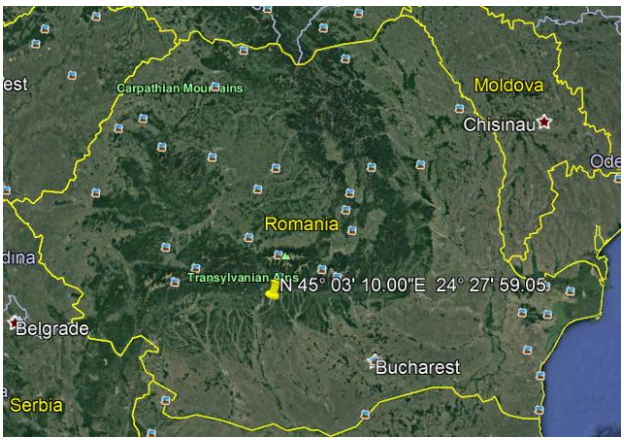
SITE SURVEY REPORT
Ericsson

1. GENERAL INFORMATION

Site name:	**MILCOIU_ORG**
Site number (code):	**CR881**
Site address (city;street;no.; building; entrance):	**Sat CAZANESTI, Com MILCOIU, Jud VALCEA**
Site area:	**VALCEA**
Site survey team:	**FLORIN VILCEA / SIMTEL**
Checked by:	**ADRIAN DOBRE /0760.683.531**
Date of site survey:	**20.01.2017**
Type of Site (urban, rooftop):	**Greenfield**
Lesser:	
Contact Person:	

2. ROOFTOP (Building information)

GPS coordinates:		
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 45° 03' 10.00" E 24° 27' 59.05**
Tower:	**Yes ☒ NO☐**
Tower type:	**☒ Heavy Cosmosite tower – 30m (or more) ☐ Polygonal Monopol – 30m (or more) ☐ Monopole lattice tower-30m ☐ Guyed tower on shelter-20m**
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... mm x ...N/A..... mm x ...N/A..... mm**
Non standard mini - shelter frame profile	**Picture to add in the bottom**
RRU to Antenna/Combiner Jumper length (type: DIN7/16 Male –N Male):	**.....8x2..... m**
Antenna to Combiner -> Jumper length (type: DIN7/16 Male – DIN7/16 Male):	**.....8x2..... m**
FO cable length between BB to RRU	**..... 4x05 ..... m**
DC cable length between PP to RRU	**..... 4x05 ..... m**
Type and length of DC power for RRU Cu 2x6 mm² (L<30m):	**Type ...2x6..... / .....4x05..... m**
Type and length of DC power for RRU Cu 2X10 mm² if needed(30m<L<60m):	**Type .....N/A..... / .....N/A..... m**
Type and length of DC power for RRU Cu 2X16 mm² if needed(60m<L<90m):	**Type .....N/A..... / .....N/A..... m**
Type and length of DC power for RRU Cu 2X25 mm² if needed(L>90m):	**Type .....N/A..... / .....N/A..... m**
Combo Box required:	**Yes ☐ NO☒ ; Length of cable: ..... m**
Connection patch length from CB to RRU (FO&DC)	**M ...N/A.....**
Outdoor CB existing breakers type	**16A☐ 25A☐ Oth.☒ ...32A spec**
PDU existing breakers availability (63A in PP)	**Yes ☐ NO☐ N/A☒**
DC cable length from PP to new PDU	**.....N/A..... m**
PP Type / producer plus picture on the bottom	**N/A**

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:	

5. POWER SUPPLY INFORMATION

Power availability:	**YES**					
Voltage-measurements (PLC display):	**L1(V)**	**N/A**	**L2(V)**	**N/A**	**L3(V)**	**N/A**
Amperage-measurements (PLC display, without A/C):	**I1(A)**	**N/A**	**I2(A)**	**N/A**	**I3(A)**	**N/A**
Amperage-measurements (PLC display, with A/C):	**I1(A)**	**N/A**	**I2(A)**	**N/A**	**I3(A)**	**N/A**
Outdoor mini shelter: 32A available breaker in LDB (5x6 mm² AC Cable)	**YES**					
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:	**YES**					
Main AC board exist:	**YES**					
Breaker value in BMPT:	**32A**					
Surge arrestors existence:	**NO**					
Type and length of power connection cable for BBU	**N/A**					
Type and length of power connection shielded cable Al 6X25 mm² if needed:	**N/A**					
Type and length of power connection shielded cable Al 6X35 mm² if needed:	**N/A**					
Type and length of AC power connection cable 5X6 mm² for mini shelter if needed:	**N/A**					
Type and length of DC power from PSU to PDU Al 2x35 mm² if needed:	**N/A**					
CB/PDU/2 Sections (if needed):	**NO**					
CB/PDU/3 Sections (if needed):	**NO**					
PDU indoor (if needed):	**NO**					
Boards grounding - secured:	**YES**					
Boards waterproofed:	**YES**					

Other Remarks:	

6. POWER PLANT and BATTERY INFORMATION

Number of units	**Unit 1** ☐	**Unit 2** ☐	**Unit 3** ☐
Type	**300A** ☐ **600A** ☐ **Other** ☒	**300A** ☐ **600A** ☐ **Other** ☐	**300A** ☐ **600A** ☐ **Other** ☐
Nr./capacity[A] of rectifier modules	**N/A**		
DC Load Amperage(displayed) [A]	**N/A**		
Battery capacity [Ah]	**92Ah**		
Battery type/number	**Power safe 12V92F/4**		

Other Remarks:	

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:	

8.NEW INSTALLATION INFORMATION

Common: number of buss with free holes	**3**
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	**NO**
Outdoor equipment: Existing space for outdoor Concentrator mounting (proposal)	**N/A**
Outdoor equipment: Existing space for RRU mounting (proposal)	**YES**

Other Remarks:	

9. EXISTING TELECOM EQUIPMENT & INFRASTRUCTURE

a. General information

Equipment type:	**Indoor ☐**	**Outdoor ☒**	
Number of RF antennas:	**2**		
Number of MW links	**-**		
Nr. of existing RBS cabinets	**1xRBS 6102**		
MW existing RL cabinet	**Indoor ☐**	**Outdoor ☒**	
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	47.50	3	pole	V	YES
2	45.50	3	pole	W	YES

c. Existing Antenna Poles

	Height	Length	Cell_id	Corner/Tower	Obstacles	installation readiness
1	47.50	V	U	1	NO	YES
2	45.50	W	V	2	NO	YES

d. Existing MW Poles

	Height	Length	Hop id	Corner/Tower	Far end	Obstacles	installation readiness
1	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Remarks:	

10. ANALYSIS LOADING DATA

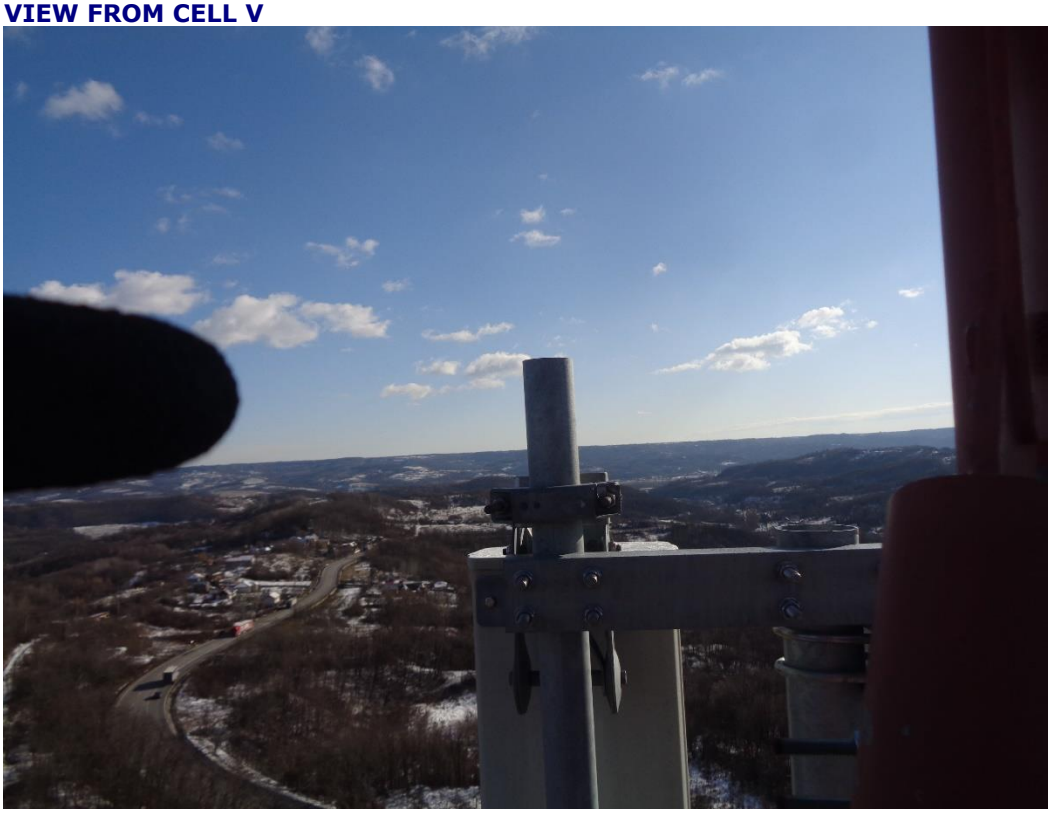
LOAD TYPE	DIAMETER (mm)	POSITION (m)	NUMBER
M/W LINK	N/A	N/A	N/A

11. EXISTING LAYOUT(S): Pictures

GENERAL VIEW OF STRUCTURE

RADIO INFORMATION
CELL V

VIEW FROM CELL V

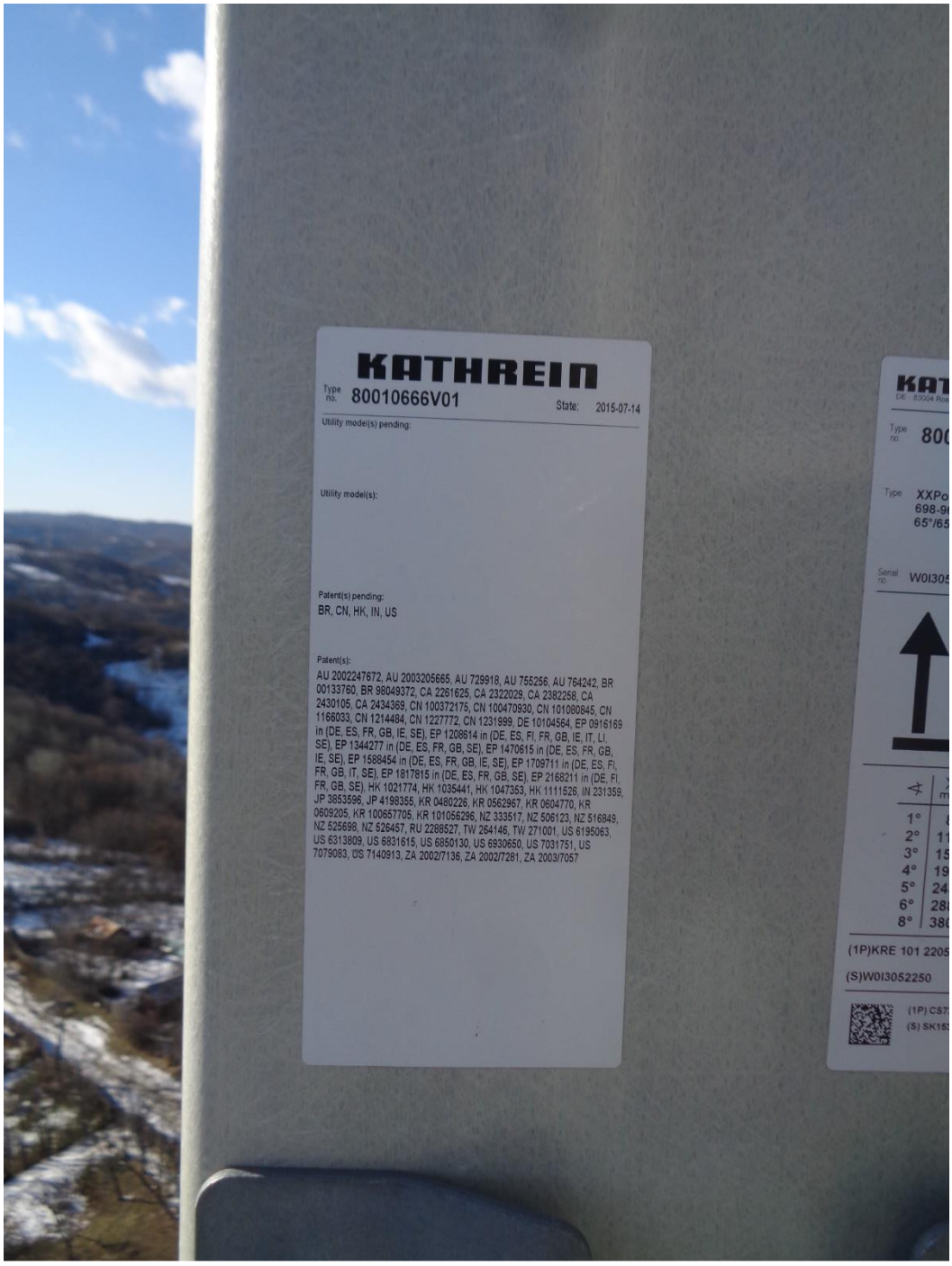


Antenna type CELL V

CELL W

VIEW FROM CELL W

Antenna type CELL W

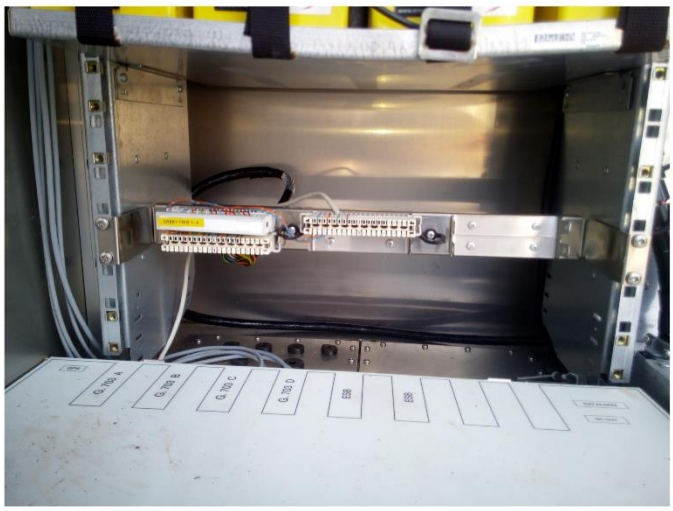


TOP VIEW

CW INFORMATION

Existing RBS CABINET

Existing TRANSMISIONS



Exisiting LDB+BMPT

Existing Cable tray

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	N/A
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 present
AC power supply availability:	YES
Needed properly holes on base:	YES
Clearances around cabinets:	YES
Other Remarks:	

c. Proposed New Masts

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

d. New Antenna Poles

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

e. New MW Poles

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

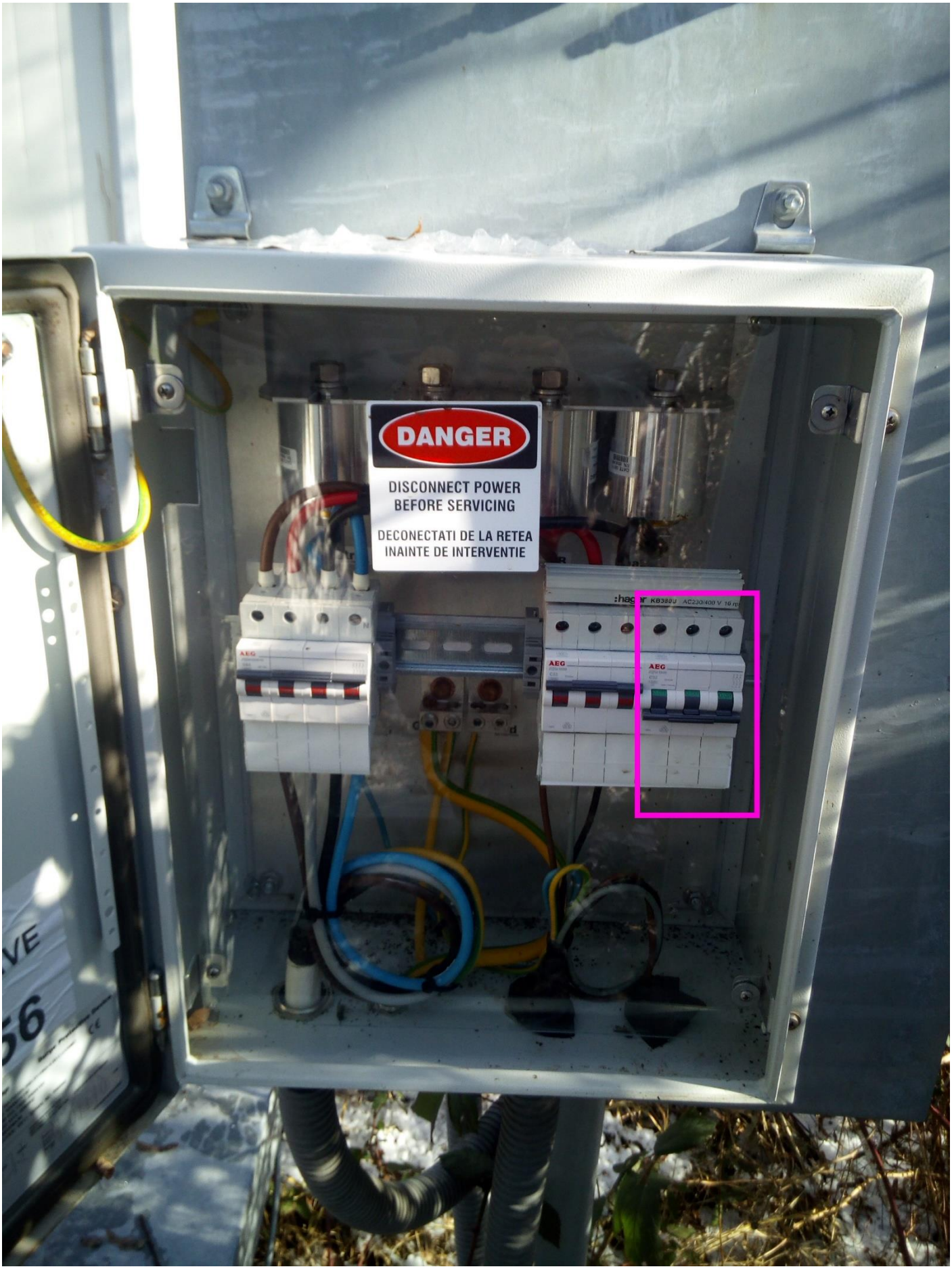
Proposed corrective works:	**- se face sharing ORANGE / TELEKOM pe antenele RF existente de tip 80010666v01 (sharing existent pe portul de 900MHz);** **- Se vor folosi 3x combineri E11F02P72** **- Se va vor instala 4xRRU noi pe piciorele ICEBRACKER-ului.** **- instalarea unui MiniShelter pe rama metalica existenta Telekom - se vor folosi adaptori de fixare. MiniShelterul se va alimenta din LDB-ul existent cu o siguranta tripolara 32A existenta in LDB. Cablul de alimentare va fi de tip CyABy 5x6mm² si va urma traseul existent de cabluri. Groundbarul din interiorul MiniShelterului se va conecta la instalatia de impamantare existenta cu cablu FY 50mm²;** **- echipamentul 2G existent (1x2106) se va demonta);** **- noile RRU-uri se vor alimenta cu cabluri 2x10mmp (ecranat) din Minishelter folosind sigurante de 25Ax4 buc, ecranul cablurilor se va conecta la groundbarul existent in MiniShelter;** **-Transmisiunile se vor muta in noul Minishelter** **- in MiniShelter se va instala un RBS6601 acesta se va alimenta pe 1x16A;** **-Jumperi necesari:8x2m pentru RRU si 8x2m pentru combineri** **-Cablu FO necesar: 4x5m** **-Cablu DC necesar: 4x5m 2x6mpp** **- echipamentele noi instalate se vor lega la instalatia de impamantare existenta;**

13. PROPOSED SOLUTION LAYOUT(S): PICTURES AND COMMENTS:

NEW RRU POSITION

NEW Minishelter

NEW MINISHELTER POWER


DANGER
DISCONNECT POWER
BEFORE SERVICING
DECONECTATI DE LA RETEA
INAINTE DE INTERVENTIE
AEG
AEG
AEG

14. Detailed site information/Picture:

- Additional it is requested to document:
  - Pictures with Metallic existing structure; further reuse to be acknowledge by Telekom;
  - Pictures with existing Cable tray to decide if additional feeders can be added/ if case
  - LDB inside picture where breakers (32A) value and space to be visible/ where Mini-shelter is requested
  - Mini-shelter frame photo (where metallic structure/profile to be visible)
  - PP picture details / producer & breaker value to be visible
  - Picture with space availability (Existing Mini-shelter or rack)
  - Pictures with Transmission solution/ outdoor cables