SITE SURVEY REPORT
Ericsson

1. GENERAL INFORMATION

Site name:	**CR588**
Site number (code):	**Berbesti 2**
Site address (city;street;no.; building; entrance):	**Loc. Damteni, Com. Berbesti, Jud. Valcea**
Site area:	
Site survey team:	**FLORIN VILCEA / SIMTEL**
Checked by:	**ADRIAN DOBRE /0760.683.531**
Date of site survey:	**16.01.2018**
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:	**…… m**
Use of crane for materials transportation:	**Yes ☒ NO☐**

Other Remarks:	

3. GREEN FIELD (Specific data information)

GPS coordinates:	N …45….° …00….' …31…,…0…" E …23….° …53…….' …49..,0…"
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):	……12x3……. m
Antenna to Combiner -> Jumper length (type: DIN7/16 Male – DIN7/16 Male):	……. m
FO cable length between BB to RRU	……6x45……. m
DC cable length between PP to RRU	……6x45……. 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……. / ……6x45……. 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	……7……. m
PP Type / producer plus picture on the bottom	Antrice redresor

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)	245	L2(V)	239	L3(V)	245
Amperage-measurements (PLC display, without A/C):	I1(A)	0	I2(A)	6.48	I3(A)	1.21
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)	NO					
1X16A available breakers in indoor Power System	NO					
1X32A available breakers in indoor Power System	NO					
2X63A available breakers in indoor Power System	NO					
Power counter exist:	YES					
Main AC board exist:	YES					
Breaker value in BMPT:	N/A					
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):	YES					
Boards grounding - secured:	YES					
Boards waterproofed:	YES					

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	3x30A	
DC Load Amperage(displayed) [A]		
Battery capacity [Ah]	152AH	
Battery type/number	Monbat/12MVR150	

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	**YES**
Indoor equipment: Existing space for Indoor Concentrator equipment mounting	**YES**
Indoor equipment: Existing space for DC PDU mounting	**YES**
Indoor equipment: Available holes in FIMO	**YES**
Outdoor equipment: Existing space on the existing base frame for mini shelter mounting	**N/A**
Outdoor equipment: Existing outdoor transmission cabinet	**N/A**
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:	**6**		
Number of MW links	**2**		
Nr. of existing RBS cabinets	**n/a**		
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	47.5	3	Offset	RF U+k, RF V+l, RF W+m	YES
2					
3					
4					

c. Existing Antenna Poles

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

d. Existing MW Poles

	Height	Length	Hop id	Corner/Tower	Far end	Obstacles	installation readiness
1	17	1					
2	26	1					
3							
4							

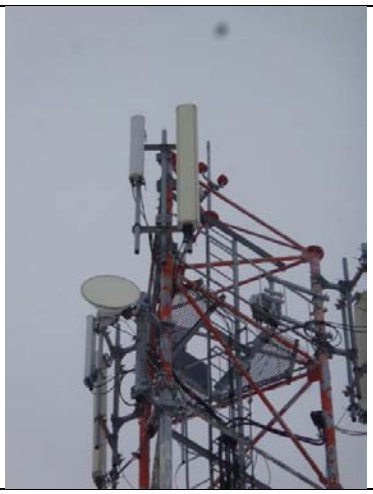
Remarks:	

10. ANALYSIS LOADING DATA

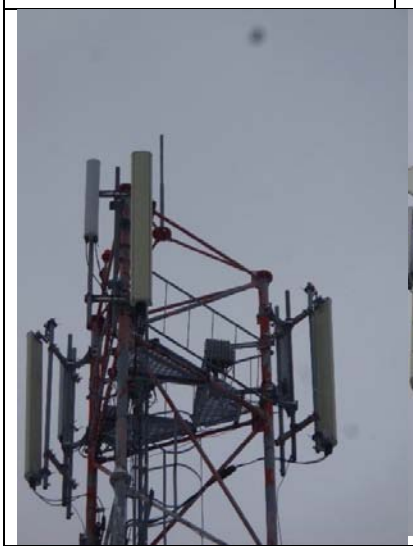
LOAD TYPE	DIAMETER (mm)	POSITION (m)	NUMBER
M/W LINK	600	26	1
M/W LINK	1800	17	
M/W LINK			
M/W LINK			
M/W LINK			
M/W LINK			

11. EXISTING LAYOUT(S): Pictures

GENERAL VIEW OF STRUCTURE

SITE CR185	
	

RADIO INFORMATION

CELL RFU+K	CELL RFV +L	CELL RFW +M
		

CELL RFU	CELL RFV	CELL RFW
		
		

EXISTING RRUs		
		

Existing cable tray and cable entry		
		

CW INFORMATION

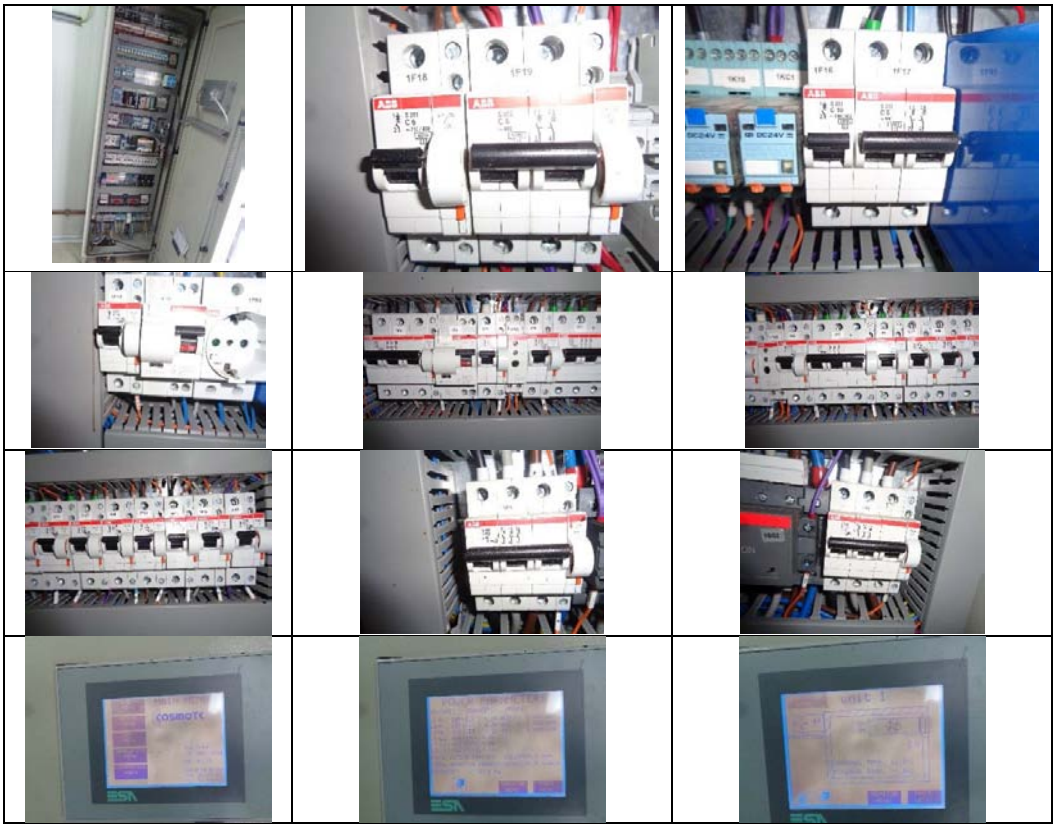
Existing Shelter

Existing RACK

Existing RBS

Existing Power plant

Existing PLC



12. PROPOSED INFRASTRUCTURE & EQUIPMENT SOLUTION

a. Indoor cabinets

Dimensions of existing room:	2820x2500x2750
Space availability for indoor equipment:	YES
Expansion of existing equipment room:	NO
Shelter needed:	NO
Shelter concrete base needed:	NO
Space availability for new shelter positioning:	N/A
AC power extension/change:	NO
Main grounding bus bar existence:	YES
Water proofing of the room needs restoration:	NO
Internal Lighting restoration:	NO
Wall painting needed:	NO
Antistatic floor addition:	NO
Fire alarm system expansion:	NO
Air Conditioning (A/C) expansion/replacement:	NO
Nr./capacity[A] of rectifier modules	4x30A
Security Lights board:	YES
Plastic trays for cables expansion :	NO
Internal ladder for the feeders availability:	YES
Cable entry expansion:	NO
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:	N/A
AC power supply availability:	N/A
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

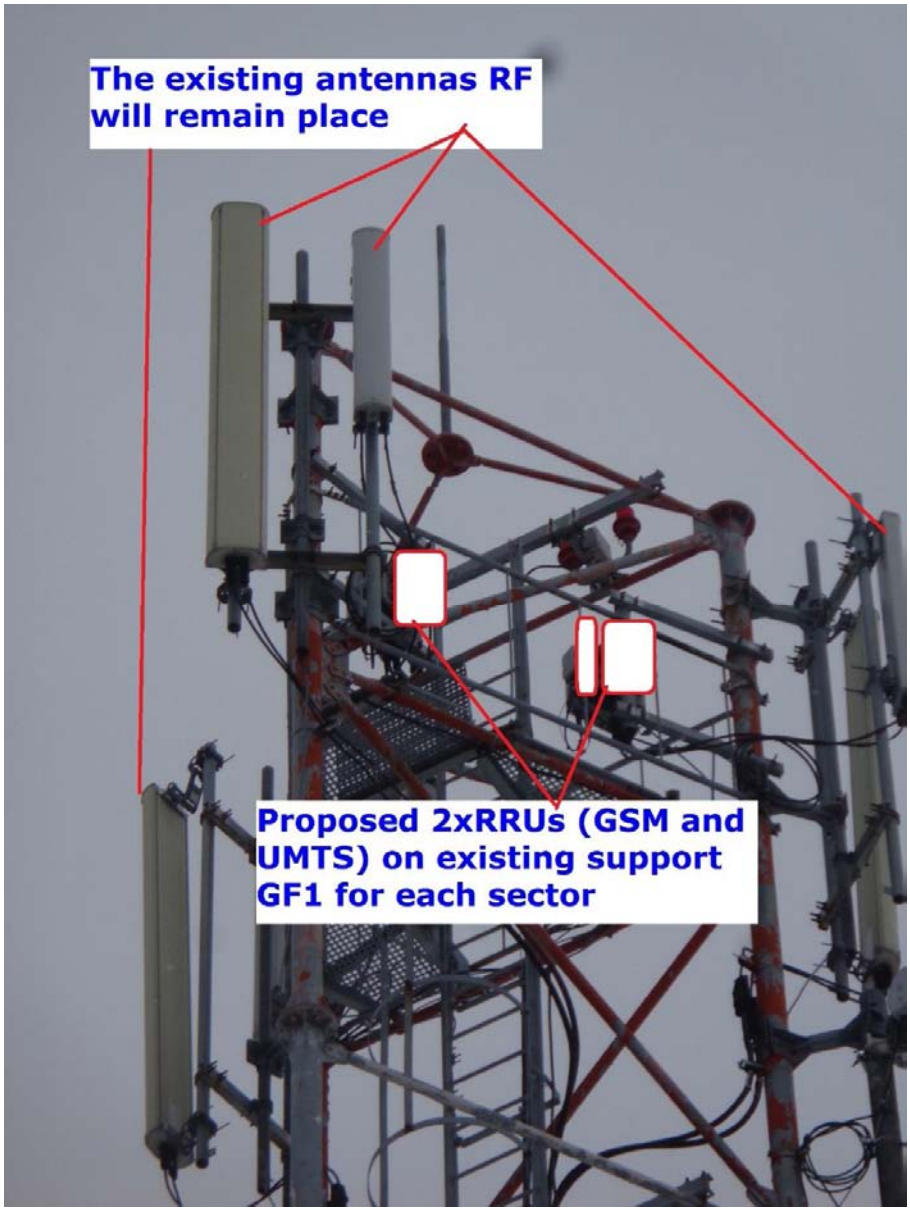
e. New MW Poles

	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 antennas RF will remain place. Proposed 2xRRUs (GSM and UMTS) on existing support GF1 for each sector. The existing feeders will be dismantled. The existing 3xRRU will be dismantled The existing ZTE 2G/3G equipment will be removed from RACK. The existing RBS2206 will be dismantled from the shelter In the existing rack the following equipment's will be installed: 1xRBS6601 and 1xPDU. The new PDU will be powered from 2 existing 63A fuse installed in the existing PSU. New PDU indoor will be installed in the existing rack and it will be powered from Power Plant on four cables of Cu 4(1X25mm²). Necessary fusses in new PDU: 1x16A for powering RBS6601, 6x25A for powering RRUs. Jumpers needed: 12 x 3m for RRU. FO needed: 6x45m. DC needed: 6x45m (2X10 mm²) The metallic shield of the power cables for RRU's must be connected in the existing 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 U/K + V/L+W/M



NEW Equipment's in rack

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