




# RADIO SITE DESIGN DOCUMENTATION

Region : North  
MD0246\_C

<b>ERICSSON</b> 			
CAPTION LIST		<b>Document List</b>	<b>1</b>
Document No. 001 53-IPA 166 0354 Uen			
Date 2019-09-24	Rev. A		
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Prepared (also subject responsible if other) <b>EMZ Zaw Myo Aung</b>		Document No. <b>001 51-IPA 166 0354 Uen</b>		
Doc respons/Approved <b>EMZ Manoj Kumar A</b>	Checked	Date <b>2019-09-24</b>	Rev. <b>A</b>	File <b>SID_MD0246_C_Rev..</b>

**Project:** Telenor Myanmar  
**Site:** MD0246\_C

	Document name	Document number	Rev.
	<b>SITE DESIGN DOCUMENT</b>	001 53-IPA 166 0354 Uen	A
<b>1</b>	<b>DOCUMENT LIST</b> Document List	001 51-IPA 166 0354 Uen	A
<b>2</b>	<b>SITE DOCUMENTS</b>		
<b>2.1</b>	Configuration Data RBS	1/127 04-IPA 166 0354 Uen	A
<b>2.2</b>	Situating Plan	153 38-IPA 166 0354 Uen	A
<b>2.3</b>	Antenna Placement Information	153 12-IPA 166 0354 Uen	A
<b>2.4</b>	Grounding Information	193 34-IPA 166 0354 Uen	A
<b>2.5</b>	Cable way Drawing	193 24-IPA 166 0354 Uen	A
<b>3</b>	<b>PLANT SPECIFICATION</b>		
<b>3.1</b>	Plant Specification (RBS)	1/127 11-IPA 166 0354 Uen	A
<b>4</b>	<b>CABLING DIAGRAM</b>		
<b>4.1</b>	Cabling Diagram (power and earth)	1/193 18-IPA 1/356 07 Uen	A
<b>4.2</b>	Cabling Diagram (signal and antenna)	2/193 18-IPA 1/356 08 Uen	A
<b>4.3</b>	Allocation Drawing (Cabinet)	193 26-IPA 1/356 09 Uen	A
<b>5</b>	<b>EXTERNAL ALARM</b> Allocation Table	193 19-IPA 166 0354 Uen	A
<b>6</b>	<b>CHECK LISTS</b>		
<b>6.1</b>	Installation Check List	153 11-IPA 166 0354 Uen	A
<b>6.2</b>	OHS Check List	176 27-IPA 166 0354 Uen	A
<b>7</b>	<b>TEST DOCUMENTS</b>		
<b>7.1</b>	RBS Test Report - G900	1/153 83-IPA 166 0354 Uen	A
<b>7.2</b>	RBS Test Report - W2100	2/153 83-IPA 166 0354 Uen	A
<b>8</b>	<b>ACCEPTANCE CERTIFICATE</b>		
	Product List	1/193 32-IPA 166 0354 Uen	A
	Site Photos	PHT-09:0001-IPA 166 0354 Ue	A
	Acceptance Certificate	179 61-IPA 166 0354 Uen	A

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**Project:** Telenor Myanmar  
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## 1 GENERAL SITE DATA

1.1	Geographical coordinates	N 22° 54' 39.35" - E 96° 29' 12.55"
1.2	Region	North
1.3	Address	Aung Myay Mingalar Monastery, D Dote Sho Ward, Mogok
1.4	Type of Site	COW
1.5	Equipment location	Outdoor cabinet
1.6	Floor material	Concrete

## 2 TECHNICAL DATA RBS GSM SYSTEM

2.1	System	GSM
2.2	RBS type	RBS 6601
2.3	No. of sector	3
2.4	No. of carrier	2/2/2
2.5	No. of Remote Radio Unit (RRU)	3
2.6	RRU type	RRU2219 B8
2.7	Mechanical Dimensions RRUS (mm) WxDxH	470x190x518
2.8	Weight for one RRU (kg)	22.4
2.9	Mechanical Dimensions MU(mm) WxDxH	483x355x66
2.10	Weight for one Main Unit (fully equiped)	10 kg
2.11	Power supply	-48V DC
2.12	Power consumption (maximum)	437 W (MU) 300 W (RRUs)
2.13	Mains circuit breaker	15A + 3x 25A
2.14	Heat dissipation (maximum)	340 W (MU) 300 W (RRUs)

## 3 TECHNICAL DATA RBS WCDMA SYSTEM

3.1	System	WCDMA
3.2	RBS type	RBS 6601
3.3	No. of sector	3
3.4	No. of carrier	2/2/2
3.5	No. of Remote Radio Unit (RRU)	5
3.6	RRU type	RRU2219 B1
3.7	Mechanical Dimensions RRUS (mm) WxDxH	470x190x518
3.8	Weight for one RRU (kg)	22.4
3.9	Mechanical Dimensions MU(mm) WxDxH	483x355x66
3.10	Weight for one Main Unit (fully equiped)	10 kg
3.11	Power supply	-48V DC
3.12	Power consumption (maximum)	437 W (MU) 300 W (RRUs)
3.13	Mains circuit breaker	15A + 3x 25A
3.14	Heat dissipation (maximum)	340 W (MU) 300 W (RRUs)

## 4 TECHNICAL DATA RBS LTE SYSTEM

4.1	System	LTE1800
4.2	RBS type	RBS 6601
4.3	No. of sector	3
4.4	No. of carrier	2/2/2
4.5	No. of Remote Radio Unit (RRU)	3
4.6	RRU type	RRUS 2219 B3
4.7	Mechanical Dimensions RRUS (mm) WxDxH	470x190x518
4.8	Weight for one RRU (kg)	22.4
4.9	Mechanical Dimensions MU(mm) WxDxH	483x355x66

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**Project:** Telenor Myanmar**Site:** MD0246\_C

4.10	Weight for one Main Unit (fully equiped)	10 kg
4.11	Power supply	-48V DC
4.12	Power consumption (maximum)	437 W (MU) 300 W (RRUs)
4.13	Mains circuit breaker	15A + 3x 25A
4.14	Heat dissipation (maximum)	340 W (MU) 300 W (RRUs)

**5 TECHNICAL DATA CABINET**

5.1	Mechanical Dimensions (mm) WxDxH	0
5.2	Free space for equipment	9

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## 6 TECHNICAL DATA RBS ANTENNA SYSTEM

6.1	Antenna height (m.a.g.l.)	A= 19	B= 19	C= 19
6.2	Antenna directions	A= 90°	B= 140°	C= 260°
6.3	Mech/Elec Downtilt, deg	A= 0°/0°	B= 0°/0°	C= 0°/0°
6.4	Quantity of RRU	# pcs		
6.5	Antenna type	RVV65D-C3-3XR		
6.6	Antenna model	694–960/2x1695–2690 MHz-65°		
6.7	Antenna dimensions (mm)	2645 x 301 x 180		
6.8	Weight of one antenna (kg)	27.5		
6.9	Wind load (N)	Frontal:	958	(at 150 km/h)
		Lateral:	299	(at 150 km/h)
		Rear:	1125	(at 150 km/h)
6.10	No. of Fiber Optic	#		

## 7 TECHNICAL DATA RBS ANTENNA SUPPORT STRUCTURE

7.1	Tower/mast/pole type	COW 30m
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Geographical coordinates  
Address

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Site ID	Antenna Hg	Building + RTT / Tower Hg	Building Hg	RTT hig	Sector	Sector	Sector	Sector	Downtilt (Mec)	Downtilt (El)
MD0246_C	19	20	-	-	90	140	260	-	0	0



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Geographical coordinates  
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N 22° 54' 39.35" - E 96° 29' 12.55"  
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**Not Available**

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**Not Available**

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	Product number	Description	Quantity
<b>1</b>	<b>RBS 6601 for 2G</b>		
1.1	'20/BFL901009/429	'20/BFL901009/429 with DUG & TCU cards	1
1.2	KRC161670/1	2G RRU with Radio 2219 B8	3
1.3	RNT44732/02	CONNECTOR/Circular Power cable connector	3
1.4	SXK1072896/1	Pole Bracket, Steel	3
<b>1</b>	<b>RBS 6601 for 3G (W21.1)</b>		
2.1	20/BFL901009/1748	RBS 6601;ASO	1
2.1	KDU137925/31	PROCESSOR UNIT/Baseband 5216; Digital Un	1
2.2	KRC161622/1	TRANSCEIVER/Radio 2219 B1;Radio Unit	5
2.3	RNT44732/02	CONNECTOR/Circular Power cable connector	5
2.4	SXK1072896/1	Pole Bracket, Steel	5
<b>1</b>	<b>RBS 6601 for 4G L1800</b>		
2.1	20/BFL901009/413	EQUIPPED CABINET/RBS 6601 ASO	1
2.2	KRC161622/1	TRANSCEIVER/Radio 2219 B3;Radio Unit	3
2.3	RNT44732/02	CONNECTOR/Circular Power cable connector	3
2.4	SXK1072896/1	Pole Bracket, Steel	3
<b>3</b>	<b>ANTENNA SYSTEM</b>		
3.2	RVV65D-C3-3XR	RVV65D-C3-3XR Tri band antenna	3
3.3	HBXX-3817TB1-A2M	Andrew Twin Beam Capacity Antenna, 1710–2180 MHz, 2x 38° horizontal beamwidth, RET compatible	2
<b>4</b>	<b>RET MATERIAL</b>		

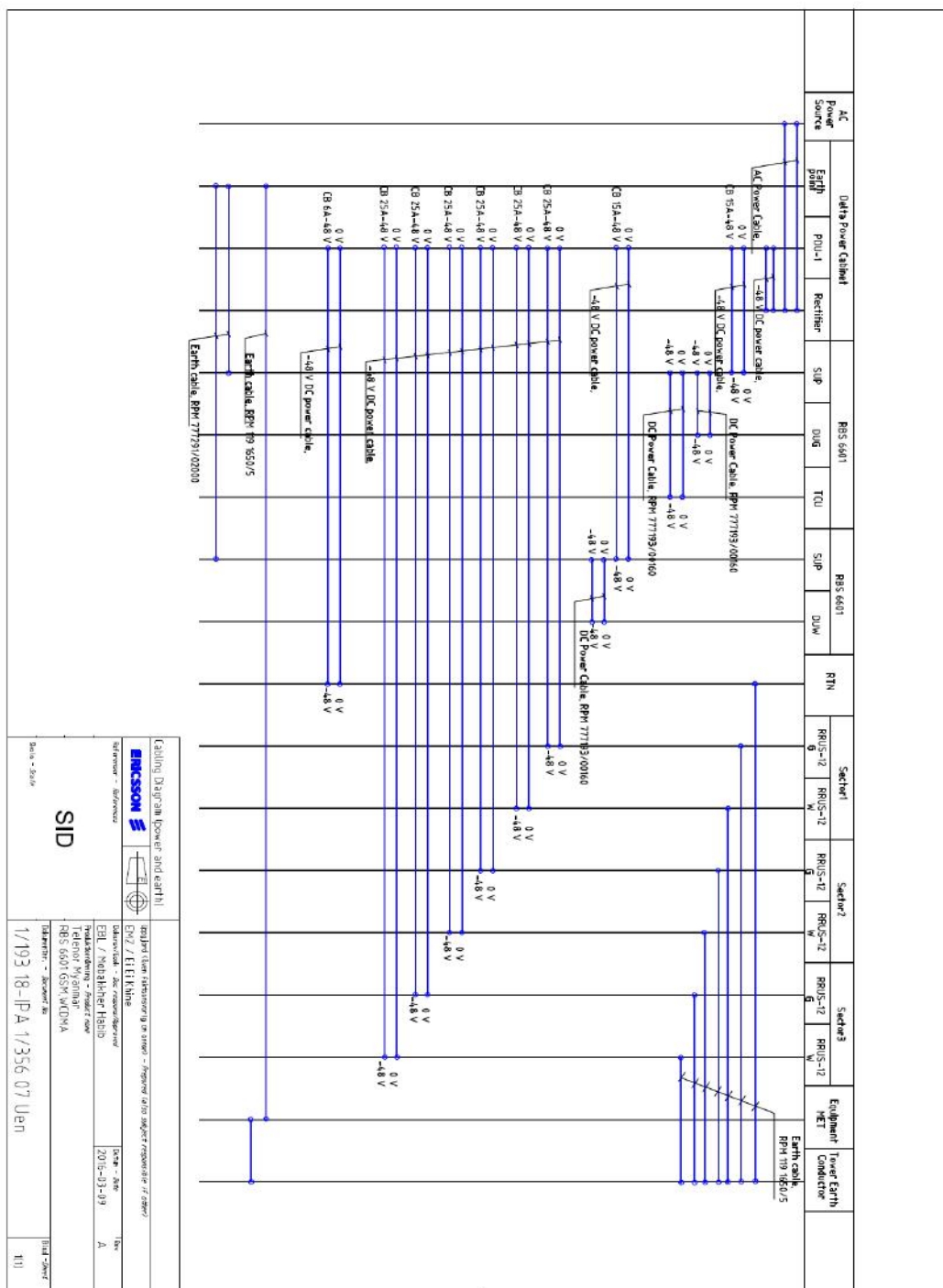
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Doc respons/Approved EMZ Manoj Kumar A	Checked	Date 2019-09-24	Rev. A	File SID_MD0246_C_Rev.A

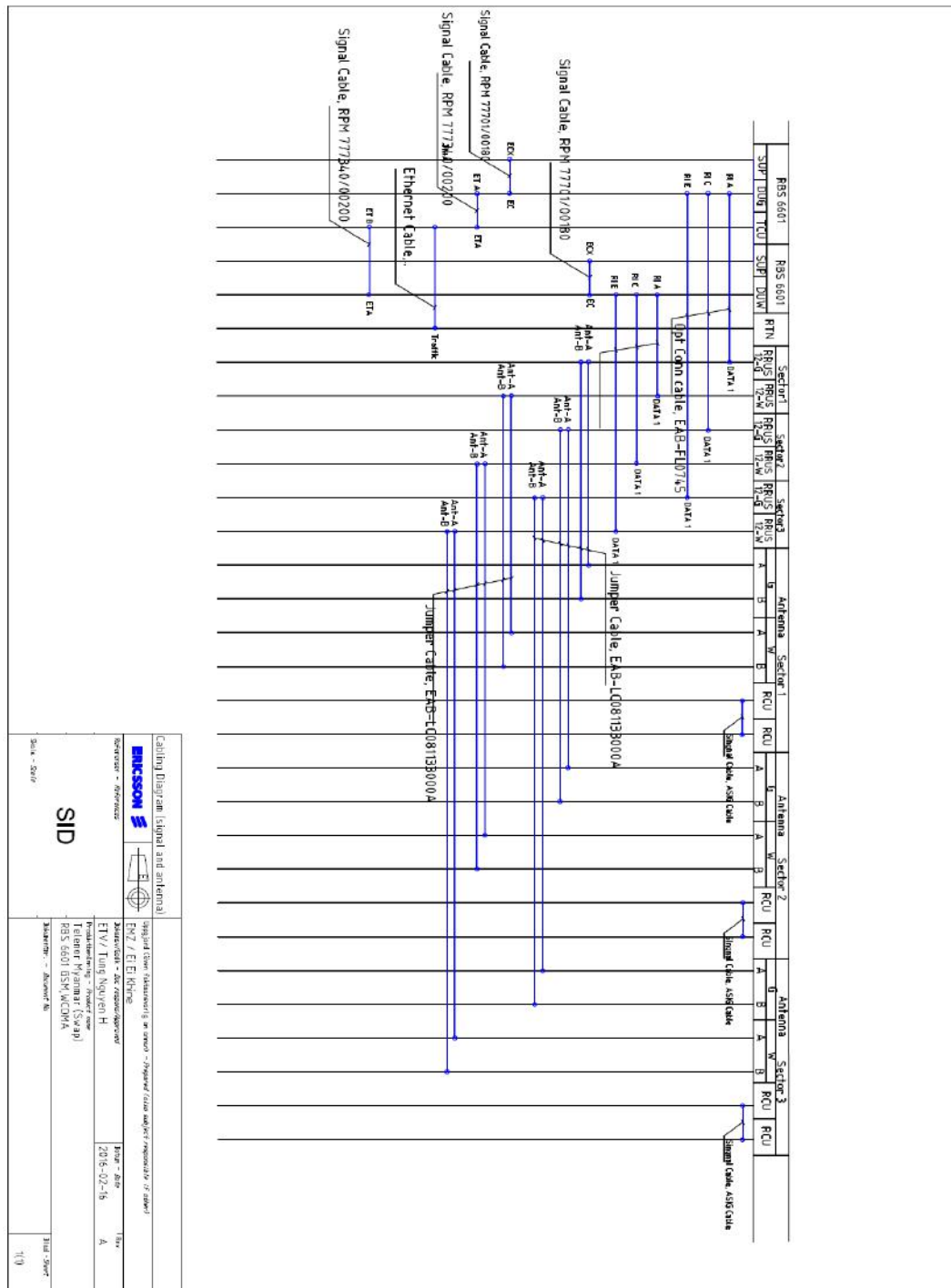
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4.1	ATCB-B01-005	RET cable	7
<b>5</b>	<b>CABINET</b>		
5.3	ESOA300FBG10	OUTD-6602-RF SERIES RBS 6601 2.0M	1
5.4	50V500AH_CABINET	BATTERY CABINET DC FAN 50V 500AHCYCLIC	1
<b>6</b>	<b>INSTALLATION MATERIALS</b>		
6.1	TFL492324/500M	POWER CABLE/2X6 MM2;UL;LSOH;ALU+CU-SCREE	5 M
6.2	TSR951362/3	½# JUMPER 4.3-10 MALE / 4.3-10 MALE, 3me	14
6.3	TSR951367/3	Jumper Cable, 1/2", 3m, 4.3/10 Male	8
6.4	NTM2013727/1	SET OF MATERIALS/TUBE KIT 8,5M	3
6.5	LTRFSEAL300	Silicon box	1
6.6	EAB-LTACCTIECV4830	Plastic tie Strap, 100 pcs/package,	2
6.7	EAB-LTPWACCLUGM825	ACC -25MM2 GROUNDING CABLE 16X CABL	5
6.8	EAB-LTACBOLTM6ZERC	10X NUTS,SCREWS, WASHERS- MOUNTING	1
6.9	TFL492324/500M	POWER CABLE/2X6 MM2;UL;LSOH;ALU+CU-SCREE	380
6.10	EMZ-AC 4x16mm2	AC power cable	10
<b>7</b>	<b>OTICAL CABLE</b>		
7.1	RPM2531610/70M	CABLE WITH CONNECTOR/2F LC(FullIAXS)-LC S	11

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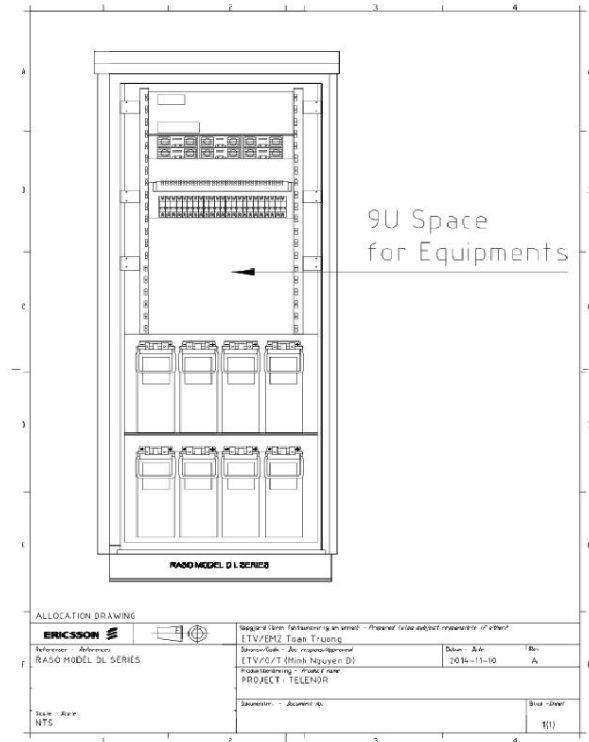
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use.



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**Project:** Telenor Myanmar  
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### ALLOCATION TABLE: ALARMS

#### 1 RBS 6601 for 2G (G900)

Sl.	Alarm	Type	Physical port
1	AC MAIN POWER FAILURE	Breaking	
2	Rectifier Module Failure	Breaking	
3	LOW BATTERY	Breaking	
4	Door Open-2	Breaking	
5	HIGH TEMP (TAH)	Breaking	
6	DOOR ALARM	Breaking	
7	DC SPD FAULT	Breaking	
8			

*Closing: the alarm cable is open when no alarms are present*

*Breaking: the alarm cable is closed when no alarms are present*

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**Project:** Telenor Myanmar  
**Site:** MD0246\_C

### INSTALLATION CHECK LIST

OK = Correctly installed, NOK = Not Correctly installed, N/A = Not applicable

#### INSTALLATION CHECK LIST

OK = Correctly installed, NOK = Not Correctly installed, N/A = Not applicable

A. CABINET	OK	NOK	N/A	COMMENTS
1. Cabinet clean and undamaged	OK			
2. Cabinet installed according to SID	OK			
3. Cable lead-in (cable gland)	OK			
4. PDUs connected to correct fuse	OK			
5. DC cable for RRUs and MU properly connected	OK			
6. Grounded, washers in place and bolts tightened	OK			torque of 15 Nm
7. Grounding cable insulation undamaged	OK			

B. MAIN UNIT (MU)	OK	NOK	N/A	COMMENTS
1. Equipment clean and undamaged	OK			
2. Installed according to allocation drawing	OK			
3. Minimum 50mm between MU & cabinet door	OK			
4. Minimum 50 mm at the rear of MU	OK			
5. Power cable connected to correct fuse	OK			
6. All cables in the front properly connected	OK			
7. All screws tightened to correct torque	OK			
8. No cables damaged	OK			
9. Equipment labeled according to SID	OK			
10 Grounded, washers in place and bolts tightened	OK			
11 Grounding cable insulation undamaged	OK			
12 All cables have enough extra length to enable the removal of the main unit without damaging	OK			

C. REMOTE RADIO UNIT (RRU)	OK	NOK	N/A	COMMENTS
1. RRUS clean and undamaged	OK			
2. RRU installed as specified in SID	OK			
3. RRU properly aligned horizontally & vertically	OK			
4. RRU mounting bracket tightened properly	OK			torque of 41 Nm
5. RRU Grounding installed and connected to MET	OK			
6. Connector jumper tightened and sealed	OK			torque of 25 Nm
7. Installation cover for optical cable tightened	OK			torque of 1.7 Nm
8. RET cables routed correctly and tightened	OK			
9. Power socket securely & correctly attached	OK			
10 Protective covers installed on unused ports	OK			
11 Optical cable undamaged	OK			
12 Equipment labeled according to SID	OK			
13 Protective covers, dust caps, and terminations plugs are installed on unused ports?	OK			
14 RET cable is correctly connected to ALD ctrl connector and tightened	OK			

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D. ANTENNA SYSTEM - RADIO	OK	NOK	N/A	COMMENTS
1. Antenna system installed as specified in SID	OK			
2. Height, Azimuth and Tilt checked	OK			
3. No cables or connectors damaged	OK			
4. RF cables properly labeled	OK			
5. Connectors properly connected	OK			
6. Minimum bending of the RF cables correct	OK			radius of 50mm
7. Correct cable connected to correct antenna port	OK			
8. RET cable correctly connected & tightened	OK			
9. Optical cables properly connected and strapped	OK			
10 Minimum bending of the optical cables correct	OK			radius of 40mm
11 Antenna support bonded to tower	OK			
12 Tower legs earthed (minimum 2 legs)	OK			

E. CONCLUDING ROUTINES	OK	NOK	N/A	COMMENTS
1. SID marked for as-built	OK			
2. Labeling of the external cables	OK			
3. Painting of cabinet scratching	OK			
4. Site area cleaned	OK			
5.				

All installation activities have been completed [ **NO** ] [ **YES** ] (if no, specify below)

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Problems/Comments (Refer to applicable activity numbers)

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**Responsible Engineer (Ericsson)**

Name \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

**Accepted by (Telenor)**

Name \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

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MANPOWER	NOS.
1 Site Supervisor	1
2 Team Leader	2
3 Technician	2
4 Laborers	1
5 Others	
6	
7	
8	
9	
10	
11	
12	

EQUIPMENT USED	NOS.
1 Digital Multimeter	2
2 Digital Tilt Meter	1
3 Mirror Compus	1
4 Hammer Dril	1
5 Heat Gun	1
6 Hexagon Key Set	1 Set
7 Screw Driver Set	1 Set
8 Knife	2
9 Cable Cutter	2
# Tie Cutter	2
# U-ring Wrench -8~32	1 Set
# Socket Sets	1 Set

### WORK ACTIVITIES:


Health & Safety Observation/Check list	OK	NOK	N/A	Comments
1 Safety Shoe	OK			
2 Safety Gloves	OK			
3 Safety Helmets	OK			
4 Safety Belts	OK			
5 Arrangement for Emergency Evacuation	OK			
6 Arrangement for Emergency Communication	OK			
7 Arrangement for First Aid	OK			
8 Arrangement for Toilets / Washing			OK	
9 Site Safety Protection	OK			
10 Security Guard at site			OK	

### OTHER MATTERS / ISSUES:


OHS confirmed by (ASP): _____  Signature: _____ Print Name: _____ Date: _____	Checked and Verified by: Ericson Myanmar Co. Ltd.  Signature: _____ Print Name: _____ Date: _____
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Project: Telenor Myanmar  
Site: MD0246\_C

## Test Record for Site Installation Verification

Date:	Site Name:
Site No.: <b>MD0246_C</b>	Cell Configuration: <b>G900 RBS 6601</b>
RBS Type: <b>RBS 6601</b>	Testers Name:

## NE Standalone test

Pass Fail N/A Remark

Incoming voltage verified	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Circuit breaker with correct rating	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Cable connection inspected	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Cables properly labeled	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
IDB parameter set	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Fault Status Read	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Internal alarm tested	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
External alarm tested	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Antenna system test	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

## Notes:

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## Responsible Engineer (Ericsson)

Name Signature Date

## Accepted by (Telenor)

Name Signature Date

## Test Record for Antenna System Tests

Date:	Site name:
Site No.: <b>MD0246_C</b>	Cell Configuration: <b>GSM900 RBS 6601</b>
Testers Name:	
RBS Type: <b>RBS 6601</b>	Serial Number (Site Master):

## Installation check



## Cell A

Jumper Marking :	DX1	DX2	
Jumper Length :	3	3	m
Optical Cable Length :			m
VSWR :			< 1.4
Cable Attenuation :			db

## Cell B

Jumper Marking :  
 Jumper Length :  
 Optical Cable Length :  
 VSWR :  
 Cable Attenuation :

DX1	DX2
3	3

m  
 m  
 < 1.4  
 db

#### Cell C

Jumper Marking :  
 Jumper Length :  
 Optical Cable Length :  
 VSWR :  
 Cable Attenuation :

DX1	DX2
3	3

m  
 m  
 < 1.4  
 db

	Sector A	Sector B	Sector C
Direction			
Mechanical Tilt			
Electrical Tilt-GSM			
Mounting Height			

#### Responsible Engineer (Ericsson)

Name Signature Date

#### Accepted by (Telenor)

Name Signature Date

#### Test Record for Site Integration

Date:	Site name:
Site No.: <b>MD0246_C</b>	Cell Configuration: <b>GSM900 RBS 6601</b>
RBS Type: <b>RBS 6601</b>	Testers Name:

	IP	VLAN
Abis over IP		
OAM		

#### VOICE, SMS, MMS, SPEED TEST

				THROUGHPUT/SPEED TEST	
Cell	MO/MT Voice Call	SMS	MMS	Downlaod	Upload
Cell 1					
Cell 2					
Cell 3					
Cell 4					
Cell 5					
Cell 6					

#### HANDOVER TEST

A to B	A to C	B to A	B to C	C to A	C to B	Remark

#### EXTERNAL ALARM TEST

Alm#	Designation	Type	Pass	Fail	Remarks
01 0		Closing			
02 0		Breaking			
03 0					
04 0					

05	0				
06	0				
07	0				
08					

Remarks:

Responsible Engineer (Ericsson)

Name Signature Date

Accepted by (Telenor)

Name Signature Date

### Test Record for Site Hardware Status

Date:	Site name:
Site No.: <b>MD0246_C</b>	Cell Configuration: <b>GSM900</b>
RBS Type: <b>#</b>	Testers Name:

### Power System

Unit	Product number	Serial
DC power		
Rectifier Module #1		
Rectifier Module #2		
Rectifier Module #3		
Rectifier Module #4		
Lithium Ion Battery 48'UIFP48V100AH-1		'4810019C180367
Lithium Ion Battery 48'UIFP48V100AH-1		'4810019C180364
Lithium Ion Battery 48'UIFP48V100AH-1		'4810019C180337
Lithium Ion Battery 48'UIFP48V100AH-1		'4810019C180359
Lithium Ion Battery 48'UIFP48V100AH-1		'4810019C180341

### Antenna

Unit	Product number	Serial
Sector A	RVV65D-C3-3XR	17CN100538989
Sector B	RVV65D-C3-3XR	18CN100461454
Sector C	RVV65D-C3-3XR	18CN100461410

### RBS Cabinet

Unit	Product number	Serial
RBS 6601	1/BFL901009/4	D822209431
DUG 20 01	KDU137569/1	CD98711406
TCU-02 01	KDU137739/1	Can't Read Serial
RRU2219 B8,sector A	KRC161670/1	E550937398
RRU2219 B8,sector B	KRC161670/1	E550937215
RRU2219 B8,sector C	KRC161670/1	E550937386

Remarks:

Responsible Engineer (Ericsson)

Name Signature Date

Accepted by (Telenor)

Name Signature Date

Prepared (also subject responsible if other) <b>EMZ Zaw Myo Aung</b>		Document No. 2/153 83-IPA 166 0354 Uen		
Doc respons/Approved <b>EMZ Manoj Kumar A</b>	Checked	Date <b>2019-09-24</b>	Rev. <b>A</b>	File SID_MD0246_C_Rev.A

**Project:** Telenor Myanmar  
**Site:** MD0246\_C

### Test Record for Site Installation Verification

Date:	Site name:
Site No.: <b>MD0246_C</b>	Cell Configuration: <b>W2100 2/2/2</b>
RBS Type: <b>RBS 6601</b>	Testers Name:

#### NE Standalone test

Pass Fail N/A Remark

Incoming voltage verified	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Circuit breaker with correct rating	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Cable connection inspected	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Cables properly labeled	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Check configuration	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Fault Status Read	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Internal alarm tested	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
External alarm tested	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Antenna system test	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

#### Notes:

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#### Responsible Engineer (Ericsson)

\_\_\_\_\_  
 Name Signature Date

#### Accepted by (Telenor)

\_\_\_\_\_  
 Name Signature Date



Prepared (also subject responsible if other) <b>EMZ Zaw Myo Aung</b>		Document No. 2/153 83-IPA 166 0354 Uen		
Doc respons/Approved <b>EMZ Manoj Kumar A</b>	Checked	Date <b>2019-09-24</b>	Rev. <b>A</b>	File SID_MD0246_C_Rev.A

**Project:** Telenor Myanmar  
**Site:** MD0246\_C

### Test Record for Antenna System Tests

Date:	Site name:
Site No.: <b>MD0246_C</b>	Cell Configuration: <b>W2100 2/2/2</b>
Testers Name:	
RBS Type: <b>RBS 6601</b>	Serial Number (Site Master):

#### Installation check



##### Sector 1

Jumper Marking :  
 Jumper Length :  
 VSWR :  
 DTF :  
 Cable Attenuation :

A	B
3	3

m  
 < 1.4  
 < 1.05  
 db

##### Sector 2

Jumper Marking :  
 Jumper Length :  
 VSWR :  
 DTF :  
 Cable Attenuation :

A	B
3	3

m  
 < 1.4  
 < 1.05  
 db

##### Sector 3

Jumper Marking :  
 Jumper Length :  
 VSWR :  
 DTF :  
 Cable Attenuation :

A	B
3	3

m  
 < 1.4  
 < 1.05  
 db

**Responsible Engineer (Ericsson)**

Name

Signature

Date

**Accepted by (Telenor)**

PA3 2014-07-28

Prepared (also subject responsible if other) EMZ Zaw Myo Aung		Document No. 2/153 83-IPA 166 0354 Uen		
Doc respons/Approved EMZ Manoj Kumar A	Checked	Date 2019-09-24	Rev. A	File SID_MD0246_C_Rev.A

Project: Telenor Myanmar

Site: MD0246\_C

Name

Signature

Date

PA3 2014-07-28

Prepared (also subject responsible if other) <b>EMZ Zaw Myo Aung</b>		Document No. 2/153 83-IPA 166 0354 Uen		
Doc respons/Approved <b>EMZ Manoj Kumar A</b>	Checked	Date <b>2019-09-24</b>	Rev. <b>A</b>	File SID_MD0246_C_Rev.A

**Project:** Telenor Myanmar  
**Site:** MD0246\_C

### Test Record for Site Integration

Date:	Site name:
Site No.: <b>MD0246_C</b>	Cell Configuration: <b>W2100 2/2/2</b>
RBS Type: <b>RBS 6601</b>	Testers Name:

	IP	Checked
NODE B		
OAM Link		
RNC Name		

### VOICE, VIDEO, SMS, MMS, SPEED TEST

Sector	Carrier	MOBILE ORIGINATING/MOBILE TERMINATING				THROUGHPUT/SPEED	
		Voice call	Video call	SMS	MMS	Download	Upload
Sector 1	1						
	2						
Sector 2	1						
	2						
Sector 3	1						
	2						
Sector 4	1						
	2						
Sector 5	1						
	2						
Sector 6	1						
	2						

### HANDOVER TEST

1 to 2	1 to 3	2 to 1	2 to 3	3 to 1	3 to 2	Remark

### EXTERNAL ALARM TEST

Alm#	Designation	Type	Pass	Fail	Remarks
01		Closing			
02		Breaking			
03					
04					
05					
06					
07					
08					

Remarks: \_\_\_\_\_

**Responsible Engineer (Ericsson)**

PA3 2014-07-28

Prepared (also subject responsible if other) EMZ Zaw Myo Aung		Document No. 2/153 83-IPA 166 0354 Uen		
Doc respons/Approved EMZ Manoj Kumar A	Checked	Date 2019-09-24	Rev. A	File SID_MD0246_C_Rev.A

**Project:** Telenor Myanmar**Site:** MD0246\_C

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Name	Signature	Date
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**Accepted by (Telenor)**

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Name	Signature	Date
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PA3 2014-07-28

Prepared (also subject responsible if other) <b>EMZ Zaw Myo Aung</b>		Document No. 2/153 83-IPA 166 0354 Uen		
Doc respons/Approved <b>EMZ Manoj Kumar A</b>	Checked	Date <b>2019-09-24</b>	Rev. <b>A</b>	File SID_MD0246_C_Rev.A

Project: **Telenor Myanmar**Site: **MD0246\_C****Test Record for Site Hardware Status**

Date:	Site name:
Site No.: <b>MD0246_C</b>	Cell Configuration: <b>W2100 2/2/2</b>
RBS Type: <b>RBS 6601</b>	Testers Name:

**Power System**

Unit	Product number	Serial
DC power		
Rectifier Module #1		
Rectifier Module #2		
Rectifier Module #3		
Rectifier Module #4		
Lithium Ion Battery 48V	'UIFP48V100AH-1	'4810019C180367
Lithium Ion Battery 48V	'UIFP48V100AH-1	'4810019C180364
Lithium Ion Battery 48V	'UIFP48V100AH-1	'4810019C180337
Lithium Ion Battery 48V	'UIFP48V100AH-1	'4810019C180359
Lithium Ion Battery 48V	'UIFP48V100AH-1	'4810019C180341

**Antenna**

Unit	Product number	Serial
694-960/2x1695-2690 MHz-65°	RVV65D-C3-3XR	17CN100538989
694-960/2x1695-2690 MHz-65°	RVV65D-C3-3XR	18CN100461454
694-960/2x1695-2690 MHz-65°	RVV65D-C3-3XR	18CN100461410

**RBS Cabinet**

Unit	Product number	Serial
RBS 6601	1/BFL901009/4	C970003875
Baseband 5216	KDU137925/31	CD3N560536
Baseband 5216	KDU137925/31	CD3N560938
RRU2219 B1,sector A	KRC161622/1	CN31657468
RRU2219 B1,sector B	KRC161622/1	CN31656384
RRU2219 B1,sector C	KRC161622/1	CN31657474
RUS 2219 B3,sector A	KRC161619/1	Can't Read Serial
RUS 2219 B3,sector B	KRC161619/1	CN31612810
RUS 2219 B3,sector C	KRC161619/1	CN31613393

PA3 2014-07-28

Prepared (also subject responsible if other) EMZ Zaw Myo Aung		Document No. 2/153 83-IPA 166 0354 Uen		
Doc respons/Approved EMZ Manoj Kumar A	Checked	Date 2019-09-24	Rev. A	File SID_MD0246_C_Rev.A

**Project:** Telenor Myanmar**Site:** MD0246\_C

Remarks: \_\_\_\_\_

**Responsible Engineer (Ericsson)**

Name	Signature	Date
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**Accepted by (Telenor)**

Name	Signature	Date
------	-----------	------

Prepared (also subject responsible if other)		Document No.	
EMZ Zaw Myo Aung		1/193 32-IPA 166 0354 Uen	
Doc respons/Approved	Checked	Date	Rev.
EMZ Manoj Kumar A		##	A

Project: Telenor Myanmar

Site: MD0246\_C MD0246\_C -

UNIT	PRODUCT CODE	REV	MFG.DATE
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<b>GSM 900</b>			
RBS 6601	1/BFL901009/4	D822209431	
DUG 20 01;Digital Unit	KDU137569/1	CD98711406	
TCU 02 01;Transport Con. Unit	KDU137739/1	Can't Read Serial	
RRUS 2219 B8,sector A	KRC161670/1	E550937398	
RRUS 2219 B8,sector B	KRC161670/1	E550937215	
RRUS 2219 B8,sector C	KRC161670/1	E550937386	
<b>WCDMA 2100</b>			
RBS 6601	1/BFL901009/4	C970003875	
Baseband 5216	KDU137925/31	CD3N560536	
Baseband 5216	KDU137925/31	CD3N560938	
RRU2219 B1,sector A	KRC161622/1	CN31657468	
RRU2219 B1,sector B	KRC161622/1	CN31656384	
RRU2219 B1,sector C	KRC161622/1	CN31657474	
RRU2219 B3,sector A	KRC161619/1	Can't Read Serial	
RRU2219 B3,sector B	KRC161619/1	CN31612810	
RRU2219 B3,sector C	KRC161619/1	CN31613393	
<b>ANTENNA</b>			
Sec1- 694-960/2x1695-2690 MHz-6E RVV65D-C3-3XR		17CN100538989	
Sec2- 694-960/2x1695-2690 MHz-6E RVV65D-C3-3XR		18CN100461454	
Sec3- 694-960/2x1695-2690 MHz-6E RVV65D-C3-3XR		18CN100461410	
<b>CABINET</b>			
50V500AH_CABINET	Potevio Cabinet	N/A	
ESOA300FBG10	ESOA300FBG10	HY51526001434W0	
Lithium Ion Battery 48V,100Ah	UIFP48V100AH	4810019C180367	
Lithium Ion Battery 48V,100Ah	UIFP48V100AH	4810019C180364	
Lithium Ion Battery 48V,100Ah	UIFP48V100AH	4810019C180337	
Lithium Ion Battery 48V,100Ah	UIFP48V100AH	4810019C180359	
Lithium Ion Battery 48V,100Ah	UIFP48V100AH	4810019C180341	

## SITE PHOTO

Prepared (also subject responsible if other) <b>EMZ Zaw Myo Aung</b>		Document No. <b>PHT-09:0001-IPA 166 0354 Uen</b>		
Doc respons/Approved <b>EMZ Manoj Kumar A</b>	Checked	Date <b>2019-09-24</b>	Rev. <b>A</b>	File <b>SID_MD0246_C_Rev.A</b>

PA3 2014-07-28

Project: **Telenor Myanmar**Site: **MD0246\_C**

## Site Location



## Tower View





# SITE PHOTO

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EMZ Zaw Myo Aung		PHT-09:0001-IPA 166 0354 Uen		
Doc respons/Approved	Checked	Date	Rev.	File
EMZ Manoj Kumar A		2019-09-24	A	SID_MD0246_C_Rev.A

Project: **Telenor Myanmar**

Site: **MD0246\_C**

## Vertical Cable Ladder



## Horizontal Cable Ladder



## Antenna Cell A



## Antenna Cell B





## SITE PHOTO

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Doc respons/Approved <b>EMZ Manoj Kumar A</b>	Checked	Date <b>2019-09-24</b>	Rev. <b>A</b>	File <b>SID_MD0246_C_Rev.A</b>

Project: **Telenor Myanmar**Site: **MD0246\_C**

Antenna Cell C



RCU Cell A

RRU2219 B3 Cell A



RRU2219 B3 Cell B



# SITE PHOTO

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Doc respons/Approved <b>EMZ Manoj Kumar A</b>	Checked	Date <b>2019-09-24</b>	Rev. <b>A</b>	File <b>SID_MD0246_C_Rev.A</b>

Project: **Telenor Myanmar**

Site: **MD0246\_C**

## RRU2219 B3 Cell C



## Earth Bar for RRU



## RRU2219 B1 Cell A



## RRU2219 B1 Cell B





SITE PHOTO

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EMZ Zaw Myo Aung		PHT-09:0001-IPA 166 0354 Uen		
Doc respons/Approved	Checked	Date	Rev.	File
EMZ Manoj Kumar A		2019-09-24	A	SID_MD0246_C_Rev.A

PA3 2014-07-28

Project: Telenor Myanmar

Site: MD0246\_C

RRU2219 B1 Cell C



Earth Bar for RRU



RRU2219 B8 Cell A



RRU2219 B8 Cell B



SITE PHOTO

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EMZ Zaw Myo Aung		PHT-09:0001-IPA 166 0354 Uen		
Doc respons/Approved	Checked	Date	Rev.	File
EMZ Manoj Kumar A		2019-09-24	A	SID_MD0246_C_Rev.A

Project: Telenor Myanmar

Site: MD0246\_C

RRU2219 B8 Cell C



Earth Bar for RRU



Cabinet (Close)



Cabinet (Open)





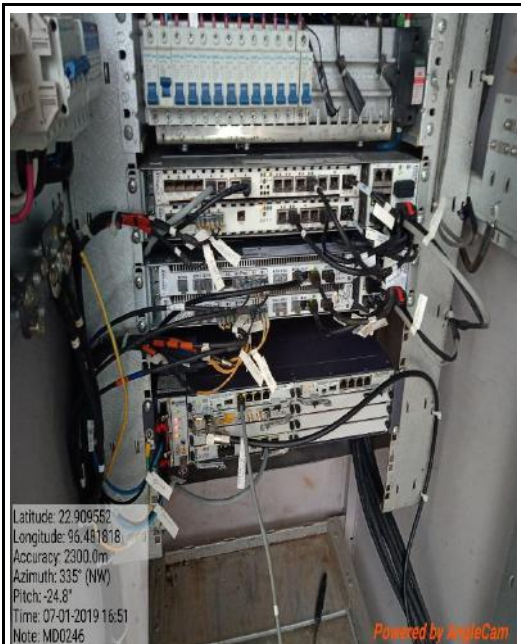
## SITE PHOTO

Prepared (also subject responsible if other) <b>EMZ Zaw Myo Aung</b>		Document No. <b>PHT-09:0001-IPA 166 0354 Uen</b>		
Doc respons/Approved <b>EMZ Manoj Kumar A</b>	Checked	Date <b>2019-09-24</b>	Rev. <b>A</b>	File <b>SID_MD0246_C_Rev.A</b>

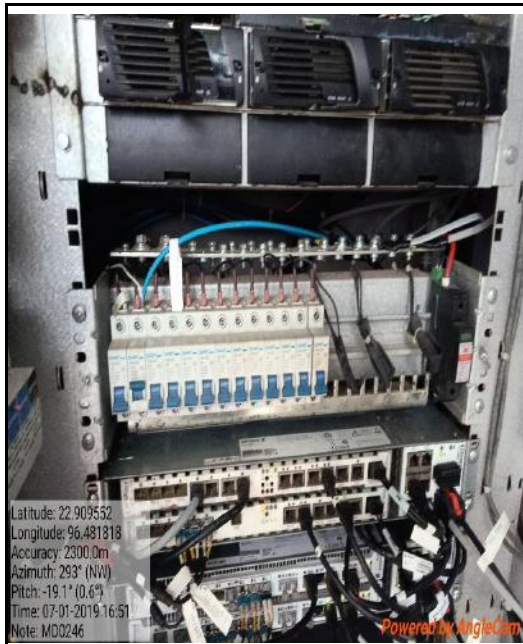
PA3 2014-07-28

Project: **Telenor Myanmar**Site: **MD0246\_C**

## DUG+5216



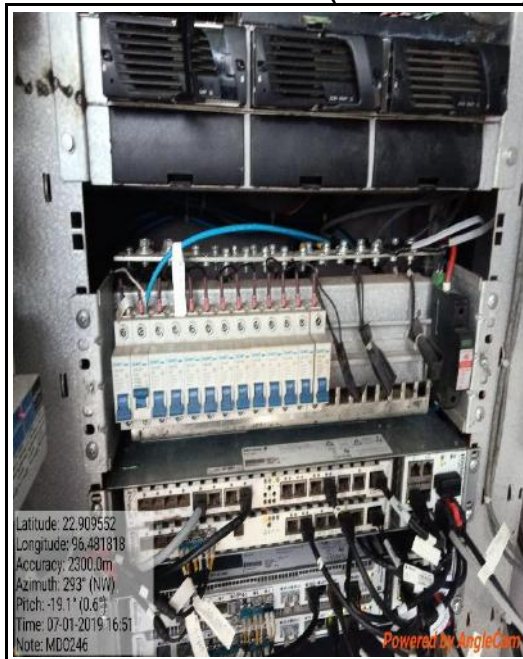
## DCDU



## External Alarm connection (with clear Label)



## External Alarm connection (with clear Label)





## SITE PHOTO

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Doc respons/Approved <b>EMZ Manoj Kumar A</b>	Checked	Date <b>2019-09-24</b>	Rev. <b>A</b>	File <b>SID_MD0246_C_Rev.A</b>

PA3 2014-07-28

Project: **Telenor Myanmar**Site: **MD0246\_C**

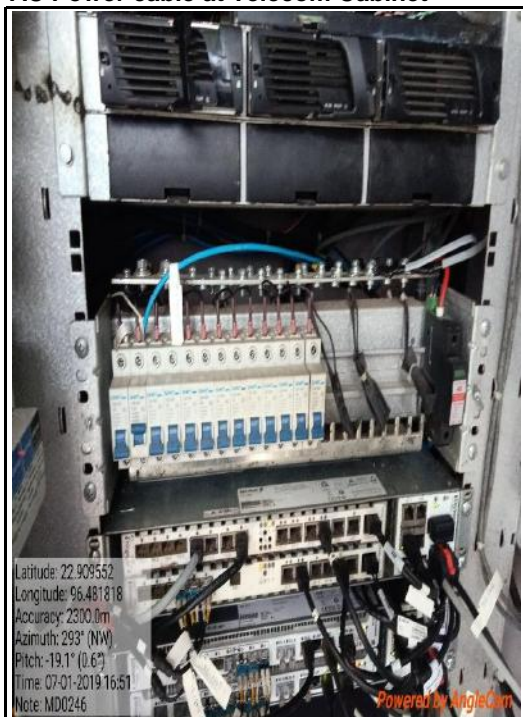
Cable inlet outdoor



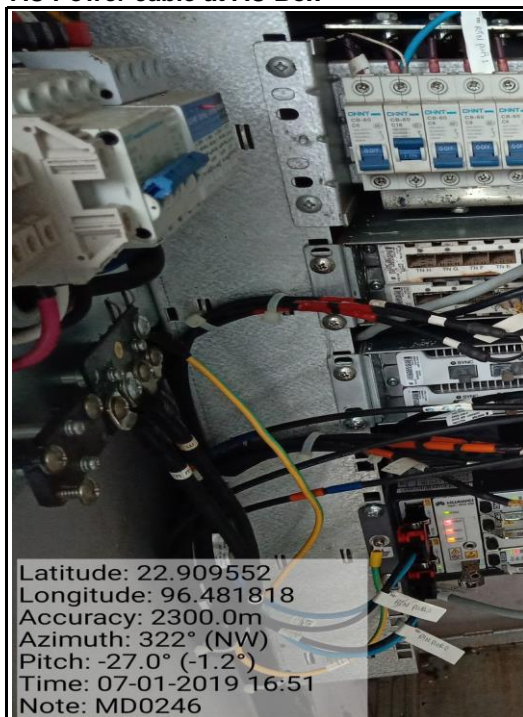
Cable inlet outdoor



AC Power cable at Telecom Cabinet



AC Power cable at AC Box





SITE PHOTO

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Doc respons/Approved <b>EMZ Manoj Kumar A</b>	Checked	Date <b>2019-09-24</b>	Rev. <b>A</b>	File <b>SID_MD0246_C_Rev.A</b>

PA3 2014-07-28

Project: **Telenor Myanmar**

Site: **MD0246\_C**

Main Earth Bar for Cabinet



Earth Bar Cabinet



Site Cleaned Photos



Site Cleaned Photo





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Doc respons/Approved <b>EMZ Manoj Kumar A</b>	Checked	Date <b>2019-09-24</b>	Rev. <b>A</b>	File <b>SID_MD0246_C_Rev.A</b>

**Project:** Telenor Myanmar  
**Site:** MD0246\_C

### NETWORK ELEMENT ACCEPTANCE CERTIFICATE

This is to certify that Ericsson Radio Systems AB has delivered, installed and tested the Network Elements on site **MD0246\_C** as defined in PO\_NS\_000017 and PO\_NS\_000018

PO RBS: PO\_NS\_000017  
 PO TRM: PO\_NS\_000018  
 PO Antenna:

The Network element acceptance has been performed in accordance with the procedures described in above mentioned contract. Further reference should be made to the acceptance documents. The Network element passed the acceptance with remarks per attached test report.

TEST DOCUMENTS  
 RBS 6601 Test Report - G900  
 RBS 6601 Test Report - W2100  
 Test Report (TRM Functional)

Documents Number  
 #  
 2/153 83-IPA 166 0354 Uen rev A  
 #

Date: .....

for

for

**Telenor**  
 (The Buyer)

**Ericsson Myanmar**  
 (The Vendor)

Name: .....

Name: .....

Title: .....

Title: .....