

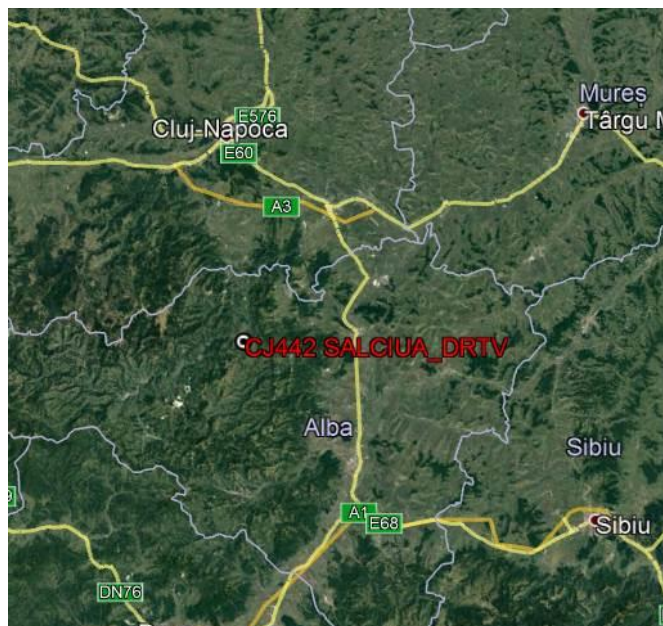


SITE SURVEY REPORT

Ericsson

1. GENERAL INFORMATION

Site name:	SALCIUA_DRTV
Site number (code):	CJ442
Site address (city;street;no.; building; entrance):	Extravilan Salciua, Jud.Alba
Site area:	ALBA
Site survey team:	ATS
Checked by:	Luca Valentin
Date of site survey:	25.02.2018
Type of Site (urban, rooftop):	Greenfield
Lesser:	-
Contact Person:	-



Other Remarks:	Nu necesita chei. Este site outdoor, iar site-ul nu este imprejmuit de gard. Exista 2 posibilitati de a ajunge la site: 1. Din Salciua, dupa ce se trece de pod, se face dreapta la rascruce, apoi pe drum forestier(momentan, in zona se executa defrisari de copaci, iar drumul este stricat de utilajele care scot lemnul din padure. Drum impracticabil. Pe jos nu se poate ajunge, pentru ca pana la site, sunt stani pazite de caini ciobanesti. (lungime drum aprox. 3km) 2. Din Slaciua, dupa ce se trece de pod, se face stanga la rascruce, apoi pe drum de pamant se merge pana in dreptul localitatii "Sub Piatra", dupa care se face dreapta pe un drum forestier(de pamant), si se merge pe coama dealului pana la site. Drumul este in intregime de pamant, foarte greu accesibil. In caz de vreme favorabila, se poate ajunge la site cu masina. (lungime drum aproximativ 13km) Pentru ambele drumuri, in caz de vreme nefavorabila (ploaie sau ninsoare) nu se poate ajunge la site deloc. Turnul este ruginit in intregime, are diagonal strambe, incovoiate, suruburi lipsa. Se recomanda reconditionarea turnului.
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2. ROOFTOP (Building information)

GPS coordinates:	N
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	E
Building height:	m
Existent tripod:	Yes ☐ NO ☐
Total height:	m
Use of crane for materials transportation:	Yes ☐ NO ☒
Other Remarks:	

3. GREEN FIELD (Specific data information)

GPS coordinates:	N 46° 22' 44.6" E 23° 25' 0.2"
Tower:	Yes ☒ NO ☐
Tower type:	☒ Heavy lattice tower – 35m (DRTV) ☐ Polygonal Monopol – 30m ☐ Monopole lattice tower-30m ☐ Guyed tower on shelter-30m
Antenna Metallic Structure:	New "H" Yes ☐ NO ☒ Upgrade existing "H" Yes ☐ NO ☒ Atypical Structure Yes ☐ NO ☒
RRU Metallic Structure:	New RRU Support Yes ☐ NO ☒ Atypical Structure Yes ☐ NO ☒
Mini - shelter require:	Yes ☐ NO ☒
Mini – shelter frame standard adaptor solution:	Yes ☐ NO ☒
In case Non Standard Mini-shelter frame solution, dimensions are requested:	N/A
Non standard mini - shelter frame profile	N/A
RRU to Antenna/Combiner Jumper length (type: DIN7/16 Male –N Male):	4 x 3m
Antenna to Combiner -> Jumper length (type: DIN7/16 Male – DIN7/16 Male):	N/A
FO cable length between BB to RRU	1x30 + 1x35m
DC cable length between PP to RRU	1x30 + 1x35m
Type and length of DC power for RRU Cu 2x6 mm ² (L<30m):	Type Cu 2x6mm ² / 1x30m + 1x35m
Type and length of DC power for RRU Cu 2X10 mm ² if needed(30m<L<60m):	-
Type and length of DC power for RRU Cu 2X16 mm ² if needed(60m<L<90m):	-
Type and length of DC power for RRU Cu 2X25 mm ² if needed(L>90m):	-
Combo Box required:	Yes ☐ NO ☒ ; Length of cable: m
Connection patch length from CB to RRU (FO&DC)	-
Outdoor CB existing breakers type	16A ☐ 25A ☐ Oth. ☐ 32A
PDU existing breakers availability (63A in PP)	Yes ☐ NO ☒
DC cable length from PP to new PDU	N/A
PP Type / producer plus picture on the bottom	-



4. EXISTING CONTRACT & CHANGES

Indoor space requires contract change	Yes ☐	No ☒	
Outdoor space requires contract change	Yes ☐	No ☒	
Cable routing requires contract change	Yes ☐	No ☒	
Power cabling requires contract change	Yes ☐	No ☒	
Indoor space requires studies & license change	Yes ☐	No ☒	
Outdoor space requires studies & license change	Yes ☐	No ☒	
Cable routing requires studies & license change	Yes ☐	No ☒	
Power cabling requires studies & license change	Yes ☐	No ☒	

Other Remarks:	
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5. POWER SUPPLY INFORMATION

Power availability:	YES
Voltage-measurements (PLC display):	L1(V) - L2(V) - L3(V) -
Amperage-measurements (PLC display, without A/C):	I1(A) - I2(A) - I3(A) -
Amperage-measurements (PLC display, with A/C):	I1(A) - I2(A) - I3(A) -
Outdoor mini shelter: 32A available breaker in LDB (5x6 mm ² AC Cable)	N/A
1X16A available breakers in indoor Power System	N/A
1X32A available breakers in indoor Power System	N/A
2X63A available breakers in indoor Power System	N/A
Power counter exist:	N/A
Main AC board exist:	N/A
Breaker value in BMPT:	N/A
Surge arrestors existence:	Yes
Type and length of power connection cable for BBU	Cu 2x2.5mm ² - 2m
Type and length of power connection shielded cable Al 6X25 mm ² if needed:	N/A
Type and length of power connection shielded cable Al 6X35 mm ² if needed:	N/A
Type and length of AC power connection cable 5X6 mm ² for mini shelter if needed:	N/A
Type and length of DC power from PSU to PDU Al 2x35 mm ² if needed:	N/A
CB/PDU/2 Sections (if needed):	N/A
CB/PDU/3 Sections (if needed):	N/A
PDU indoor (if needed):	N/A
Boards grounding - secured:	YES
Boards waterproofed:	YES

Other Remarks:	
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6. POWER PLANT and BATTERY INFORMATION

Number of units	Unit 1 ☐	Unit 2 ☐
Type	300A ☐ 600A ☐ Other ☐	300A ☐ 600A ☐ Other ☐
Nr./capacity[A] of rectifier modules	-	-
DC Load Amperage(displayed) [A]	-	-
Battery capacity [Ah]	-	-
Battery type/number	-	-

Other Remarks:	
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7. AIR CONDITIONING INFORMATION

Temperature [°C]	Internal: -	External:-
Number of units	Unit 1 ☐	Unit 2 ☐
Type	Free Cooling ☐ Duct ☐ Split ☐	Free Cooling ☐ Duct ☐ Split ☐
Technical specifications from external unit label		
Cooling capacity [BTU]	9.000 ☐ 12.000 ☐ 18.000 ☐ 24.000 ☐ Other ☐	9.000 ☐ 12.000 ☐ 18.000 ☐ 24.000 ☐ Other ☐
Start meter	Compressor: - Evap. Fan:- Heather: -	Compressor: Evap. Fan: Heather:
Work time meter [h]	Compressor: - Evap. Fan: - Heather: -	Compressor: Evap. Fan: Heather:
Alarms outputs	Very high temp ☐ Very low temp ☐	Very high temp ☐ Very low temp ☐

Other Remarks:	
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8. NEW INSTALLATION INFORMATION

Common: number of buss with free holes	N/A
Common: Available space on the existing cable tray	YES
Indoor equipment: Existing space for ILP mounting	N/A
Indoor equipment: Existing space for Radio Indoor equipment mounting	N/A
Indoor equipment: Existing space for Indoor Concentrator equipment mounting	N/A
Indoor equipment: Existing space for DC PDU mounting	N/A
Indoor equipment: Available holes in FIMO	N/A
Outdoor equipment: Existing space on the existing base frame for mini shelter mounting	YES
Outdoor equipment: Existing outdoor transmission cabinet	YES
Outdoor equipment: Existing space for outdoor Concentrator mounting (proposal)	N/A
Outdoor equipment: Existing space for RRU mounting (proposal)	YES

Other Remarks:	
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9. EXISTING TELECOM EQUIPMENT & INFRASTRUCTURE

a. General information

Equipment type:	Indoor ☐	Outdoor ☒	Minishelter Raycap
Number of RF antennas:	2 Telekom		
Number of MW links	1 Telekom		
Nr. of existing RBS cabinets	0		
MW existing RL cabinet	Indoor ☐	Outdoor ☒	Minishelter Raycap
Power cabinet exist (BBS):	Yes ☐	No ☒	
Existing cable ladder availability:	Yes ☒	No ☐	
Existing cable entry availability:	Yes ☒	No ☐	
Air condition existence & operation	Yes ☒	No ☐	
Grounding protection existence:	Yes ☒	No ☐	
Lightning protection existence:	Yes ☒	No ☐	
Installation of RF & IF cables requires special machinery (e.g. crane)	Yes ☐	No ☒	

b. Existing Masts

	Height	Length	poles/mast	Cell_id on the mast	installation readiness
1					
2					
3					
4					

c. Existing Antenna Poles

	Height	Length	Cell_id	Corner/Tower	Obstacles	installation readiness
1	23.0m	1x3m	RF U/G		No	Yes
2	25.5m	1x3m	RF W/I		No	Yes
3						
4						
5						

d. Existing MW Poles

	Height	Length	Hop id	Corner/Tower	Far end	Obstacles	installation readiness
1	+16.0m	1m					
2							
3							
4							
5							
6							

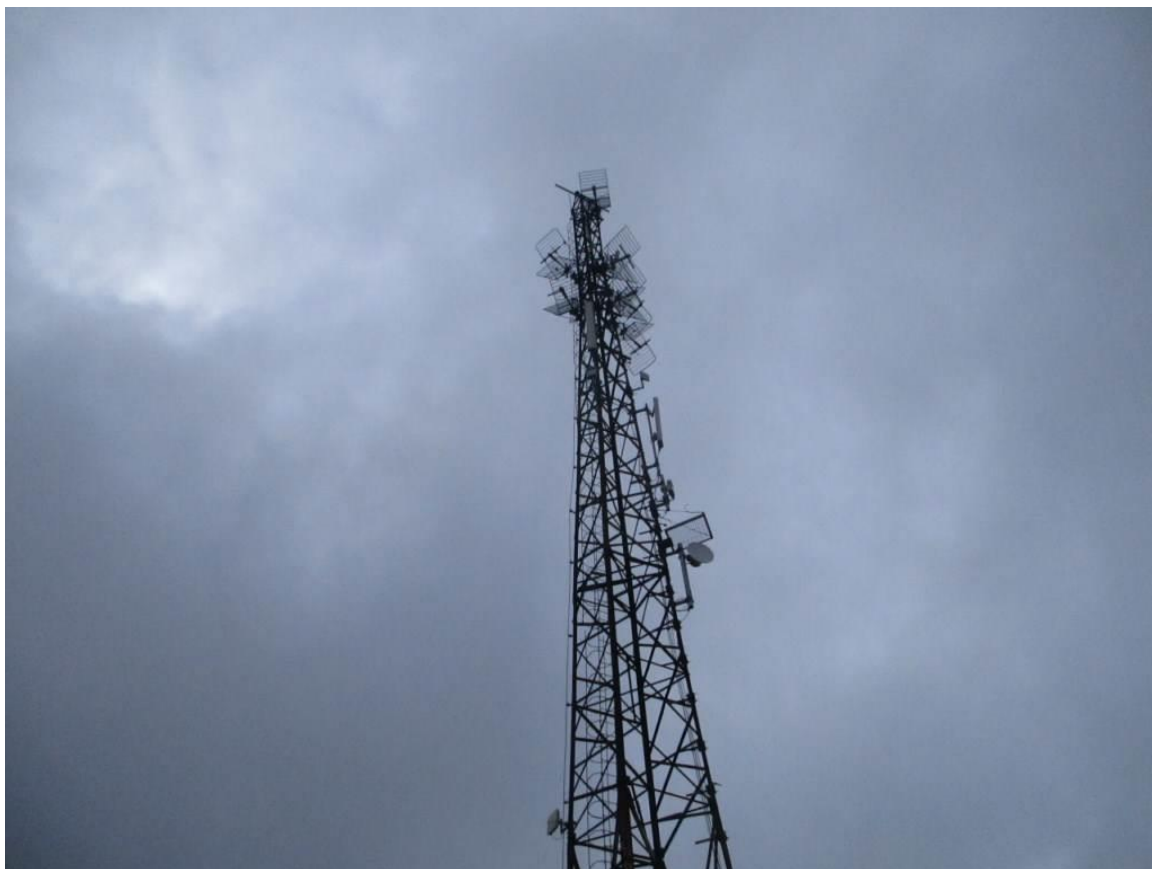
Remarks:

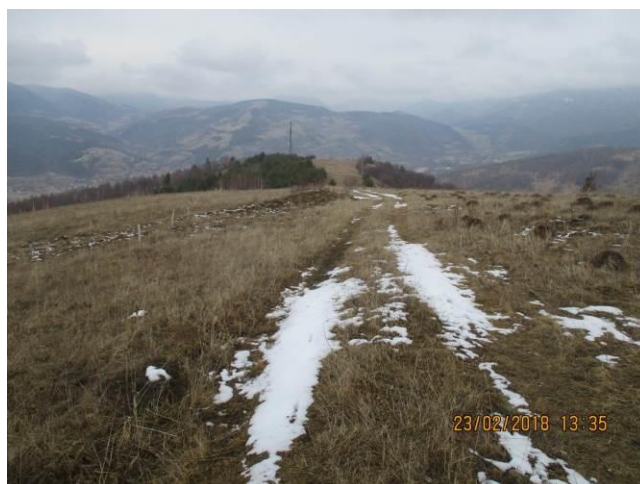
10. ANALYSIS LOADING DATA

LOAD TYPE	DIAMETER (mm)	POSITION (m)	NUMBER
M/W LINK	600	+16.0m	
M/W LINK			
M/W LINK			
M/W LINK			
M/W LINK			
M/W LINK			

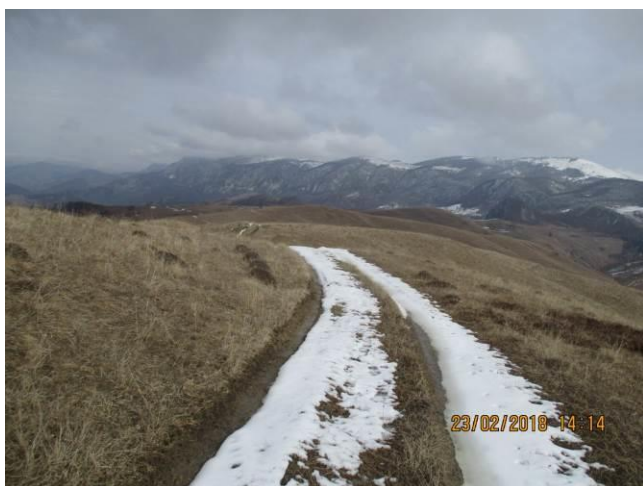
**11. EXISTING LAYOUT(S):
GENERAL VIEW OF STRUCTURE**

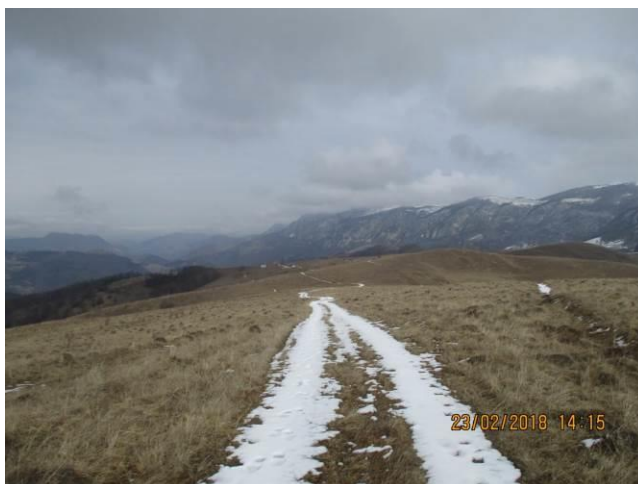












Drum de acces 2: Din Slaciua, dupa ce se trece de pod, se face stanga la rascruce, apoi pe drum de pamant se merge pana in dreptul localitatii "Sub Piatra", dupa care se face dreapta pe un drum forestier(de pamant), si se merge pe coama dealului pana la site. Drumul este in intregime de pamant, foarte greu accesibil. In caz de vreme favorabila, se poate ajunge la site cu masina. (lungime drum aproximativ 13km)

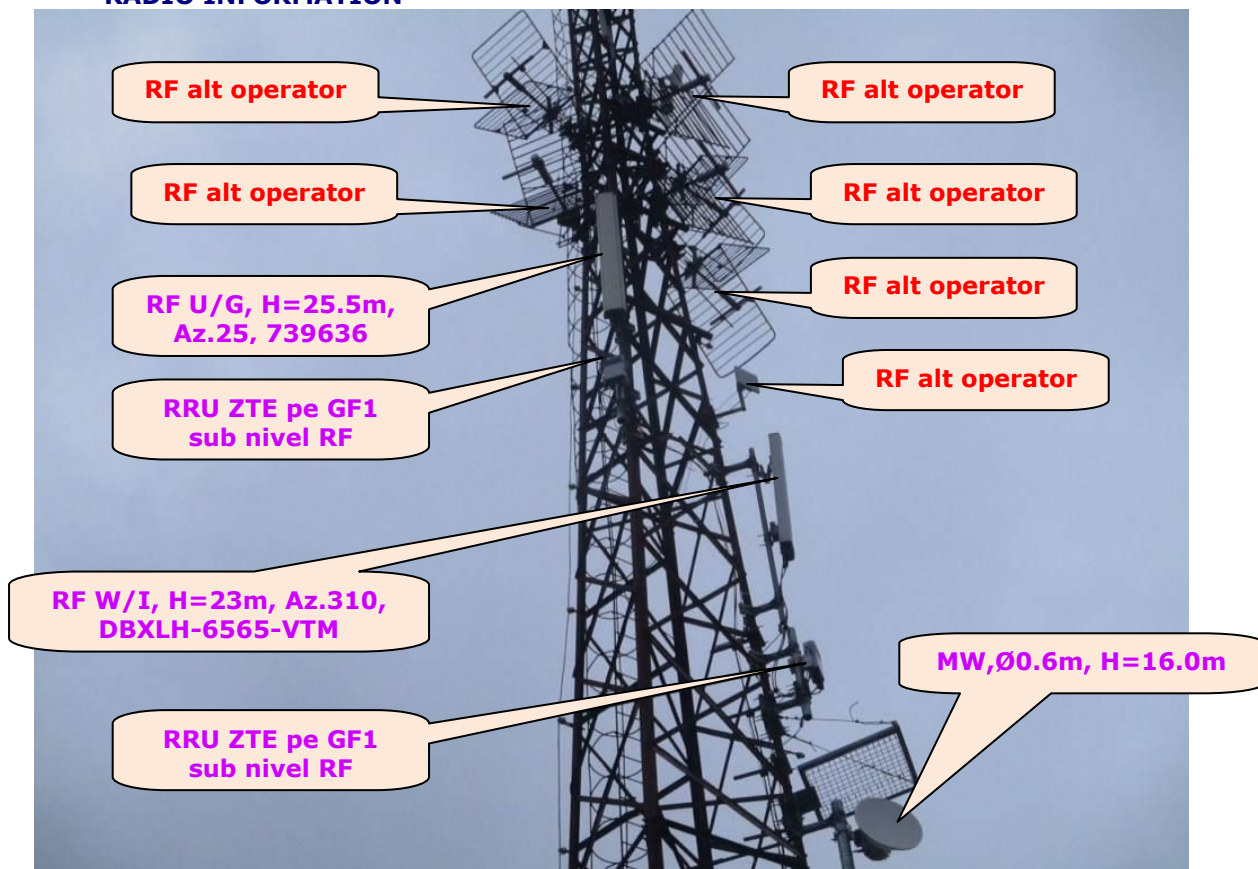
Pentru ambele drumuri, in caz de vreme nefavorabila (ploaie sau ninsoare) nu se poate ajunge la site deloc.

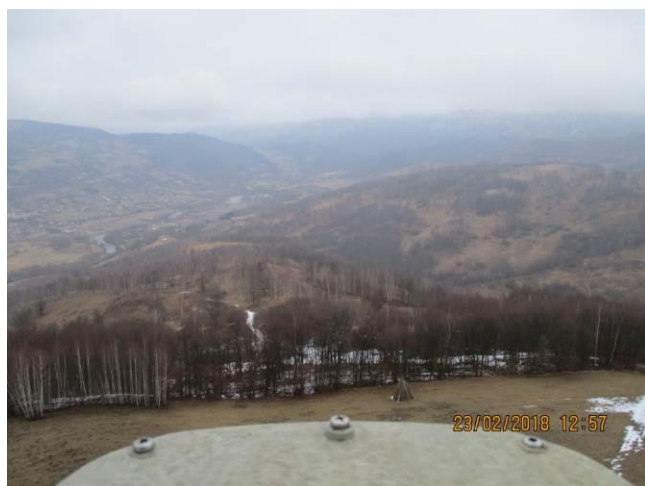




Drum de acces 1: Din Salciua, dupa ce se trece de pod, se face dreapta la rascruce, apoi pe drum forestier(momentan, in zona se executa defrisari de copaci, iar drumul este stricat de utilajele care scot lemnul din padure. Drum impracticabil. Pe jos nu se poate ajunge, pentru ca pana la site, sunt stani pazite de caini ciobanesti. (lungime drum aprox. 3km)

RADIO INFORMATION





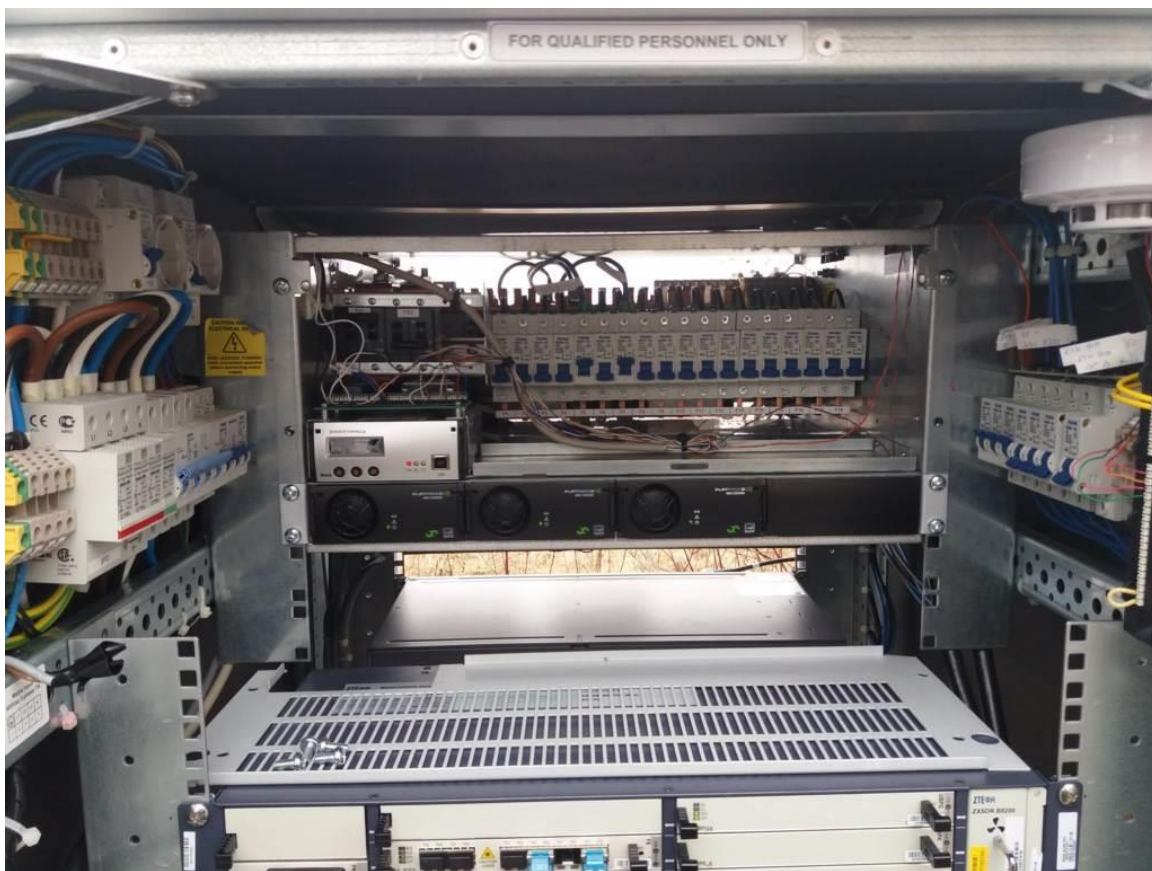
Sectorul 1

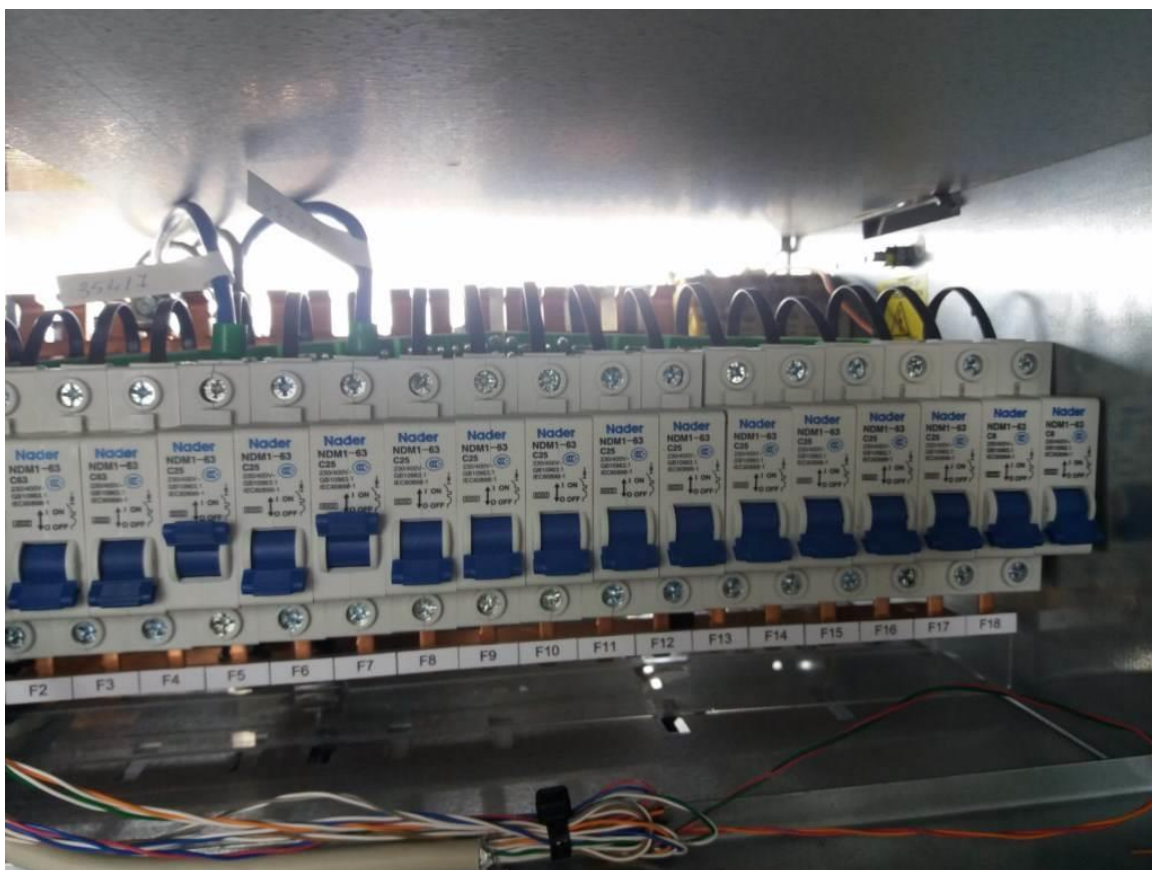
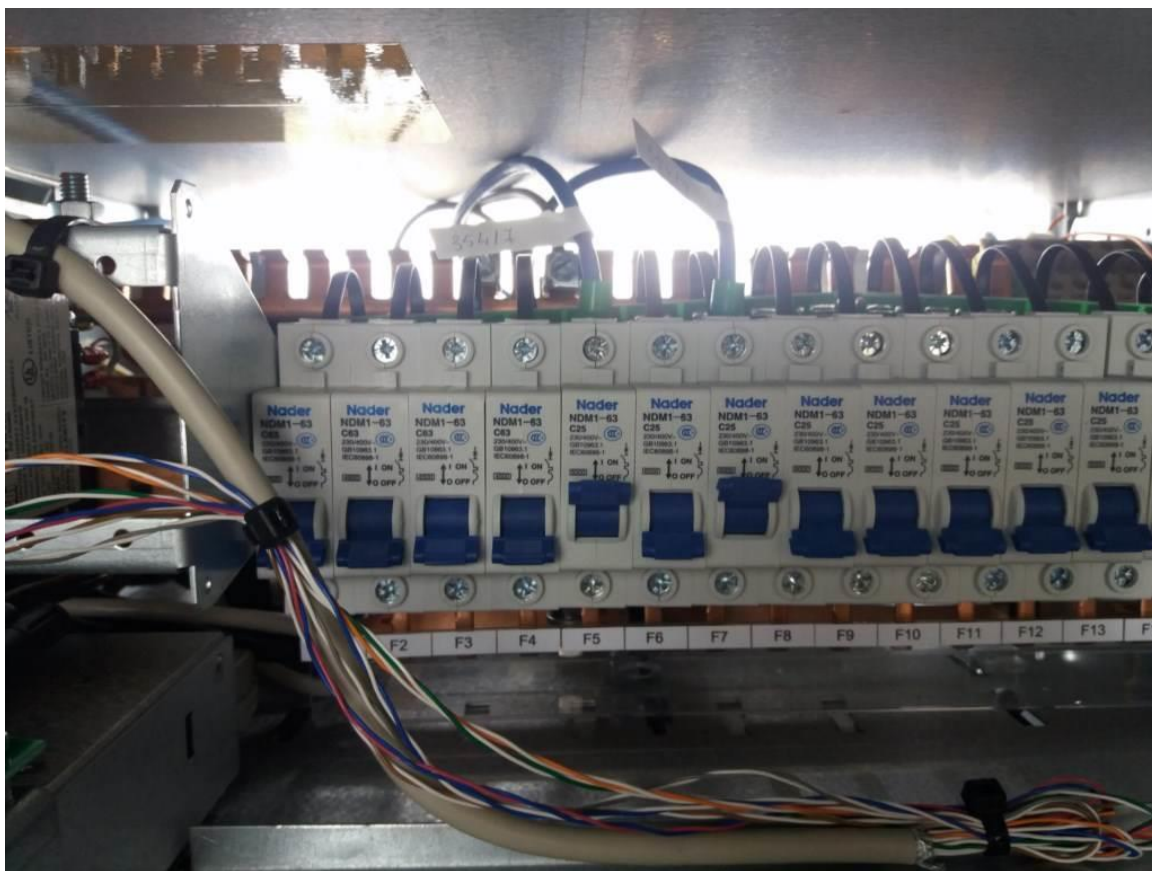


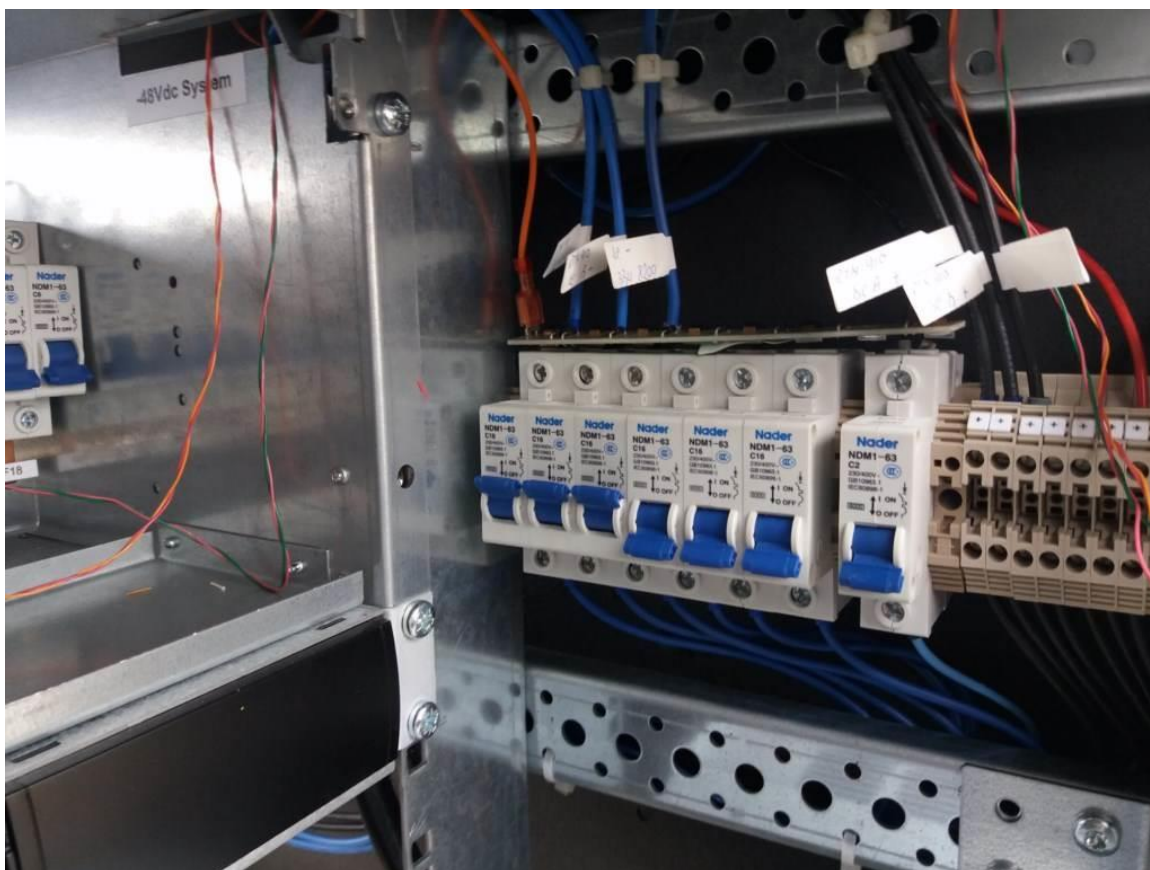


Sectorul 3

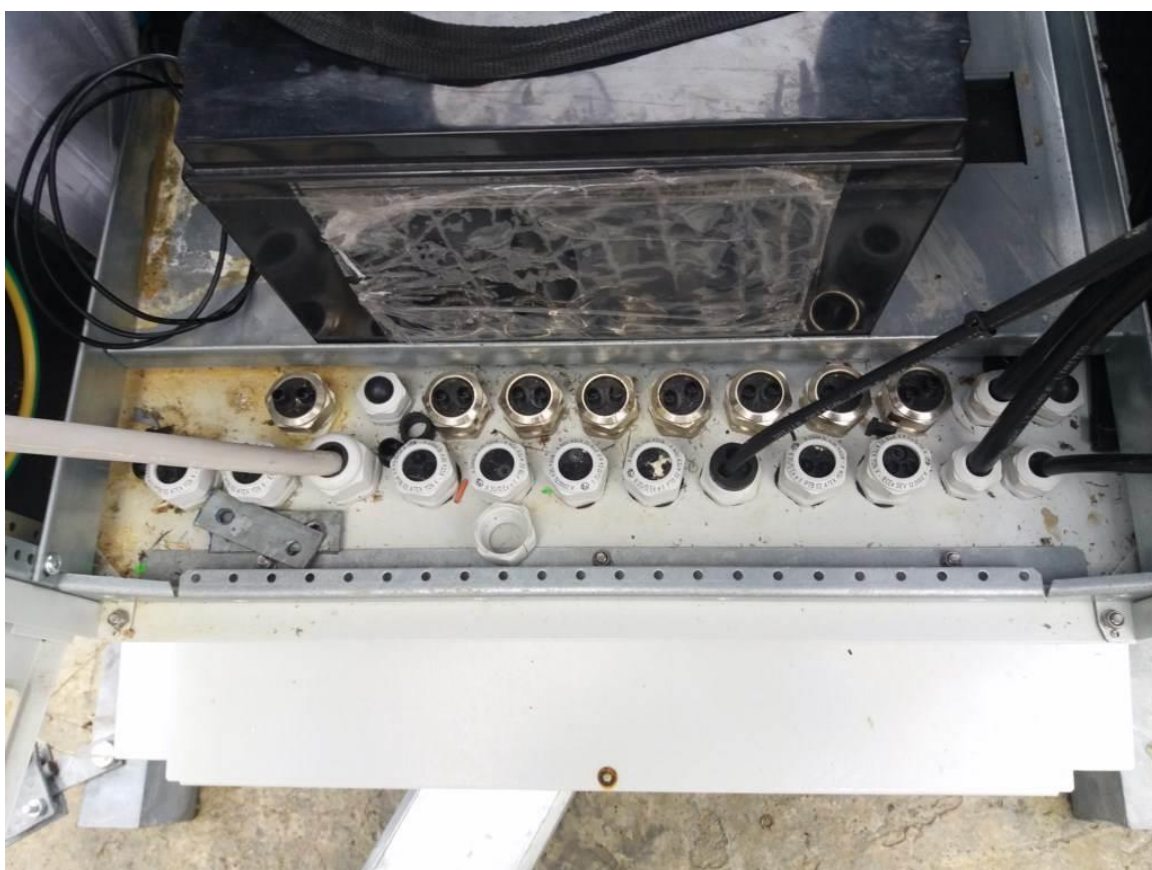




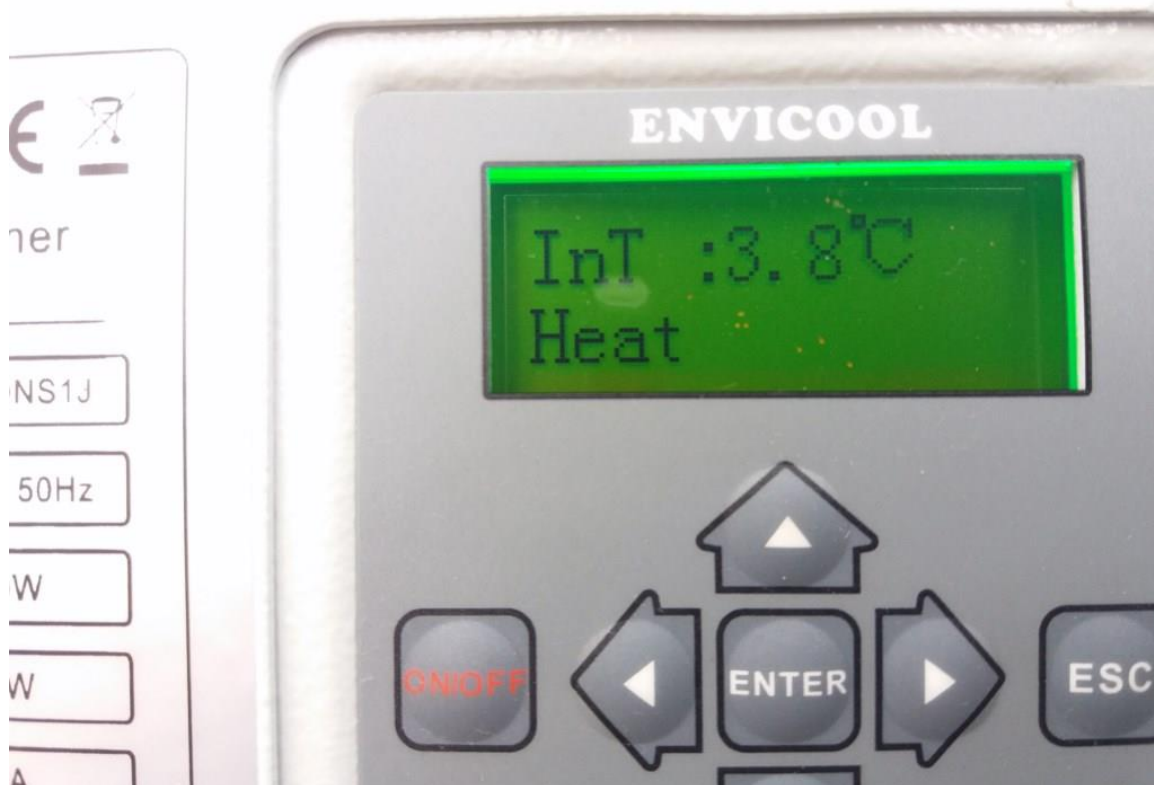
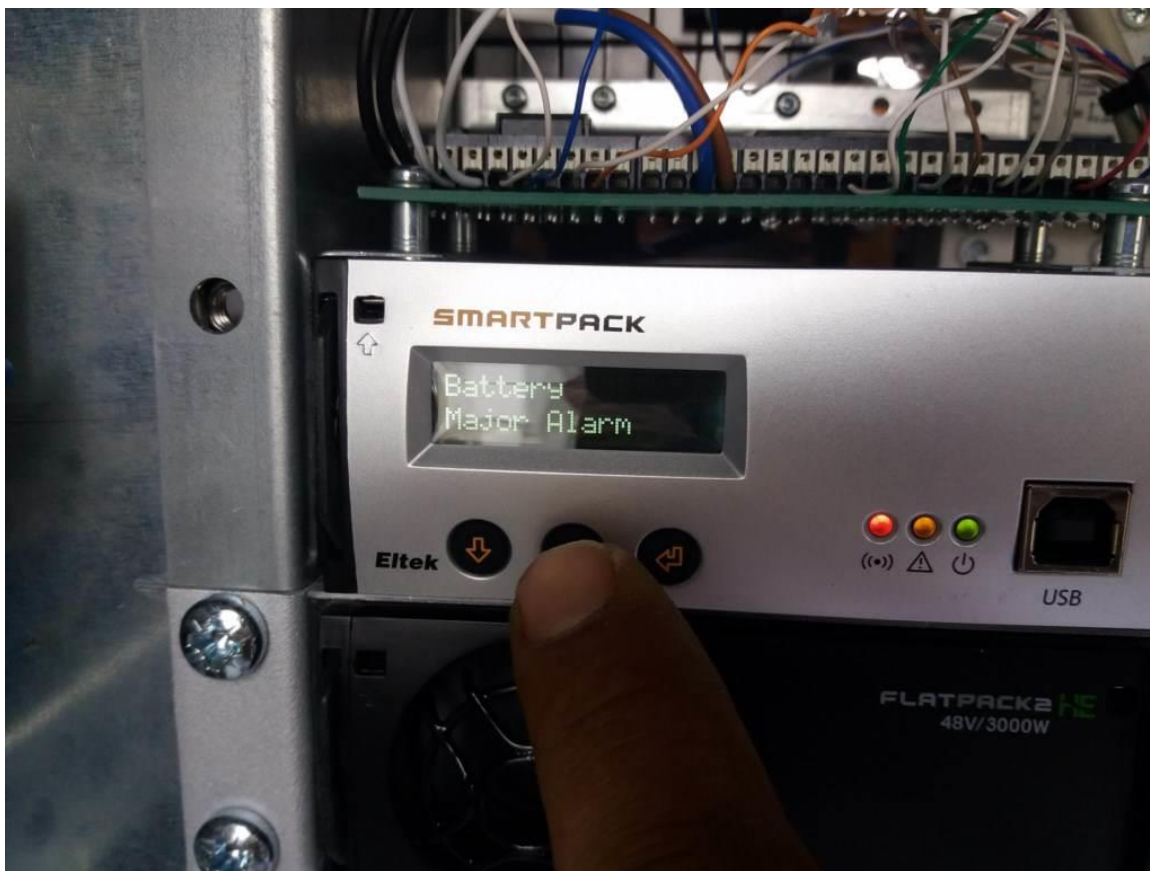


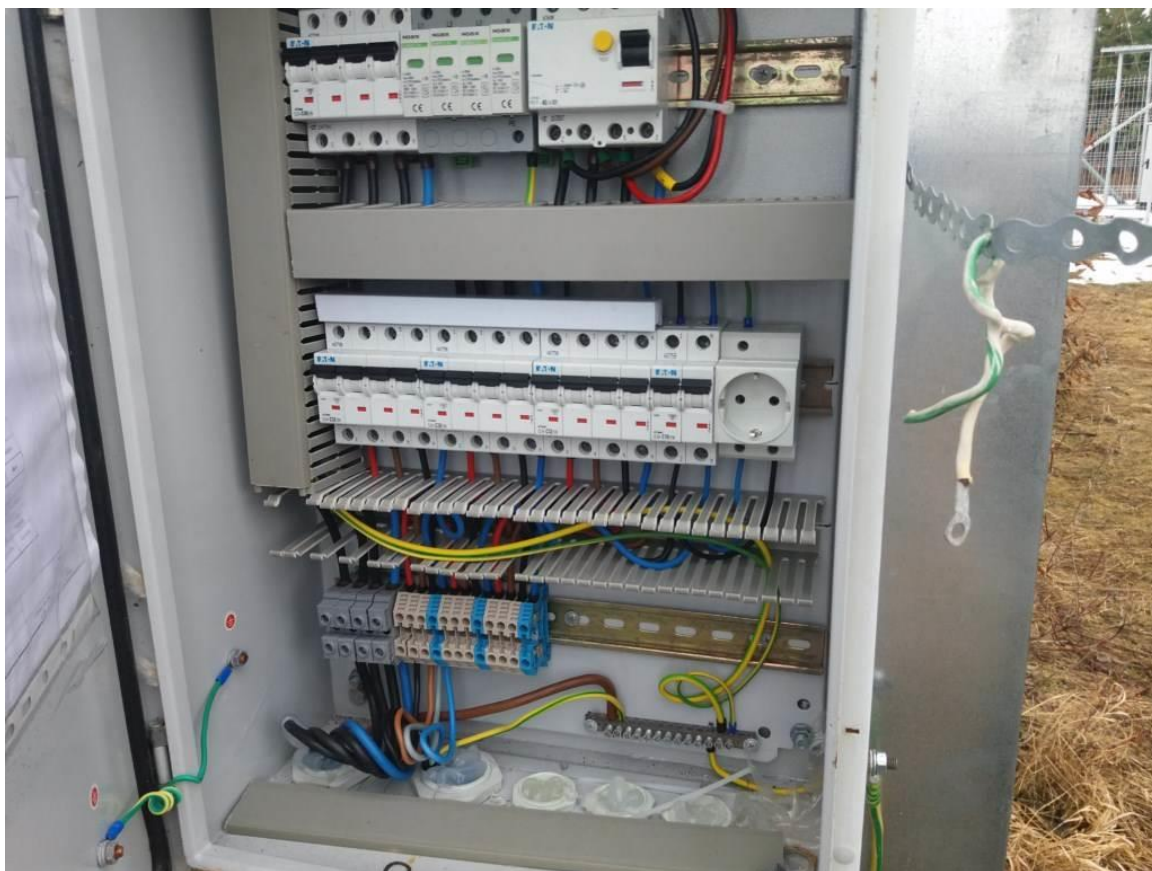








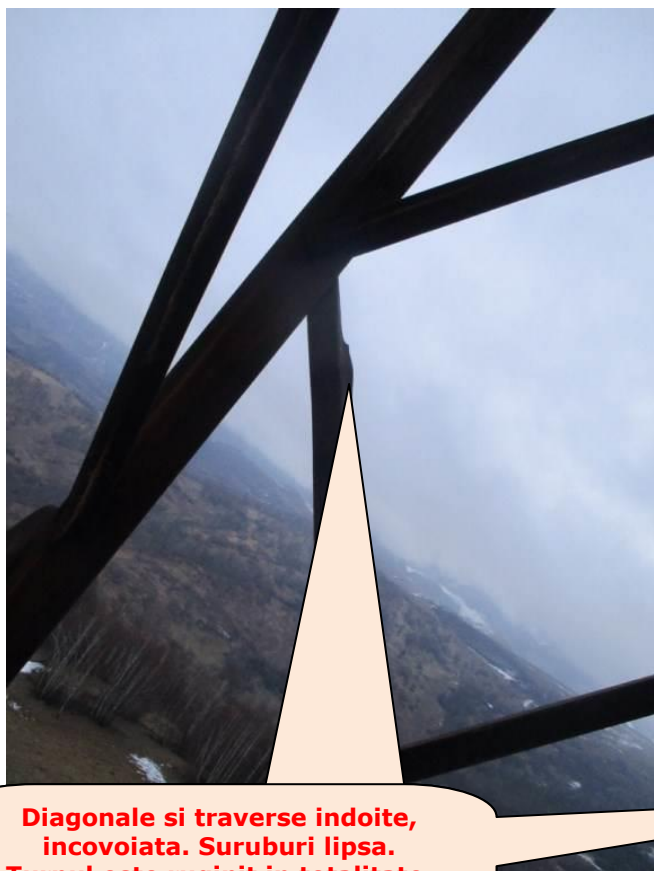




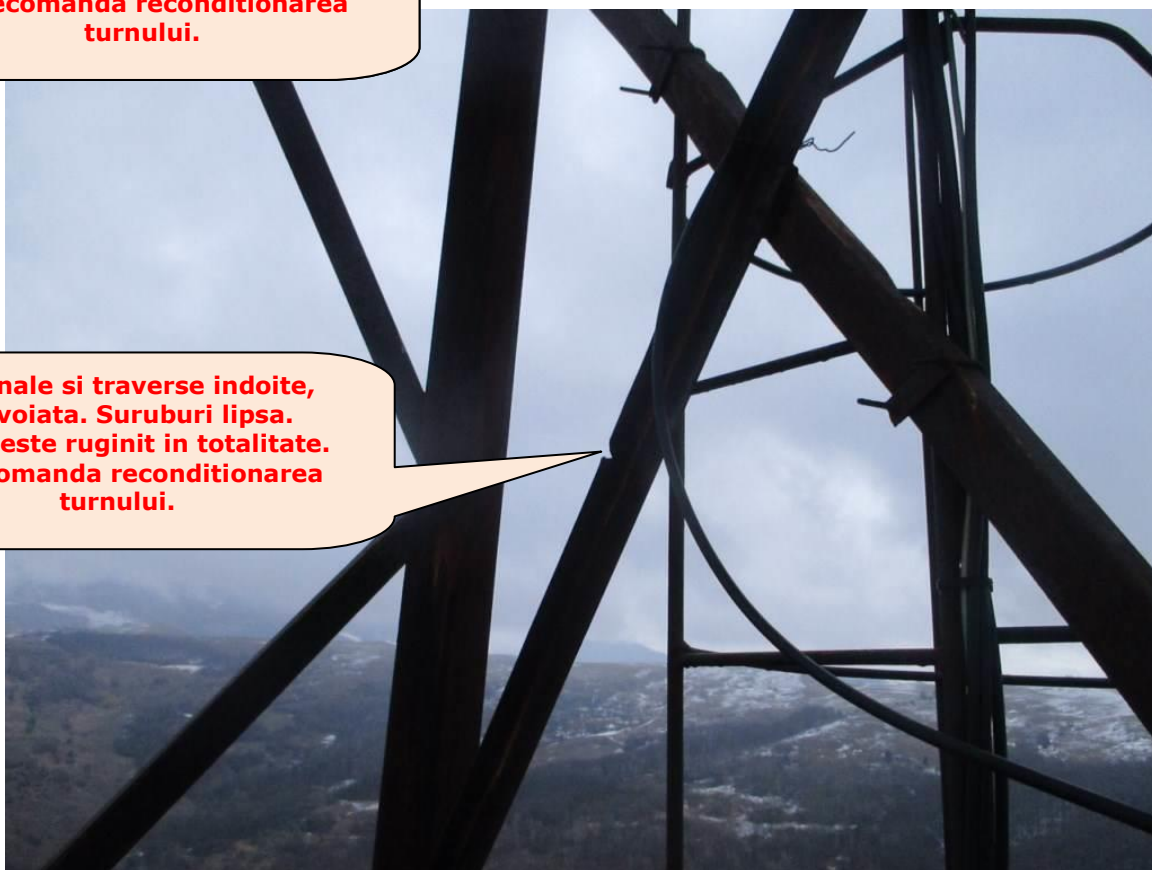
CW INFORMATION



**Diagonale si traverse indoite,
incovoiate. Suruburi lipsa.
Turnul este ruginit in totalitate.
Se recomanda reconditionarea
turnului.**



Diagonale si traverse indoite, incovoiate. Suruburi lipsa. Turnul este ruginit in totalitate. Se recomanda reconditionarea turnului.



Diagonale si traverse indoite, incovoiate. Suruburi lipsa. Turnul este ruginit in totalitate. Se recomanda reconditionarea turnului.





12. PROPOSED INFRASTRUCTURE & EQUIPMENT SOLUTION

a. Indoor cabinets

Dimensions of existing room:	N/A
Space availability for indoor equipment:	N/A
Expansion of existing equipment room:	N/A
Shelter needed:	N/A
Shelter concrete base needed:	N/A
Space availability for new shelter positioning:	N/A
AC power extension/change:	N/A
Main grounding bus bar existence:	N/A
Water proofing of the room needs restoration:	N/A
Internal Lighting restoration:	N/A
Wall painting needed:	N/A
Antistatic floor addition:	N/A
Fire alarm system expansion:	N/A
Air Conditioning (A/C) expansion/replacement:	N/A
Nr./capacity[A] of rectifier modules	3/37
Security Lights board:	N/A
Plastic trays for cables expansion :	N/A
Internal ladder for the feeders availability:	N/A
Cable entry expansion:	N/A
Other Remarks:	-

b. Outdoor cabinets

New metal base needed:	No
Dimensions of new metal base:	N/A
Secure of metal base on floor:	Yes
Grounding of base/Earthing for equipments:	Yes
AC power supply availability:	Yes
Needed properly holes on base:	No
Clearances around cabinets:	No
Other Remarks:	-

c. Proposed New Masts

	Height	Length	poles/mast	Cell_id on the mast	Position
1					
2					
3					
4					

d. New Antenna Poles

	Height	Length	Cell_id	Corner/Tower	Obstacles	installation readiness
1						
2						
3						
4						

e. New MW Poles

	Height	Length	Hop id	Corner/Tower	Far end	Obstacles	installation readiness
1							
2							
3							



Proposed corrective works:	Reconfigurarea site-ului CJ442 SALCIUA_DRTV care sa includa urmatoarele elemente: - Se vor pastra antenele existente 1x739636 si 1xDBXLH-6565B-VTM; - Antenele se vor reutiliza pentru tehnologiile GSM900/UMTS900; - Pe cei 2 suporti GF1 se vor instala 2xRRU-uri noi GSM900/UMTS900; - In minishelter Raycap se va instala 1xRBS6601 nou echipat cu 1xBB5216. - RBS6601 se va alimenta din 1x16A din distributie minishelter(din bandoul de sigurante din dreapta – de unde este alimentat BBU-ul ZTE; - Cele 3xRRU-uri noi se vor alimenta din 3x25A din distributie minishelter cu cabluri DC CU2x5mmp – 1x30m + 1x35m; - Dupa swap, se vor dezinstala RRU-urile ZTE impreuna cu FO/DC + echipamente din minishelter; Lungimi cabluri: Jumperi 1/2" – 4x3m; FO – 1x30m + 1x35m; DC CU2x5mmp – 1x30m + 1x35m; DC CU2x2,5mmp – 2m; * Structurile metalice si echipamentele noi se vor conecta la impamantarea existenta pe site.
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13. PROPOSED SOLUTION LAYOUT(S): PICTURES AND COMMENTS:

