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Approved	Checked	Date	Rev	Reference
		21-01-2020	Ver1.0	

MOP of Optical port receiving link failure (198098319) for ZTE Site

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Activity Description

This activity is for E2E troubleshooting and alarm clearance of Optical port receiving link failure(198098319)

Attached is the details to be followed. As this need to be followed as guideline.

Alarm Name	Optical port receiving link failure(198098319)
Alarm Description	Link failure(517)
Possible Causes – arrange in logical order	1. Fibers or cables are damaged. 2. The surfaces of fibers or cables are dirty. 3. The optical or electrical module on the local or peer end is not fully inserted into the slot. 4. The optical or electrical module of the peer equipment is damaged. 5. The actual fiber length is longer than the maximum length supported by the optical module. 6. The optical or electrical module rate on the local or peer end does not match. 7. The peer equipment is operating abnormally.

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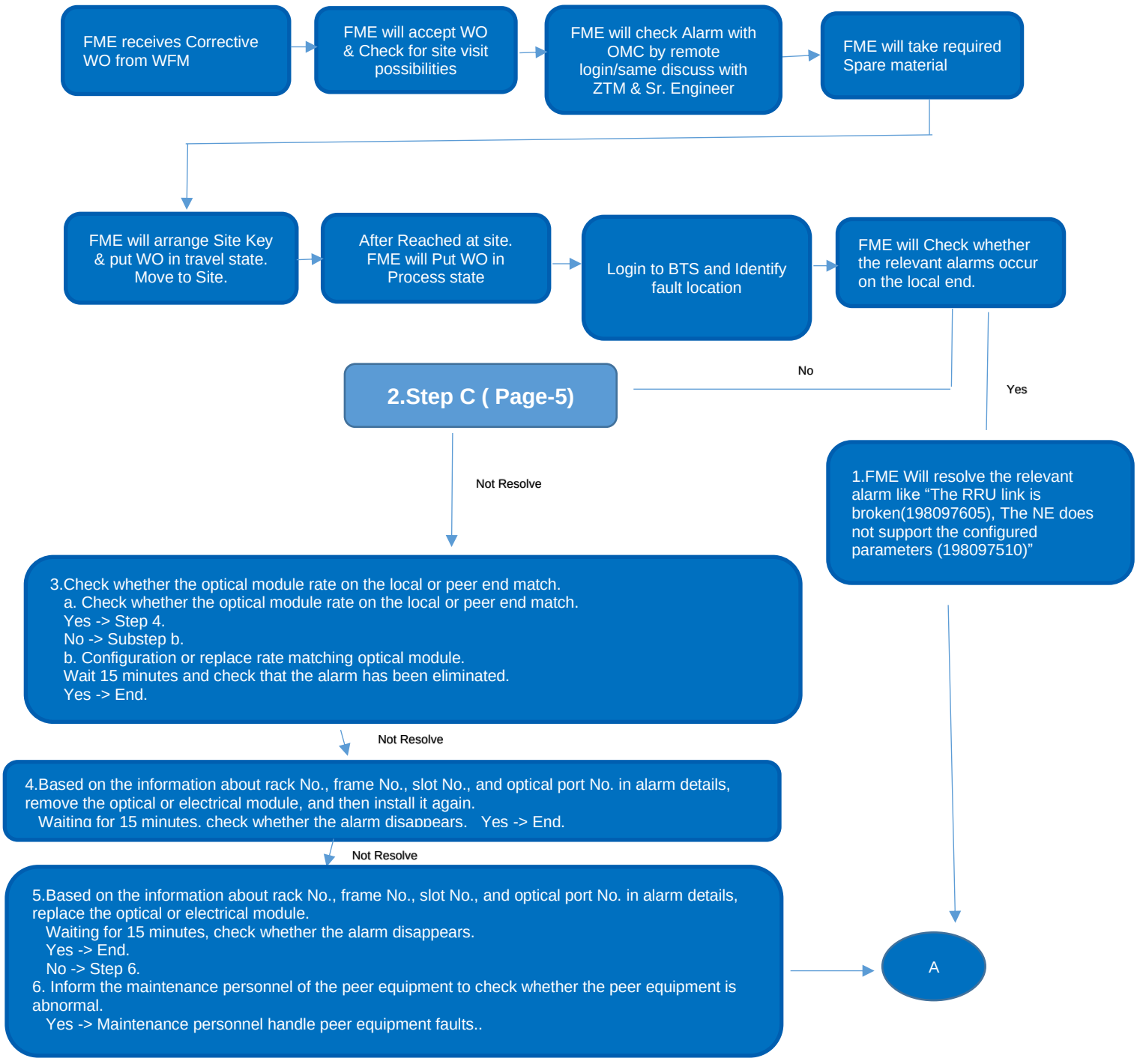
Flow Chart



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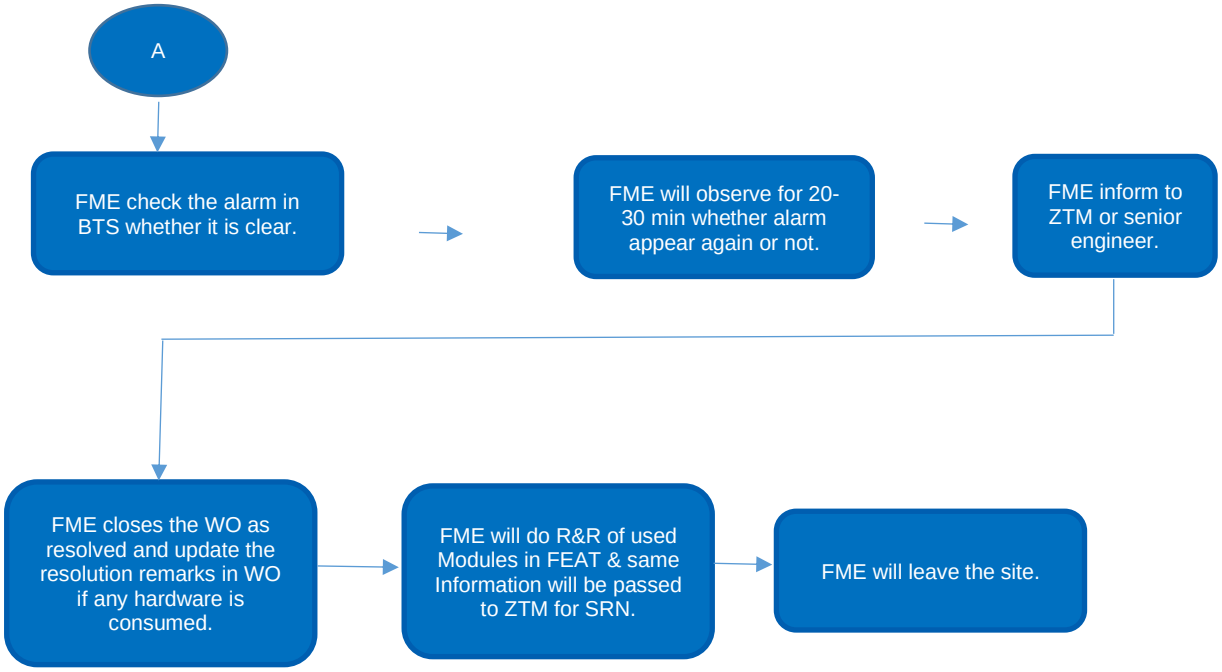

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2.Step C

2.Check whether the received optical power of the optical module is normal.
a. During diagnostic tests, diagnose the board based on the information about rack No., frame No., and slot No. in alarm details. Base on the information about optical port No. in alarm details, check whether the received optical power of the optical module. The receiving sensitivities of common optical modules are described as follows:
1.25G (-19dBm)
2.5G (-17dBm)
6G (-15dBm)
10G (-13dBm)
b. Check whether the received power of the optical module is lower than the receiving sensitivity.
Yes -> Substep c.
No -> Step 3.
c. During diagnostic tests, diagnose the board based on the information about rack No., frame No., and slot No. in alarm details. Base on the information about optical port No. in alarm details, query the maximum distance supported by the optical module, and then check whether fiber length is longer than the maximum distance supported by the optical module.
Yes -> Substep d.
No -> Substep e.
d. Replace the optical module with a proper one or reduce fiber length.
Waiting for 15 minutes, Check whether the alarm disappears.
Yes -> End.
No -> Substep e.
e. Verify that optical fibers are properly connected.
Yes -> Substep f.
No -> Substep g.
f. Check whether the surfaces of fiber connectors are dirty.
Yes -> Substep h.
No -> Substep i.
g. Connect fibers.
Waiting for 15 minutes, check whether the alarm disappears.
Yes -> End.
No -> Substep i.
h. Clean the fiber connectors.
Waiting for 15 minutes, check whether the alarm disappears.
Yes -> End.
No -> Substep i.
i. Check whether fibers are in good condition.
Yes -> Step 3.
No -> Substep j.
j. Replace fibers.
Waiting for 15 minutes, check whether the alarm disappears.
Yes -> End.
No -> Step 3.

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Activity Summary

1	Corrective WO of alarm is received on WFM portal
2	FME will Accept the WO
3	Put WO in travel
4	After reaching site - put WO in process
5	Login the BTS & Check alarm status in which sector its coming
8	FME will check as per MOP
9	If cleared, then Put WO in closed state
10	If not cleared, then check either the hardware to replace
11	If cleared, then Put WO in closed state

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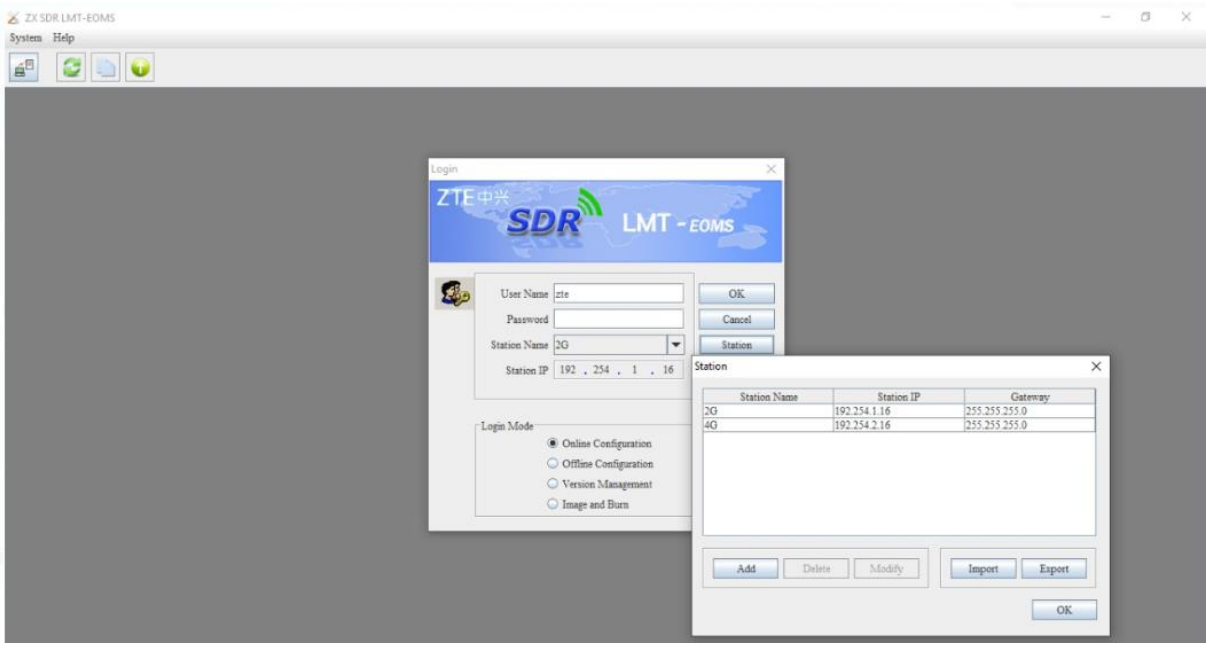
Activity Details

Pre requisites:

1) SVD WO for Optical port receiving link failure(198098319)
2) Alarm on OneFM/Netnumen/WFM.

Case : Optical port receiving link failure(198098319))alarm on 1 cell

A) Login in 2G BBU/ enodeb as per RAN MOP via ZX SDR LMT OEMS connect using LAN cable



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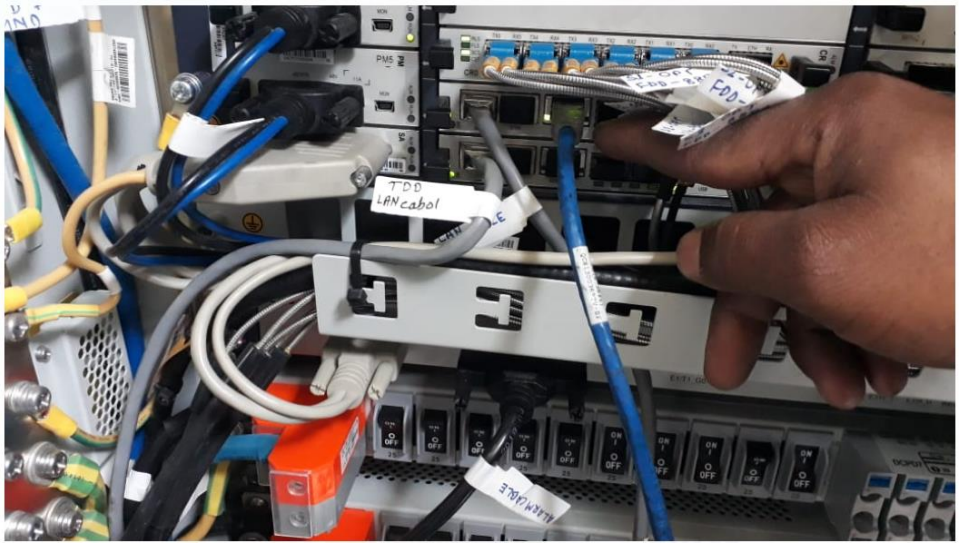

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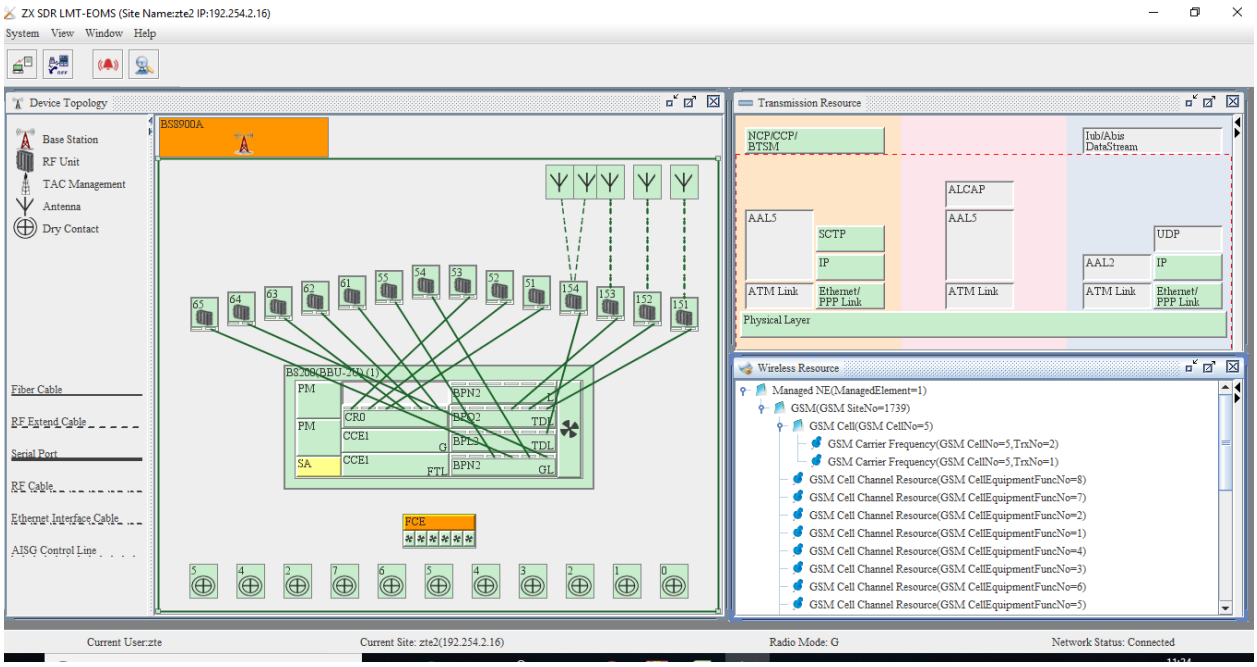
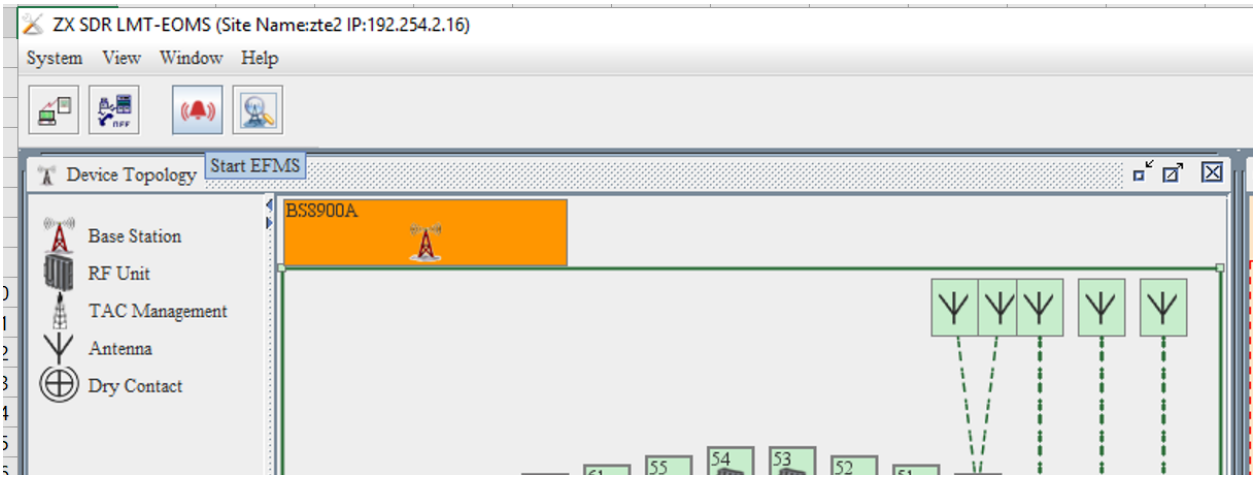


a) Start EFMS to view alarm window



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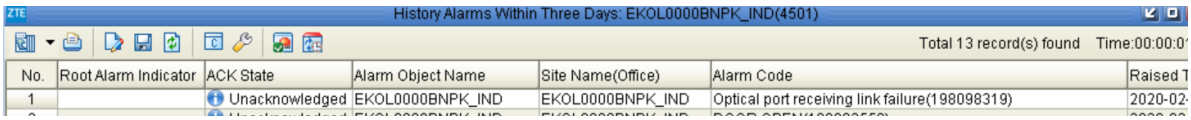
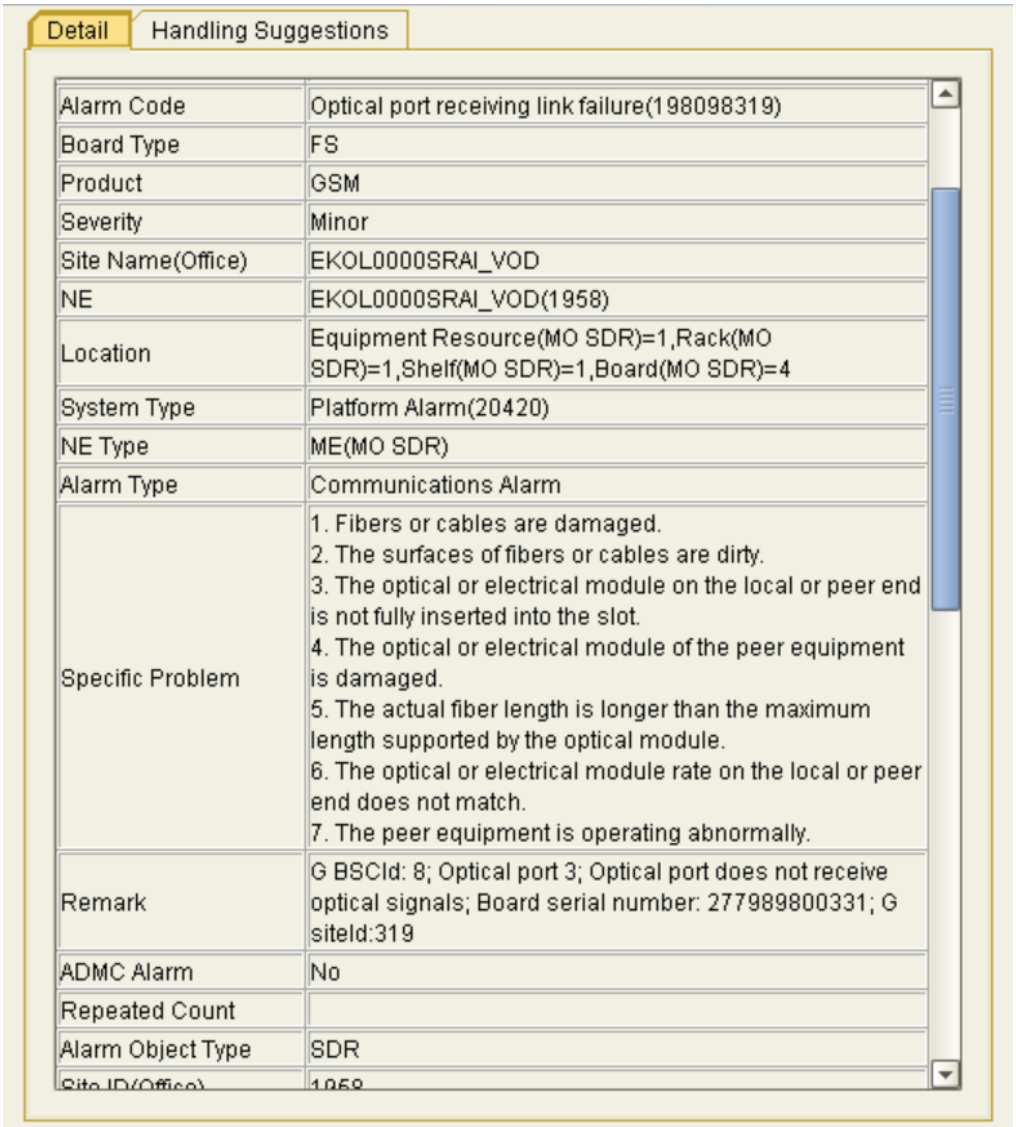
EMS View:-



b) Double click on the alarm to check the alarm Description. (EMS View):-



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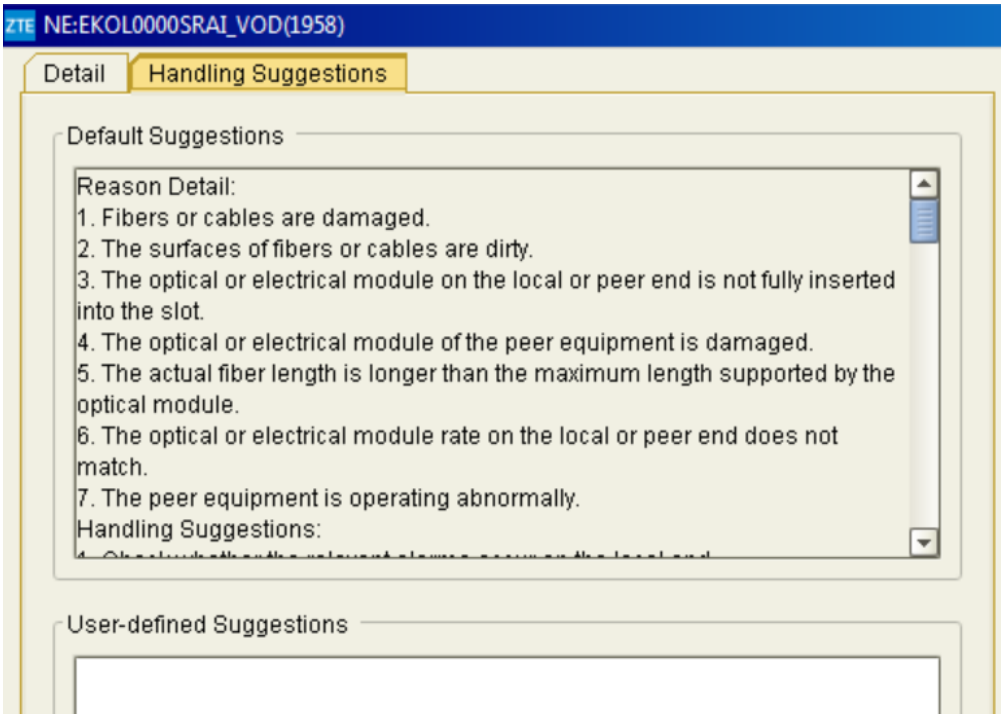
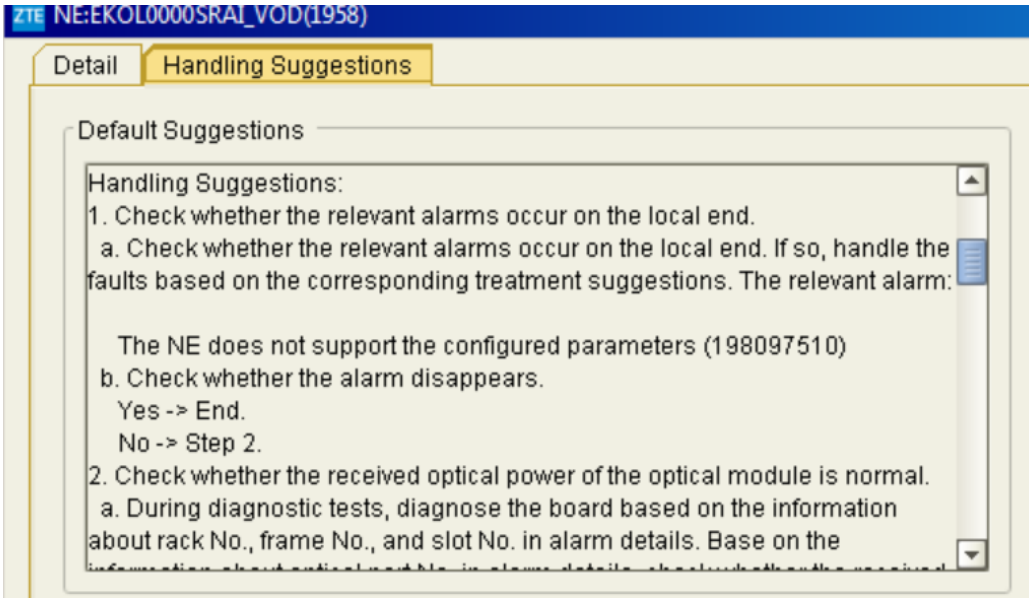
c) Click on the solution tab to check the check the probable cause





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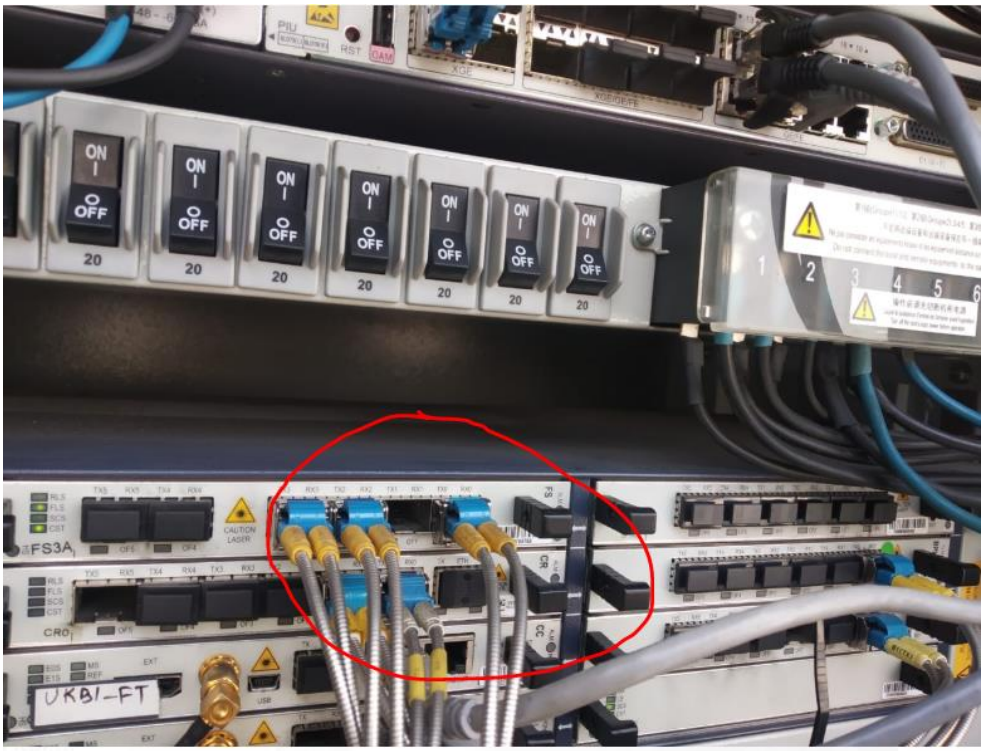

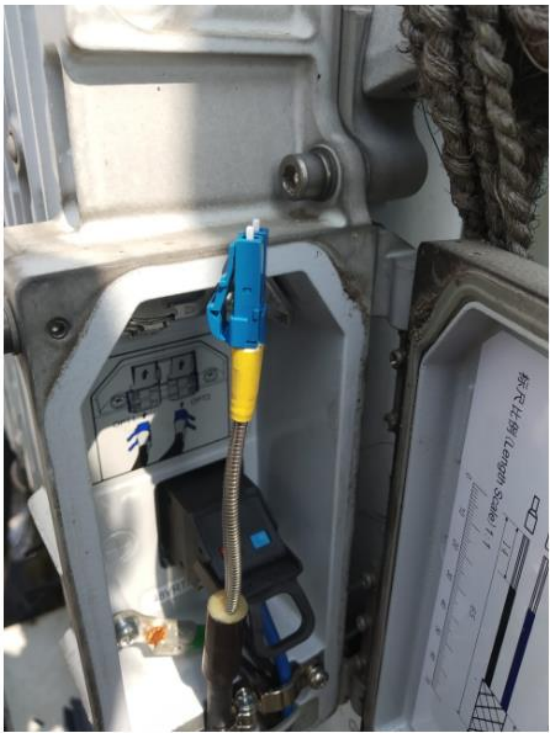

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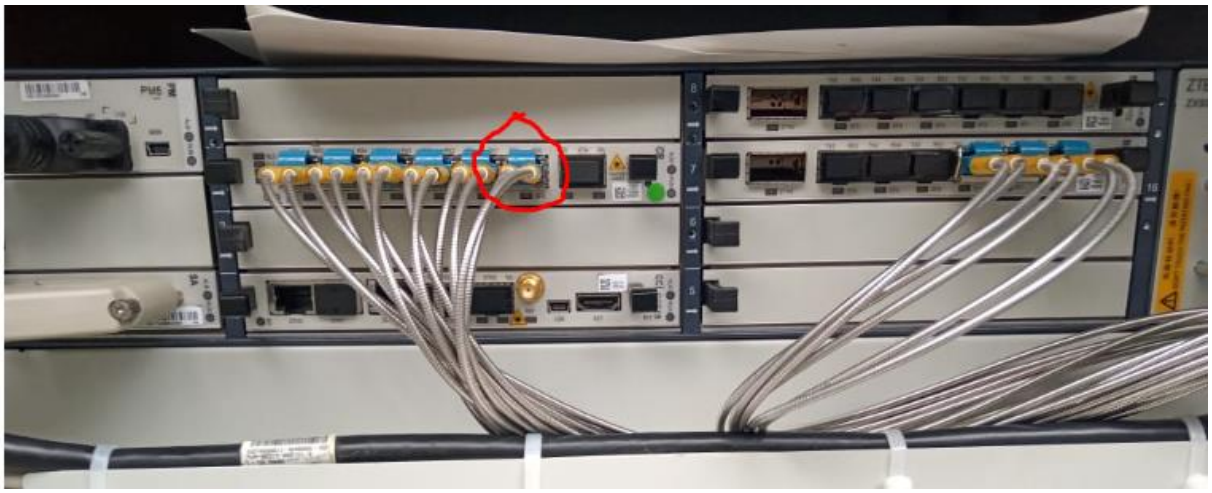
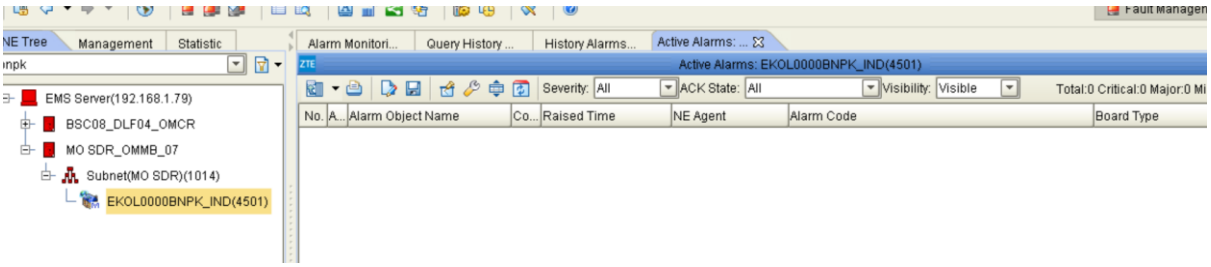
d) Replace hardware as per fault location & troubleshooting steps mentioned.



e) Check in EFMS/OneFM/Netnumen whether alarm cleared or not.



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Post Analysis

Step No.	Step Name/Step Type	Command	Field	Mandatory (Y/N)	Expected Value
1	FME will check at One FM/Netnumen after 30 minutes to check alarm	As per attached MOP in traffic check status step---**Refer RAN MOP**	RAN	Y	As per MOP
2	BSS Team will check after 24 hrs if alarm has reappeared				