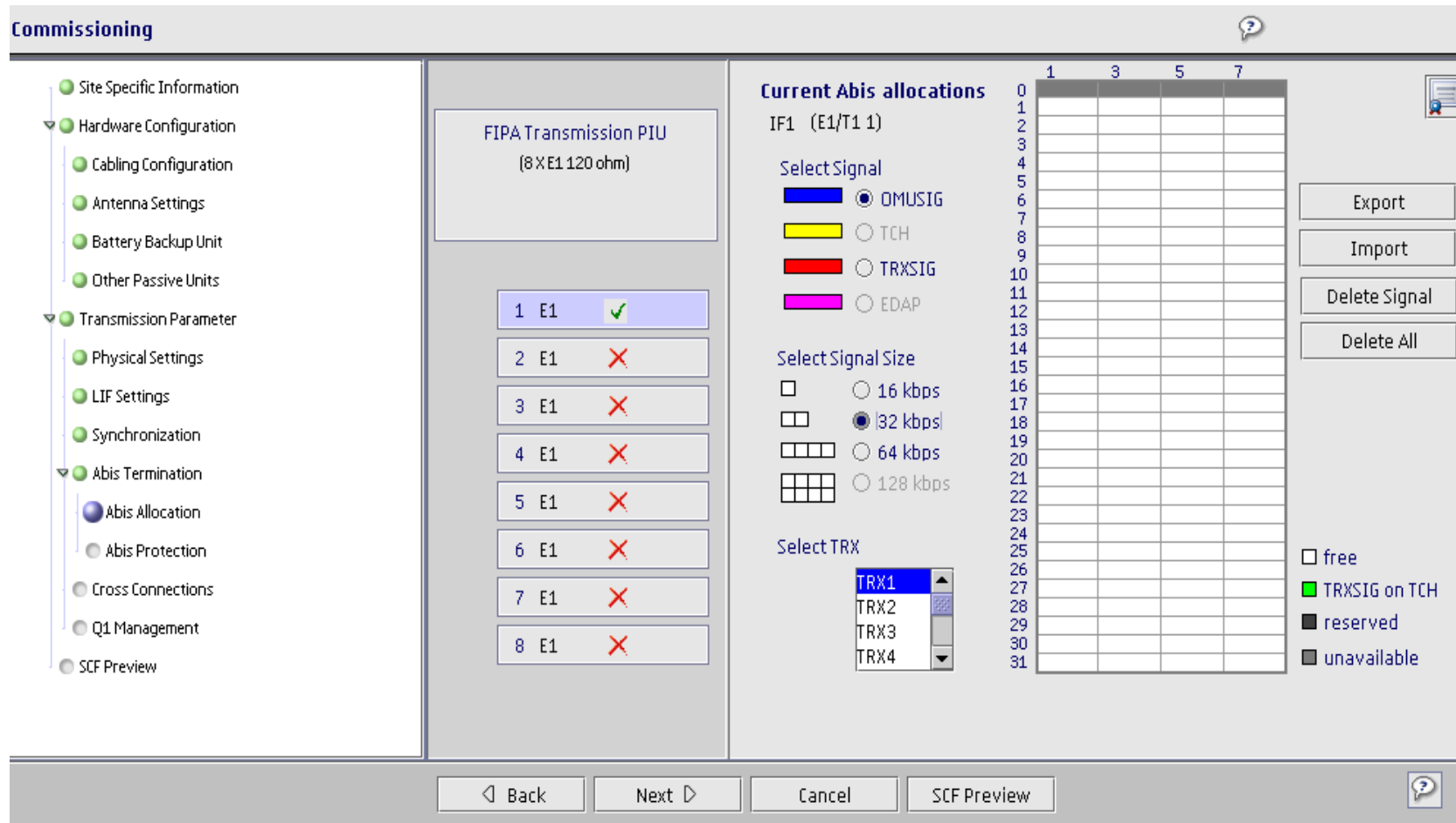
# Commissioning BTS

Click on Next



# Commissioning BTS

For Abis Allocation you require Abis Plan from Access planner to assign OMUSig on correct timeslot



The screenshot shows the 'Commissioning' software interface. On the left is a navigation tree with categories like 'Site Specific Information', 'Hardware Configuration', and 'Transmission Parameter'. The 'Abis Allocation' option is selected. The main area displays 'FIPA Transmission PIU (8 X E1 120 ohm)' and a list of 8 E1 channels. Channel 1 is marked with a green checkmark, while channels 2-8 are marked with red X's. To the right, 'Current Abis allocations' are shown for IF1 (E1/T1 1), with options for signal type (OMUSIG selected), signal size (32 kbps selected), and TRX (TRX1 selected). A grid shows timeslots 0-31 for channels 1, 3, 5, and 7. A legend indicates 'free' (white), 'TRXSIG on TCH' (green), 'reserved' (black), and 'unavailable' (grey). Navigation buttons at the bottom include 'Back', 'Next', 'Cancel', and 'SCF Preview'.

# Commissioning BTS

Abis plan shows timeslot of OMUsig and also size  
 Each block is 16kb, so OMUsig is 32kb

	b	5	5	5	5		
	7	6	6	6	6	BCF-79/TRX-6	GSM900 (BTS-80)
	8	6	6	6	6		
Small block is 16kb	9	9	9	9	9	BCF-79/TRX-9	
	10	9	9	9	9		SECT A3 GSM900 (BTS-81)
	11	10	10	10	10	BCF-79/TRX-10	
	12	10	10	10	10		
	13	13	13	13	13	BCF-79/TRX-13	SECT A4 GSM1800 (BTS-82)
	14	13	13	13	13		
	15	14	14	14	14	BCF-79/TRX-14	
	16	14	14	14	14		
	17	17	17	17	17	BCF-79/TRX-17	SECT A5 GSM1800 (BTS-83)
	18	17	17	17	17		
	19	18	18	18	18	BCF-79/TRX-18	
	20	18	18	18	18		
	21	21	21	21	21	BCF-79/TRX-21	SECT A6 GSM1800 (BTS-84)
	22	21	21	21	21		
	23	22	22	22	22	BCF-79/TRX-22	
	24	22	22	22	22		
	25					EDAP 79	
	26	1			5		
	27	9			13		
	28	17			21		TRX SIG
	29	2	6	10	14		
	30	18	22				
OMUsig is 32kb	31					OMUSIG32 (BCF-79)	

# Commissioning BTS

Select Signal Size as 32kb – as per Abis plan

**Commissioning**

- Site Specific Information
- Hardware Configuration
  - Cabling Configuration
  - Antenna Settings
  - Battery Backup Unit
  - Other Passive Units
- Transmission Parameter
  - Physical Settings
  - LIF Settings
  - Synchronization
  - Abis Termination
    - Abis Allocation**
    - Abis Protection
    - Cross Connections
    - Q1 Management
    - SCF Preview

FIPA Transmission PIU  
(8 X E1 120 ohm)

1	E1	✓
2	E1	✗
3	E1	✗
4	E1	✗
5	E1	✗
6	E1	✗
7	E1	✗
8	E1	✗

**Current Abis allocations**  
IF1 (E1/T1 1)

Select Signal

- OMUSIG
- TCH
- TRXSIG
- EDAP

Select Signal Size

- 16 kbps
- 32 kbps
- 64 kbps
- 128 kbps

Select TRX

- TRX1
- TRX2
- TRX3
- TRX4

	1	3	5	7
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
31				

Export  
Import  
Delete Signal  
Delete All

free  
 TRXSIG on TCH  
 reserved  
 unavailable

Back Next Cancel SCF Preview

# Commissioning BTS

Click on Timeslot 31 and assign OMUsig as per Abis plan

*Abis Plan*

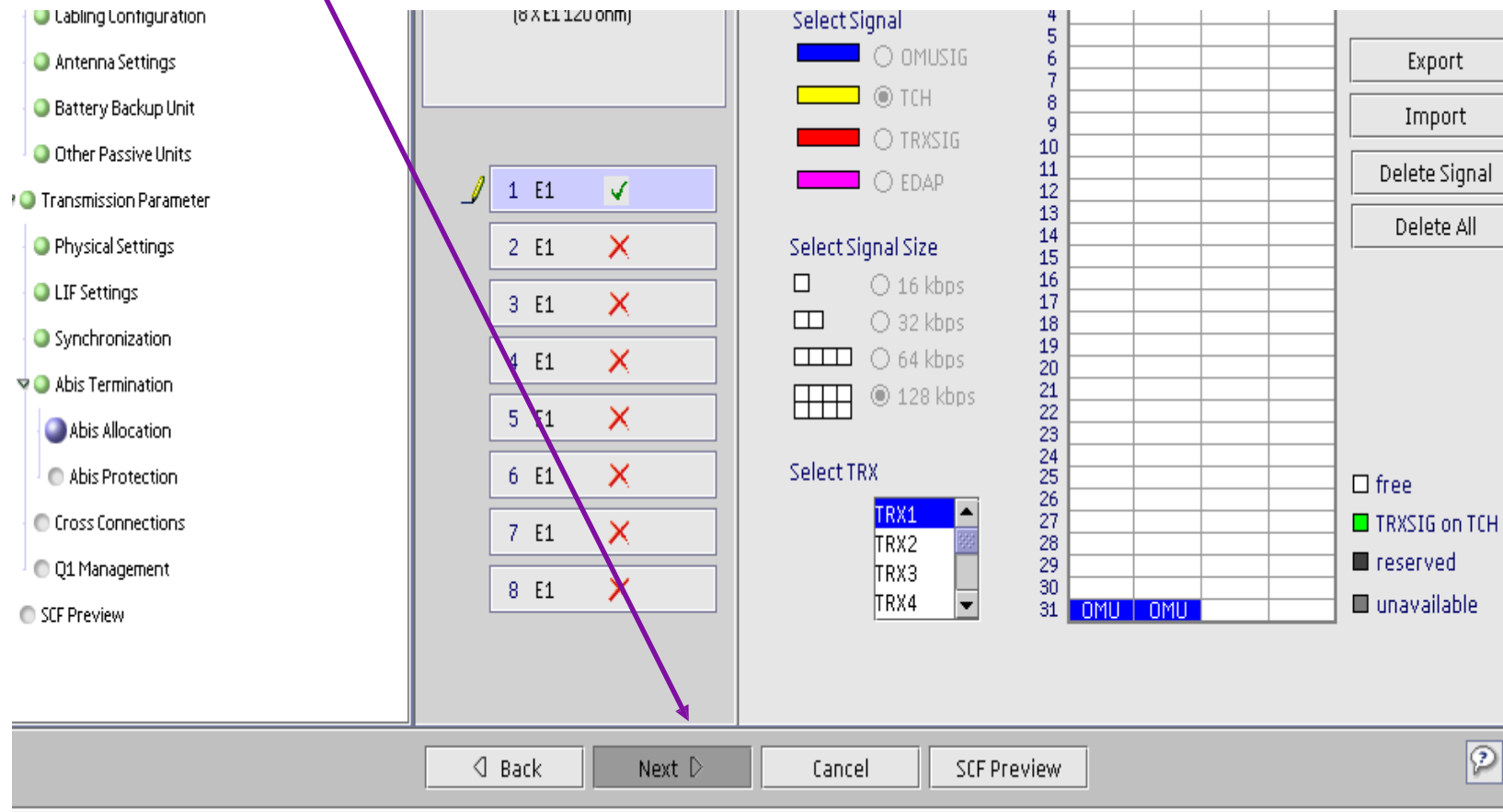
6	5	5	5	5		
7	6	6	6	6	BCF-70/TRX-6	GSM900 (BTS-80)
8	6	6	6	6		
9	9	9	9	9	BCF-70/TRX-9	SECT A3 GSM900 (BTS-81)
10	9	9	9	9		
11	10	10	10	10	BCF-70/TRX-10	
12	10	10	10	10		
13	13	13	13	13	BCF-70/TRX-13	SECT A4 GSM1800 (BTS-82)
14	13	13	13	13		
15	14	14	14	14	BCF-70/TRX-14	
16	14	14	14	14		
17	17	17	17	17	BCF-70/TRX-17	SECT A5 GSM1800 (BTS-83)
18	17	17	17	17		
19	18	18	18	18	BCF-70/TRX-18	
20	18	18	18	18		
21	21	21	21	21	BCF-70/TRX-21	SECT A6 GSM1800 (BTS-84)
22	21	21	21	21		
23	22	22	22	22	BCF-70/TRX-22	
24	22	22	22	22		
25					EDAP 70	
26	1		5			
27	9		13			
28	17		21		TRX SIG	
29	2	6	10	14		
30	18	22				
31						

*BTS Manager*

The screenshot shows the 'BTS Manager' interface. On the left, there's a list of transmission PIUs (1 E1 to 8 E1) with a checkmark for the first one. The main area shows 'Current Abis allocations' for IF1 (E1/T1 1) with a grid for timeslots 0-31 and channels 1-7. A blue arrow points from timeslot 31 in the 'Abis Plan' table to the 'OMU' allocation in the 'BTS Manager' grid. The 'Select Signal' section has 'TCH' selected. The 'Select Signal Size' section has '128 kbps' selected. The 'Select TRX' dropdown shows 'TRX1' selected. The bottom of the interface has navigation buttons: Back, Next, Cancel, and SCF Preview.

# Commissioning BTS

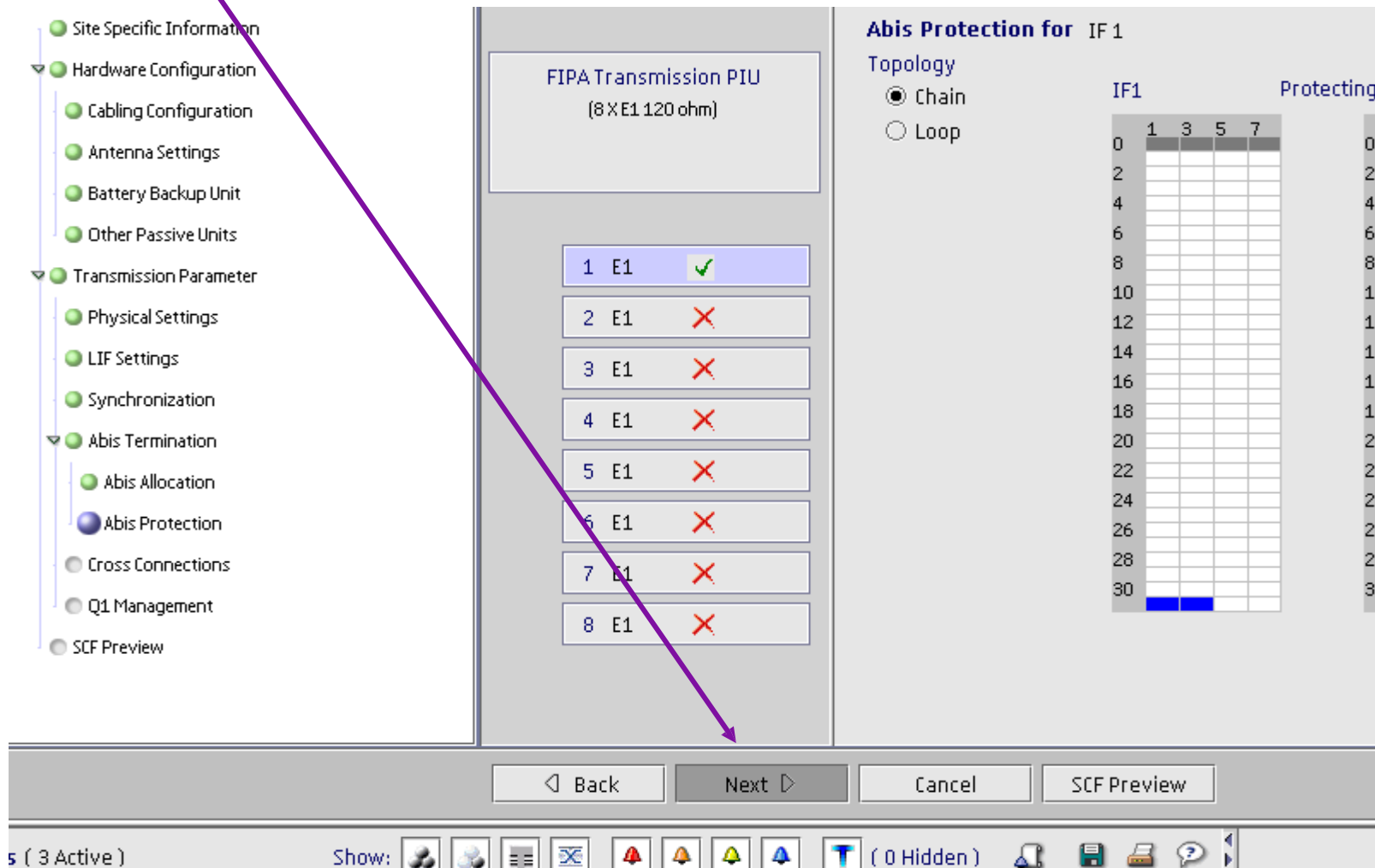
Click on Next



The screenshot shows the 'Abis Allocation' configuration screen for a BTS. On the left is a navigation tree with 'Abis Allocation' selected. The main area displays a table of 8 E1 channels, with the first channel (1 E1) marked with a green checkmark and the others with red X's. To the right are configuration options for 'Select Signal' (OMUSIG, TCH, TRXSIG, EDAP), 'Select Signal Size' (16, 32, 64, 128 kbps), and 'Select TRX' (TRX1-4). A frequency grid on the right shows 'OMU' at 31 MHz. At the bottom, there are buttons for 'Back', 'Next >', 'Cancel', and 'SCF Preview'. A purple arrow points from the 'Next >' button to the text 'Click on Next' above it.

# Commissioning BTS

Abis Protection – only relevant if implemented in network – click on Next



**Abis Protection for IF 1**

Topology  
 Chain  
 Loop

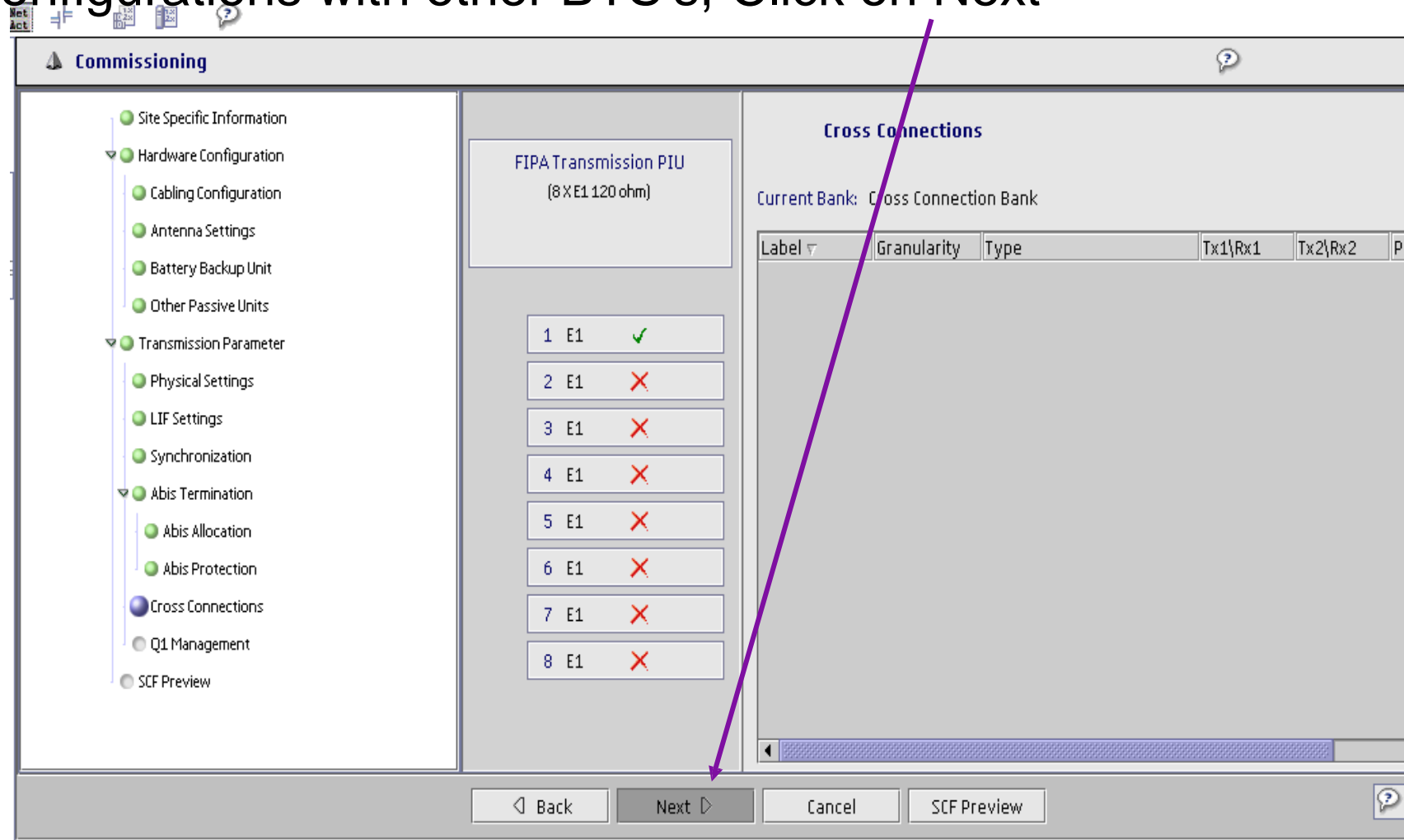
IF1	Protecting			
1	3	5	7	
0				0
2				2
4				4
6				6
8				8
10				10
12				12
14				14
16				16
18				18
20				20
22				22
24				24
26				26
28				28
30				30

Buttons: Back, Next, Cancel, SCF Preview



# Commissioning BTS

Cross Connections – only relevant if Add-Drop (Daisy) configurations with other BTS's, Click on Next



The screenshot shows the 'Commissioning' software interface. On the left is a navigation tree with the following items:

- Site Specific Information
- Hardware Configuration
  - Cabling Configuration
  - Antenna Settings
  - Battery Backup Unit
  - Other Passive Units
- Transmission Parameter
  - Physical Settings
  - LIF Settings
  - Synchronization
  - Abis Termination
    - Abis Allocation
    - Abis Protection
  - Cross Connections** (highlighted)
  - Q1 Management
  - SCF Preview

The main area is titled 'FIPA Transmission PIU (8 X E1 120 ohm)'. Below this title is a list of 8 E1 lines:

1	E1	✓
2	E1	✗
3	E1	✗
4	E1	✗
5	E1	✗
6	E1	✗
7	E1	✗
8	E1	✗

To the right of this list is the 'Cross Connections' section, which includes a table with columns: Label, Granularity, Type, Tx1\Rx1, Tx2\Rx2, and Pr. The 'Current Bank' is set to 'Cross Connection Bank'. A purple arrow points from the 'Next' button at the bottom to the 'Cross Connections' section.

At the bottom of the window are four buttons: 'Back', 'Next', 'Cancel', and 'SCF Preview'. The 'Next' button is highlighted.

# Commissioning BTS

Q1 Management – only if transmission module is FlexiHopper...

Click in Next

Commissioning Connection BIS SW HW Modules Supervision Transmission BIS Control Tests View Help

**Commissioning**

- Site Specific Information
- Hardware Configuration
  - Cabling Configuration
  - Antenna Settings
  - Battery Backup Unit
  - Other Passive Units
- Transmission Parameter
  - Physical Settings
  - LIF Settings
  - Synchronization
  - Abis Termination
    - Abis Allocation
    - Abis Protection
    - Cross Connections
    - Q1 Management**
  - SCF Preview

FIPA Transmission PIU  
(8 X E1 120 ohm)

1	E1	✓
2	E1	✗
3	E1	✗
4	E1	✗
5	E1	✗
6	E1	✗
7	E1	✗
8	E1	✗

**Q1 Management**

**Q1 EOC Allocation**

Q1 Polling Mode

Current Q1 EOC Allocations

Interface	In Use	Timeslot	Bits

Sampling Rate:

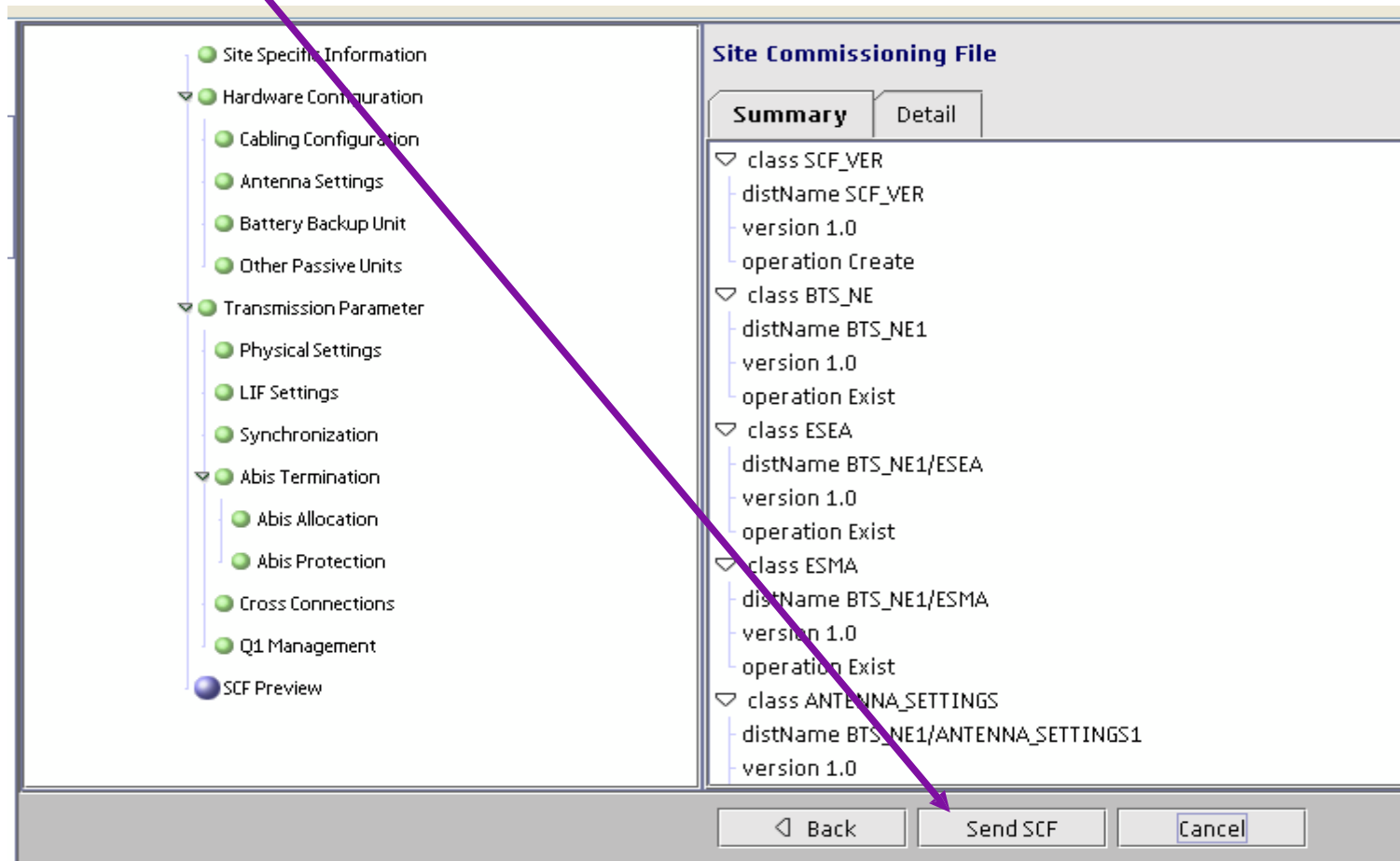
Enable Q1 Slave Loop Protection

Primary EOC: Interface: N/A, In Use: N/A, Timeslot:

Secondary EOC: Interface: , In Use: N/A, Timeslot:

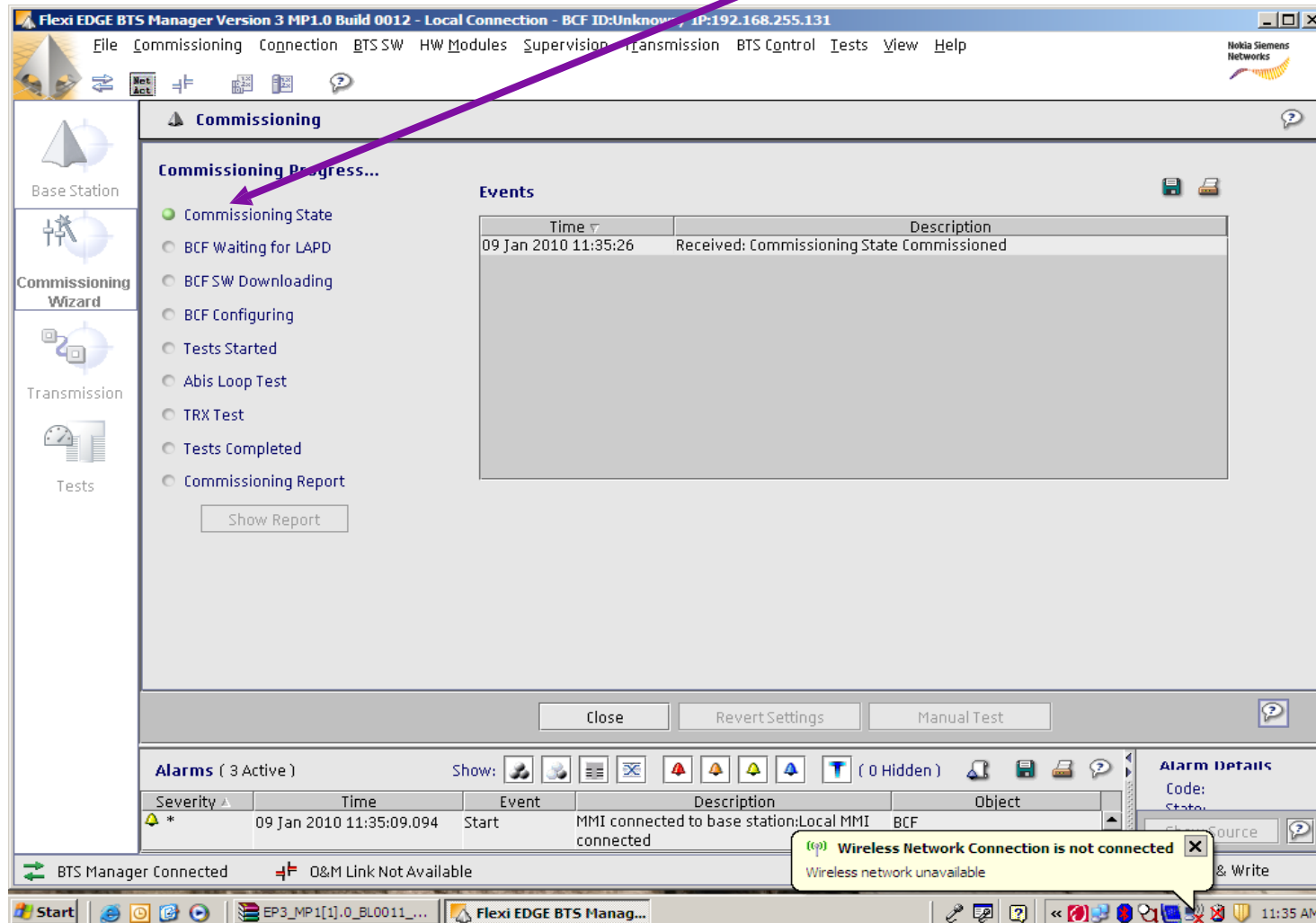
# Commissioning BTS

Commissioning file is now ready to be send to BTS, click on Send SCF. Verify in Commissioning report that BTS is commissioned and that BTS comes on Air – OMU comes up



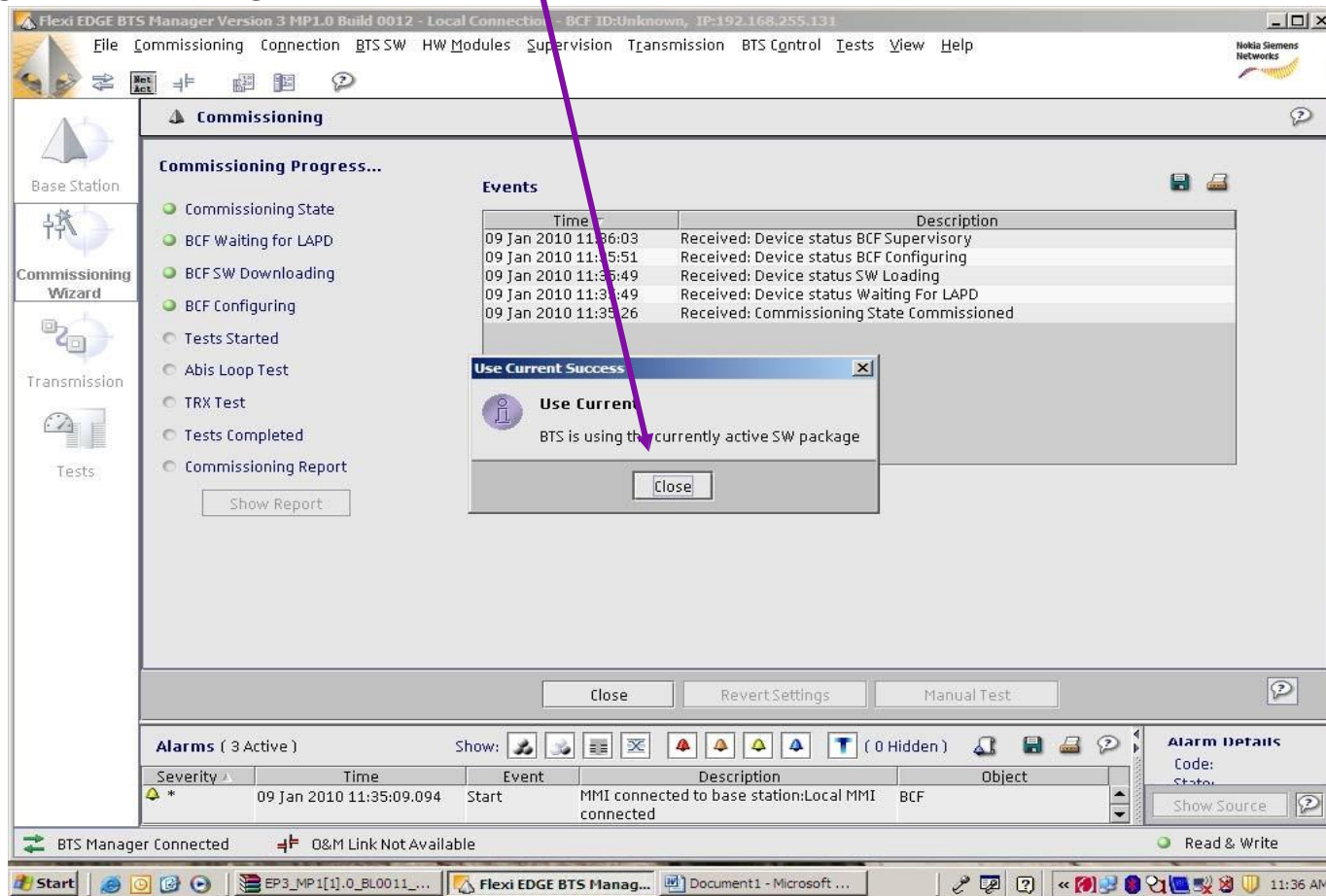
# Commissioning BTS

The BTS is now going through the commissioning progress



# Commissioning BTS

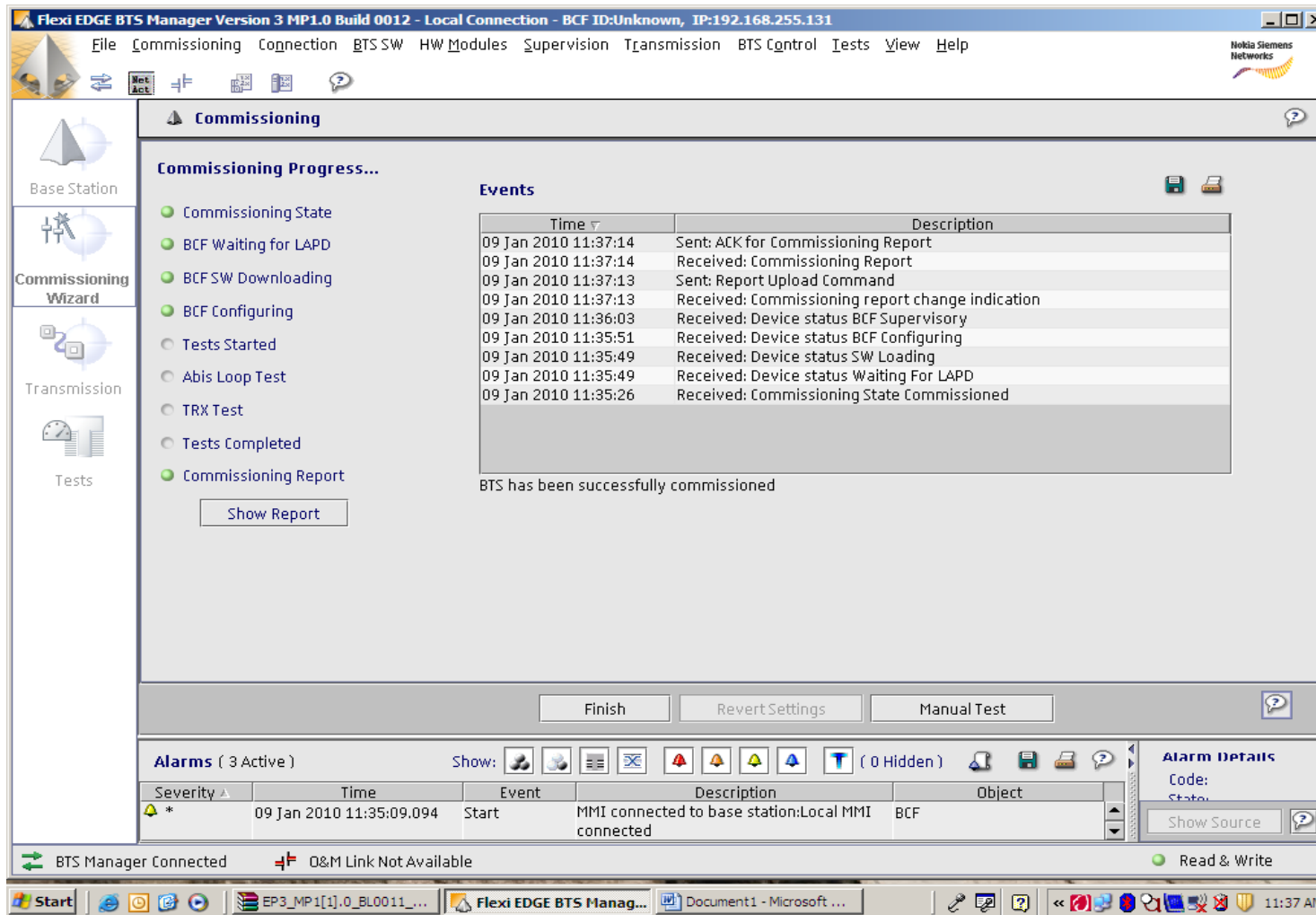
When in standalone commissioned the BTS will show below information of Running SW package, click Close



*When BTS is not commissioned as standalone it will wait for LAPD Before going further – E1 must be connected and OMU will come up*

# Commissioning BTS

*BTS is now commissioned and ready for cutover*



The screenshot displays the Flexi EDGE BTS Manager software interface. The main window is titled "Flexi EDGE BTS Manager Version 3 MP1.0 Build 0012 - Local Connection - BCF ID:Unknown, IP:192.168.255.131". The interface is divided into several sections:

- Commissioning Progress...:** A list of steps in the commissioning process, with "Commissioning Report" selected and marked as completed (green circle).
- Events:** A table showing a log of events during the commissioning process.
- Alarms (3 Active):** A table showing active alarms, including one for "MMI connected to base station:Local MMI connected".
- Buttons:** "Finish", "Revert Settings", and "Manual Test" buttons are visible at the bottom of the main panel.
- Status Bar:** Shows "BTS Manager Connected" and "D&M Link Not Available".

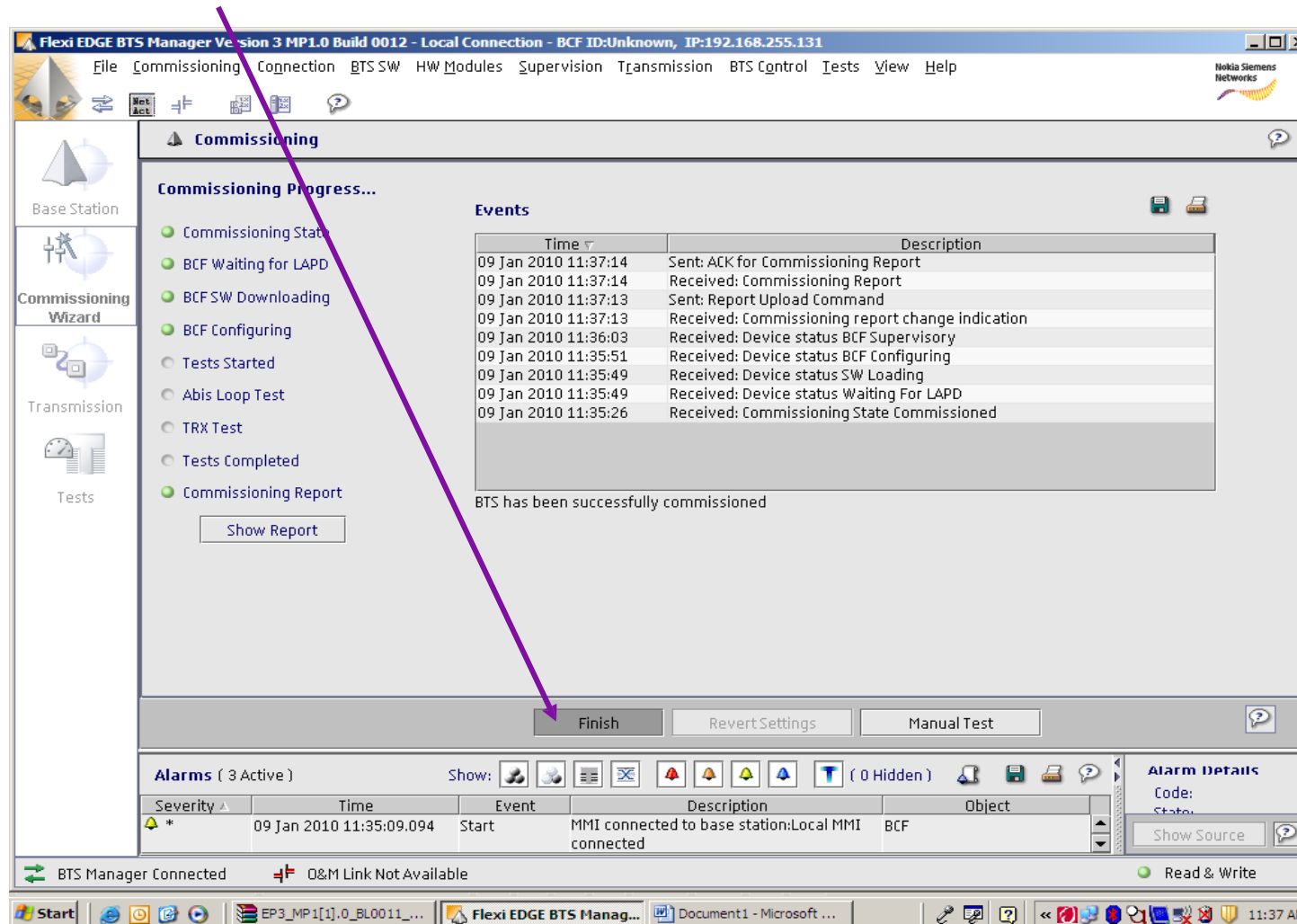
Time	Description
09 Jan 2010 11:37:14	Sent: ACK for Commissioning Report
09 Jan 2010 11:37:14	Received: Commissioning Report
09 Jan 2010 11:37:13	Sent: Report Upload Command
09 Jan 2010 11:37:13	Received: Commissioning report change indication
09 Jan 2010 11:36:03	Received: Device status BCF Supervisory
09 Jan 2010 11:35:51	Received: Device status BCF Configuring
09 Jan 2010 11:35:49	Received: Device status SW Loading
09 Jan 2010 11:35:49	Received: Device status Waiting For LAPD
09 Jan 2010 11:35:26	Received: Commissioning State Commissioned

BTS has been successfully commissioned

Severity	Time	Event	Description	Object
⚠ *	09 Jan 2010 11:35:09.094	Start	MMI connected to base station:Local MMI connected	BCF

# Commissioning BTS

*Click on Finish*



**Flexi EDGE BTS Manager Version 3 MP1.0 Build 0012 - Local Connection - BCF ID:Unknown, IP:192.168.255.131**

File Commissioning Connection BTS SW HW Modules Supervision Transmission BTS Control Tests View Help

**Commissioning**

**Commissioning Progress...**

- Commissioning State
- BCF Waiting for LAPD
- BCF SW Downloading
- BCF Configuring
- Tests Started
- Abis Loop Test
- TRX Test
- Tests Completed
- Commissioning Report

Show Report

**Events**

Time	Description
09 Jan 2010 11:37:14	Sent: ACK for Commissioning Report
09 Jan 2010 11:37:14	Received: Commissioning Report
09 Jan 2010 11:37:13	Sent: Report Upload Command
09 Jan 2010 11:37:13	Received: Commissioning report change indication
09 Jan 2010 11:36:03	Received: Device status BCF Supervisory
09 Jan 2010 11:35:51	Received: Device status BCF Configuring
09 Jan 2010 11:35:49	Received: Device status SW Loading
09 Jan 2010 11:35:49	Received: Device status Waiting For LAPD
09 Jan 2010 11:35:26	Received: Commissioning State Commissioned

BTS has been successfully commissioned

Finish Revert Settings Manual Test

**Alarms ( 3 Active )** Show: [Icons] ( 0 Hidden )

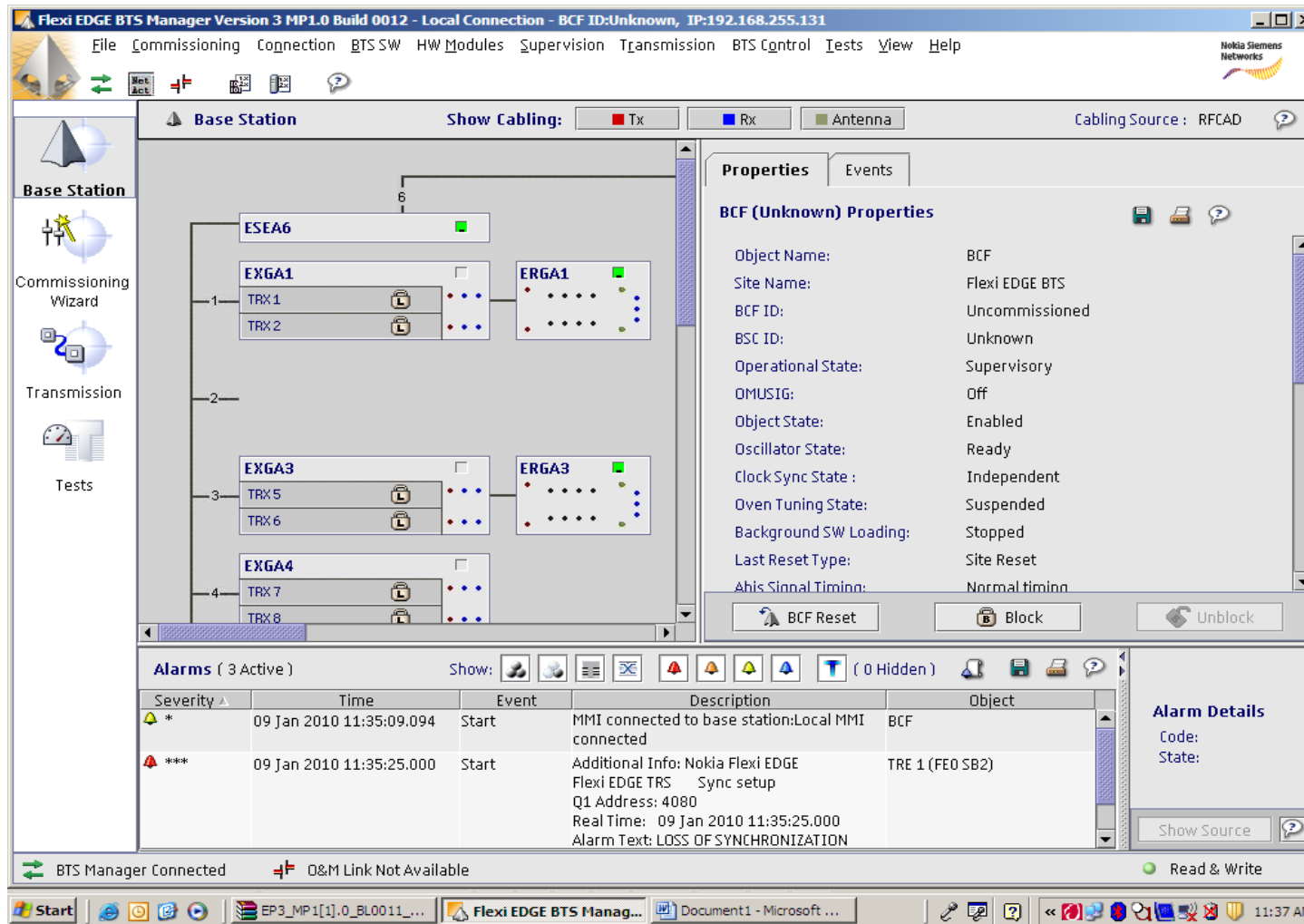
Severity	Time	Event	Description	Object
* (Warning)	09 Jan 2010 11:35:09.094	Start	MMI connected to base station:Local MMI connected	BCF

Alarm Details: Code: Status: Show Source

BTS Manager Connected O&M Link Not Available Read & Write

# Commissioning BTS

*BTS now ready for swap*



The screenshot displays the Flexi EDGE BTS Manager software interface. The main window shows a configuration tree for a Base Station with components like ESEA6, EXGA1, ERGA1, EXGA3, ERGA3, and EXGA4. A Properties panel on the right shows details for the BCF (Unknown) object, including its name, site name, BCF ID, BSC ID, and various states. An Alarms section at the bottom shows three active alarms, with the most recent one indicating a synchronization loss.

**BCF (Unknown) Properties**

- Object Name: BCF
- Site Name: Flexi EDGE BTS
- BCF ID: Uncommissioned
- BSC ID: Unknown
- Operational State: Supervisory
- OMUSIG: Off
- Object State: Enabled
- Oscillator State: Ready
- Clock Sync State: Independent
- Oven Tuning State: Suspended
- Background SW Loading: Stopped
- Last Reset Type: Site Reset
- Abis Signal Timinn: Normal timinn

**Alarms ( 3 Active )**

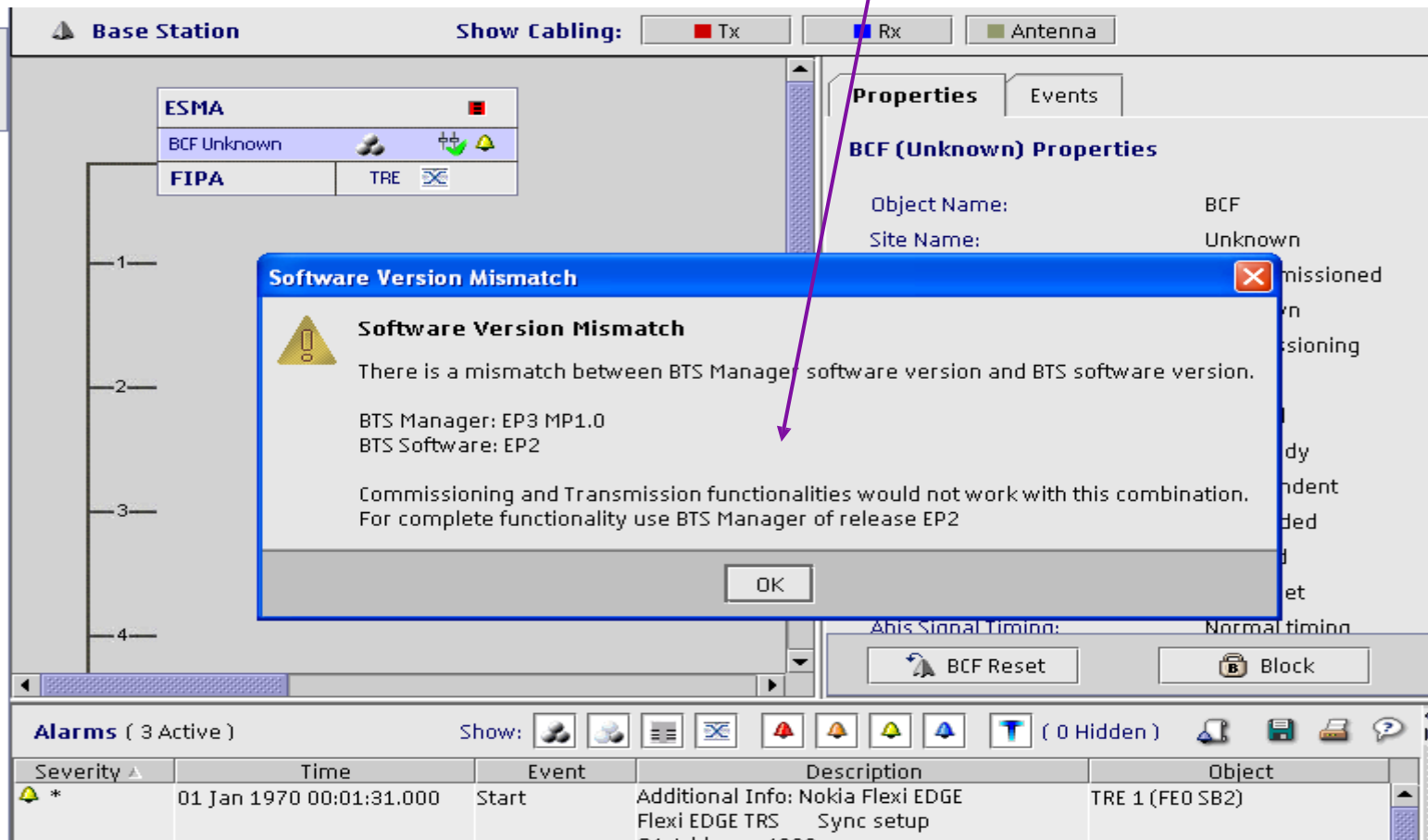
Severity	Time	Event	Description	Object
*	09 Jan 2010 11:35:09.094	Start	MMI connected to base station:Local MMI connected	BCF
***	09 Jan 2010 11:35:25.000	Start	Additional Info: Nokia Flexi EDGE Flexi EDGE TRS Sync setup Q1 Address: 4080 Real Time: 09 Jan 2010 11:35:25.000 Alarm Text: LOSS OF SYNCHRONIZATION	TRE 1 (FE0 SB2)



## Software Mismatch

# Login

The following alarm will be seen as the software levels of the BTS and the BTS Manager may differ, software download is required to have both on same level



**Software Version Mismatch**

There is a mismatch between BTS Manager software version and BTS software version.

BTS Manager: EP3 MP1.0  
BTS Software: EP2

Commissioning and Transmission functionalities would not work with this combination.  
For complete functionality use BTS Manager of release EP2

OK

**Base Station** Show Cabling: Tx Rx Antenna

ESMA  
BCF Unknown  
FIPA TRE

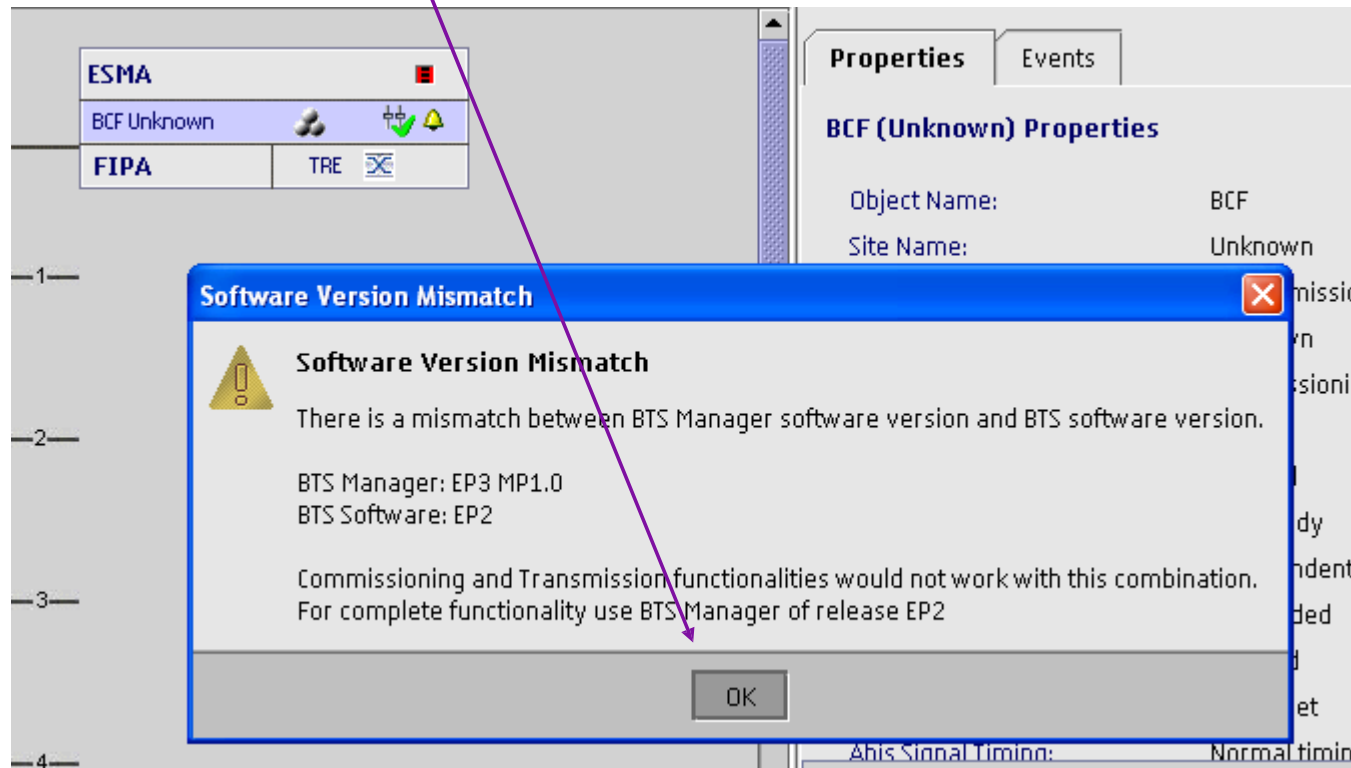
**Properties** Events  
**BCF (Unknown) Properties**  
Object Name: BCF  
Site Name: Unknown

Alarms ( 3 Active ) Show: ( 0 Hidden )

Severity	Time	Event	Description	Object
* (Warning)	01 Jan 1970 00:01:31.000	Start	Additional Info: Nokia Flexi EDGE Flexi EDGE TRS Sync setup 01 Address: 4000	TRE 1 (FE0 SB2)

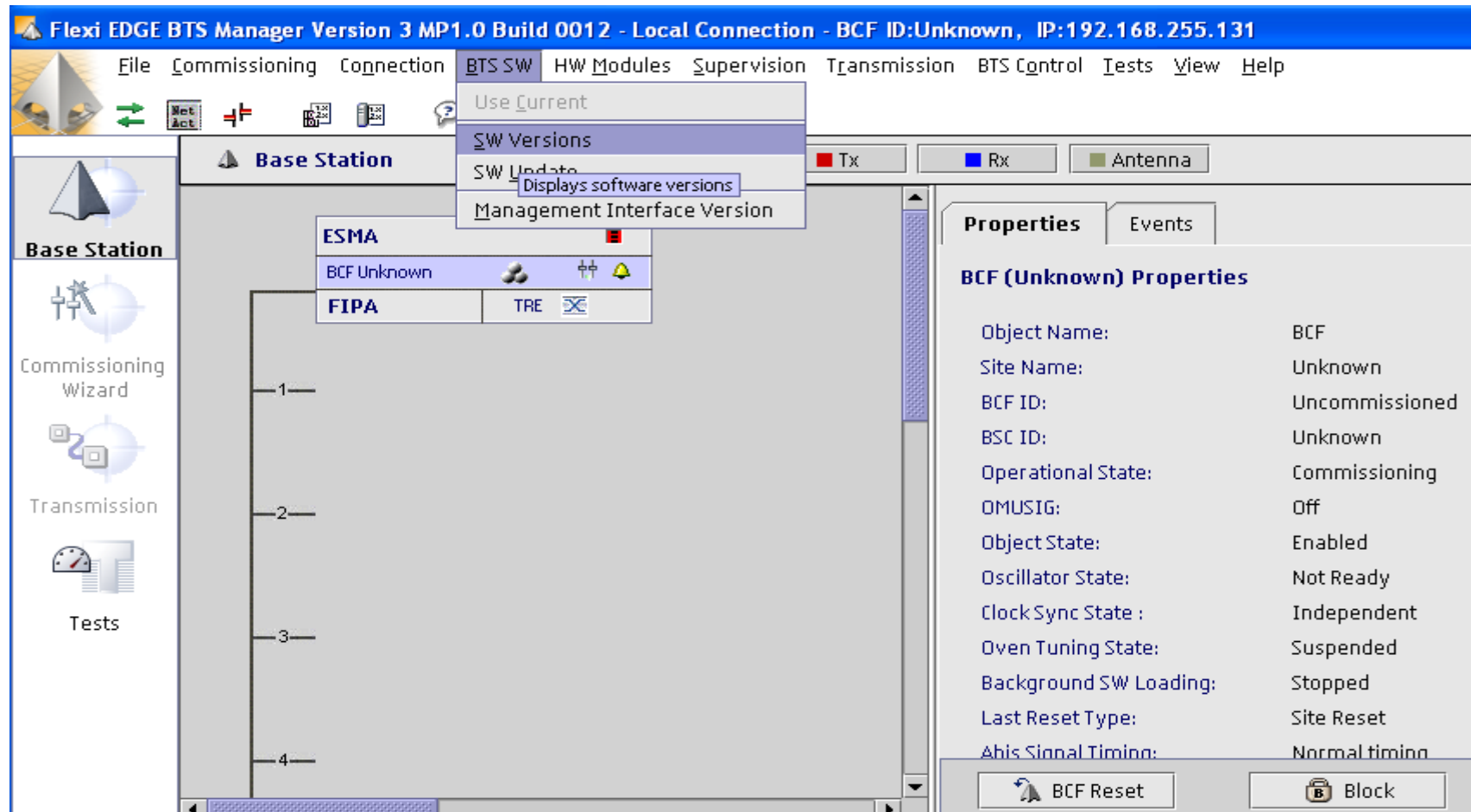
# Software download

Click on OK to remove the Window



# Software Download

Click on BTS\_SW



The screenshot shows the Flexi EDGE BTS Manager software interface. The title bar reads "Flexi EDGE BTS Manager Version 3 MP1.0 Build 0012 - Local Connection - BCF ID:Unknown, IP:192.168.255.131". The menu bar includes File, Commissioning, Connection, **BTS SW**, HW Modules, Supervision, Transmission, BTS Control, Tests, View, and Help. The "BTS SW" menu is open, showing options: Use Current, SW Versions (highlighted), SW Update, and Management Interface Version. A tooltip for "SW Versions" says "Displays software versions".

The main workspace shows a "Base Station" tree with a "BCF Unknown" node selected. Below it, a table lists components:

ESMA	
BCF Unknown	
FIPA	TRE

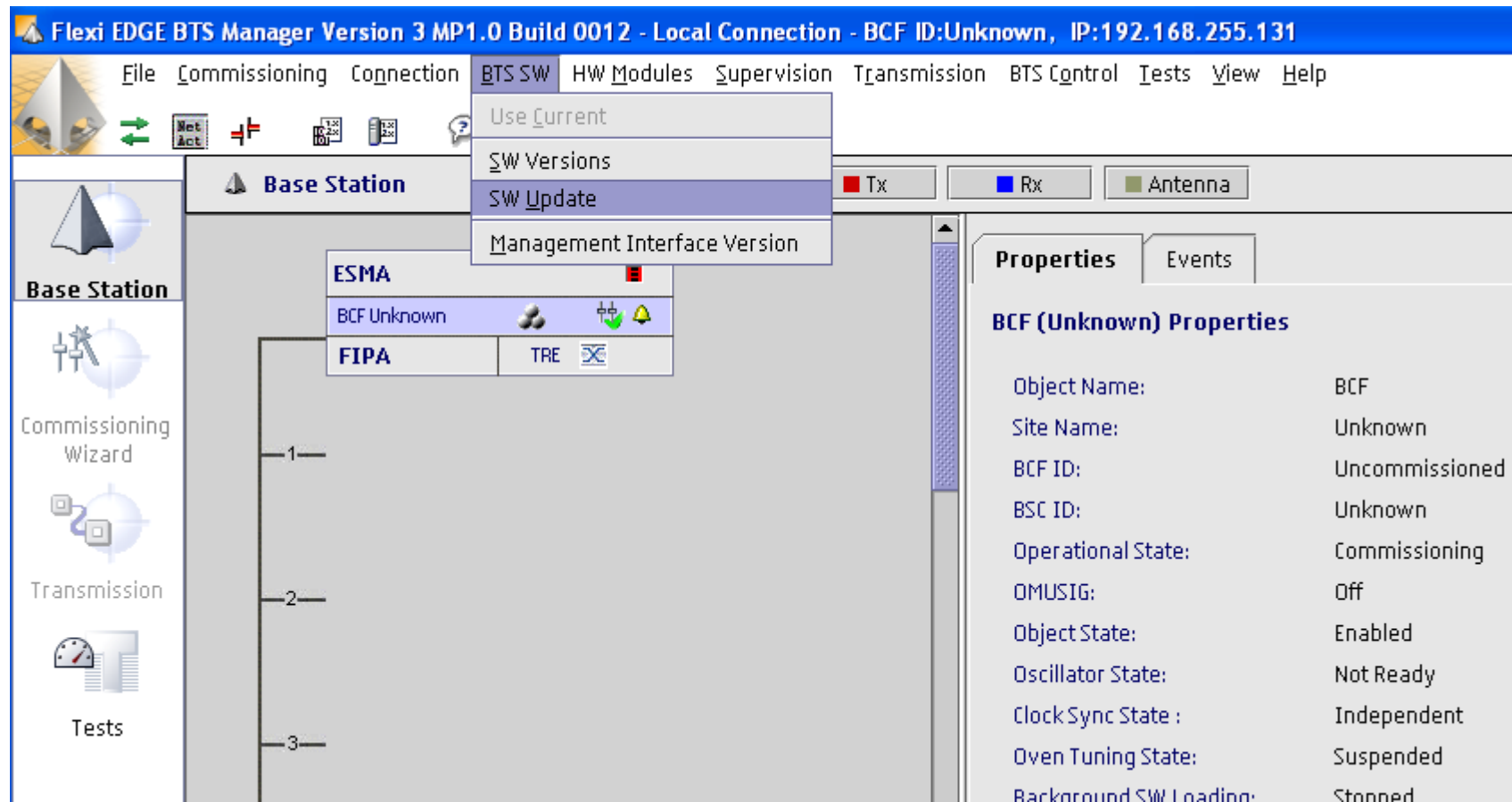
On the right, the "Properties" panel shows "BCF (Unknown) Properties":

Object Name:	BCF
Site Name:	Unknown
BCF ID:	Uncommissioned
BSC ID:	Unknown
Operational State:	Commissioning
OMUSIG:	Off
Object State:	Enabled
Oscillator State:	Not Ready
Clock Sync State :	Independent
Oven Tuning State:	Suspended
Background SW Loading:	Stopped
Last Reset Type:	Site Reset
Abis Signal Timing:	Normal timing

At the bottom of the properties panel, there are buttons for "BCF Reset" and "Block".

# Software download

## Select SW Update

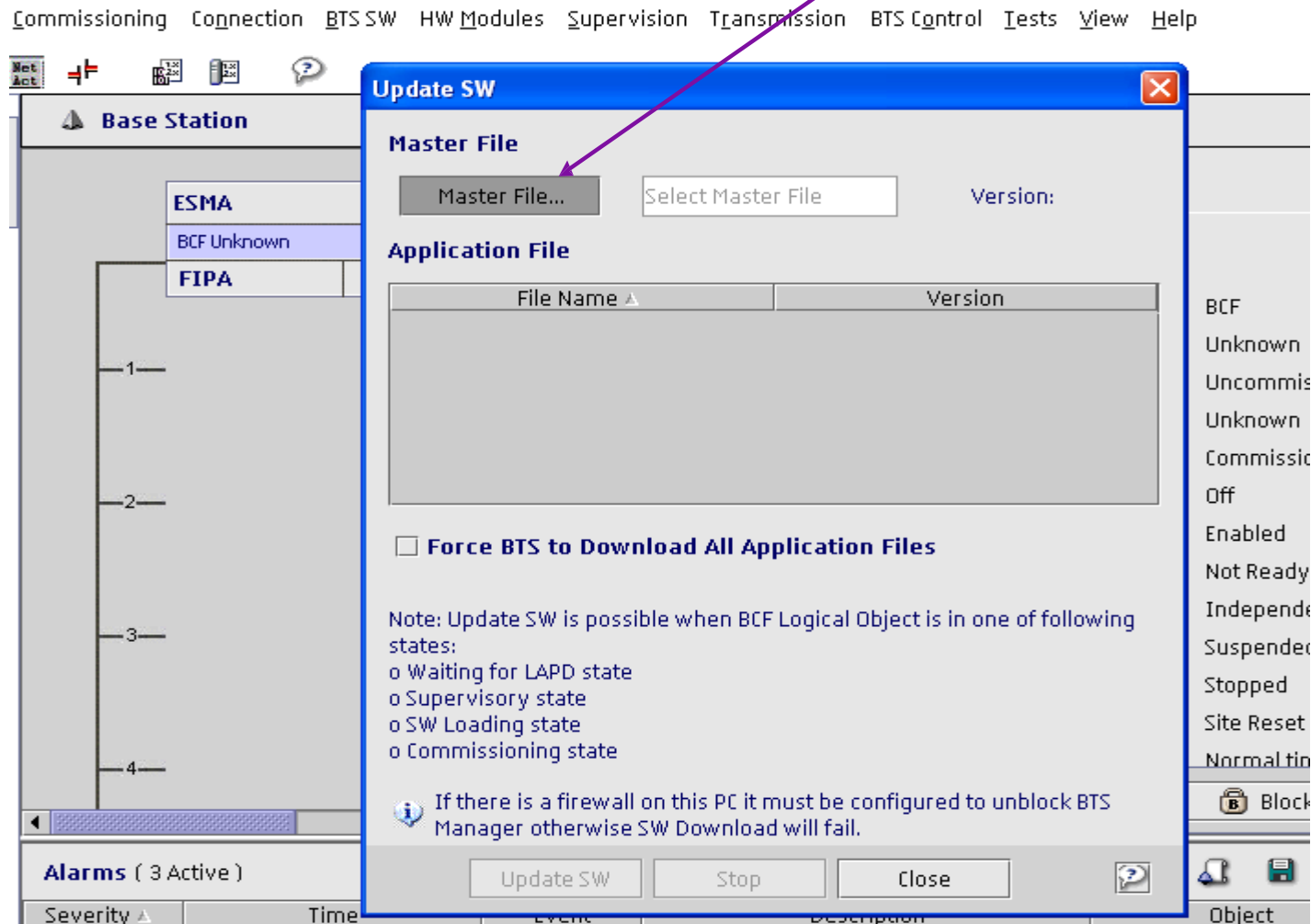


The screenshot shows the Flexi EDGE BTS Manager software interface. The title bar reads "Flexi EDGE BTS Manager Version 3 MP1.0 Build 0012 - Local Connection - BCF ID:Unknown, IP:192.168.255.131". The menu bar includes "File", "Commissioning", "Connection", "BTS SW", "HW Modules", "Supervision", "Transmission", "BTS Control", "Tests", "View", and "Help". The "BTS SW" menu is open, showing options: "Use Current", "SW Versions", "SW Update", and "Management Interface Version". The "SW Update" option is highlighted. The main window displays a "Base Station" configuration tree with "ESMA", "BCF Unknown", and "FIPA" components. The "Properties" pane on the right shows "BCF (Unknown) Properties" with the following details:

Property	Value
Object Name:	BCF
Site Name:	Unknown
BCF ID:	Uncommissioned
BSC ID:	Unknown
Operational State:	Commissioning
OMUSIG:	Off
Object State:	Enabled
Oscillator State:	Not Ready
Clock Sync State :	Independent
Oven Tuning State:	Suspended
Background SW Loading:	Stopped

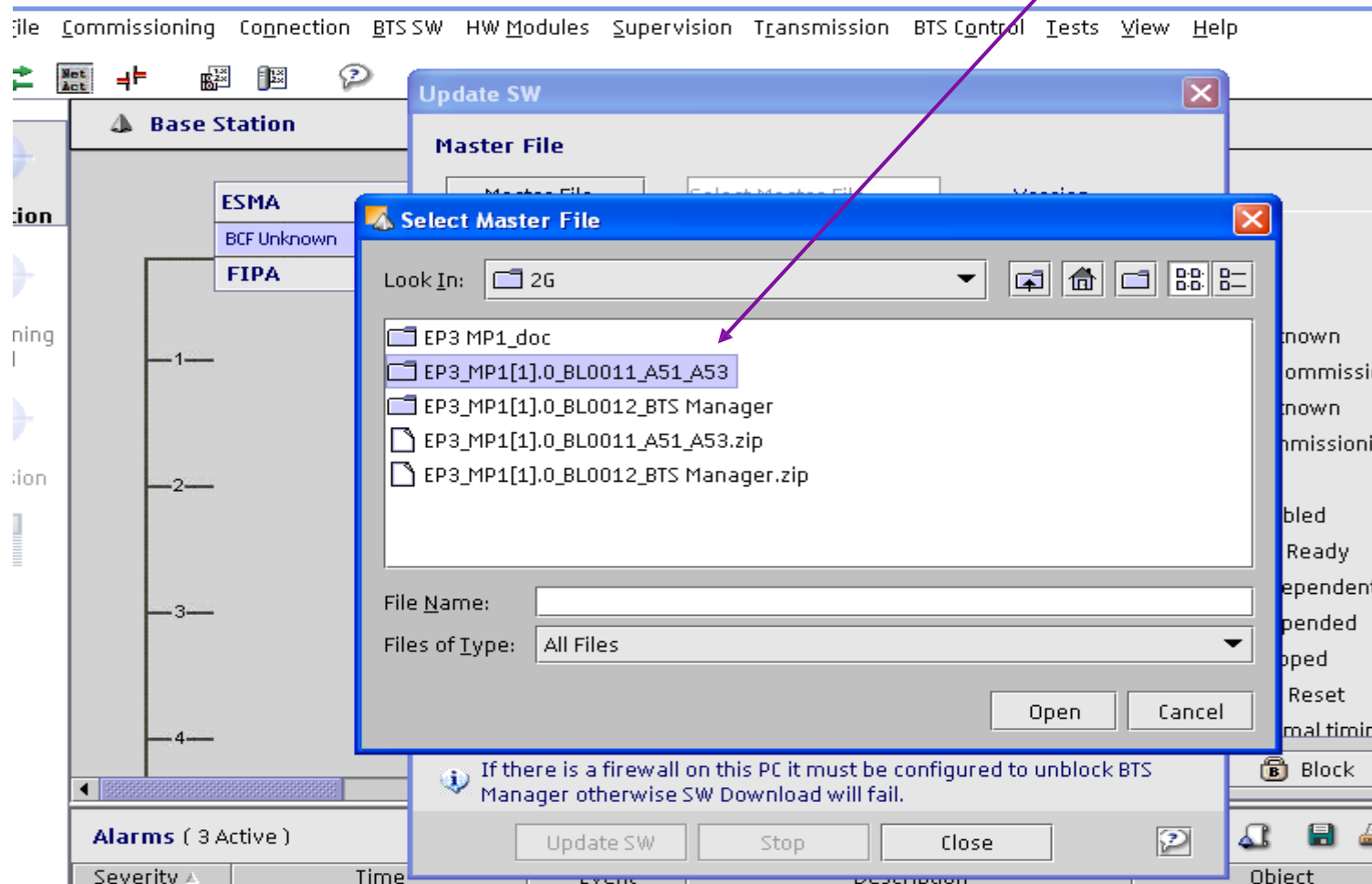
# Software Download

Following Window opens, then click on Master File...



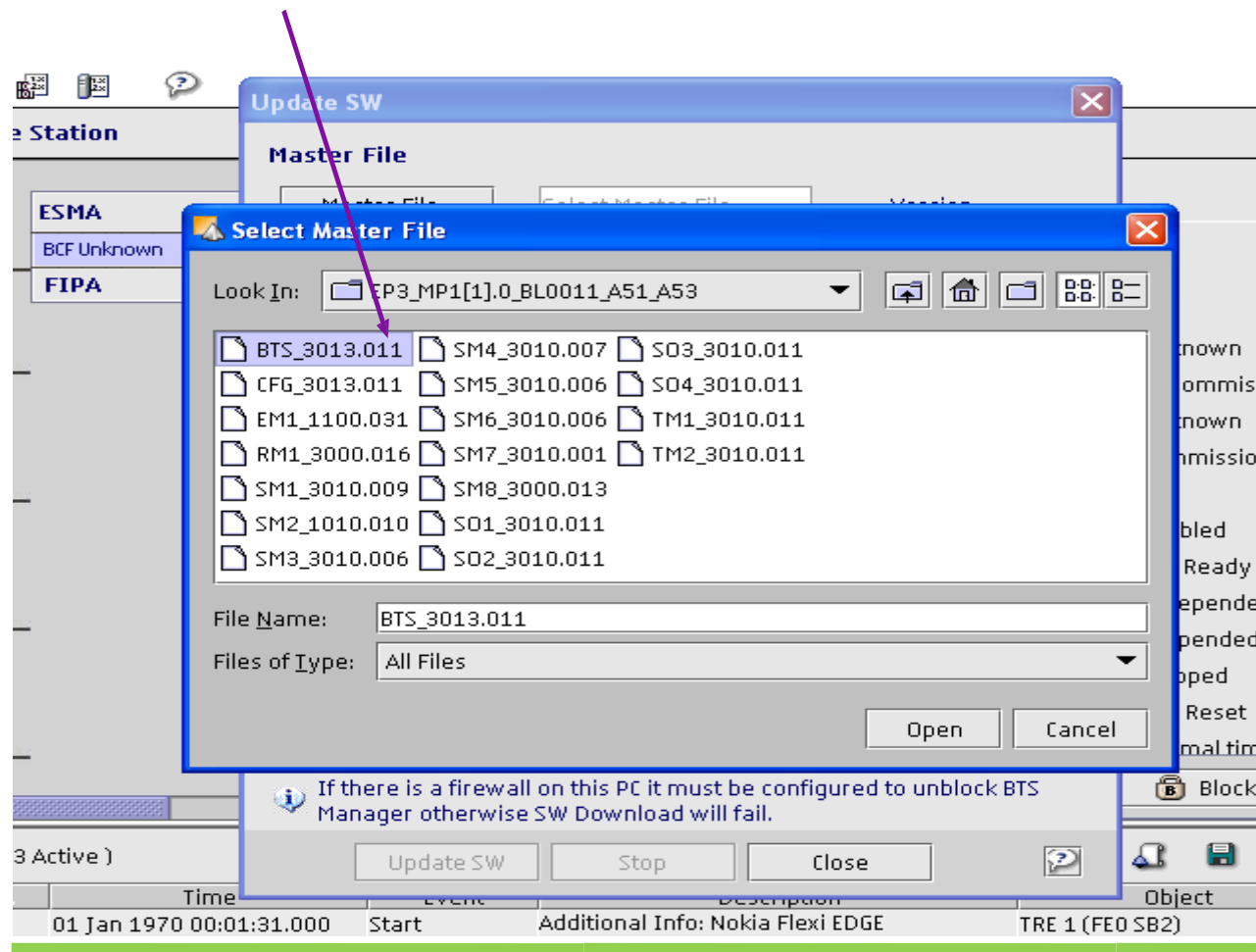
# Software Download

Go to the Folder where the latest software was stored on your computer and select the latest software folder



# Software Download

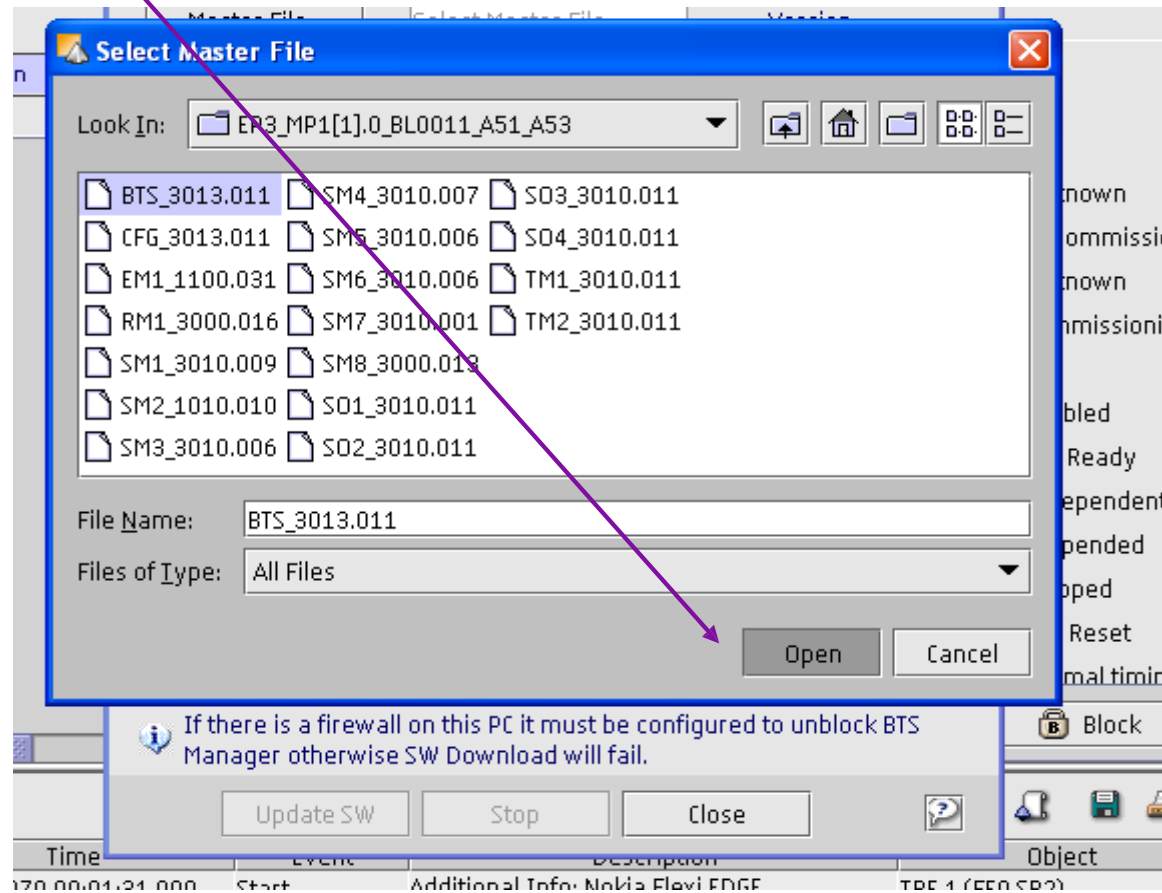
In the folder there is a BTS\_ ,  
Select this file as it is the Master file





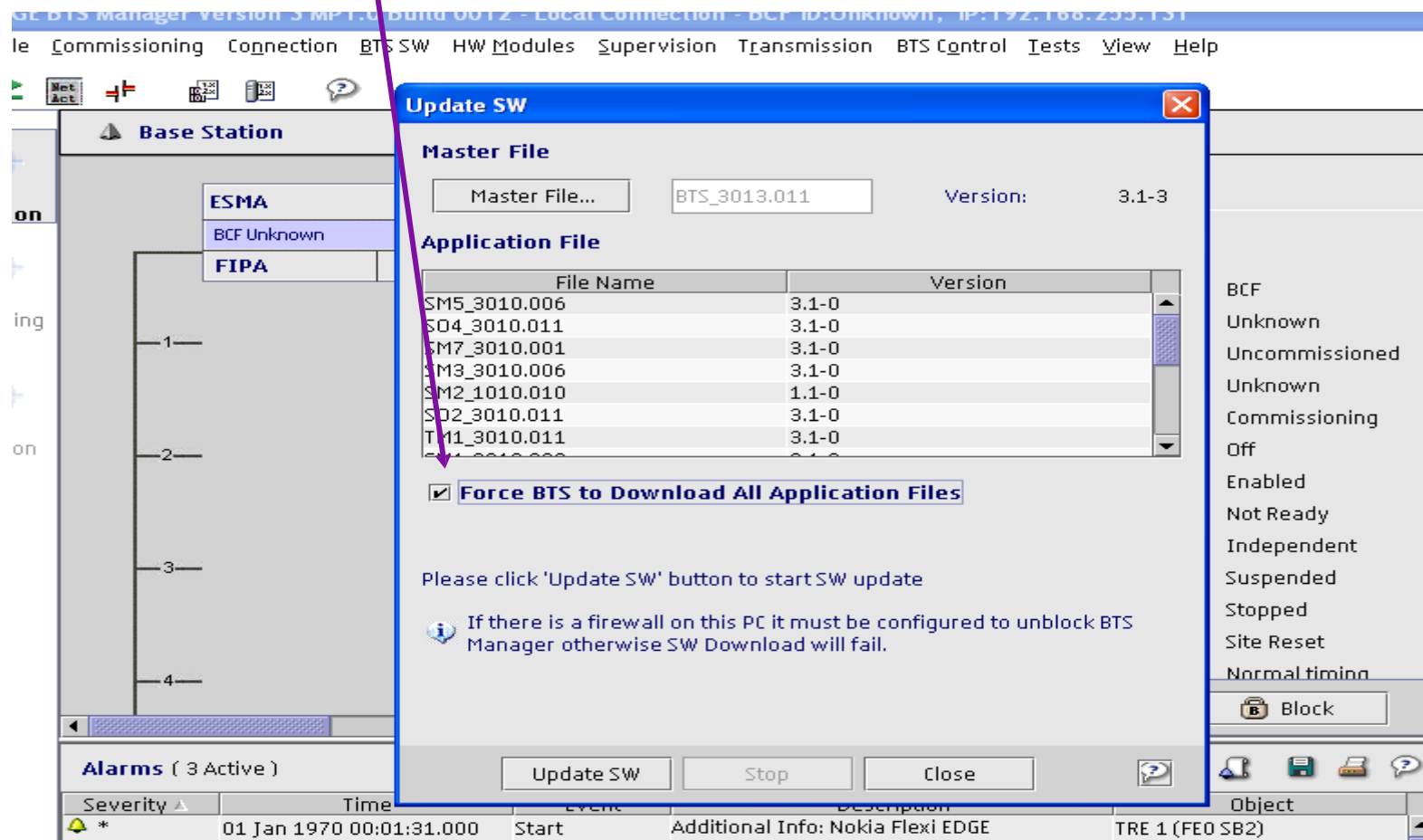
# Software Download

Click on open



# Software Download

Click on Force BTS to Download All Application Files – this ensures that All the latest software is downloaded to the BTS



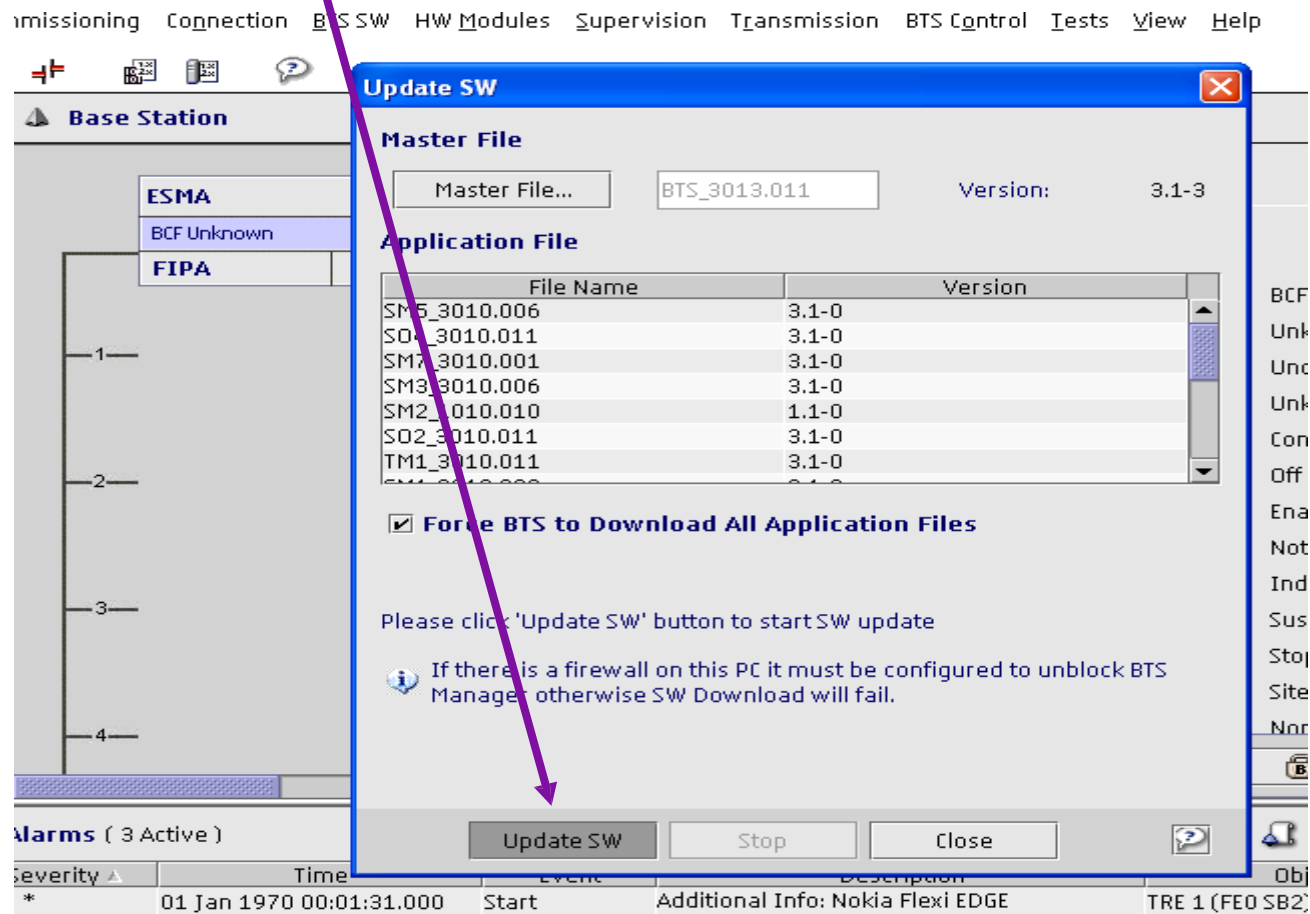
The screenshot shows the 'Update SW' dialog box in the software interface. The dialog has a 'Master File' section with a 'Master File...' button and a text field containing 'BTS\_3013.011'. The 'Version' is '3.1-3'. Below this is an 'Application File' table with columns 'File Name' and 'Version'.

File Name	Version
SM5_3010.006	3.1-0
SD4_3010.011	3.1-0
SM7_3010.001	3.1-0
SM3_3010.006	3.1-0
SM2_1010.010	1.1-0
SD2_3010.011	3.1-0
TM1_3010.011	3.1-0

Below the table, the checkbox 'Force BTS to Download All Application Files' is checked. Below the checkbox, there is a message: 'Please click 'Update SW' button to start SW update' and a note: 'If there is a firewall on this PC it must be configured to unblock BTS Manager otherwise SW Download will fail.' At the bottom of the dialog are buttons for 'Update SW', 'Stop', and 'Close'. The background shows a 'Base Station' configuration window with a tree view containing 'ESMA', 'BCF Unknown', and 'FIPA'. An 'Alarms' section at the bottom shows 3 active alarms.

# Software Download

Click on Update SW to start the download



Commissioning Connection B S SW HW Modules Supervision Transmission BTS Control Tests View Help

**Base Station**

ESMA  
BCF Unknown  
FIPA

**Update SW**

Master File  
Master File... BTS\_3013.011 Version: 3.1-3

Application File

File Name	Version
SM5_3010.006	3.1-0
SO4_3010.011	3.1-0
SM7_3010.001	3.1-0
SM3_3010.006	3.1-0
SM2_010.010	1.1-0
SO2_3010.011	3.1-0
TM1_3010.011	3.1-0

Force BTS to Download All Application Files

Please click 'Update SW' button to start SW update

*If there is a firewall on this PC it must be configured to unblock BTS Manager otherwise SW Download will fail.*

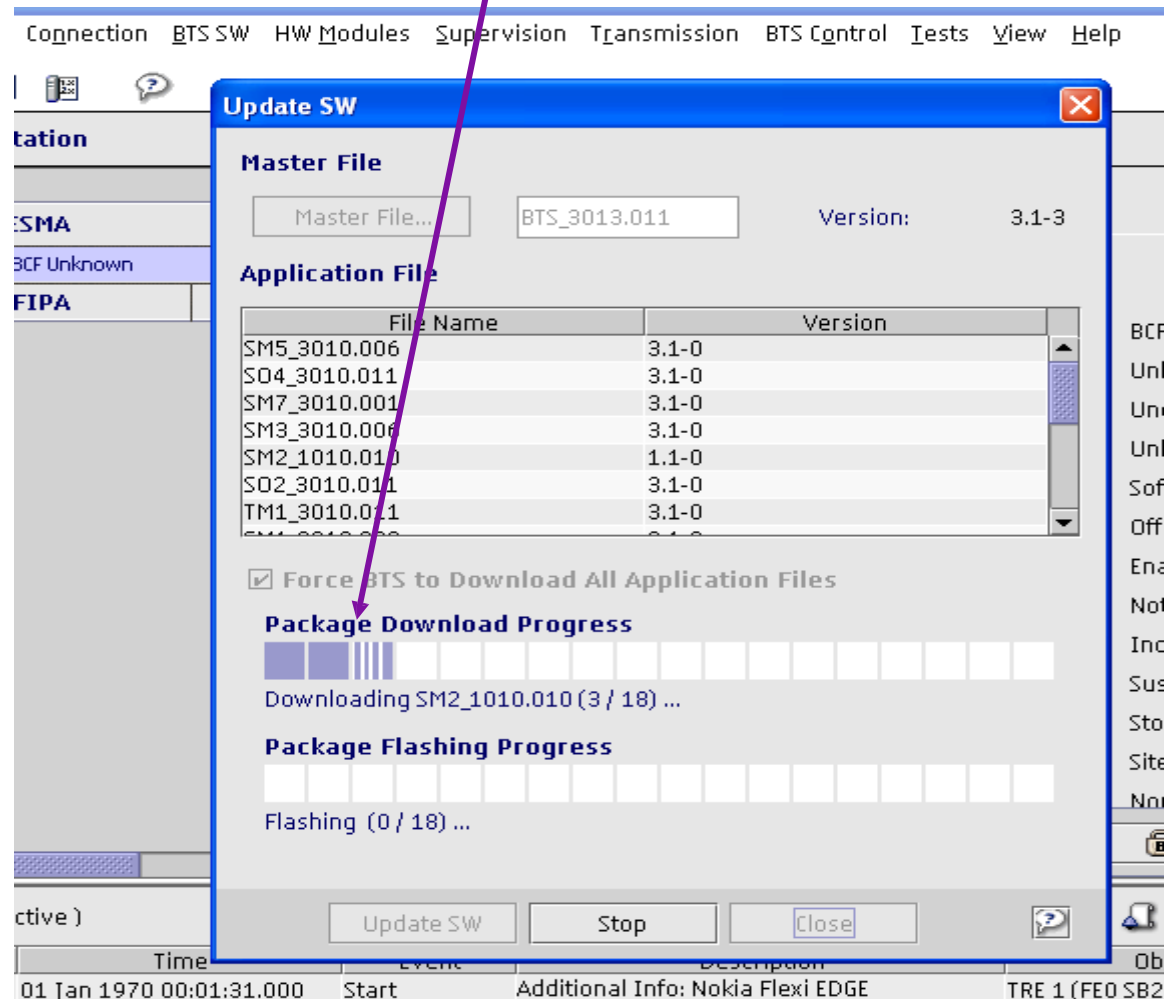
Update SW Stop Close

Alarms ( 3 Active )

Severity	Time	Event	Description	Obj
*	01 Jan 1970 00:01:31.000	Start	Additional Info: Nokia Flexi EDGE	TRE 1 (FE0 SB2)

# Software Download

Verify that software is downloading as per below, Package Download Progress will move from left to right



Connection BTS SW HW Modules Supervision Transmission BTS Control Tests View Help

**Update SW**

**Master File**

Master File... BTS\_3013.011 Version: 3.1-3

**Application File**

File Name	Version
SM5_3010.006	3.1-0
SO4_3010.011	3.1-0
SM7_3010.001	3.1-0
SM3_3010.006	3.1-0
SM2_1010.010	1.1-0
SO2_3010.011	3.1-0
TM1_3010.011	3.1-0

Force BTS to Download All Application Files

**Package Download Progress**

Downloading SM2\_1010.010 (3 / 18) ...

**Package Flashing Progress**

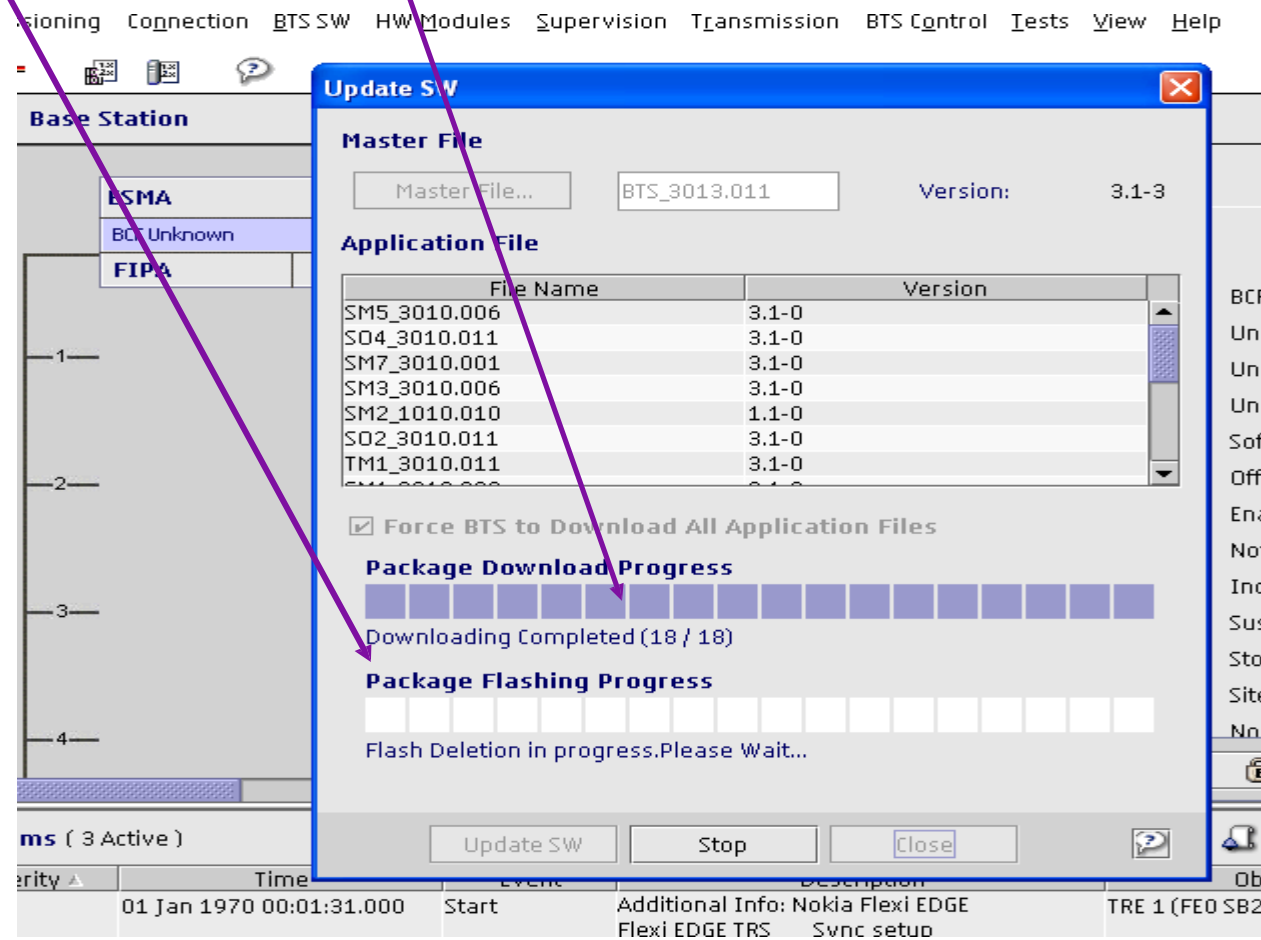
Flashing (0 / 18) ...

Update SW Stop Close

01 Jan 1970 00:01:31.000 Start Additional Info: Nokia Flexi EDGE TRE 1 (FEO SB2

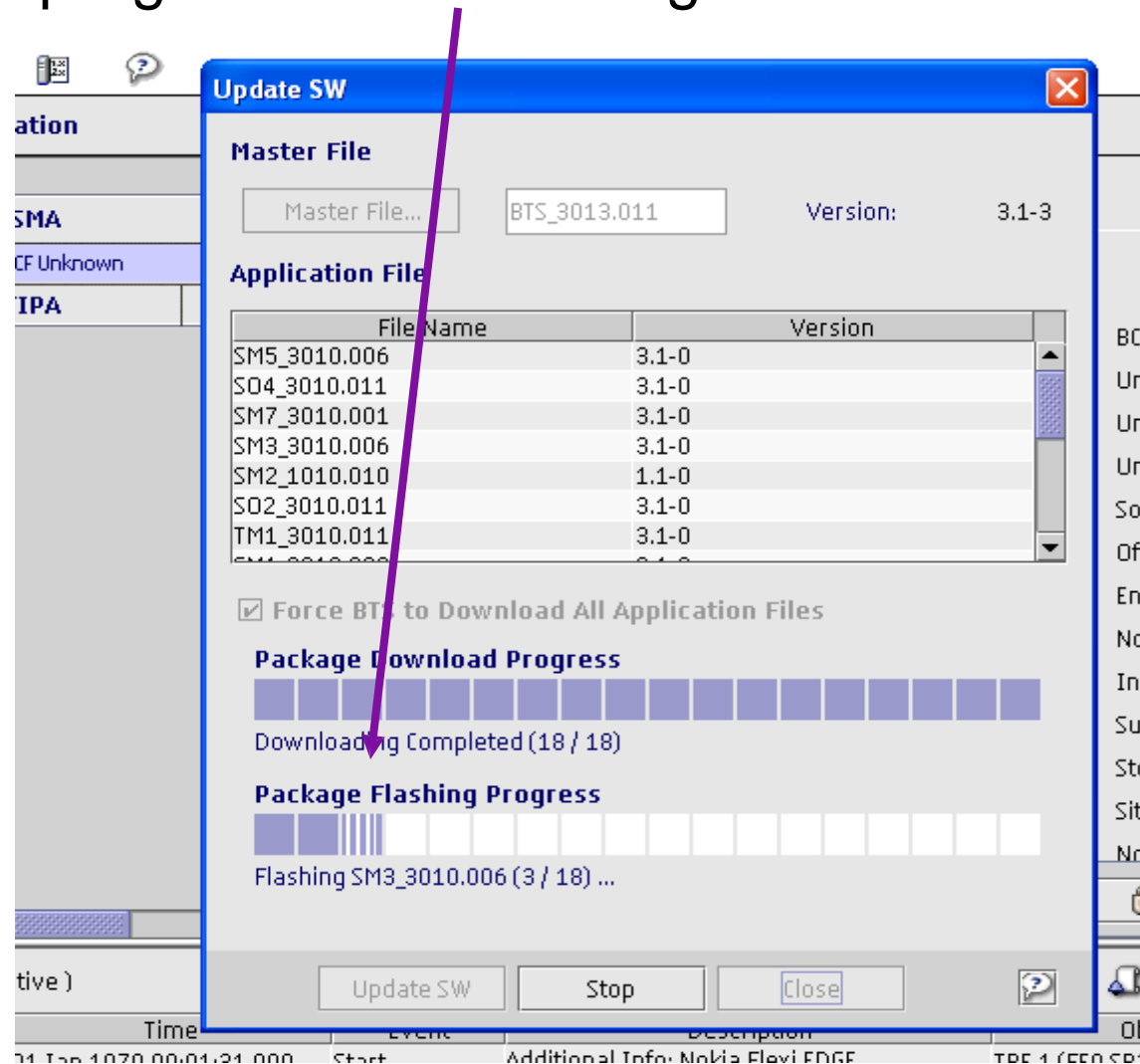
# Software Download

Download to BTS is completed, wait now for Package Flashing Progress



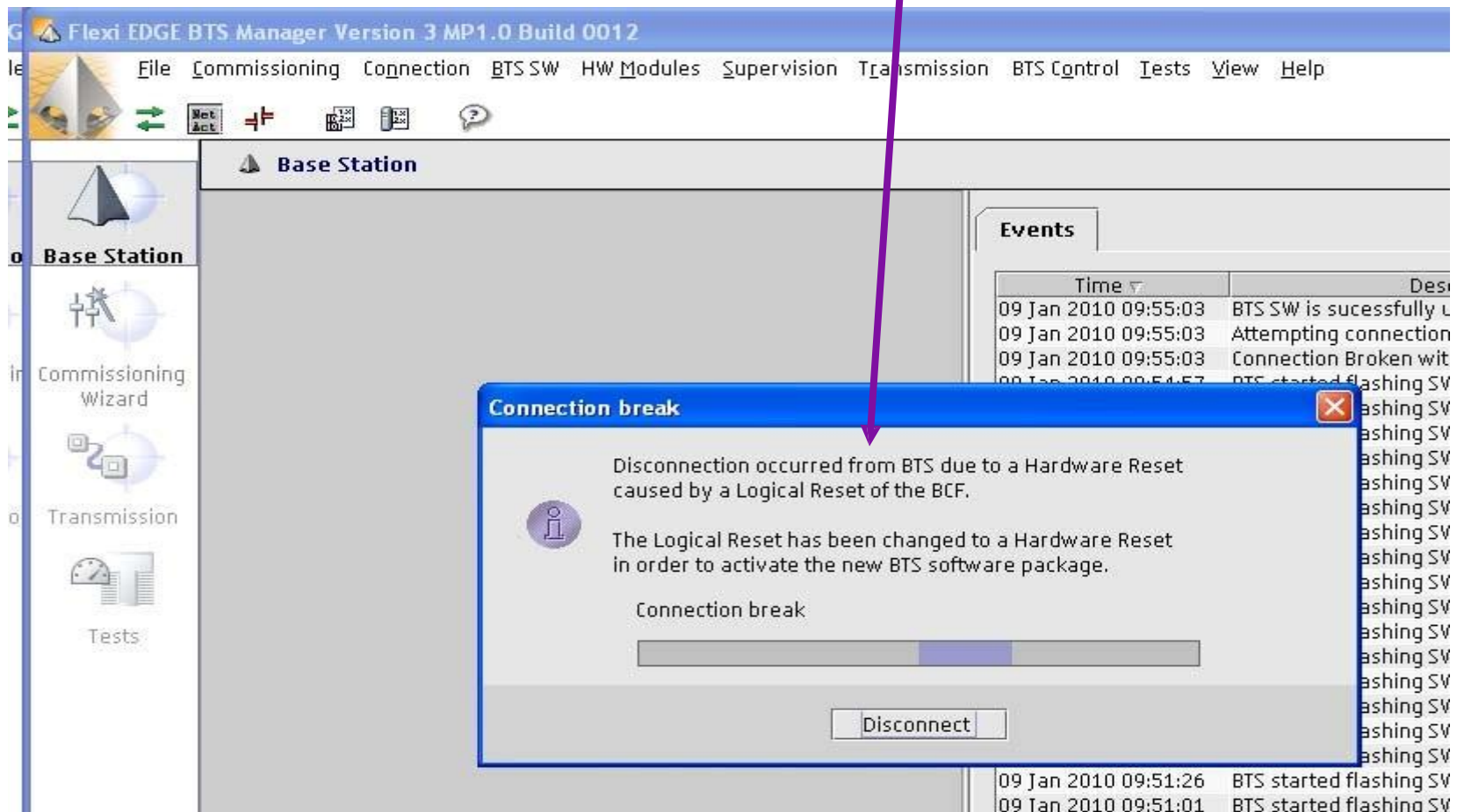
# Software Download

Below is the progress of the flashing



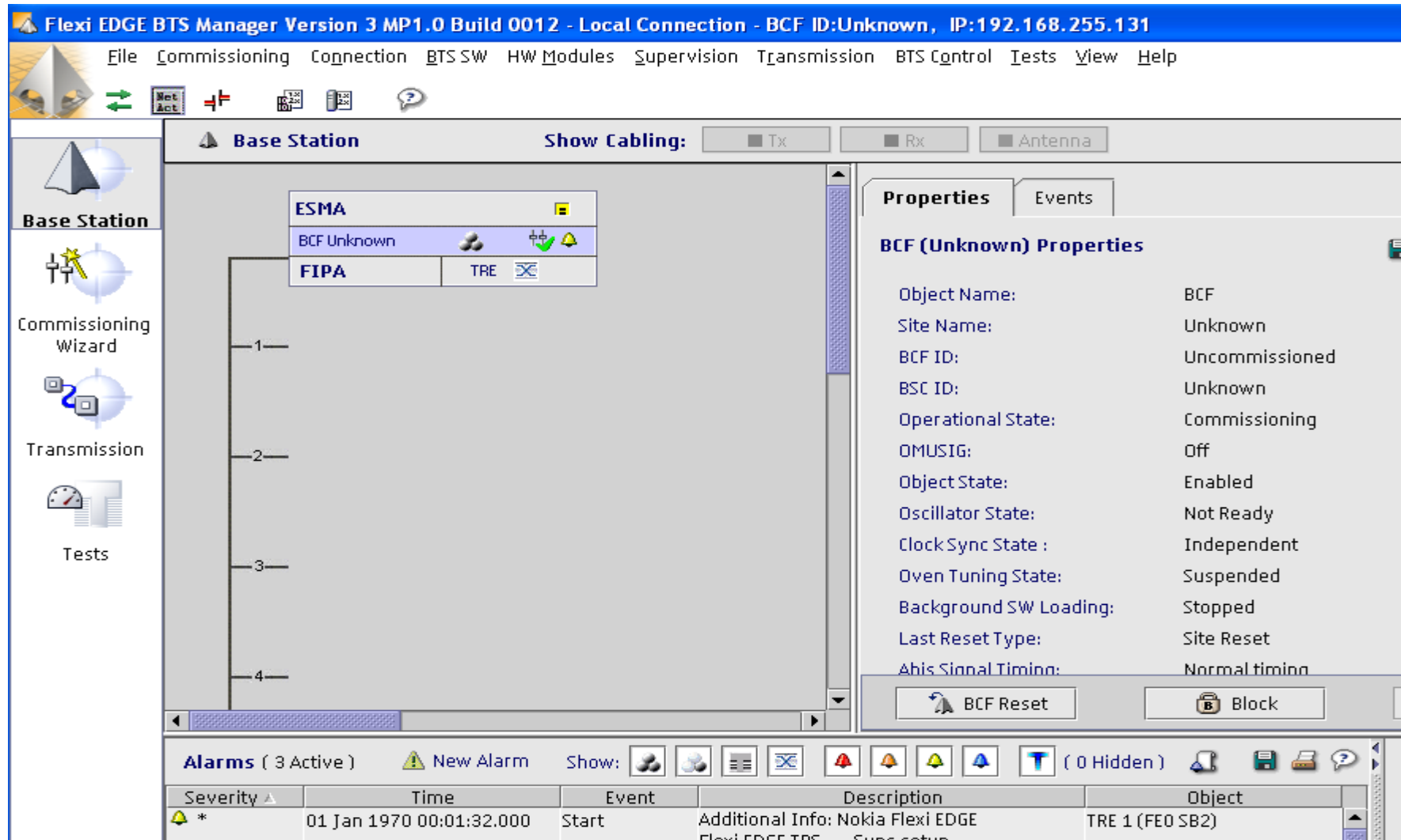
# Software download

After completion of the Flashing the BTS will reset



# Software download

BTS is now restarted and no error of software mismatch is seen



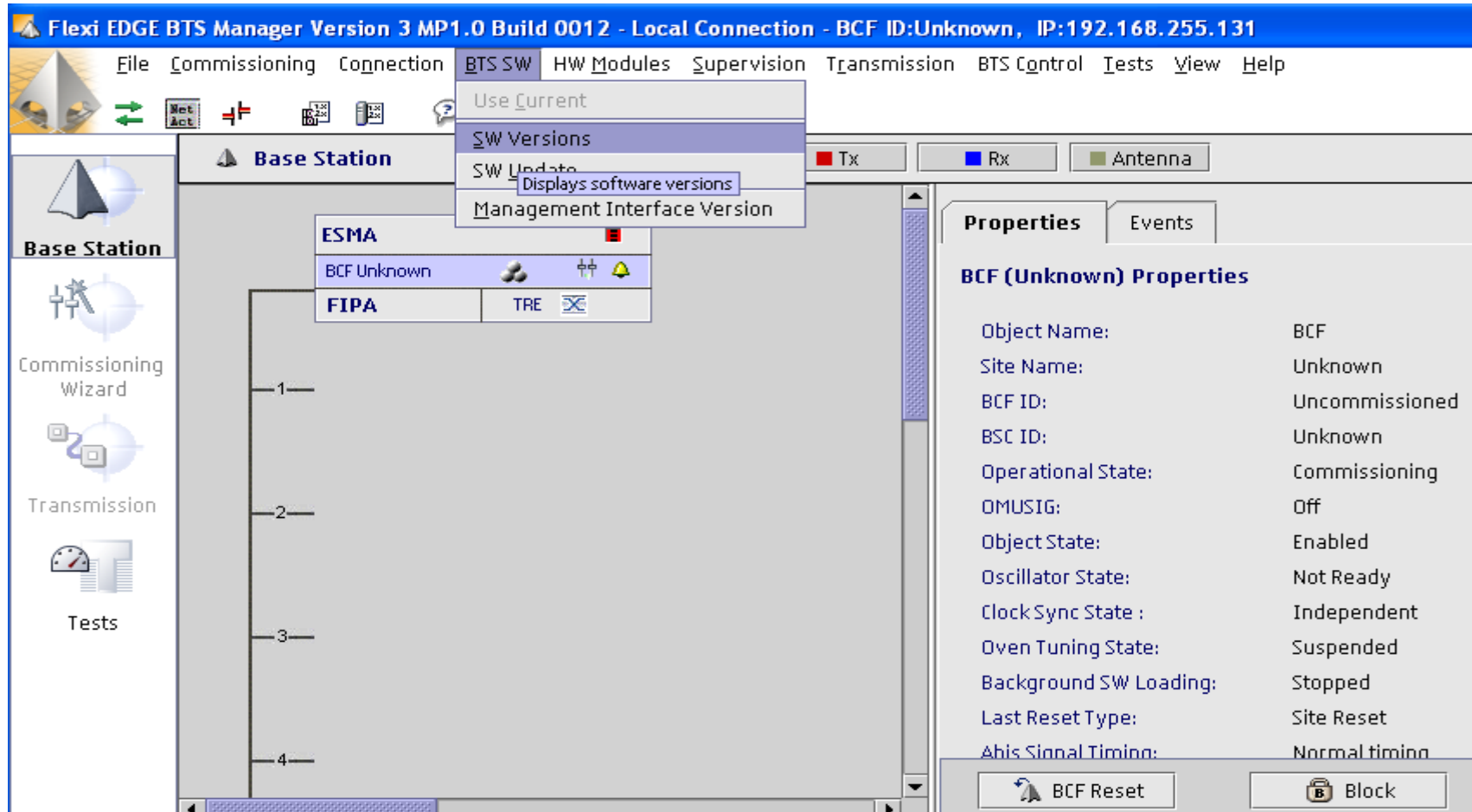
The screenshot displays the Flexi EDGE BTS Manager software interface. The title bar indicates the version is 3 MP1.0 Build 0012, connected locally to a BCF ID: Unknown at IP 192.168.255.131. The main window shows a 'Base Station' configuration for 'ESMA' with a 'BCF Unknown' component. The 'Properties' pane on the right lists various parameters for the BCF (Unknown) component, such as Object Name, Site Name, BCF ID, BSC ID, Operational State, and more. The 'Alarms' section at the bottom shows 3 active alarms, with the most recent one being a 'Start' event for 'TRE 1 (FE0 SB2)'.

Severity	Time	Event	Description	Object
Warning	01 Jan 1970 00:01:32.000	Start	Additional Info: Nokia Flexi EDGE Flexi EDGE TRS Sync setup	TRE 1 (FE0 SB2)



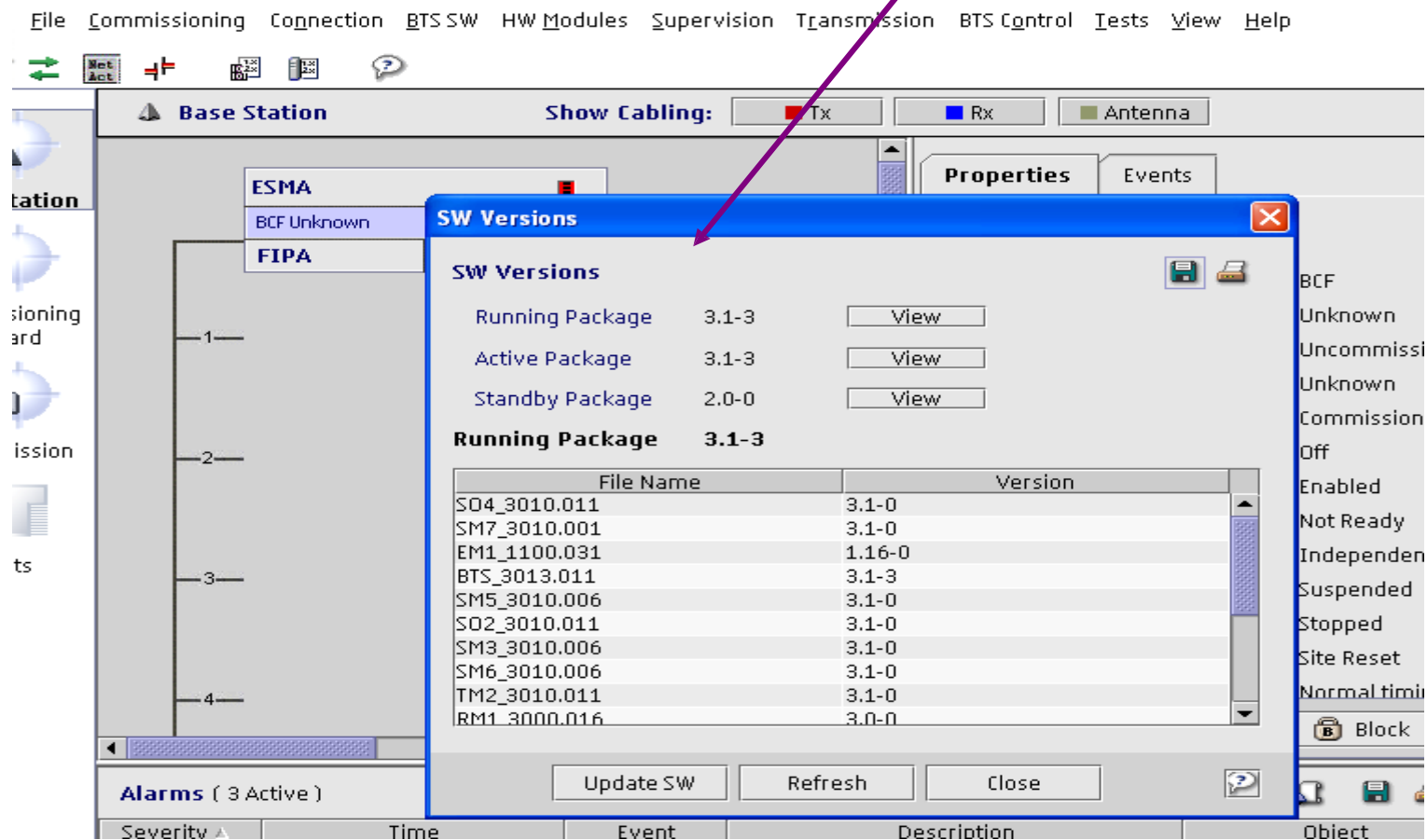
# Software Download

Verify BTS software is downloaded, click on BTS SW and then select SW Versions



# Software Download

Verify downloaded SW Package is now running software



The screenshot shows a software management application window titled 'Base Station'. A 'SW Versions' dialog box is open, displaying the following information:

- Running Package: 3.1-3 (View)
- Active Package: 3.1-3 (View)
- Standby Package: 2.0-0 (View)

**Running Package 3.1-3**

File Name	Version
SO4_3010.011	3.1-0
SM7_3010.001	3.1-0
EM1_1100.031	1.16-0
BTS_3013.011	3.1-3
SM5_3010.006	3.1-0
SO2_3010.011	3.1-0
SM3_3010.006	3.1-0
SM6_3010.006	3.1-0
TM2_3010.011	3.1-0
RM1_3000.016	3.0-0

Buttons at the bottom of the dialog: Update SW, Refresh, Close.

For BTS sites where a second E1 is required, the actions for assigning the BCF ID and rest of the steps are same.

The only area that changes is the activation of the second E1 link.

Next slides will give steps to be taken for activation of second link.

# Commissioning BTS – Second E1 on BTS

## Abis Plan for BTS with 2 E1

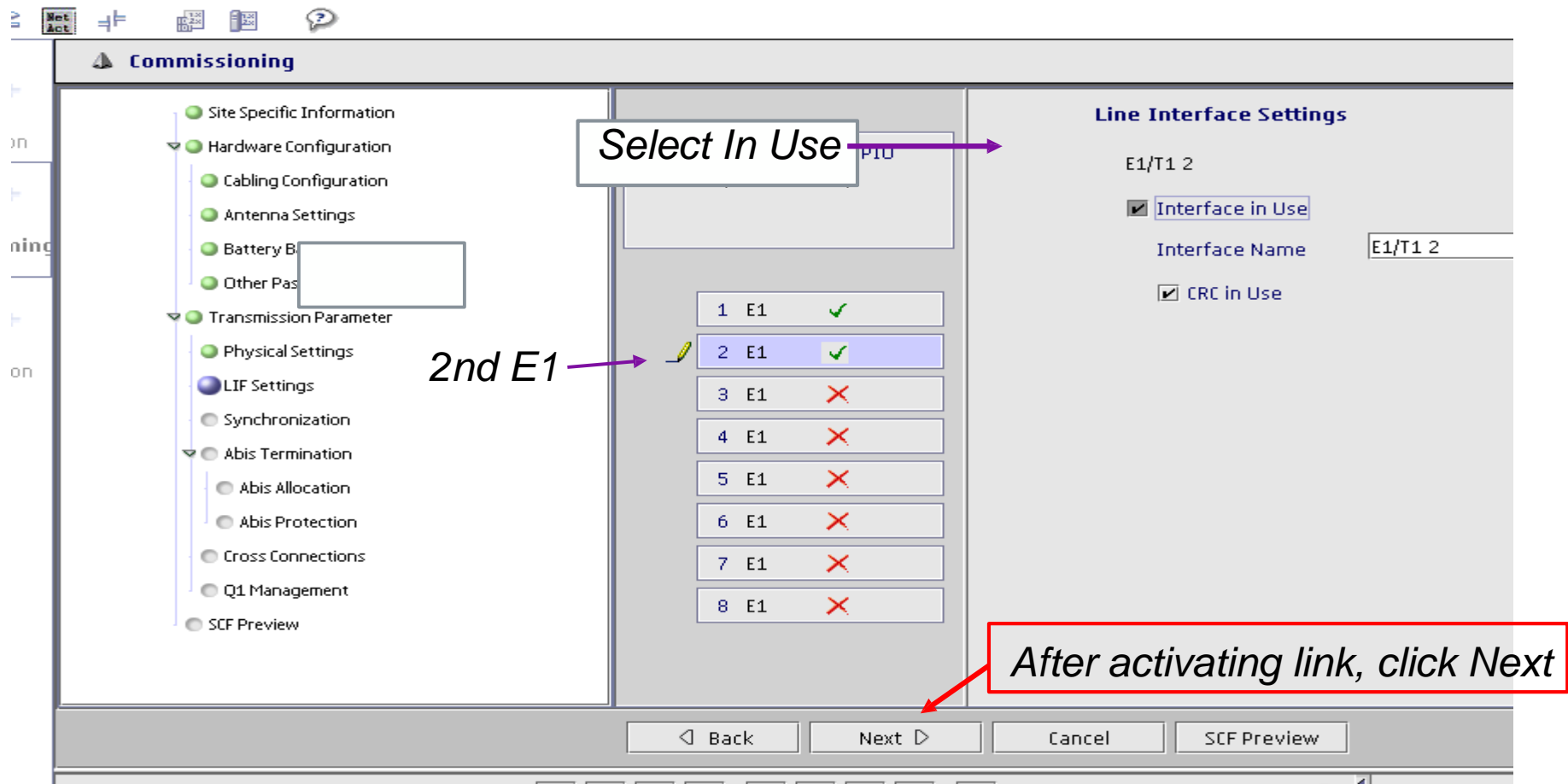
BSC ET Port: 67		BSC ET Port: 68	
	1 2 3 4 5 6 7 8		1 2 3 4 5 6 7 8
0			
1	1 1 1 1	13 13 13 13	
2	1 1 1 1	13 13 13 13	
3	2 2 2 2	14 14 14 14	
4	2 2 2 2	14 14 14 14	
5	3 3 3 3	15 15 15 15	
6	3 3 3 3	15 15 15 15	
7	5 5 5 5	16 16 16 16	
8	5 5 5 5	16 16 16 16	
9	6 6 6 6	17 17 17 17	
10	6 6 6 6	17 17 17 17	
11	7 7 7 7	18 18 18 18	
12	7 7 7 7	18 18 18 18	
13	9 9 9 9	21 21 21 21	
14	9 9 9 9	21 21 21 21	
15	10 10 10 10	22 22 22 22	
16	10 10 10 10	22 22 22 22	
17		23 23 23 23	
18		23 23 23 23	
19			
20			
21			
22			
23			
24			
25			
26			
27			
28	1 3	13 14 15 16	
29	5 7	17 18 21 22	
30	2 6 10		
31			

BSC ET Port: 67		BSC ET Port: 68	
	1 2 3 4 5 6 7 8		1 2 3 4 5 6 7 8
0			
1	1 1 1 1	13 13 13 13	
2	1 1 1 1	13 13 13 13	
3	2 2 2 2	14 14 14 14	
4	2 2 2 2	14 14 14 14	
5	3 3 3 3	15 15 15 15	
6	3 3 3 3	15 15 15 15	
7	5 5 5 5	16 16 16 16	
8	5 5 5 5	16 16 16 16	
9	6 6 6 6	17 17 17 17	
10	6 6 6 6	17 17 17 17	
11	7 7 7 7	18 18 18 18	
12	7 7 7 7	18 18 18 18	
13	9 9 9 9	21 21 21 21	
14	9 9 9 9	21 21 21 21	
15	10 10 10 10	22 22 22 22	
16	10 10 10 10	22 22 22 22	
17		23 23 23 23	
18		23 23 23 23	
19			
20			
21			
22			
23			
24			
25			
26			
27			
28	1 3	13 14 15 16	
29	5 7	17 18 21 22	
30	2 6 10		
31			

# Commissioning BTS – Second E1 on BTS

Activate second E1 on Line interface Settings – Click on “2 E1” and then Select “Interface in Use”

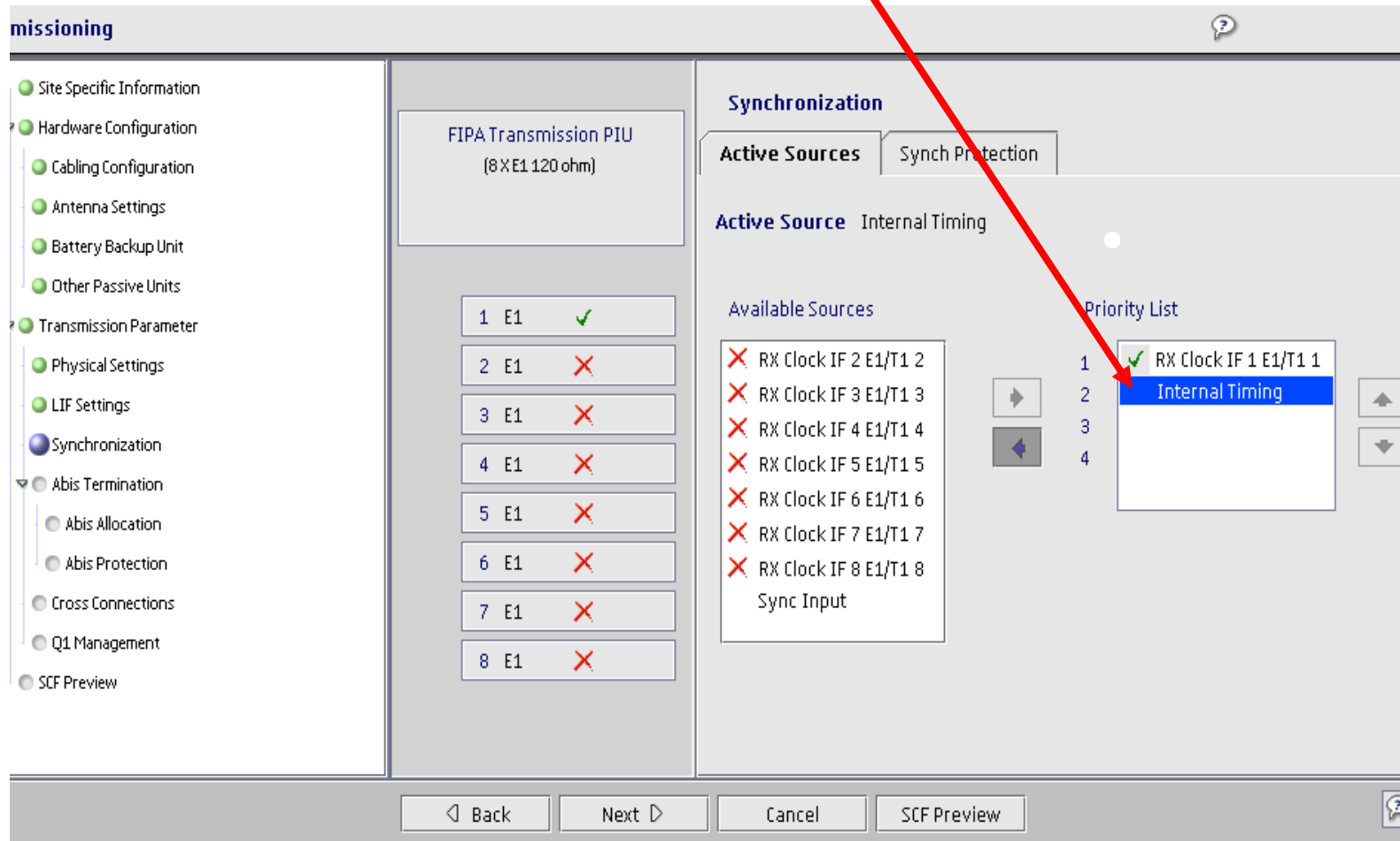


The screenshot shows the 'Commissioning' software interface. On the left is a navigation tree with categories like 'Site Specific Information', 'Hardware Configuration', 'Transmission Parameter', and 'Physical Settings'. The 'Transmission Parameter' section is expanded, showing a list of E1 lines. A table in the center lists 8 E1 lines, with the second line ('2 E1') highlighted in blue and marked with a green checkmark. A purple arrow points to this row with the text '2nd E1'. Another purple arrow points to the 'Interface in Use' checkbox in the 'Line Interface Settings' panel on the right, with the text 'Select In Use'. The 'Line Interface Settings' panel shows 'E1/T1 2' selected, with 'Interface in Use' and 'CRC in Use' checked. The 'Interface Name' is set to 'E1/T1 2'. At the bottom, there are buttons for 'Back', 'Next', 'Cancel', and 'SCF Preview'. A red box around the 'Next' button contains the text 'After activating link, click Next'.

1	E1	✓
2	E1	✓
3	E1	✗
4	E1	✗
5	E1	✗
6	E1	✗
7	E1	✗
8	E1	✗

# Commissioning BTS – Second E1 on BTS

Synchronization – Select Internal Timing and move to Available Sources



**missioning**

- Site Specific Information
- Hardware Configuration
  - Cabling Configuration
  - Antenna Settings
  - Battery Backup Unit
  - Other Passive Units
- Transmission Parameter
- Physical Settings
- LIF Settings
- Synchronization
- Abis Termination
  - Abis Allocation
  - Abis Protection
- Cross Connections
- Q1 Management
- SCF Preview

FIPA Transmission PIU  
(8 X E1 120 ohm)

1	E1	✓
2	E1	✗
3	E1	✗
4	E1	✗
5	E1	✗
6	E1	✗
7	E1	✗
8	E1	✗

**Synchronization**

Active Sources | Synch Protection

Active Source: Internal Timing

Available Sources

- ✗ RX Clock IF 2 E1/T1 2
- ✗ RX Clock IF 3 E1/T1 3
- ✗ RX Clock IF 4 E1/T1 4
- ✗ RX Clock IF 5 E1/T1 5
- ✗ RX Clock IF 6 E1/T1 6
- ✗ RX Clock IF 7 E1/T1 7
- ✗ RX Clock IF 8 E1/T1 8
- Sync Input

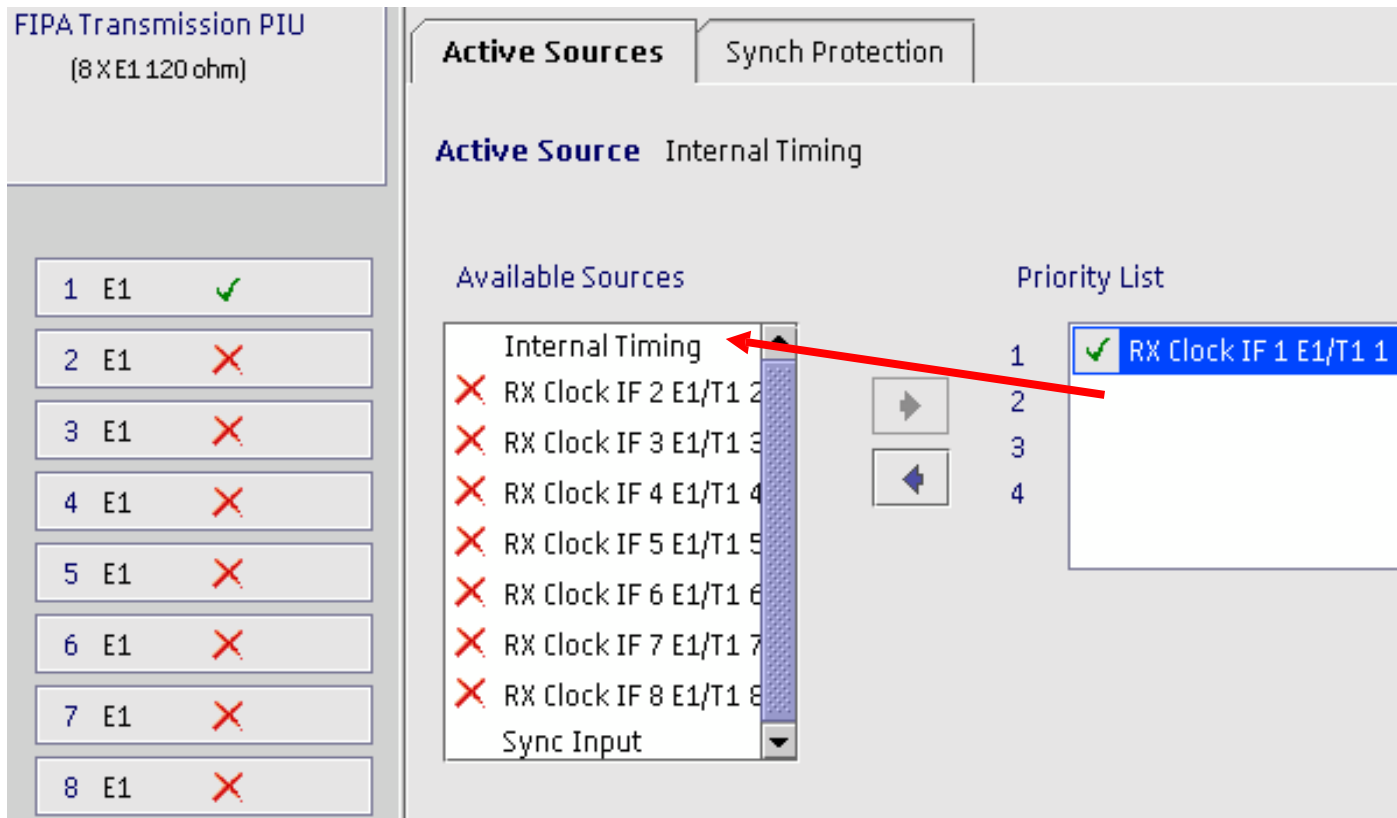
Priority List

1	✓ RX Clock IF 1 E1/T1 1
2	Internal Timing
3	
4	

Navigation: Back | Next | Cancel | SCF Preview

# Commissioning BTS – Second E1 on BTS

Internal Timing has now been moved from Priority list – This is a must for better BTS operations



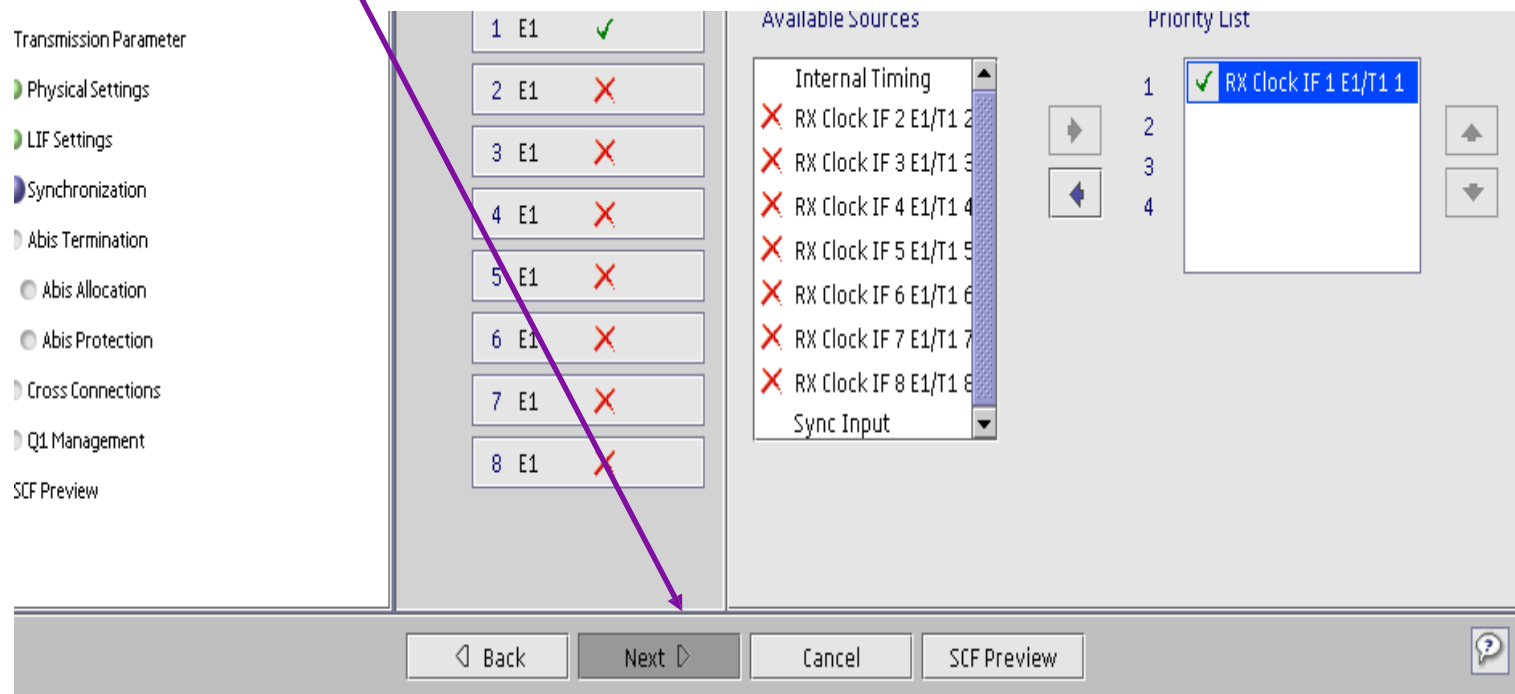
The screenshot shows the configuration interface for FIPA Transmission PIU (8 X E1 120 ohm). It features two tabs: 'Active Sources' and 'Synch Protection'. The 'Active Sources' tab is selected, showing 'Internal Timing' as the active source. Below this, there are two lists: 'Available Sources' and 'Priority List'. The 'Available Sources' list includes 'Internal Timing' (selected with a red arrow) and eight 'RX Clock IF' options (E1/T1 2 through 8), all marked with a red 'X'. The 'Priority List' shows 'RX Clock IF 1 E1/T1 1' as the only active source, marked with a green checkmark. A red arrow points from the 'Internal Timing' entry in the 'Available Sources' list to the 'RX Clock IF 1 E1/T1 1' entry in the 'Priority List'.

Port	Type	Status
1	E1	✓
2	E1	✗
3	E1	✗
4	E1	✗
5	E1	✗
6	E1	✗
7	E1	✗
8	E1	✗

Available Sources	Priority List
Internal Timing	1 ✓ RX Clock IF 1 E1/T1 1
✗ RX Clock IF 2 E1/T1 2	2
✗ RX Clock IF 3 E1/T1 3	3
✗ RX Clock IF 4 E1/T1 4	4
✗ RX Clock IF 5 E1/T1 5	
✗ RX Clock IF 6 E1/T1 6	
✗ RX Clock IF 7 E1/T1 7	
✗ RX Clock IF 8 E1/T1 8	
Sync Input	

# Commissioning BTS – Second E1 on BTS

Click on Next



Transmission Parameter

- Physical Settings
- LIF Settings
- Synchronization
- Abis Termination
- Abis Allocation
- Abis Protection
- Cross Connections
- Q1 Management
- SCF Preview

1	E1	✓
2	E1	✗
3	E1	✗
4	E1	✗
5	E1	✗
6	E1	✗
7	E1	✗
8	E1	✗

Available Sources

- Internal Timing
- ✗ RX Clock IF 2 E1/T1 2
- ✗ RX Clock IF 3 E1/T1 3
- ✗ RX Clock IF 4 E1/T1 4
- ✗ RX Clock IF 5 E1/T1 5
- ✗ RX Clock IF 6 E1/T1 6
- ✗ RX Clock IF 7 E1/T1 7
- ✗ RX Clock IF 8 E1/T1 8
- Sync Input

Priority List

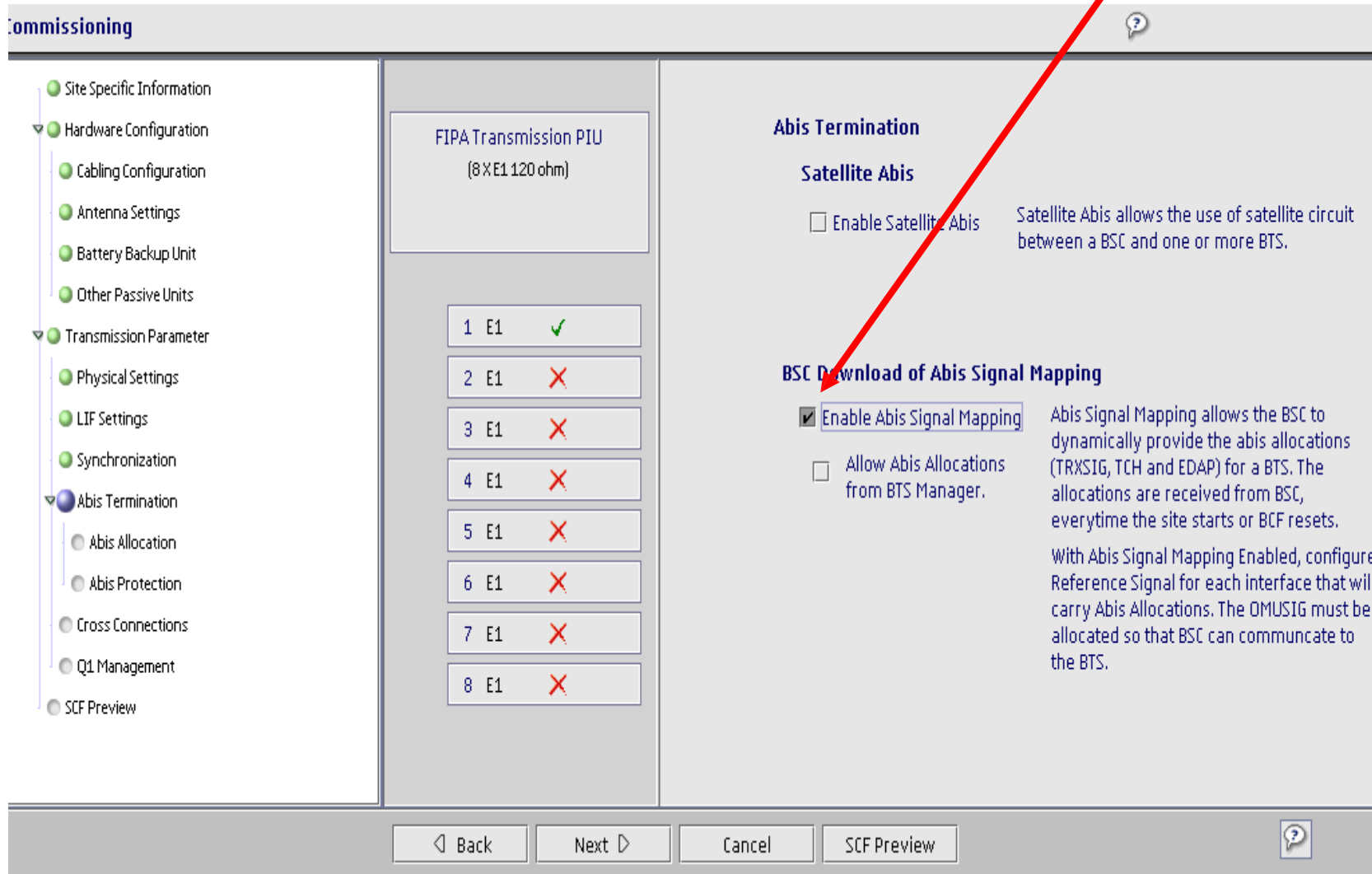
1	✓ RX Clock IF 1 E1/T1 1
2	
3	
4	

Buttons: Back, Next, Cancel, SCF Preview



# Commissioning BTS – Second E1 on BTS

Abis Termination – ONLY select “Enable Abis Signal Mapping”



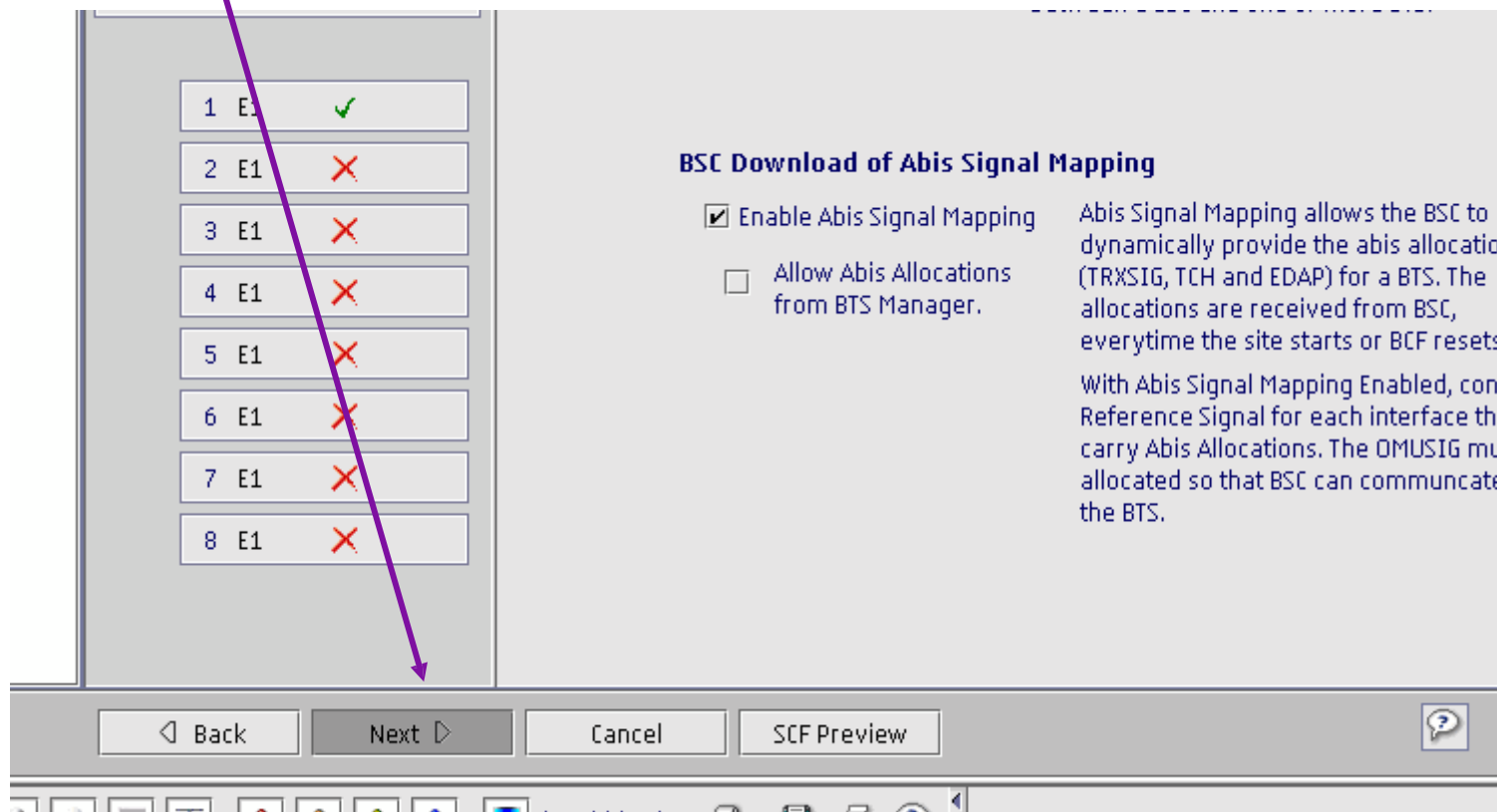
The screenshot shows the 'Commissioning' interface for a BTS. The left sidebar lists various configuration sections, with 'Abis Termination' selected. The main area is divided into three panels:

- FIPA Transmission PIU (8 X E1 120 ohm):** A table showing the status of 8 E1 lines. Line 1 is marked with a green checkmark, while lines 2 through 8 are marked with red X's.
- Abis Termination:** Contains two sub-sections:
  - Satellite Abis:** Includes an unchecked checkbox for 'Enable Satellite Abis' with a descriptive text: 'Satellite Abis allows the use of satellite circuit between a BSC and one or more BTS.'
  - BSC Download of Abis Signal Mapping:** Includes a checked checkbox for 'Enable Abis Signal Mapping' (highlighted by a red arrow) and an unchecked checkbox for 'Allow Abis Allocations from BTS Manager.' Below these is descriptive text: 'Abis Signal Mapping allows the BSC to dynamically provide the abis allocations (TRXSIG, TCH and EDAP) for a BTS. The allocations are received from BSC, everytime the site starts or BCF resets. With Abis Signal Mapping Enabled, configure Reference Signal for each interface that will carry Abis Allocations. The OMUSIG must be allocated so that BSC can communicate to the BTS.'

At the bottom of the interface are navigation buttons: 'Back', 'Next', 'Cancel', and 'SCF Preview', along with a help icon.

# Commissioning BTS – Second E1 on BTS

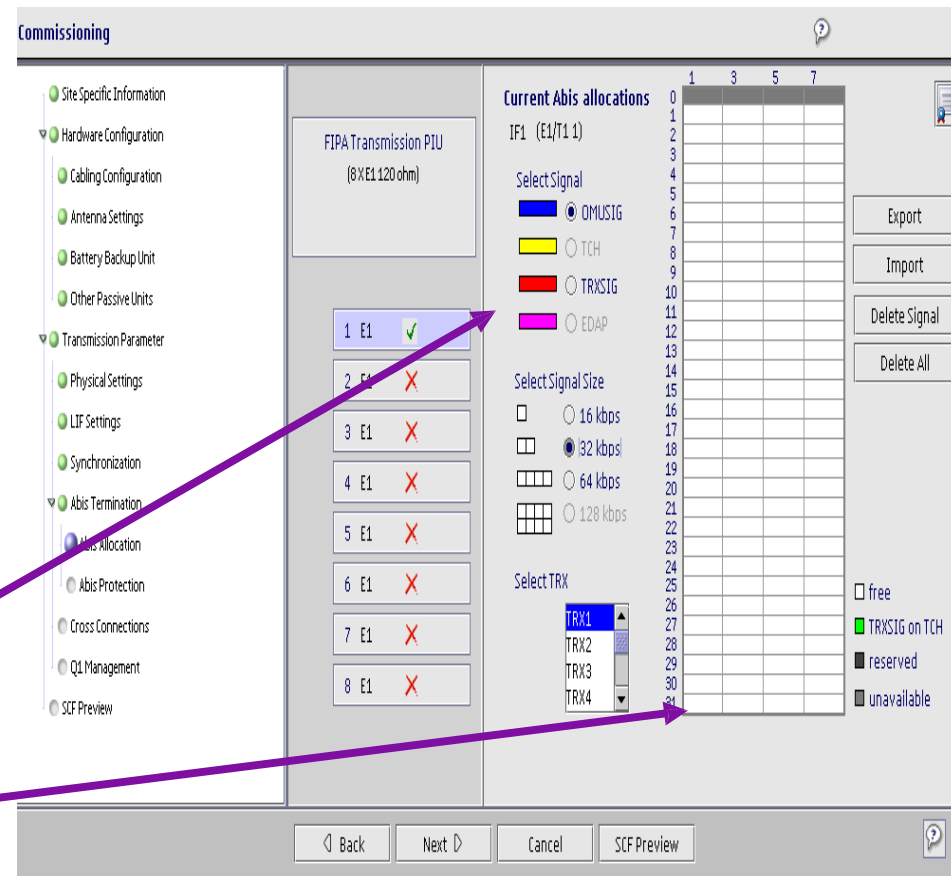
Click on Next



# Commissioning BTS – Second E1 on BTS

For Abis Allocation you require Abis Plan from Access planner to assign OMUsig on correct timeslot

	1	2	3	4	5	6	7	8
0								
1	1	1	1	1	1			
2	1	1	1	1	1			
3	2	2	2	2				
4	2	2	2	2				
5	3	3	3	3				
6	3	3	3	3				
7	5	5	5	5				
8	5	5	5	5				
9	6	6	6	6				
10	6	6	6	6				
11	7	7	7	7				
12	7	7	7	7				
13	9	9	9	9				
14	9	9	9	9				
15	10	10	10	10				
16	10	10	10	10				
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27					9			
28	1				3			
29	5							
30	2	6			10			
31								



**Commissioning**

- Site Specific Information
- Hardware Configuration
- Cabling Configuration
- Antenna Settings
- Battery Backup Unit
- Other Passive Units
- Transmission Parameter
- Physical Settings
- LIF Settings
- Synchronization
- Abis Termination
- Abis Allocation**
- Abis Protection
- Cross Connections
- QL Management
- SCF Preview

FIPA Transmission PIU (8 X E1 120 ohm)

Current Abis allocations

IF1 (E1/T1 1)

Select Signal

- OMUSIG
- TCH
- TRXSIG
- EDAP

Select Signal Size

- 16 kbps
- 32 kbps
- 64 kbps
- 128 kbps

Select TRX

- TRX1
- TRX2
- TRX3
- TRX4

1 E1 ✓

2 E1 ✗

3 E1 ✗

4 E1 ✗

5 E1 ✗

6 E1 ✗

7 E1 ✗

8 E1 ✗

Legend:  free,  TRXSIG on TCH,  reserved,  unavailable

Buttons: Back, Next, Cancel, SCF Preview

# Commissioning BTS – Second E1 on BTS

Abios plan shows timeslot of OMUsig and also size

Each block is 16kb, so OMUsig is 32kb

Small block is 16kb

	1	2	3	4	5	6	7	8	
0									LINK MANAGEMENT
1	1	1	1	1					BCF7-/TRX-1
2	1	1	1	1					SECT A1 GSM/00 (BTS-7)
3	2	2	2	2				BCF7-/TRX-2	
4	2	2	2	2					SECT A2 GSM/00 (BTS-8)
5	3	3	3	3				BCF7-/TRX-3	
6	3	3	3	3					SECT A3 GSM/00 (BTS-9)
7	5	5	5	5				BCF7-/TRX-5	
8	5	5	5	5					TRX SIG
9	6	6	6	6				BCF7-/TRX-6	
10	6	6	6	6					OMUSIG32 (BCF-7)
11	7	7	7	7				BCF7-/TRX-7	
12	7	7	7	7					
13	9	9	9	9					
14	9	9	9	9					
15	10	10	10	10					
16	10	10	10	10					
17									
18									EDAP 7
19									
20									
21									
22									
23									
24									
25									
26									
27							9		
28							3		
29							5	7	
30							2	6	10
31									

OMUsig is 32kb

# Commissioning BTS – Second E1 on BTS

*Select Signal Size as 32kb – as per Abis plan*

**Commissioning**

- Site Specific Information
- Hardware Configuration
  - Cabling Configuration
  - Antenna Settings
  - Battery Backup Unit
  - Other Passive Units
- Transmission Parameter
  - Physical Settings
  - LIF Settings
  - Synchronization
  - Abis Termination
    - Abis Allocation**
    - Abis Protection
    - Cross Connections
    - Q1 Management
    - SCF Preview

FIPA Transmission PIU  
(8 X E1 120 ohm)

1	E1	✓
2	E1	✗
3	E1	✗
4	E1	✗
5	E1	✗
6	E1	✗
7	E1	✗
8	E1	✗

**Current Abis allocations**  
IF1 (E1/T1 1)

Select Signal

- OMUSIG
- TCH
- TRXSIG
- EDAP

Select Signal Size

- 16 kbps
- 32 kbps
- 64 kbps
- 128 kbps

Select TRX

- TRX1
- TRX2
- TRX3
- TRX4

	1	3	5	7
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
31				

Export  
Import  
Delete Signal  
Delete All

free  
 TRXSIG on TCH  
 reserved  
 unavailable

Back Next Cancel SCF Preview

# Commissioning BTS – Second E1 on BTS

Click on Timeslot 31 and assign OMUsig as per Abis plan  
*Abis Plan* *BTS Manager*

	1	2	3	4	5	6	7	8	
0									LNK MANAGEMENT
1	1	1	1	1					BCF7-/TRX-1
2	1	1	1	1					
3	2	2	2	2					SECT A1 GSM/900 (BTS-7)
4	2	2	2	2					BCF7-/TRX-2
5	3	3	3	3					BCF7-/TRX-3
6	3	3	3	3					
7	5	5	5	5					BCF7-/TRX-5
8	5	5	5	5					
9	6	6	6	6					SECT A2 GSM/900 (BTS-8)
10	6	6	6	6					BCF7-/TRX-6
11	7	7	7	7					BCF7-/TRX-7
12	7	7	7	7					
13	9	9	9	9					BCF7-/TRX-9
14	9	9	9	9					SECT A3 GSM/900 (BTS-9)
15	10	10	10	10					BCF7-/TRX-10
16	10	10	10	10					
17									
18									EDAP 7
19									
20									
21									
22									
23									
24									
25									
26									
27							9		
28	1						3		
29	5						7		TRX SIG
30	2	6	10						
31									OMUSIG32 (BCF-7)

**Current Abis allocations**

IF1 (E1/T1 1)

Select Signal

OMUSIG

TCH

TRXSIG

EDAP

Select Signal Size

16 kbps

32 kbps

64 kbps

128 kbps

Select TRX

TRX1

TRX2

TRX3

TRX4

	1	3	5	7
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
31	OMU			

free

TRXSIG on TCH

reserved

unavailable

Export

Import

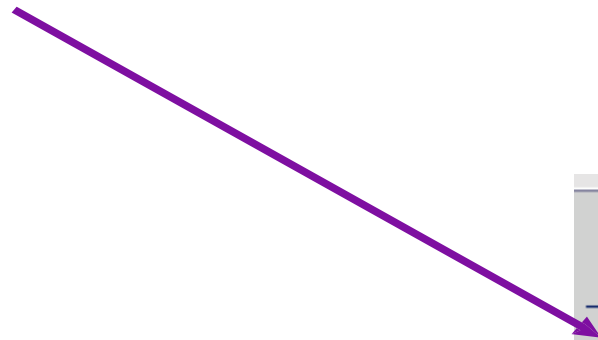
Delete Signal

Delete All

Back Next Cancel SCF Preview

# Commissioning BTS – Second E1 on BTS

*Click on the Second E1 to start assignment of TRXsig*



1	E1	✓
2	E1	✓
3	E1	✗
4	E1	✗
5	E1	✗
6	E1	✗
7	E1	✗
8	E1	✗

<input type="radio"/>	TCH	8
<input checked="" type="radio"/>	TRXSIG	9
<input type="radio"/>	EDAP	10
		11
		12
		13
		14
		15
		16
		17
		18
		19
		20
		21
		22
		23
		24
		25
		26
		27
		28
		29
		30
		31

Select Signal Size

16 kbps

32 kbps

64 kbps

128 kbps

Select TRX

TRX12

**TRX13**

TRX14

TRX15

◀ Back    Next ▶    Cancel    SCF Preview

# Commissioning BTS – Second E1 on BTS

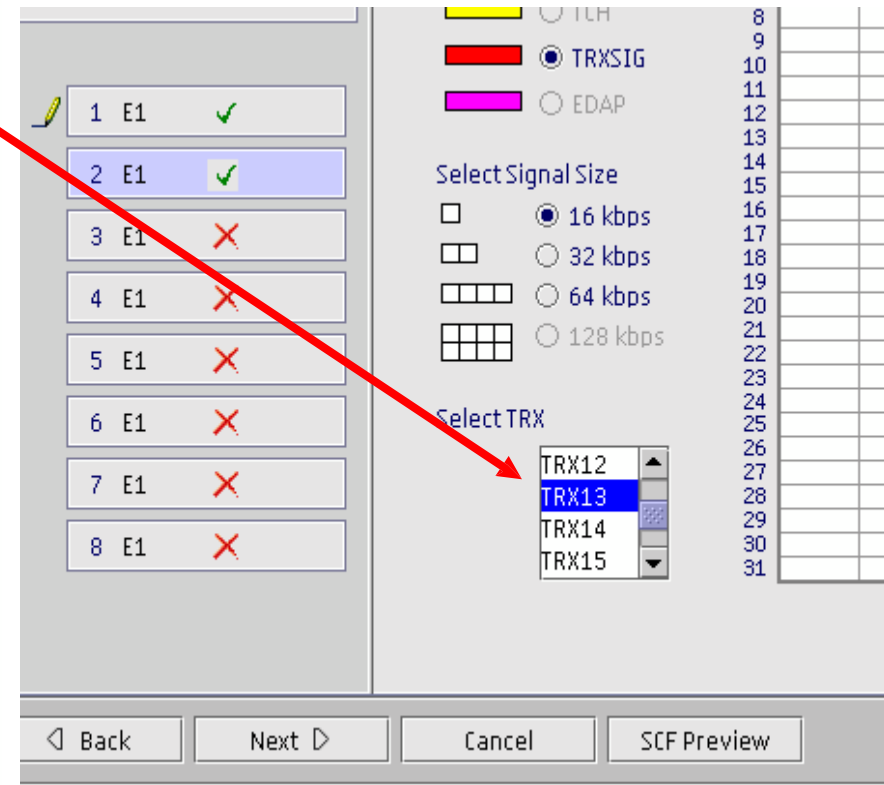
Select the First TRX on the second E1 – in this case TRX 13

*First E1*

BSC ET Port:67							
	1	2	3	4	5	6	7 8
0							LINK MANAGEMENT
1	1	1	1	1	1		BCF-7/TRX-1
2	1	1	1	1	1		
3	2	2	2	2	2		BCF-7/TRX-2
4	2	2	2	2	2		SECT A1 GSM1800 (BTS-7)
5	3	3	3	3	3		BCF-7/TRX-3
6	3	3	3	3	3		
7	5	5	5	5	5		BCF-7/TRX-5
8	5	5	5	5	5		
9	6	6	6	6	6		BCF-7/TRX-6
10	6	6	6	6	6		SECT A2 GSM1800 (BTS-8)
11	7	7	7	7	7		BCF-7/TRX-7
12	7	7	7	7	7		
13	9	9	9	9	9		BCF-7/TRX-9
14	9	9	9	9	9		SECT A3 GSM1800 (BTS-9)
15	10	10	10	10	10		BCF-7/TRX-10
16	10	10	10	10	10		
17							
18							EDAP 7
19							
20							
21							
22							
23							
24							
25							
26							
27					9		
28	1			3			
29	5			7			TRX SIG
30	2	6	10				
31							OML/SIG32 (BCF-7)

*Second E1*

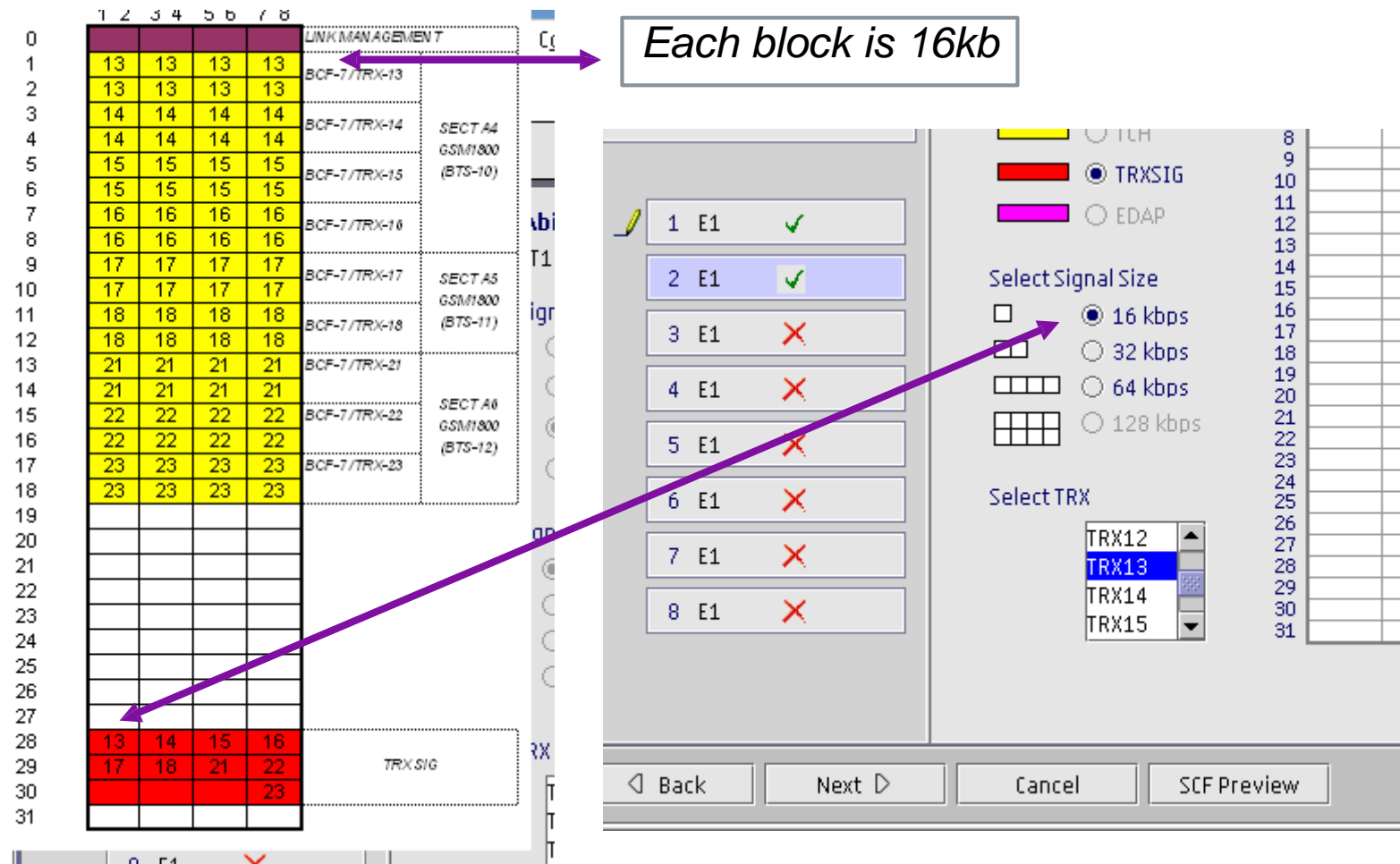
BSC ET Port:68							
	1	2	3	4	5	6	7 8
0							LINK MANAGEMENT
1	13	13	13	13	13		BCF-7/TRX-13
2	13	13	13	13	13		
3	14	14	14	14	14		BCF-7/TRX-14
4	14	14	14	14	14		SECT A4 GSM1800 (BTS-10)
5	15	15	15	15	15		BCF-7/TRX-15
6	15	15	15	15	15		
7	16	16	16	16	16		BCF-7/TRX-16
8	16	16	16	16	16		
9	17	17	17	17	17		BCF-7/TRX-17
10	17	17	17	17	17		SECT A5 GSM1800 (BTS-11)
11	18	18	18	18	18		BCF-7/TRX-18
12	18	18	18	18	18		
13	21	21	21	21	21		BCF-7/TRX-21
14	21	21	21	21	21		
15	22	22	22	22	22		BCF-7/TRX-22
16	22	22	22	22	22		SECT A6 GSM1800 (BTS-12)
17	23	23	23	23	23		BCF-7/TRX-23
18	23	23	23	23	23		
19							
20							
21							
22							
23							
24							
25							
26							
27							
28	13	14	15	16			TRX SIG
29	17	18	21	22			
30				23			
31							





# Commissioning BTS – Second E1 on BTS

Set the TRXsig of the TRX as 16kb as per the Abis plan



The screenshot shows a configuration window with a table on the left and a dialog box on the right.

	1	2	3	4	5	6	7	8	
0									LNK/MANAGEMENT
1	13	13	13	13					BCF-7/TRX-13
2	13	13	13	13					BCF-7/TRX-14
3	14	14	14	14					BCF-7/TRX-15
4	14	14	14	14					BCF-7/TRX-16
5	15	15	15	15					BCF-7/TRX-17
6	15	15	15	15					BCF-7/TRX-18
7	16	16	16	16					BCF-7/TRX-21
8	16	16	16	16					BCF-7/TRX-22
9	17	17	17	17					BCF-7/TRX-23
10	17	17	17	17					
11	18	18	18	18					
12	18	18	18	18					
13	21	21	21	21					
14	21	21	21	21					
15	22	22	22	22					
16	22	22	22	22					
17	23	23	23	23					
18	23	23	23	23					
19									
20									
21									
22									
23									
24									
25									
26									
27									
28	13	14	15	16					TRX SIG
29	17	18	21	22					
30				23					
31									

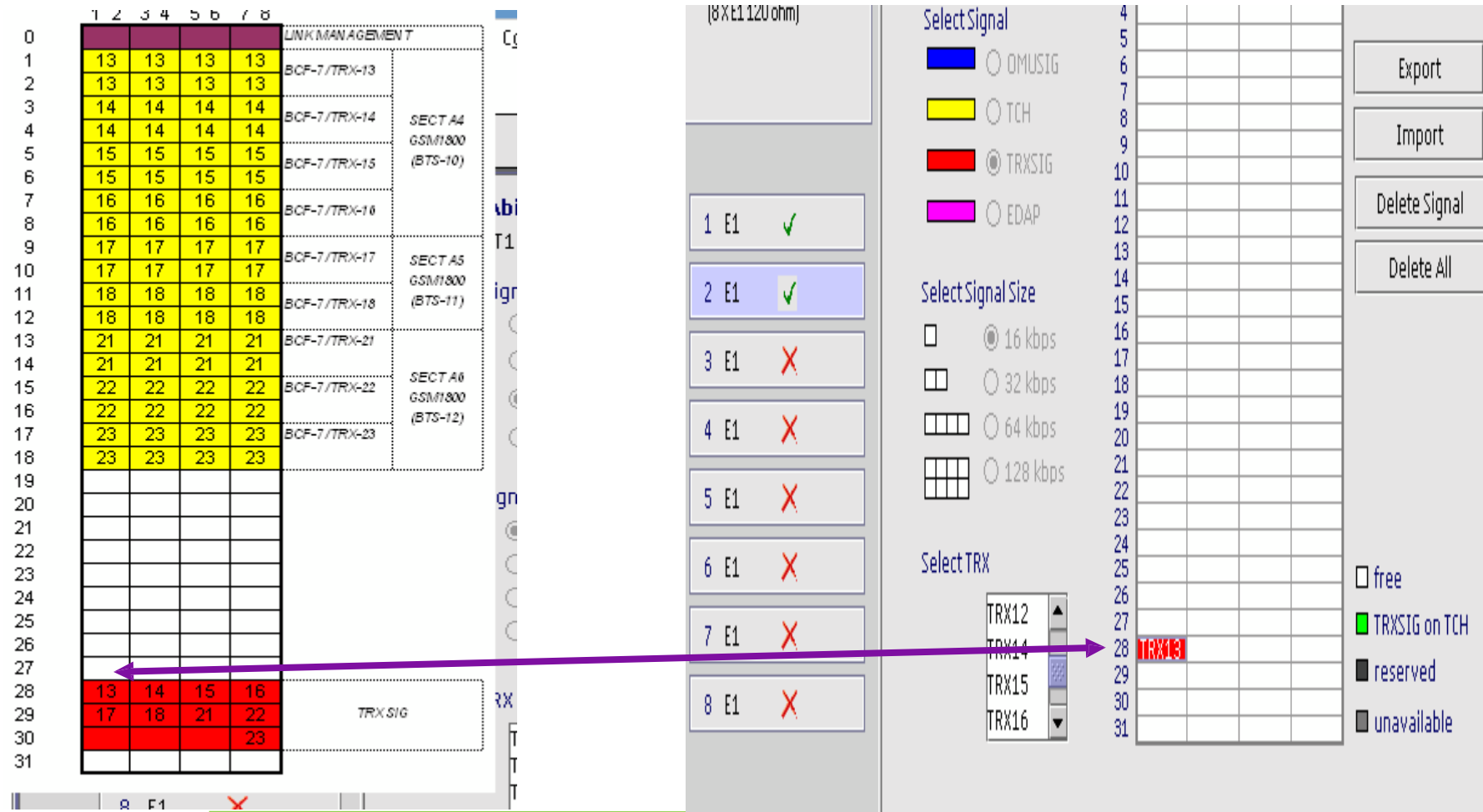
The dialog box on the right has the following settings:

- Select Signal Size:** 16 kbps (selected)
- Select TRX:** TRX13 (selected)

Buttons at the bottom: Back, Next, Cancel, SCF Preview.

# Commissioning BTS – Second E1 on BTS

Assign TRXsig of the first TRX on second E1 to the timeslot as per the BTS Abis plan



	1	2	3	4	5	6	7	8	
0									LINK MANAGEMENT
1	13	13	13	13					BCF-7/TRX-13
2	13	13	13	13					SECT A4 GSM1800 (BTS-10)
3	14	14	14	14				BCF-7/TRX-14	
4	14	14	14	14				BCF-7/TRX-15	
5	15	15	15	15					SECT A5 GSM1800 (BTS-11)
6	15	15	15	15				BCF-7/TRX-16	
7	16	16	16	16					SECT A6 GSM1800 (BTS-12)
8	16	16	16	16				BCF-7/TRX-17	
9	17	17	17	17					BCF-7/TRX-18
10	17	17	17	17				BCF-7/TRX-19	
11	18	18	18	18					BCF-7/TRX-21
12	18	18	18	18				BCF-7/TRX-22	
13	21	21	21	21					BCF-7/TRX-23
14	21	21	21	21				BCF-7/TRX-24	
15	22	22	22	22					BCF-7/TRX-25
16	22	22	22	22				BCF-7/TRX-26	
17	23	23	23	23					BCF-7/TRX-27
18	23	23	23	23				BCF-7/TRX-28	
19									TRX SIG
20									
21									
22									
23									
24									
25									
26									
27									
28	13	14	15	16					
29	17	18	21	22					
30				23					
31									

(8x1.12Uohm)

Select Signal

- OMUSIG
- TCH
- TRXSIG
- EDAP

Select Signal Size

- 16 kbps
- 32 kbps
- 64 kbps
- 128 kbps

Select TRX

- TRX12
- TRX14
- TRX15
- TRX16

1 E1 ✓

2 E1 ✓

3 E1 ✗

4 E1 ✗

5 E1 ✗

6 E1 ✗

7 E1 ✗

8 E1 ✗

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28 TRX13

29

30

31

Export

Import

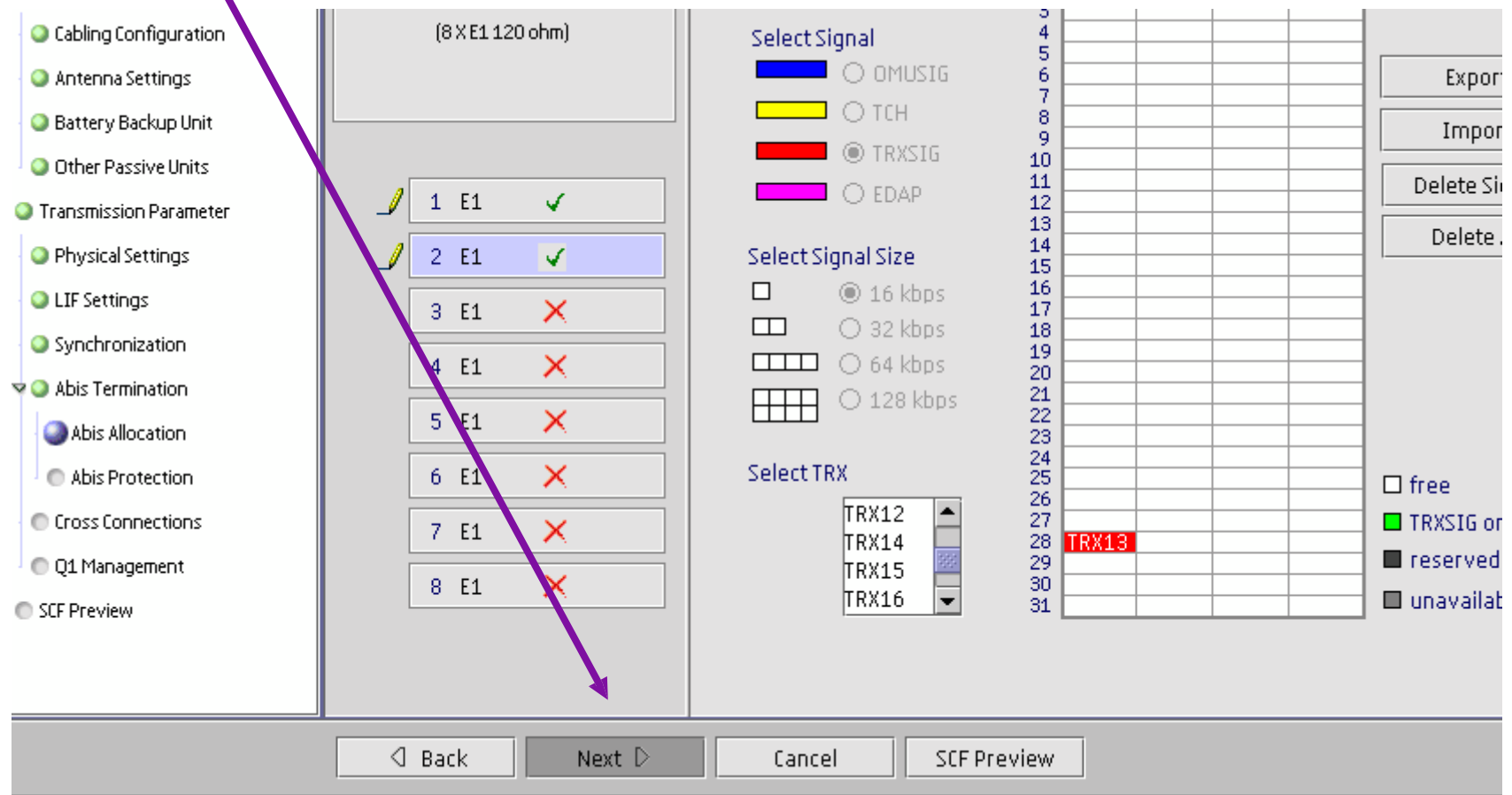
Delete Signal

Delete All

- free
- TRXSIG on TCH
- reserved
- unavailable

# Commissioning BTS – Second E1 on BTS

Click on next



(8 X E1 120 ohm)

- 1 E1 ✓
- 2 E1 ✓**
- 3 E1 ✗
- 4 E1 ✗
- 5 E1 ✗
- 6 E1 ✗
- 7 E1 ✗
- 8 E1 ✗

Select Signal

- OMUSIG
- TCH
- TRXSIG
- EDAP

Select Signal Size

- 16 kbps
- 32 kbps
- 64 kbps
- 128 kbps

Select TRX

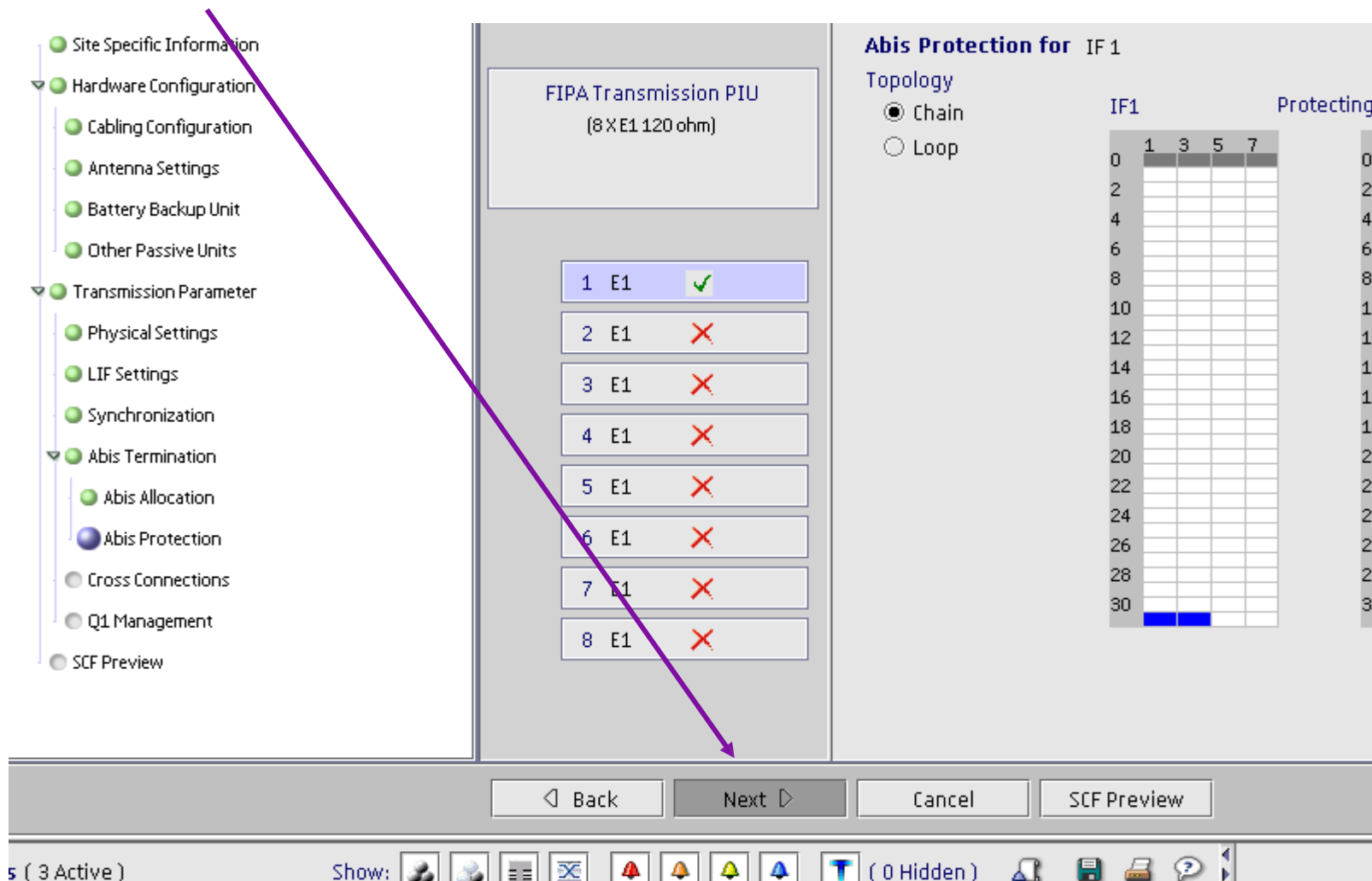
- TRX12
- TRX14
- TRX15
- TRX16

3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28	TRX13		
29			
30			
31			

Buttons: Back, Next, Cancel, SCF Preview

# Commissioning BTS – Second E1 on BTS

Abis Protection – only relevant if implemented in network – click on Next



**Site Specific Information**

- Hardware Configuration
  - Cabling Configuration
  - Antenna Settings
  - Battery Backup Unit
  - Other Passive Units
- Transmission Parameter
  - Physical Settings
  - LIF Settings
  - Synchronization
  - Abis Termination
    - Abis Allocation
    - Abis Protection**
  - Cross Connections
  - Q1 Management
  - SCF Preview

**FIPA Transmission PIU**  
(8 X E1 120 ohm)

1	E1	✓
2	E1	✗
3	E1	✗
4	E1	✗
5	E1	✗
6	E1	✗
7	E1	✗
8	E1	✗

**Abis Protection for IF 1**

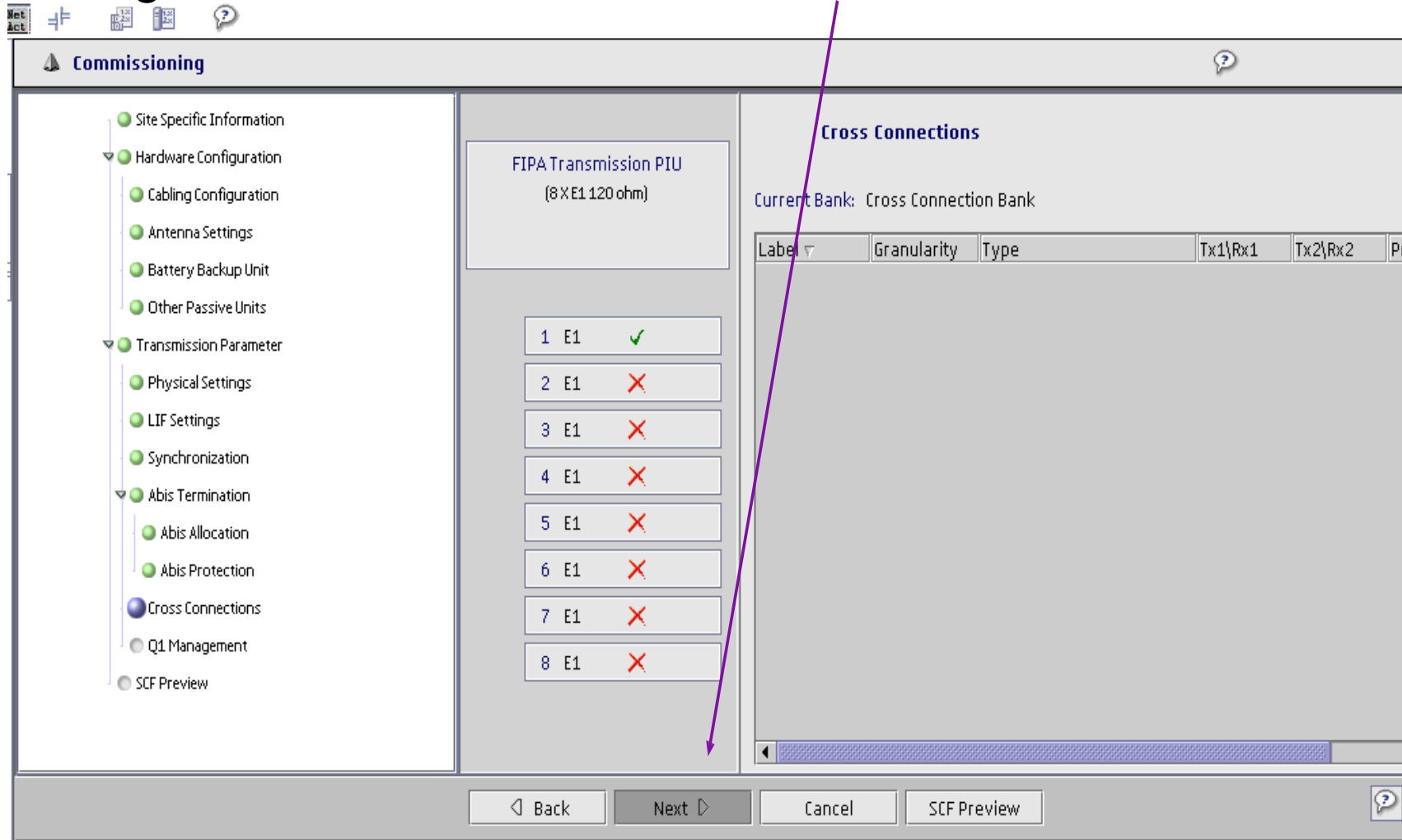
Topology  
 Chain  
 Loop

IF1	Protecting				
	1 3 5 7				
0					0
2					2
4					4
6					6
8					8
10					10
12					12
14					14
16					16
18					18
20					20
22					22
24					24
26					26
28					28
30					30

Buttons: Back, Next, Cancel, SCF Preview

# Commissioning BTS – Second E1 on BTS

Cross Connections – only relevant if Add-Drop (Daisy) configurations with other BTS's, Click on Next



The screenshot shows the 'Commissioning' software interface. On the left is a navigation tree with categories like 'Site Specific Information', 'Hardware Configuration', 'Transmission Parameter', and 'Abis Termination'. The 'Cross Connections' option is selected and highlighted in blue. The main area is titled 'Cross Connections' and shows 'Current Bank: Cross Connection Bank'. Below this is a table with columns for 'Label', 'Granularity', 'Type', 'Tx1\Rx1', 'Tx2\Rx2', and 'Pr'. A list of 8 E1 connections is shown, with the first one (labeled '1 E1') having a green checkmark and the others having red 'X' marks. A purple arrow points from the 'Next' button at the bottom to the first E1 entry in the list.

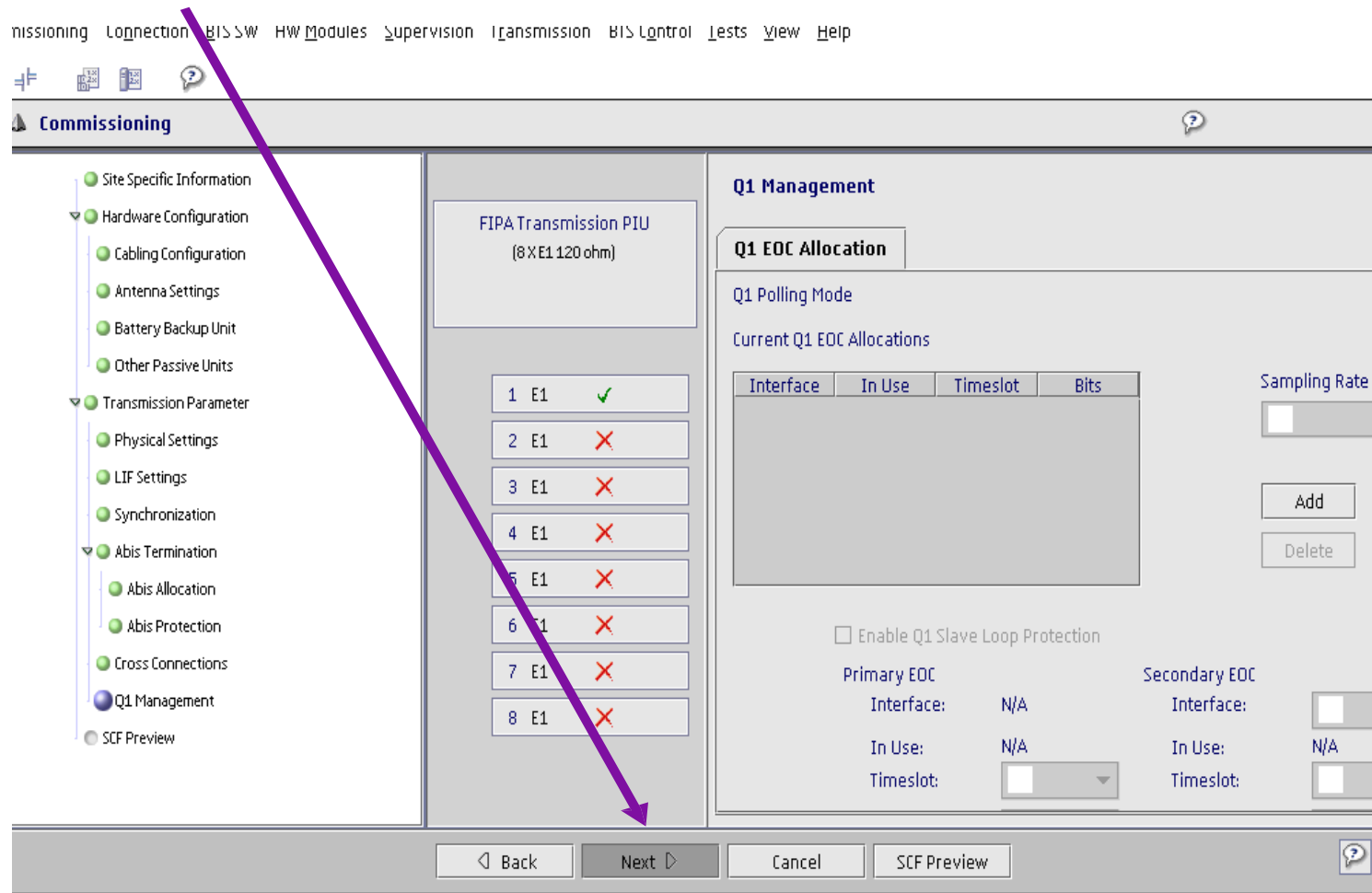
Label	Granularity	Type	Tx1\Rx1	Tx2\Rx2	Pr
1	E1				
2	E1				
3	E1				
4	E1				
5	E1				
6	E1				
7	E1				
8	E1				

Buttons at the bottom: Back, Next, Cancel, SCF Preview.

# Commissioning BTS

Q1 Management – only if transmission module is FlexiHopper...

Click in Next



Commissioning Connection BIS SW HW Modules Supervision Transmission BIS Control Tests View Help

**Commissioning**

- Site Specific Information
- Hardware Configuration
  - Cabling Configuration
  - Antenna Settings
  - Battery Backup Unit
  - Other Passive Units
- Transmission Parameter
  - Physical Settings
  - LIF Settings
  - Synchronization
  - Abis Termination
    - Abis Allocation
    - Abis Protection
  - Cross Connections
  - Q1 Management**
  - SCF Preview

FIPA Transmission PIU  
(8 X E1 120 ohm)

1	E1	✓
2	E1	✗
3	E1	✗
4	E1	✗
5	E1	✗
6	E1	✗
7	E1	✗
8	E1	✗

**Q1 Management**

**Q1 EOC Allocation**

Q1 Polling Mode

Current Q1 EOC Allocations

Interface	In Use	Timeslot	Bits	Sampling Rate
				<input type="text"/>

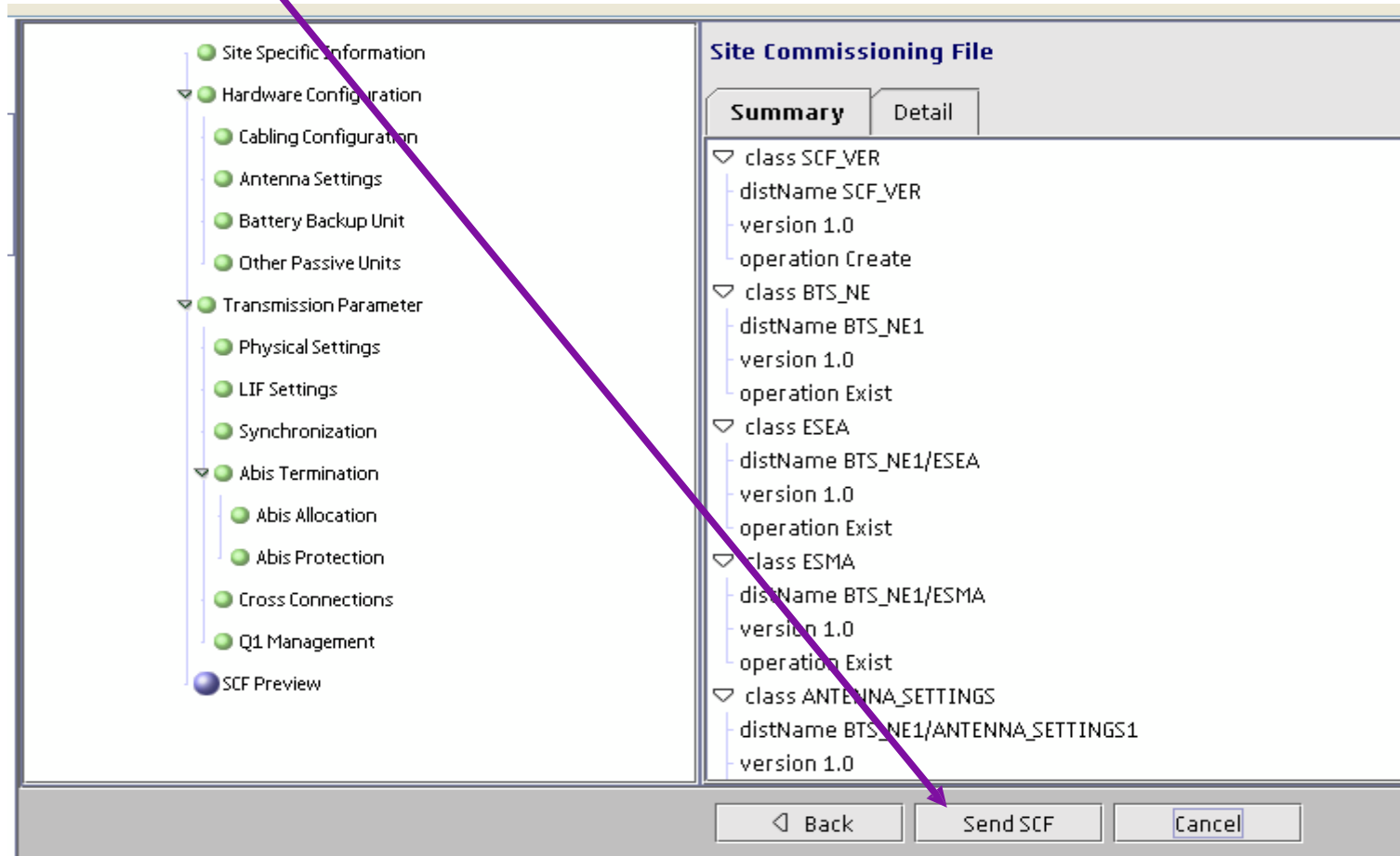
Enable Q1 Slave Loop Protection

<b>Primary EOC</b>		<b>Secondary EOC</b>	
Interface:	N/A	Interface:	<input type="text"/>
In Use:	N/A	In Use:	N/A
Timeslot:	<input type="text"/>	Timeslot:	<input type="text"/>

◀ Back   **Next ▶**   Cancel   SCF Preview

# Commissioning BTS

Commissioning file is now ready to be send to BTS, click on Send SCF. Verify in Commissioning report that BTS is commissioned and that BTS comes on Air – OMU comes up



---

Follow the steps of slide 52 to 56 when the OMU comes up and BTS is fully commissioned.



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# Thank you !