Modernization Telekom Mobile

SITE SURVEY REPORT
Ericsson

1. GENERAL INFORMATION

Site name:	**POGOANELE**
Site number (code):	**BX 144**
Site address (city;street;no.; building; entrance):	**Strada Nicolae Balcescu 85 Pogoanele**
Site area:	**BUZAU**
Site survey team:	**MIHAI DOBRESCU**
Checked by:	
Date of site survey:	**28.03.2017**
Type of Site (urban, rooftop):	**URBAN**
Lesser:	
Contact Person:	

Other Remarks:	

2. ROOFTOP (Building information)

GPS coordinates:	**N 44 54 58.600** **E 26 59 29.810**
Building height:	
Existent tripod:	**Yes ☐ NO☐**
Total height:	
Use of crane for materials transportation:	**Yes ☐ NO☐**

Other Remarks:	

3. GREEN FIELD (Specific data information)

GPS coordinates:	**N 44° 54.' 58,60"** **E 26.° 59' 29,81"**
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:	…… mm x …… mm x …… 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):	0 m
Antenna to Combiner -> Jumper length (type: DIN7/16 Male – DIN7/16 Male):	2 m
FO cable length between BB to RRU	0 m
DC cable length between PP to RRU	0 m
Type and length of DC power for RRU Cu 2x6 mm² (L<30m):	Type …… / …… m
Type and length of DC power for RRU Cu 2X10 mm² if needed(30m<L<60m):	Type …… / …… m
Type and length of DC power for RRU Cu 2X16 mm² if needed(60m<L<90m):	Type …… / …… m
Type and length of DC power for RRU Cu 2X25 mm² if needed(L>90m):	Type …… / …… m
Combo Box required:	Yes ☐ NO☒ ; Length of cable: …… m
Connection patch length from CB to RRU (FO&DC)	M ……
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:						
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)	YES					
1X16A available breakers in indoor Power System	3Pcs					
1X25A available breakers in indoor Power System	10Pcs					
2X63A available breakers in indoor Power System						
Power counter exist:	YES					
Main AC board exist:						
Breaker value in BMPT:						
Surge arrestors existence:						
Type and length of power connection cable for BBU						
Type and length of power connection shielded cable Al 6X25 mm² if needed:						
Type and length of power connection shielded cable Al 6X35 mm² if needed:						
Type and length of AC power connection cable 5X6 mm² for mini						

shelter if needed:	
Type and length of DC power from PSU to PDU Al 2x35 mm² if needed:	
CB/PDU/2 Sections (if needed):	
CB/PDU/3 Sections (if needed):	
PDU indoor (if needed):	
Boards grounding - secured:	
Boards waterproofed:	

Other Remarks:	

6. POWER PLANT and BATTERY INFORMATION

Number of units	☒	**Unit 2** ☐
Type	**300A** ☐ **600A** ☐ **Other** ☒	**300A** ☐ **600A** ☐ **Other** ☐
Nr./capacity[A] of rectifier modules	**3 Pcs /1500W**	
DC Load Amperage(displayed) [A]	**54A**	
Battery capacity [Ah]	**150A**	
Battery type/number	**Monolite 12FIT150x4**	

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	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	YES
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	YES
Outdoor equipment: Existing space on the existing base frame for mini shelter mounting	YES
Outdoor equipment: Existing outdoor transmission cabinet	Existig Minishelter
Outdoor equipment: Existing space for outdoor Concentrator mounting (proposal)	N/A
Outdoor equipment: Existing space for RRU mounting (proposal)	YES

Other Remarks:	New RRU 2217/2219 replacing old RRU 01 B3	

9. EXISTING TELECOM EQUIPMENT & INFRASTRUCTURE

a. General information

Equipment type:	Indoor ☐	Outdoor ☒	
Number of RF antennas:	6 (3 for 2G & 3 for 3G)		
Number of MW links	2 HOP 8347 & HOP 1828		
Nr. of existing RBS cabinets	2 XRBS 6601 2G+3G		
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	60		6 x 3 m	U,V,W,K,L,M,A,B,C	
2					
3					
4					

c. Existing Antenna Poles

	Height	Length	Cell_id	Corner/Tower	Obstacles	installation readiness
1	60	2 x3 m	U,V,A		NO	
2	60	2 x3 m	W,K,B		NO	
3	60	2 x3 m	L,M,C		NO	
4						

d. Existing MW Poles

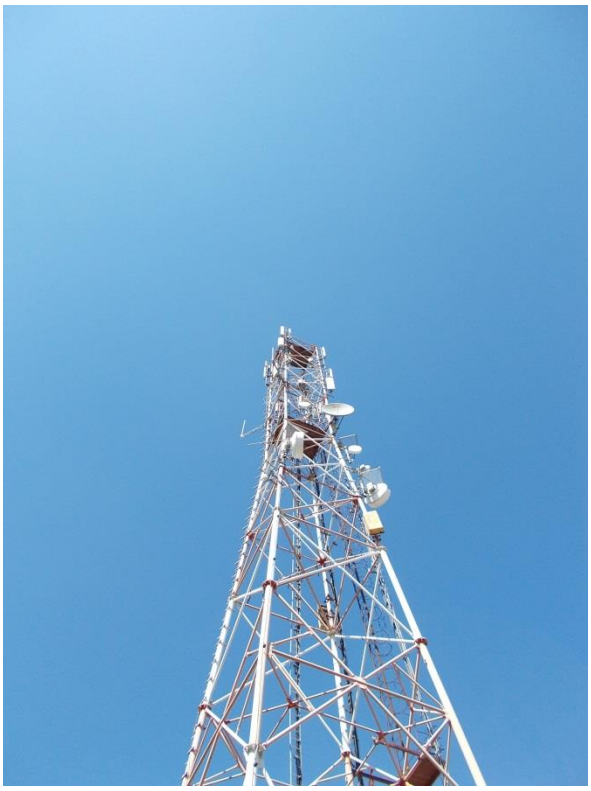
	Height	Length	Hop id	Corner/Tower	Far end	Obstacles	installation readiness
1	40	1m	8347				20^0
2	50	1m	1828				130^0
3							
4							

Remarks:	

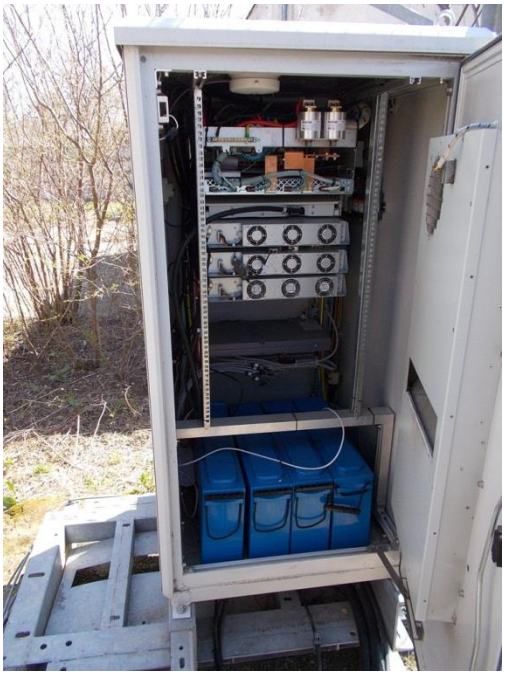
10. ANALYSIS LOADING DATA

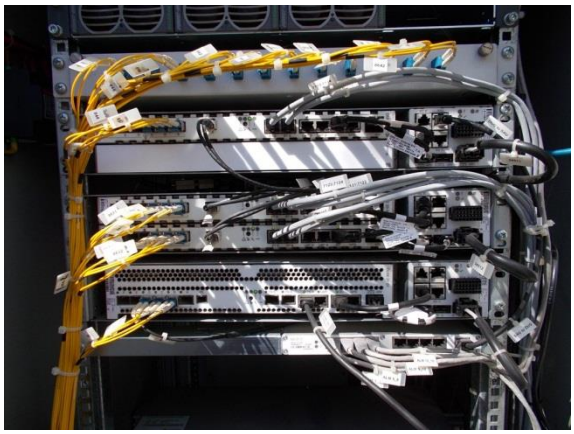
LOAD TYPE	DIAMETER (mm)	POSITION (m)	NUMBER
M/W LINK	1200	40	8347
M/W LINK	600	50	1828
M/W LINK			
M/W LINK			
M/W LINK			
M/W LINK			

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



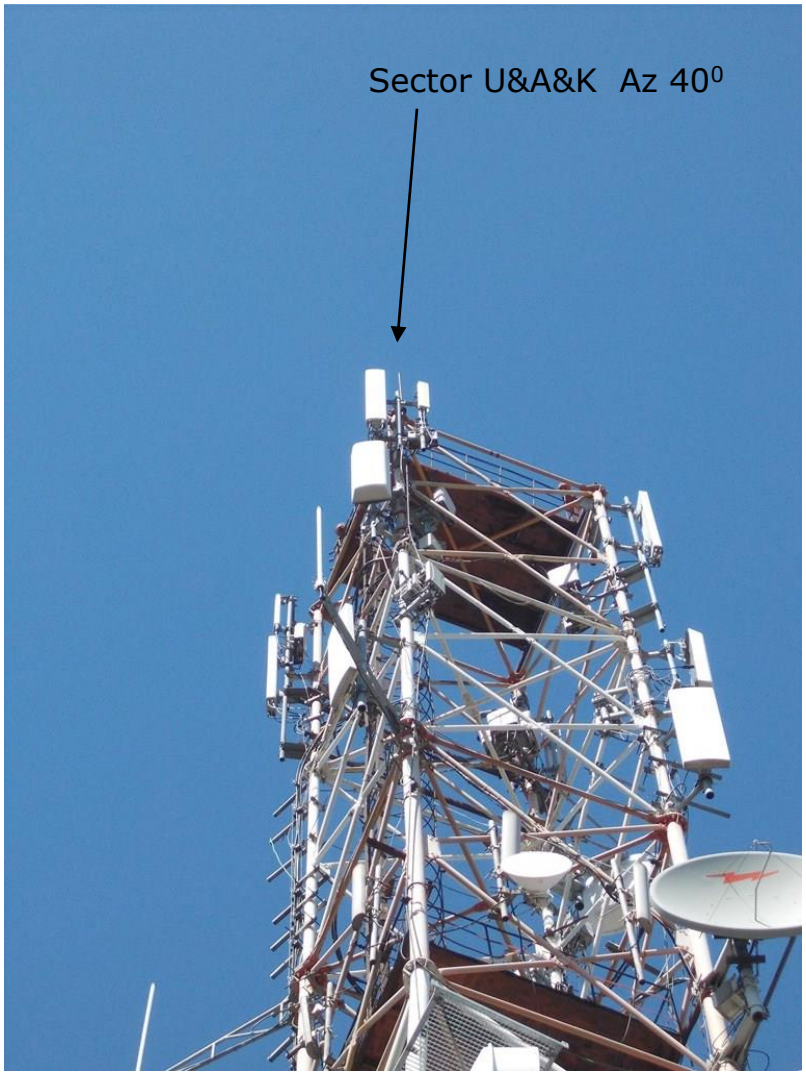
MINISHELTER



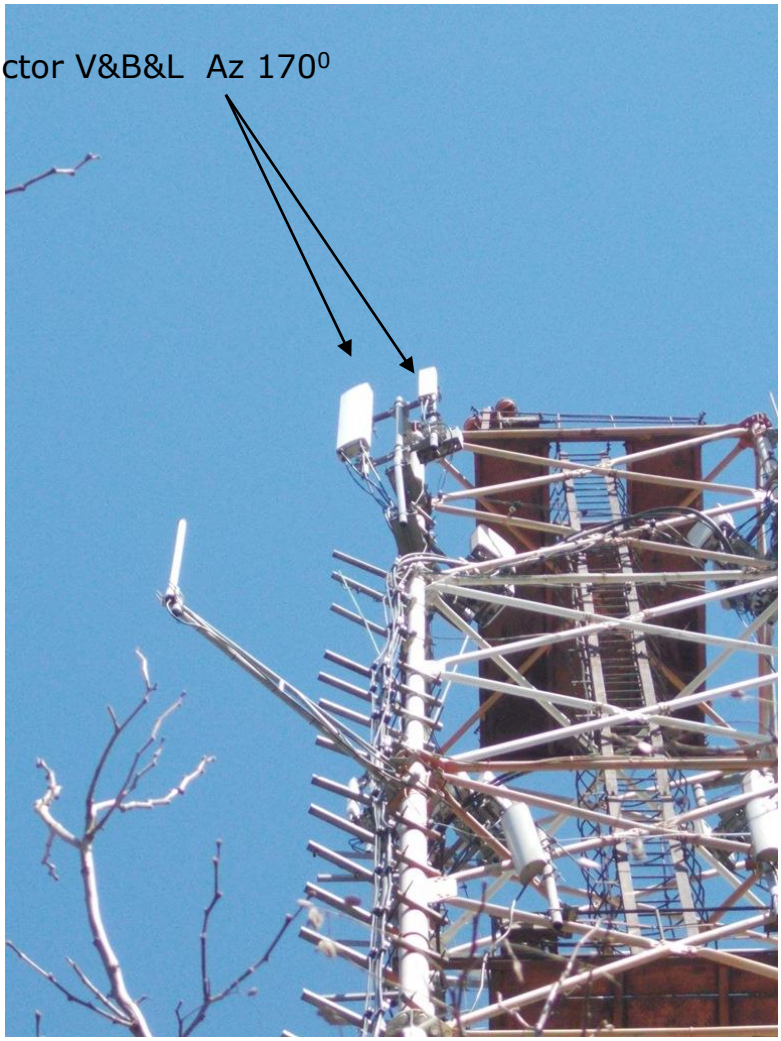


RADIO INFORMATION

Sector U&A (900+1800) with Ant. DBXLH-6565B VTM & K (2100) with Ant. K742215 Azimuth 40°



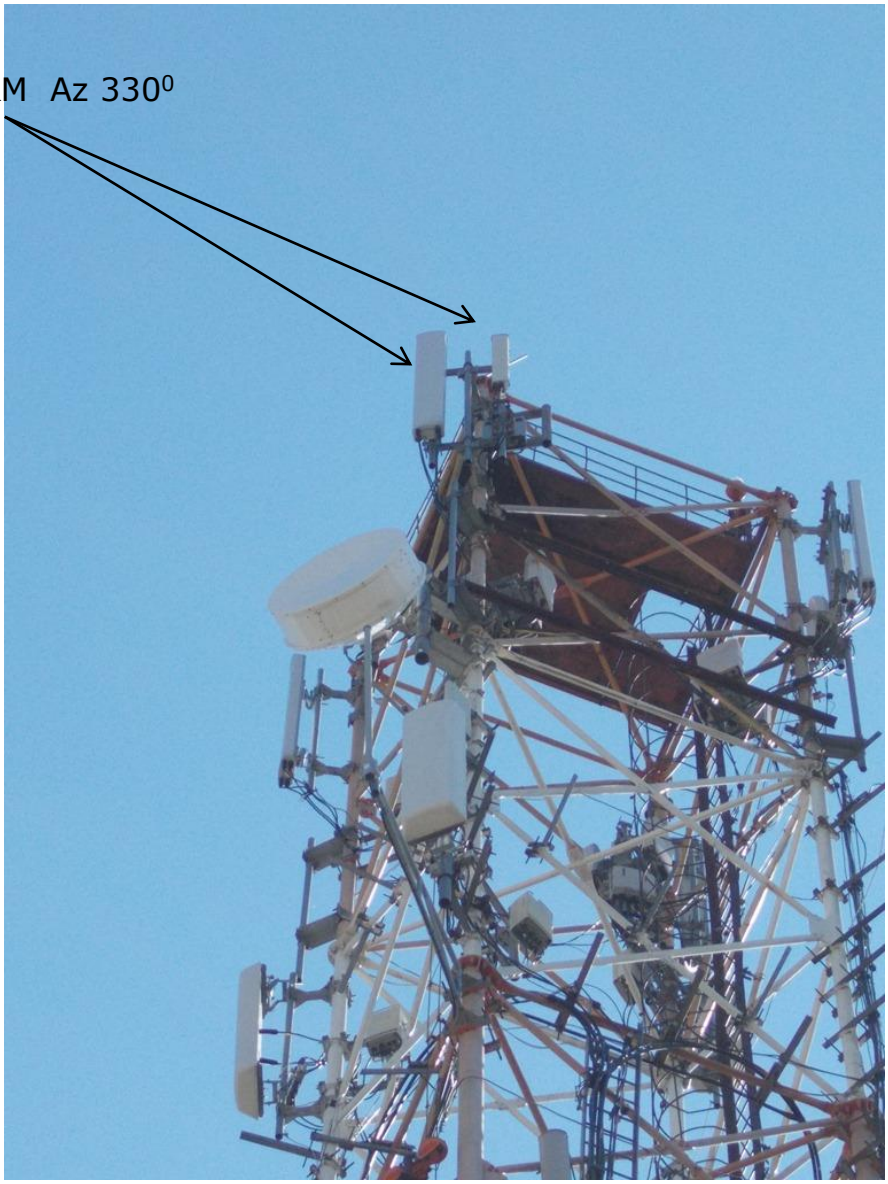
Sector V&B (900+1800) with Ant. DBXLH-6565B & L(2100) with Ant. K742215 Azimuth 170^0



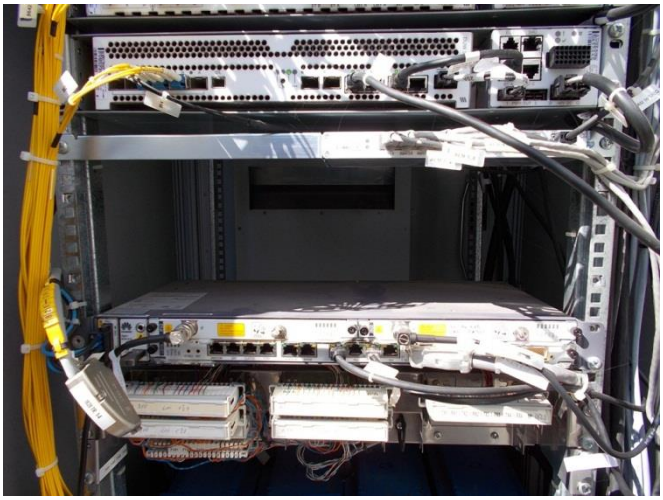
Direction Sect V&B Az 170^0

Direction Sect L Az 170^0

Sector W&C (900+1800) with Ant. DBXLH-6565B VTM & M (2100) with Ant. K742215



TRANSMISION



LDB

CW INFORMATION

12. PROPOSED INFRASTRUCTURE & EQUIPMENT SOLUTION

a. Indoor cabinets

Dimensions of existing room:	**N/A**
Space availability for indoor equipment:	**YES in Raycap Minishelter**
Expansion of existing equipment room:	**N/A**
Shelter needed:	**N/A**
Shelter concrete base needed:	**N/A**
Space availability for new shelter positioning:	**YES**
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**
AC power supply availability:	**YES**
Needed properly holes on base:	**YES**
Clearances around cabinets:	
Other Remarks:	

c. Proposed New Masts

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

d. New Antenna Poles

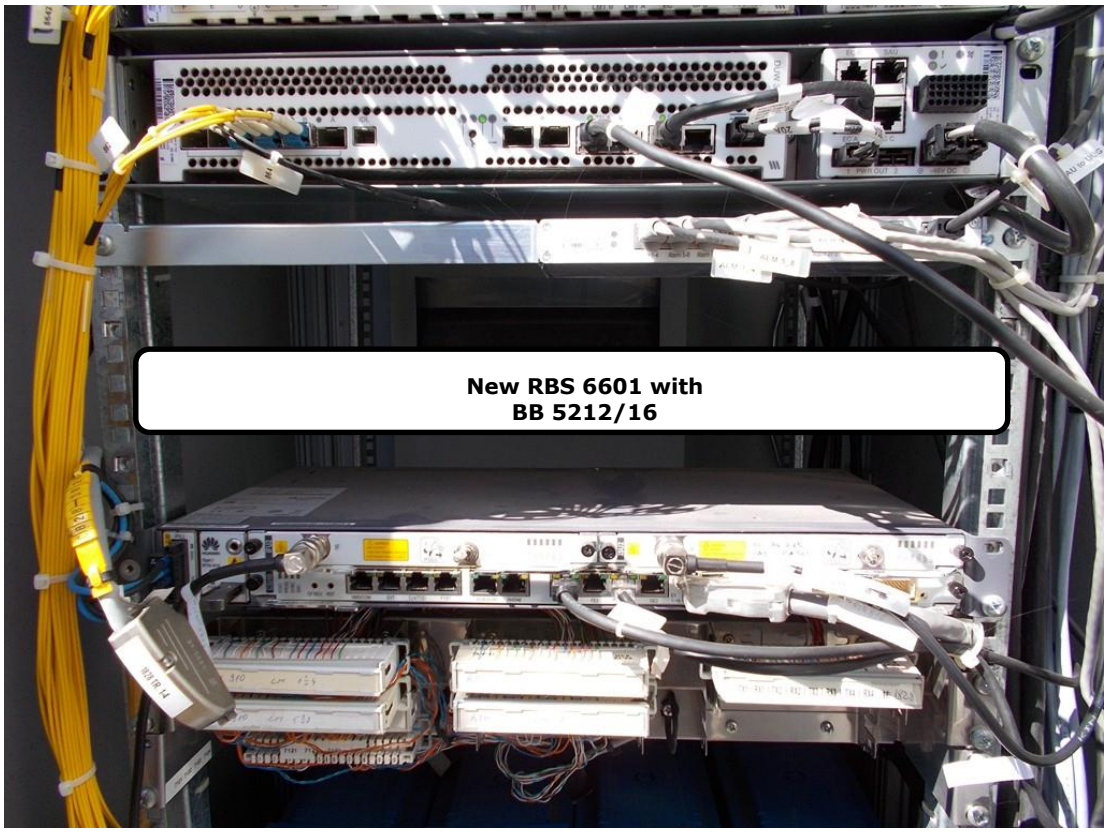
	Height	Length	Cell_id	Corner/Tower	Obstacles	installation readiness
1						
2						
3						
4						

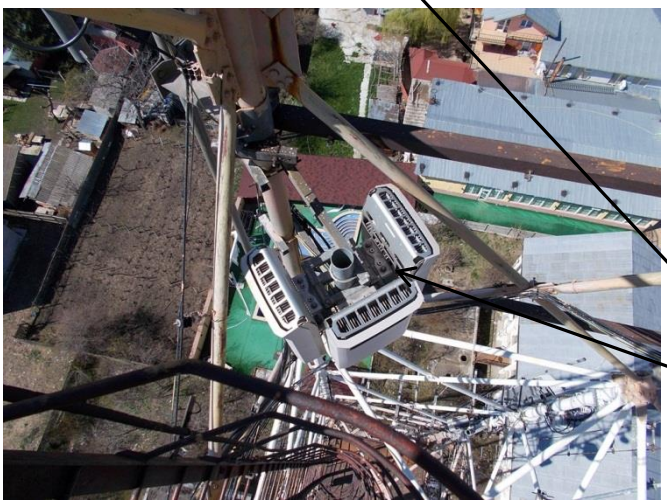
e. New MW Poles

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

Proposed corrective works:	**<u>The proposal situation is fallowing:</u>** **- The existing RF antennas 3 x DBXLH-6565B & 3 x 742215 will be reused use for new and remaining technologies** **- new RBS 6601 DUS(BB) shall be installed inside the existing rack (Minishelter)** **-The existing 3 X RRU 01 1800 MHz shall be dismantled and replaced with3 new RRU 12/RRU 2217/RRU 2219 (2G & 4G)** **<u>Cables lengths:</u>** **DC cable and FO – can be reused from dismantled RRUs** **New FO shall be installed – 3x100m (RBS6601 – RRU) for 4G** **The new equipment's will be connected to existing grounding system.**

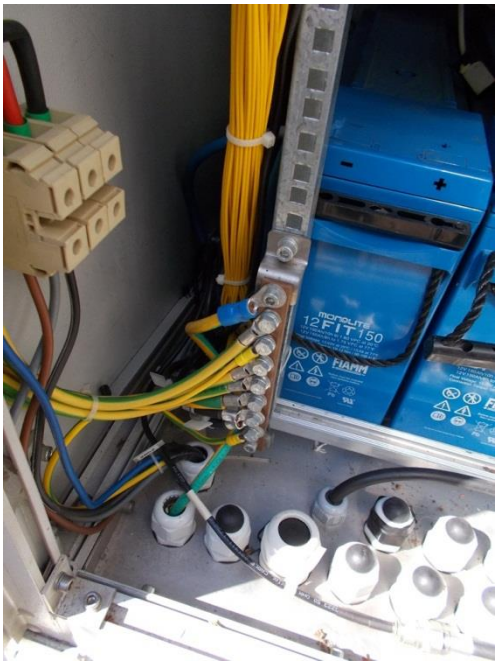
13. PROPOSED SOLUTION LAYOUT(S): PICTURES AND COMMENTS:

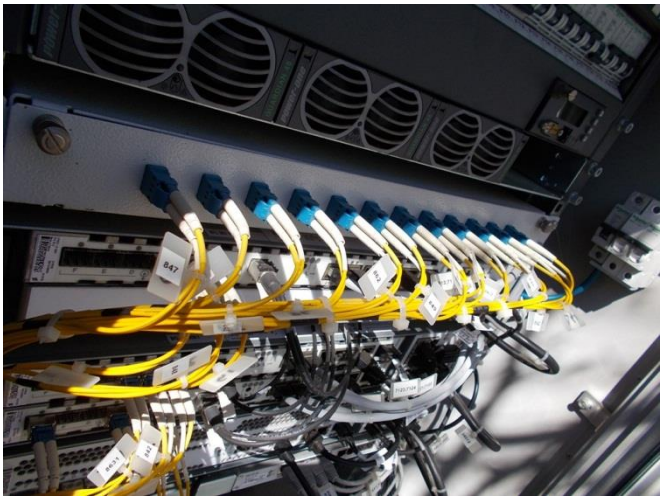


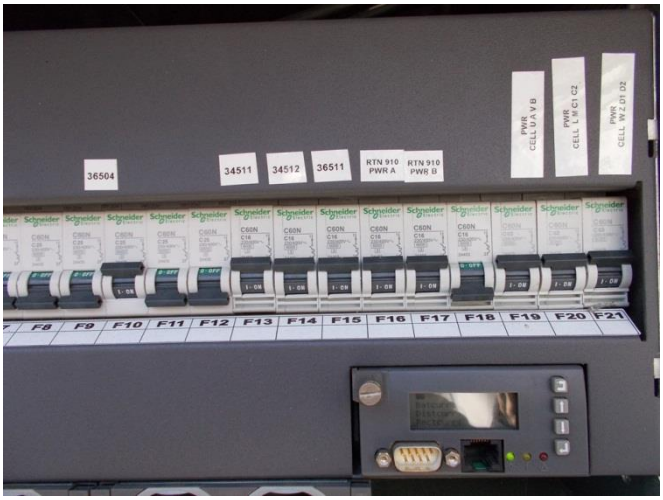


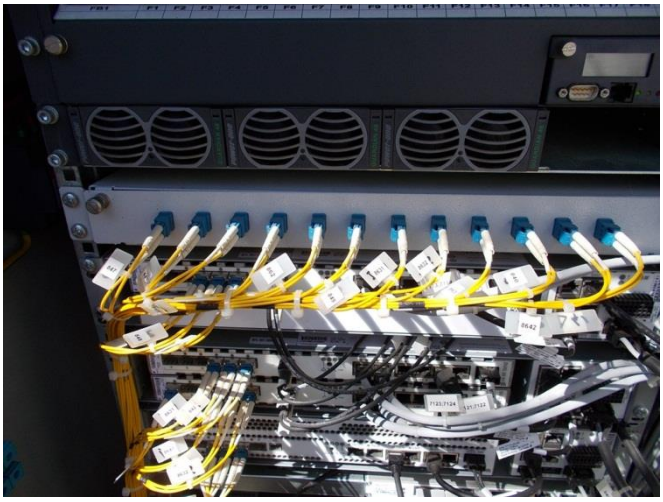
Swap existing 3x 01B3 RRU's with 3 new 2217/2219 RRU's

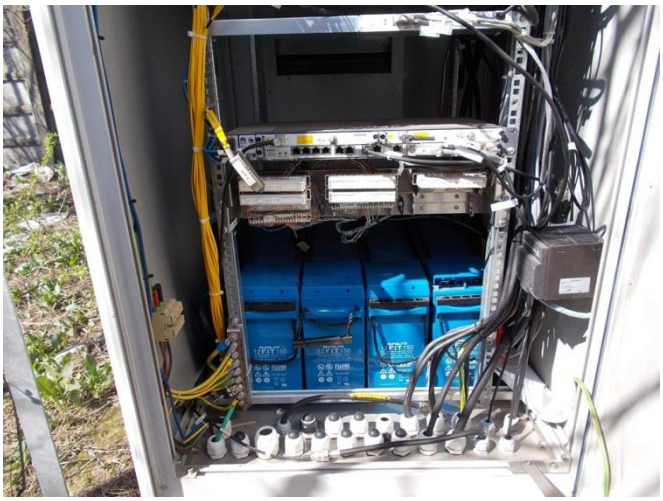
14 DETAILED SITE INFORMATION / PICTURES


monbat
12FIT150
HAWK




36504
34511
34512
36511
RTN 910 PWR A
RTN 910 PWR B
F8 F9 F10 F11 F12 F13 F14 F15 F16 F17 F18 F19 F20 F21






Rayc-ap


Batcurr: 0 A
Distcurr: 54 A
Rectcurr: 53 A