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

MOP of VSWR of Antenna Feeder Abnormal (198098465) Alarm for ZTE Site

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Activity Description

This activity is for E2E troubleshooting and alarm clearance of VSWR of the antenna feeder abnormal (198098465).

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

Alarm Name	VSWR of the antenna feeder abnormal (198098465)
Alarm Description	VSWR value is above threshold (threshold value lower Limit: - 1.5/upper limit: - 2.5)
Possible Causes – arrange in logical order	1. The connectors of the antenna and feeder cables are substandard, are not connected tightly, are penetrated by water, or have foreign objects such as metal fragments. 2. The antenna and feeder cables are squeezed or bent, or the feeder cable is damaged. 3. The RRU hardware is faulty. 4. The antenna is obstructed. 5. The Standing Wave Ratio (SWR) threshold is too low.

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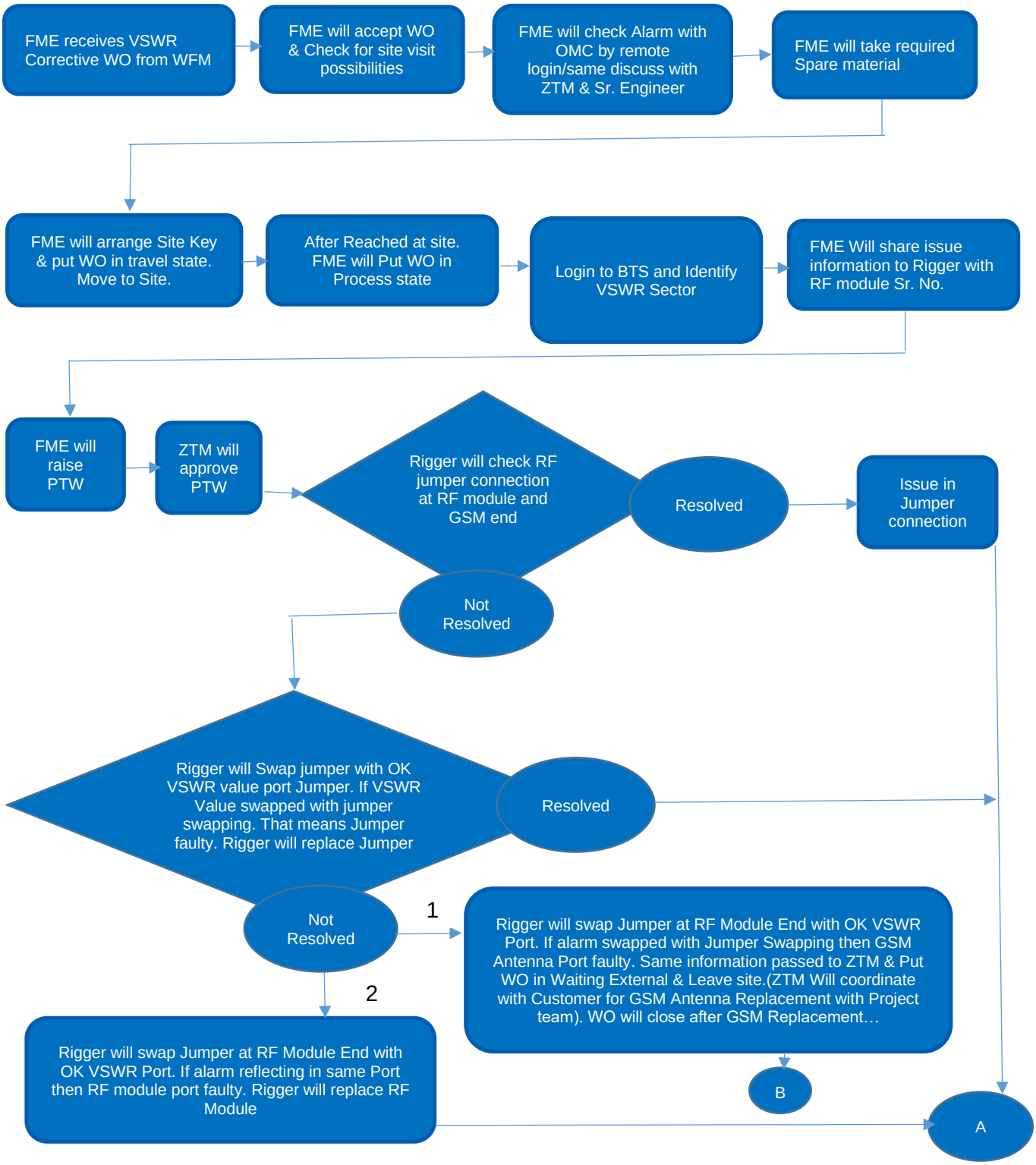
Flow Chart



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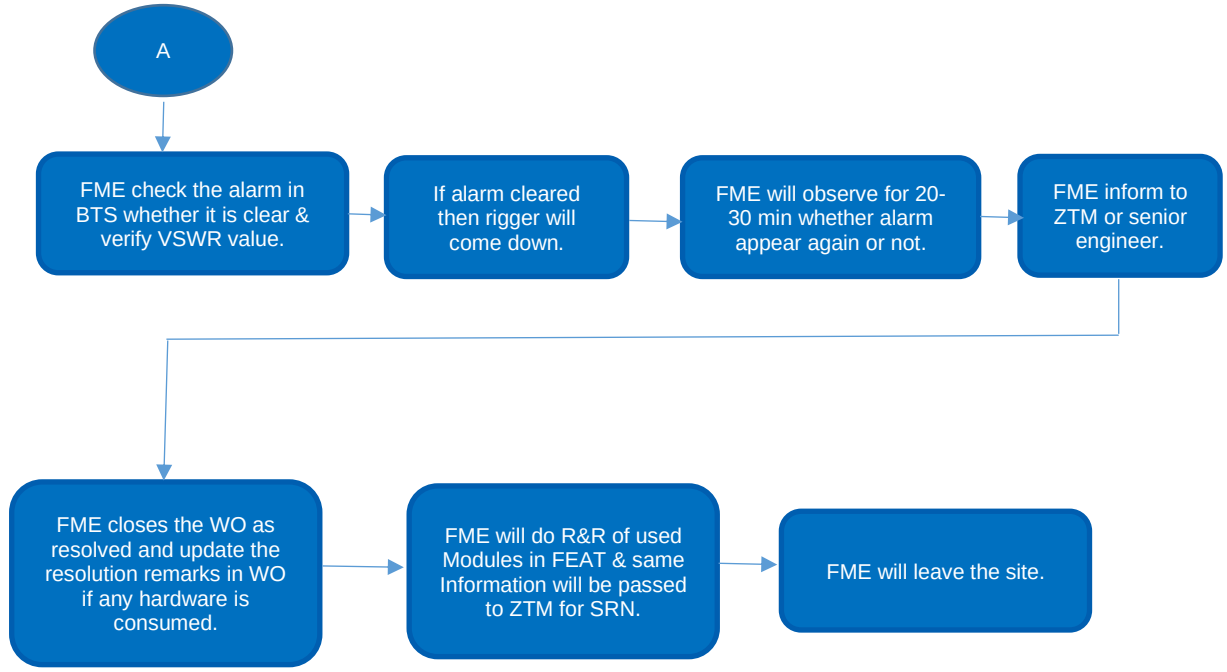

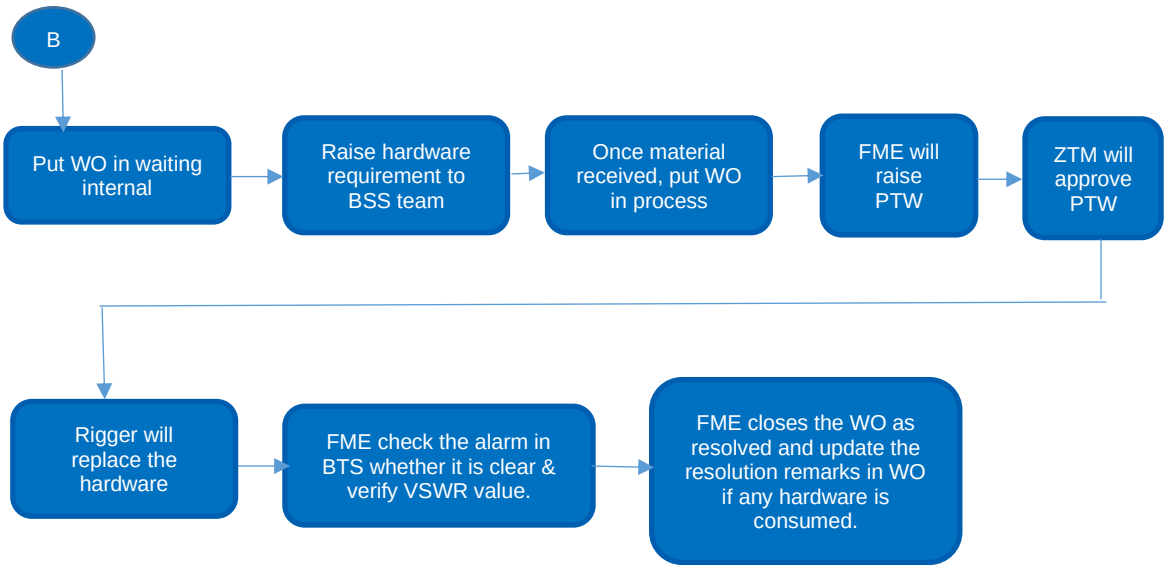

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Activity Summary

1	Corrective WO of VSWR 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
6	Raise PTW to ZTM
7	PTW Approval done by ZTM
8	Rigger will Check Jumper on Tower top (either loose / if Faulty (then replace)
9	FME will check in BTS (Alarm cleared or not)
10	If cleared, then Put WO in closed state
11	If not cleared, then check either RRU or GSM Antenna Faulty
12	Put Work order in Waiting internal if any HW Req at site
13	Raise Req of Hardware to BSS Team
14	Once Material received again put WO in Travel mode
15	After reaching site - put WO in process
16	Raise PTW to ZTM
17	PTW Approval done by ZTM
18	Replace the hardware
19	Check from BTS Login that alarm cleared or not after hardware replaced
	Once Alarm Cleared
20	FME will close the WO as resolved

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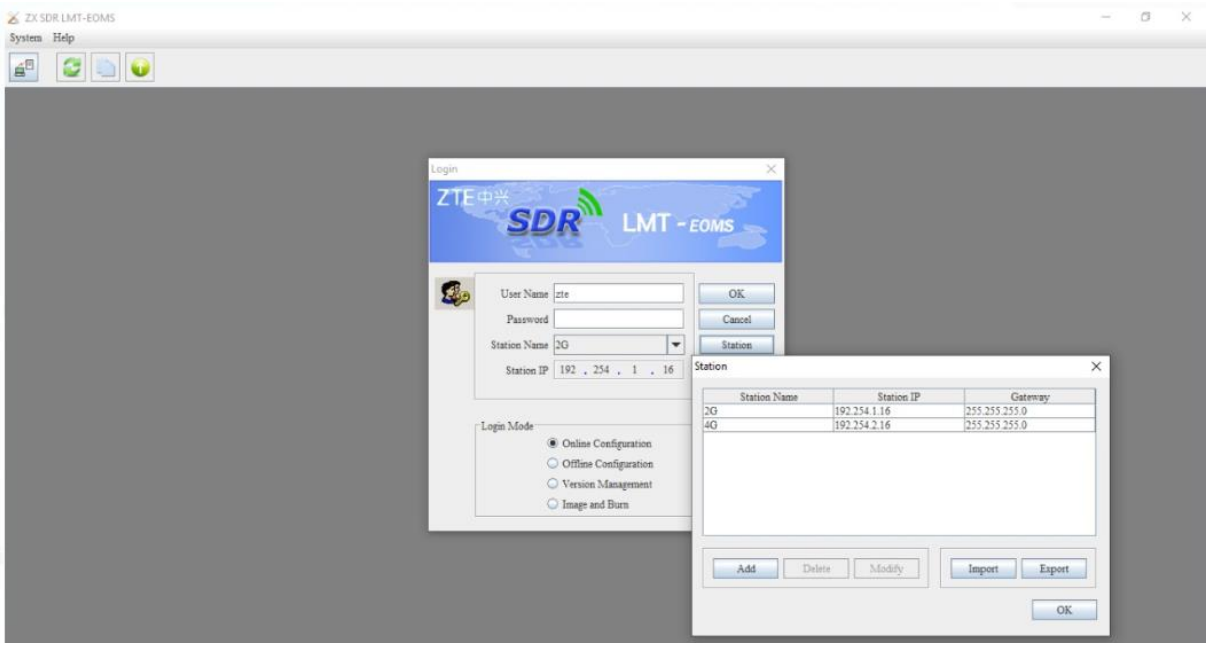
Activity Details

Pre requisites:

1) SVD WO for VSWR alarm.
2) Alarm on OneFM/Netnumen/WFM.

Case : VSWR 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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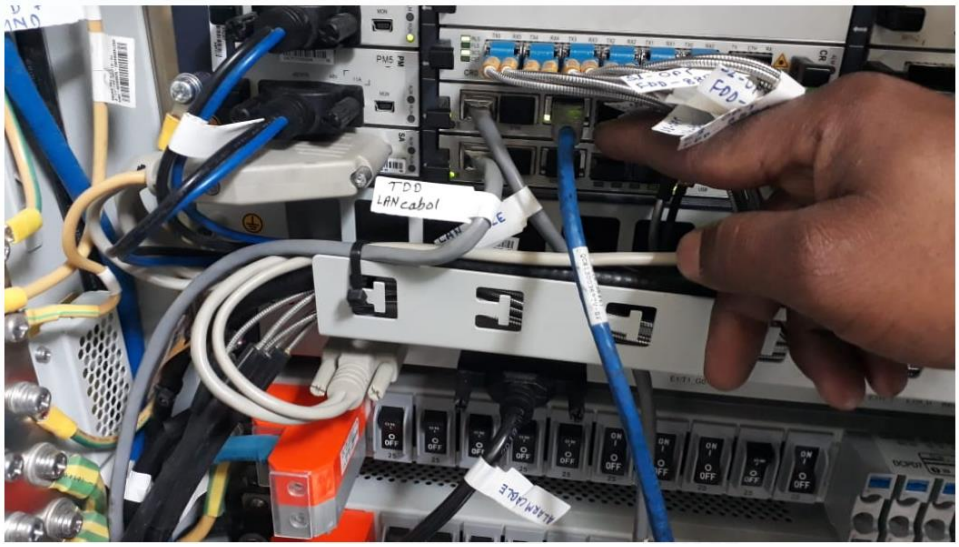

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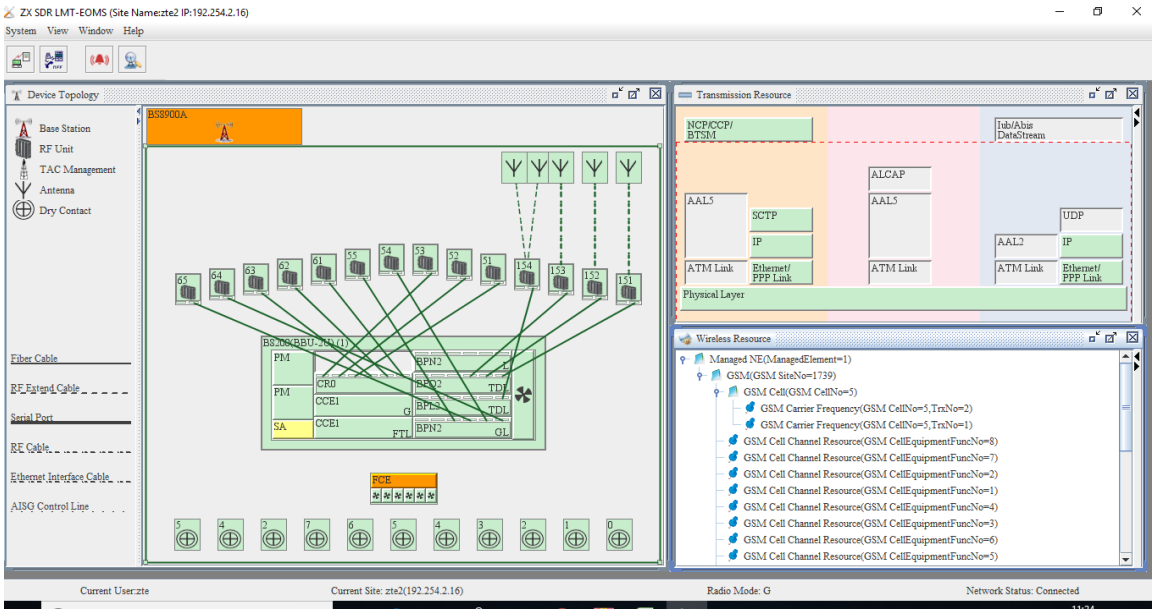
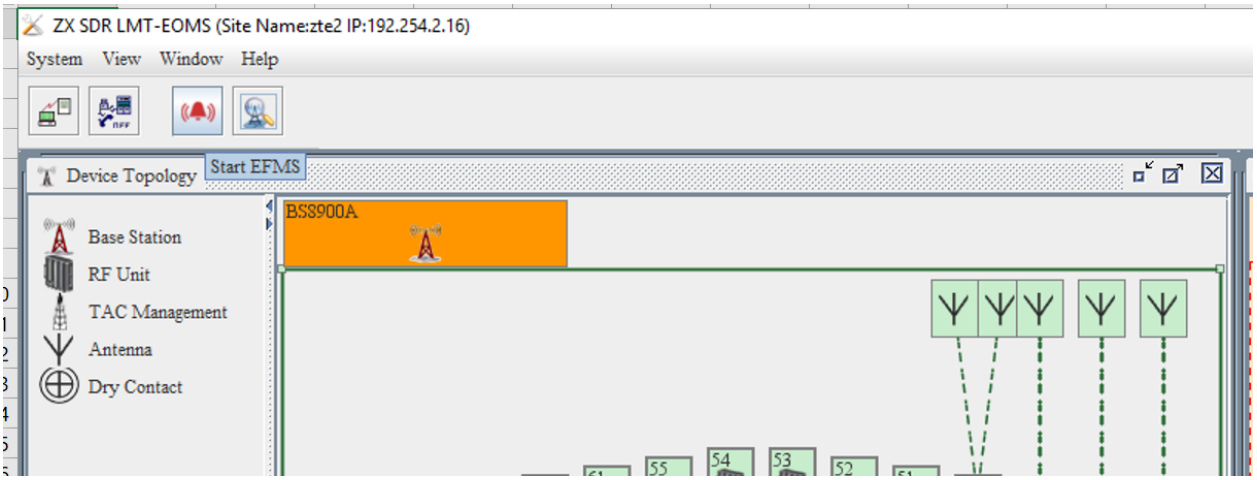


a) Start EFMS to view alarm window



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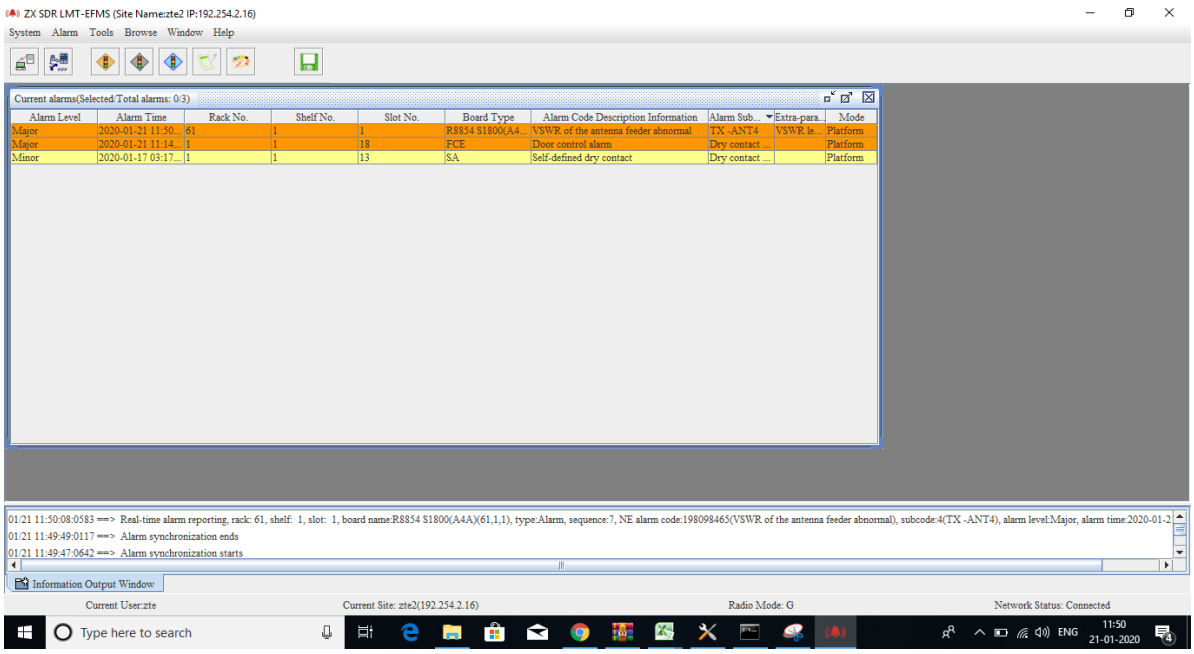
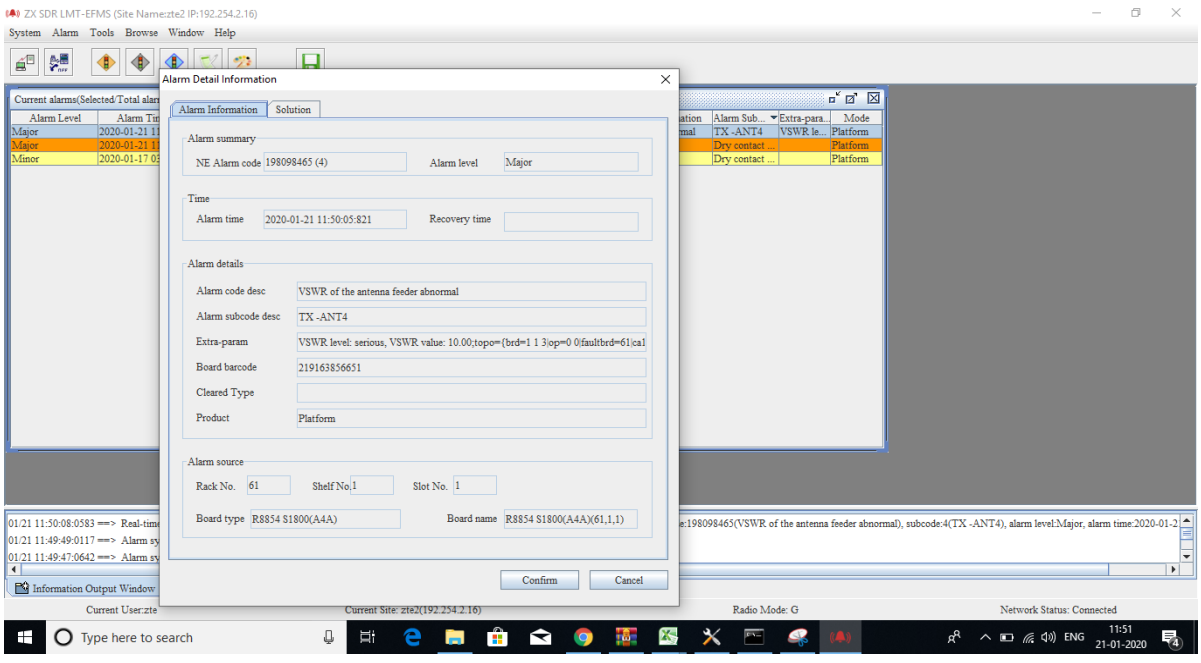


b) Double click on the alarm to check the RRU type/Rack No/Antenna port.



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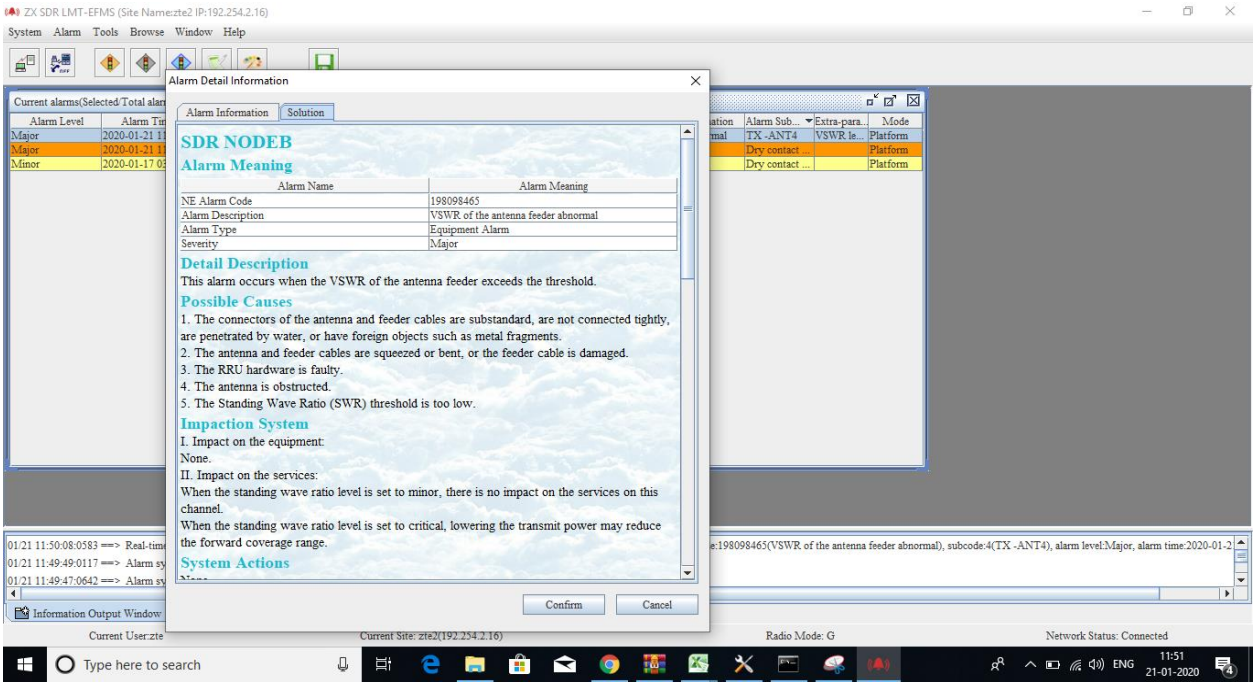
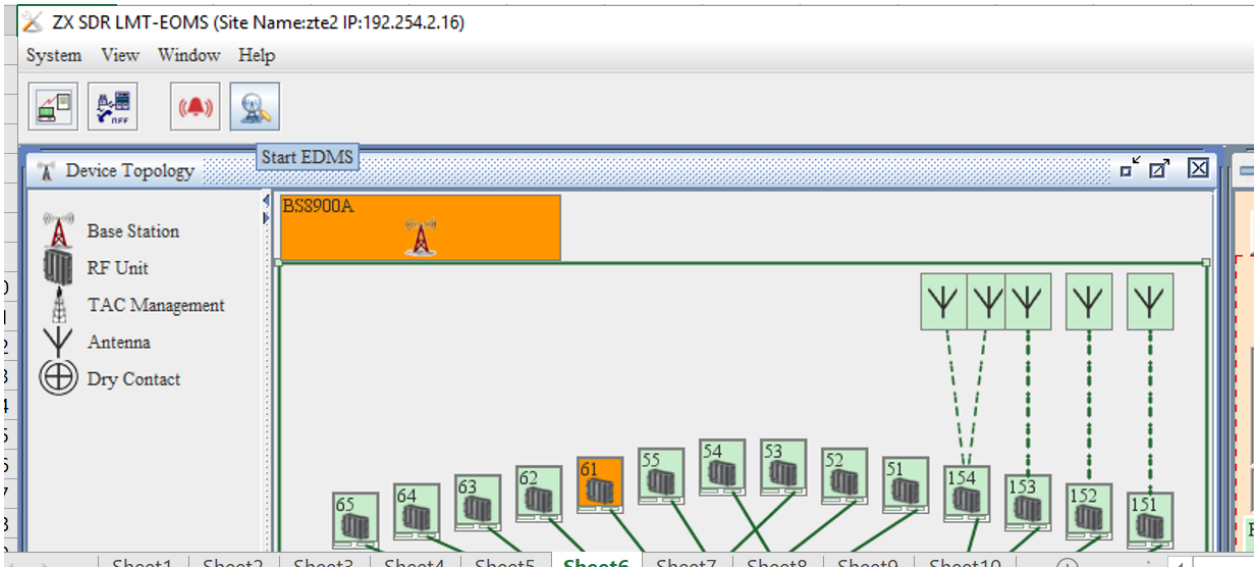
c) Click on the solution tab to check the check the probable cause



d) Start EDMS



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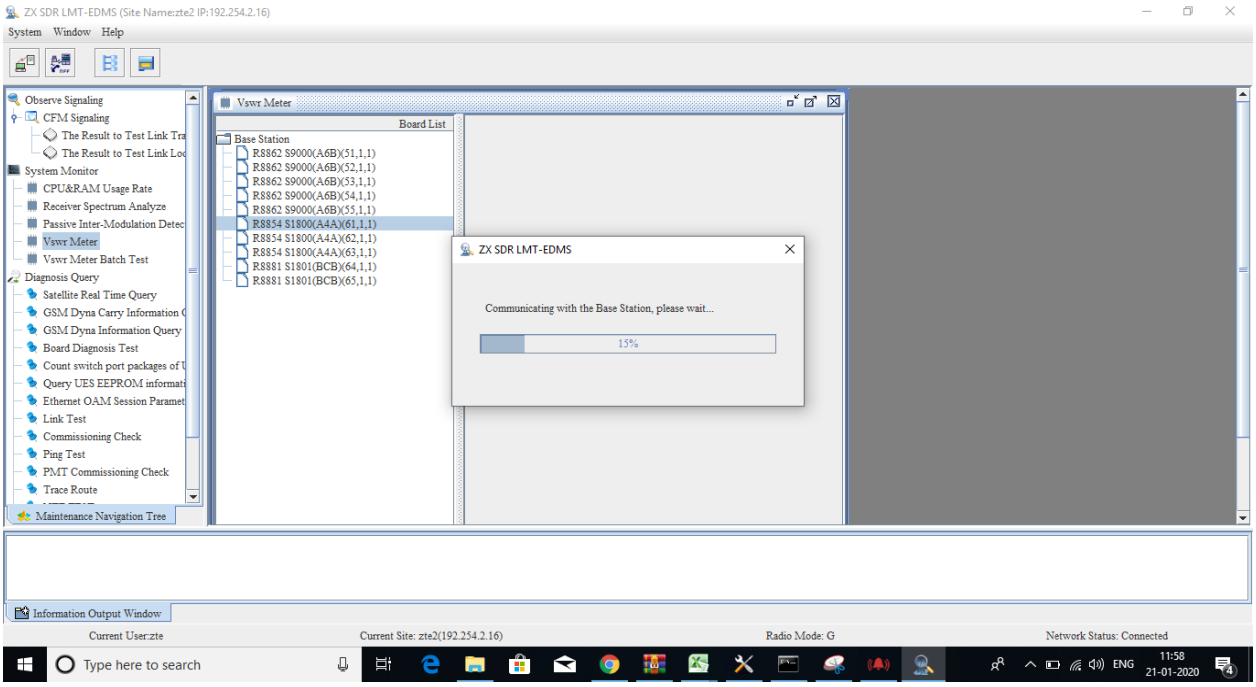
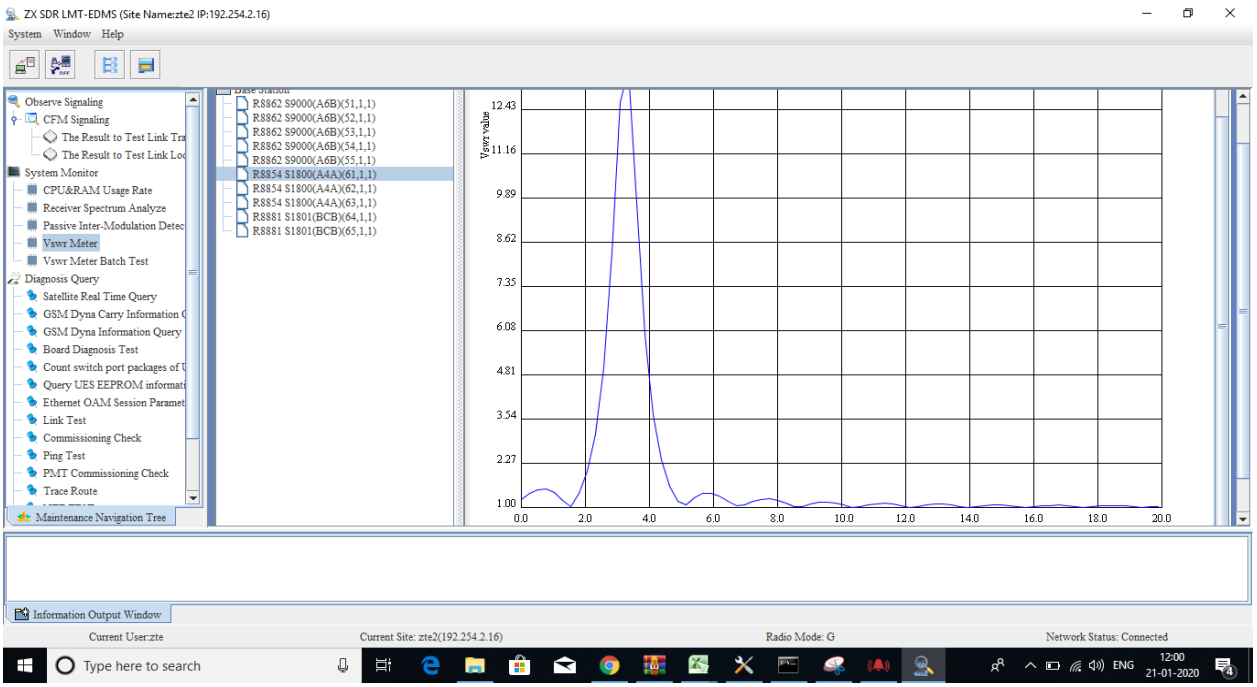
e) Double click on VSWR Meter, select the RRU as per Rack and start



f) Check the VSWR fault location



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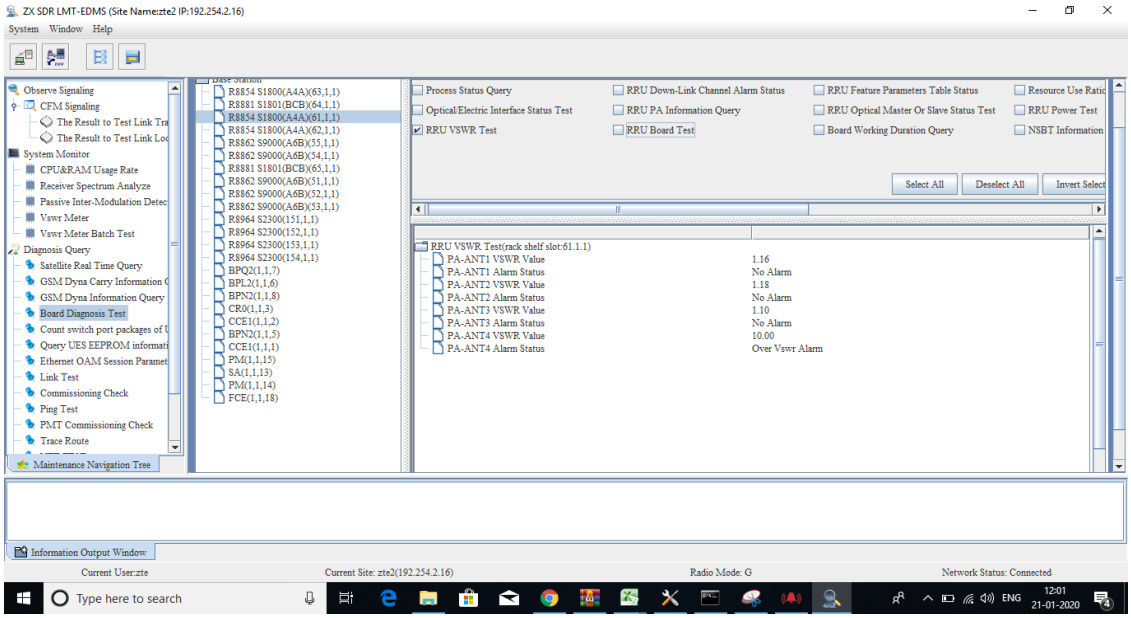
i) VSWR value can be checked from Board diagnosis Test also.



g) If tower work involves, perform PTW

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h) Rectify the fault location (Reconnection of jumper connector)

i) 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				