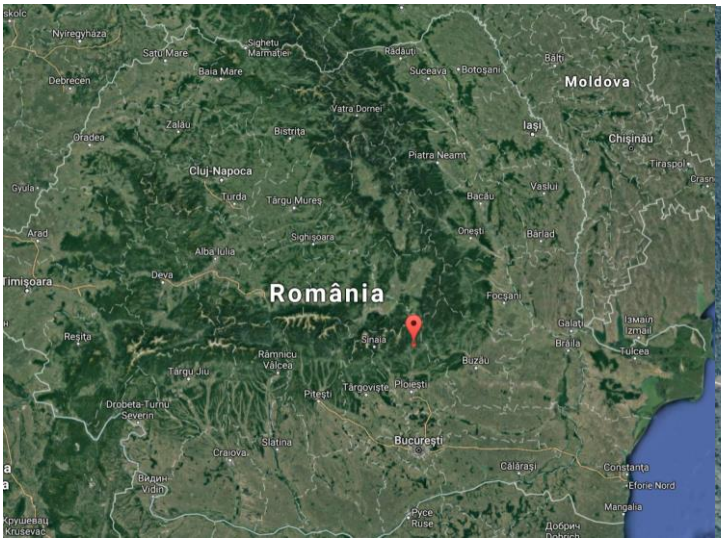
SITE SURVEY REPORT
Ericsson

1. GENERAL INFORMATION

Site name:	**SCARISOARA_RTc**
Site number (code):	**CJ731**
Site address (city;street;no.; building; entrance):	**Localitatea Scarisoara, Judetul ALBA**
Site area:	
Site survey team:	**FLORIN VILCEA / SIMTEL**
Checked by:	**ADRIAN DOBRE /0760.683.531**
Date of site survey:	**28.02.2017**
Type of Site (urban, rooftop):	**Greenfield**
Lesser:	
Contact Person:	



Other Remarks:	

2. ROOFTOP (Building information)

GPS coordinates:	**N .....° .....' .....,....."** **E .....° .....' .....,....."**
Building height:	**..... m**
Existent tripod:	**Yes ☒ NO☐**
Total height:	**.....35..... m**
Use of crane for materials transportation:	**Yes ☒ NO☐**

Other Remarks:	

3. GREEN FIELD (Specific data information)

GPS coordinates:	**N …46….° …27….' …30…,…00…"** **E …22….° …53…….' …03..,70…"**
Tower:	**Yes ☐ NO☐**
Tower type:	**☒Heavy Cosmosite tower – 30m (or more)** **☐ Polygonal Monopol – 30m (or more)** **☐Monopole lattice tower-30m** **☐Guyed tower-43m**
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):	**……..18x3……. m**
Antenna to Combiner -> Jumper length (type: DIN7/16 Male – DIN7/16 Male):	**……..6x2m…….. m**
FO cable length between BB to RRU	**……7x45…….. m**
DC cable length between PP to RRU	**……..7x45……. m**
Type and length of DC power for RRU Cu 2x6 mm² (L<30m):	**Type ……N/A……. / ……..N/A……. m**
Type and length of DC power for RRU Cu 2X10 mm² if needed(30m<L<60m):	**Type ……2x10……. / ……7x45……. 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.☐ …A spec**
PDU existing breakers availability (63A in PP)	**Yes ☐ NO☒**
DC cable length from PP to new PDU	**…… m**
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:	

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 mm² 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:	**YES**					
Main AC board exist:	**YES**					
Breaker value in BMPT:	**63A**					
Surge arrestors existence:	**NO**					
Type and length of power connection cable for BBU	**CA 2x2,5mm²– 2m**					
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):	**N/A**					
CB/PDU/3 Sections (if needed):	**N/A**					
PDU indoor (if needed):	**N/A**					
Boards grounding - secured:	**N/A**					
Boards waterproofed:	**N/A**					

Other Remarks:	

6. POWER PLANTand BATTERY INFORMATION

Number of units	**Unit 1** ☒	**Unit 2** ☐
Type	**300A** ☐ **600A** ☐ **Other** ☒	**300A** ☐ **600A** ☐ **Other** ☐
Nr./capacity[A] of rectifier modules	**2x48A**	
DC Load Amperage(displayed) [A]		
Battery capacity [Ah]	**100AH**	
Battery type/number	**12MVR100TA**	

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	
Common: Available space on the existing cable tray	**YES**
Indoor equipment: Existing space for ILP mounting	**YES**
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	**N/A**
Outdoor equipment: Existing outdoor transmission cabinet	**Yes**
Outdoor equipment: Existing space for outdoor Concentrator mounting (proposal)	**YES**
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:	**4**		
Number of MW links	**1**		
Nr. of existing RBS cabinets			
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	30	3	tower	U,V, W+C	YES
2					
3					
4					

c. Existing Antenna Poles

	Height	Length	Cell_id	Corner/Tower	Obstacles	installation readiness
1	27.5		U		NO	YES
2	27.5		V		NO	YES
3	27.5		W		NO	YES
4	27.5		C		NO	YES

d. Existing MW Poles

	Height	Length	Hop id	Corner/Tower	Far end	Obstacles	installation readiness
1	16	1		1		NO	YES
2							
3							
4							

Remarks:	

10. ANALYSIS LOADING DATA

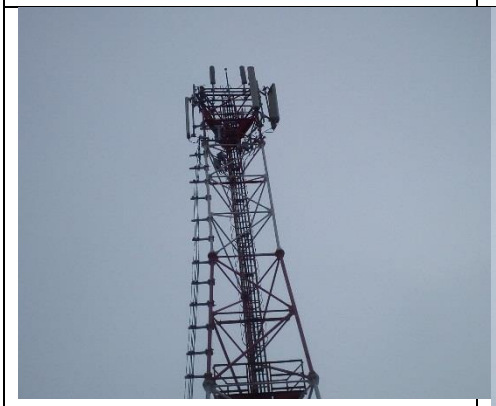
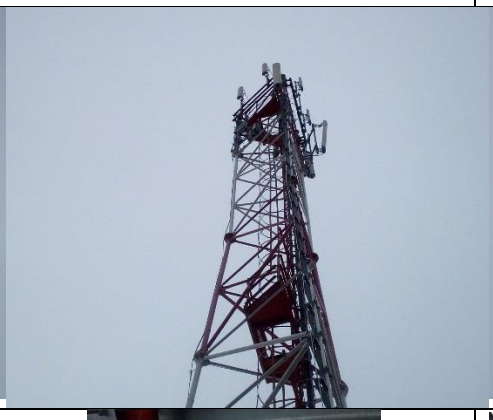
LOAD TYPE	DIAMETER (mm)	POSITION (m)	NUMBER
M/W LINK	1200	16	1
M/W LINK			
M/W LINK			
M/W LINK			
M/W LINK			
M/W LINK			

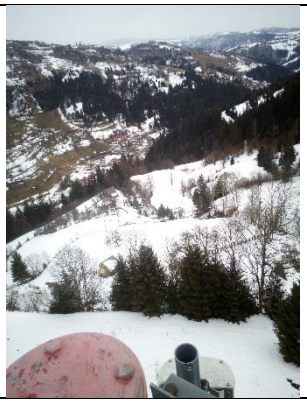
11. EXISTING LAYOUT(S): Pictures

GENERAL VIEW OF STRUCTURE

GENERAL VIEW OF STRUCTURE	
	

RADIO INFORMATION

CELL U	CELL V	CELL W+C
		
		

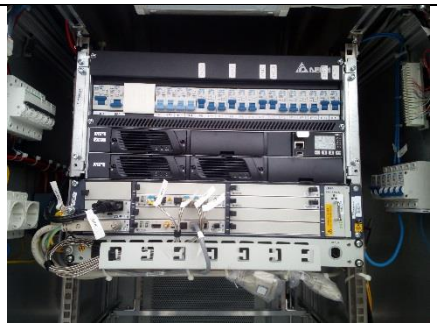

Existing RRU		
		

Existing cable tray and cable entry		
		

CW INFORMATION

Existing cabinet

Existing minishelter Raycap



Existing LDB

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:	N/A
Dimensions of new metal base:	N/A
Secure of metal base on floor:	N/A
Grounding of base/Earthing for equipments:	Yes
AC power supply availability:	Yes
Needed properly holes on base:	N/A
Clearances around cabinets:	N/A
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:	**The existing 4 antennas (2x 739636, RFW- 741785 and HWX-6516DS1-VTM) will be replaced with a 3 new antennas 80010666v01** **Proposed 3x dual-band combiner K78210971 for LTE800** **Proposed 7xRRUs (3xGSM, 3xUMTS and 1xRRU LTE800PSI) to be installed on existing GF1 support;** **Proposed 1No. TTMF - Triple Frequency Shifting TMA.** **The existing RRU ZTE and OLP box will be dismantled** **The existing ZTE 3G equipment will be removed from minishelter Raycap.** **Necessary fusses in PDU: 1x16A existing for powering 1xRBS6601, 7x25A (3 existing and 4 new) for powering RRUs.** **Jumpers needed:** **- 6x3m between TTMF and combiner.** **- 6x2m between antenna and combiner.** **- 2x2m between TTMF and RRU LTE800PSI** **- 12x3m between RRU (GSM and UMTS) and antenna** **FO needed: 7x45m.** **DC needed: 7x45m. (2X10 mm²)** **The metallic shield of the power cables for RRU's must be connected in the new PDU indoor to the specific ground-bar;** **The new equipment's and metallic parts will be grounded**

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

NEW CELL

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