



RADIO SITE DESIGN DOCUMENTATION

Region : North
SG0592

ERICSSON 			
CAPTION LIST		Document List	1
Document No. 001 53-IPA 165 9212 Uen			
Date 2019-05-23	Rev. A		
SITE DESIGN DOCUMENT  Telenor Myanmar SG0592 Sagaing G900+U2100		Site Documents	2
		Plant Specification	3
		Cabling Diagram	4
		External Alarm	5
		Check Lists	6
		Test Documents	7
		Acceptance Certificate	8

Prepared (also subject responsible if other) EMZ Zaw Myo Aung		Document No. 001 51-IPA 165 9212 Uen		
Doc respons/Approved EMZ Manoj Kumar A	Checked	Date 2019-05-23	Rev. A	File SDD_SG0592_Rev.A

Project: Telenor Myanmar
Site: SG0592

	Document name	Document number	Rev.
	SITE DESIGN DOCUMENT	001 53-IPA 165 9212 Uen	A
1	DOCUMENT LIST Document List	001 51-IPA 165 9212 Uen	A
2	SITE DOCUMENTS		
2.1	Configuration Data RBS	1/127 04-IPA 165 9212 Uen	A
2.2	Situating Plan	153 38-IPA 165 9212 Uen	A
2.3	Antenna Placement Information	153 12-IPA 165 9212 Uen	A
2.4	Grounding Information	193 34-IPA 165 9212 Uen	A
2.5	Cable way Drawing	193 24-IPA 165 9212 Uen	A
3	PLANT SPECIFICATION		
3.1	Plant Specification (RBS)	1/127 11-IPA 165 9212 Uen	A
4	CABLING DIAGRAM		
4.1	Cabling Diagram (power and earth)	1/193 18-IPA 1/356 07 Uen	A
4.2	Cabling Diagram (signal and antenna)	2/193 18-IPA 1/356 08 Uen	A
4.3	Allocation Drawing (Cabinet)	193 26-IPA 1/356 09 Uen	A
5	EXTERNAL ALARM Allocation Table	193 19-IPA 165 9212 Uen	A
6	CHECK LISTS		
6.1	Installation Check List	153 11-IPA 165 9212 Uen	A
6.2	OHS Check List	176 27-IPA 165 9212 Uen	A
7	TEST DOCUMENTS		
7.1	RBS Test Report - G900	1/153 83-IPA 165 9212 Uen	A
7.2	RBS Test Report - W2100	2/153 83-IPA 165 9212 Uen	A
8	ACCEPTANCE CERTIFICATE Product List Site Photos Acceptance Certificate	1/193 32-IPA 165 9212 Uen PHT-09:0001-IPA 165 9212 Uen 179 61-IPA 165 9212 Uen	A A A

Prepared (also subject responsible if other) EMZ Zaw Myo Aung		Document No. 1/127 04-IPA 165 9212 Uen		
Doc respons/Approved EMZ Manoj Kumar A	Checked	Date 2019-05-23	Rev. A	File SDD_SG0592_Rev.A

Project: Telenor Myanmar
Site: SG0592

1 GENERAL SITE DATA

1.1	Geographical coordinates	N 23° 6' 32.44" - E 94° 2' 27.24"
1.2	Region	North
1.3	Address	Tho Mar Village, Kalay TSP, Sagaing
1.4	Type of Site	Green Field
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	3/3/3
2.5	No. of Remote Radio Unit (RRU)	3
2.6	RRU type	RRUS 01 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 equipped)	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)	3
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 equipped)	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)

5 TECHNICAL DATA CABINET

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

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Project: Telenor Myanmar
Site: SG0592

6 TECHNICAL DATA RBS ANTENNA SYSTEM

6.1	Antenna height (m.a.g.l.)	A= 45	B= 45	C= 45
6.2	Antenna directions	A= 60°	B= 230°	C= 330°
6.3	Mech/Elec Downtilt, deg	A= 2°/0°	B= 2°/0°	C= 2°/0°
6.4	Quantity of RRU	6 pcs		
6.5	Antenna type	ADU451807v01		
6.6	Antenna model	DXX-790-960/1710-2180-65/65-17.5i/18.5i-M/M		
6.7	Antenna dimensions (mm)	2535 x 259 x 135		
6.8	Weight of one antenna (kg)	21		
6.9	Wind load (N)	Frontal:	910	(at 150 km/h)
		Lateral:	470	(at 150 km/h)
		Rear:	1200	(at 150 km/h)
6.10	No. of Fiber Optic	6		

7 TECHNICAL DATA RBS ANTENNA SUPPORT STRUCTURE

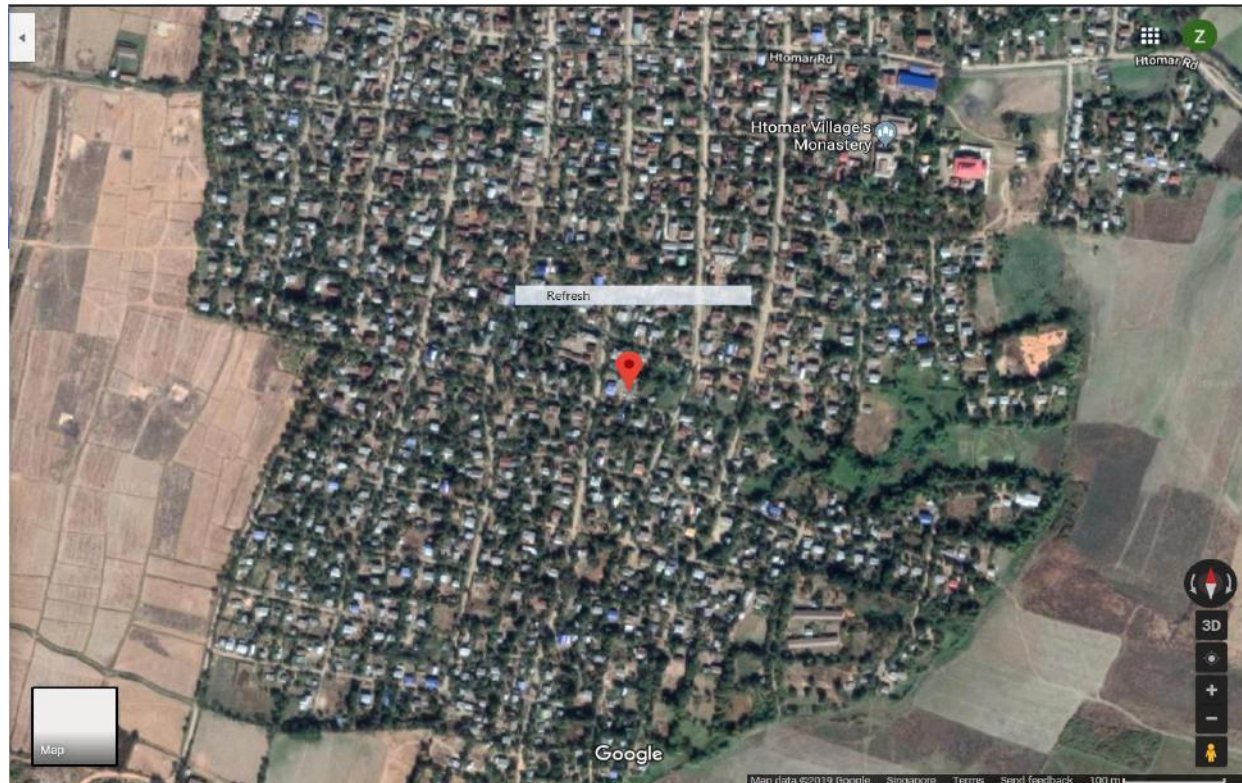
7.1	Tower/mast/pole type	Green Field 60m
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Prepared (also subject responsible if other) EMZ Zaw Myo Aung		Document No. 153 38-IPA 165 9212 Uen		
Doc respons/Approved EMZ Manoj Kumar A	Checked	Date 2019-05-23	Rev. A	File SDD_SG0592_Rev.A

Project: Telenor Myanmar
Site: SG0592

Geographical coordinates
Address

N 23° 6' 32.44" - E 94° 2' 27.24"
Tho Mar Village, Kalay TSP, Sagaing



PA3 2014-07-28

Prepared (also subject responsible if other) EMZ Zaw Myo Aung		Document No. 153 12-IPA 165 9212 Uen		
Doc respons/Approved EMZ Manoj Kumar A	Checked	Date 2019-05-23	Rev. A	File SDD_SG0592_Rev.A

Project: Telenor Myanmar
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Geographical coordinates
Address

N 23° 6' 32.44" - E 94° 2' 27.24"
Tho Mar Village, Kalay TSP, Sagaing
0

TSSR RND Info	Bearing	Antenna Mid Ht	Tower/Pole Hight (m)	Tower Type	Building High	M Tilt	E Tilt
SG0592_C01_1	60	45	60	GBT		2	0
SG0592_C01_2	230	45	60	GBT		2	0
SG0592_C01_3	330	45	60	GBT		2	0

PA3 2014-07-28

Prepared (also subject responsible if other) EMZ Zaw Myo Aung		Document No. 193 34-IPA 165 9212 Uen		
Doc respons/Approved EMZ Manoj Kumar A	Checked	Date 2019-05-23	Rev. A	File SDD_SG0592_Rev.A

Project: Telenor Myanmar
Site: SG0592

Geographical coordinates
Address

N 23° 6' 32.44" - E 94° 2' 27.24"
Tho Mar Village, Kalay TSP, Sagaing
0

No Grounding info is available.

PA3 2014-07-28

Prepared (also subject responsible if other) EMZ Zaw Myo Aung		Document No. 193 24-IPA 165 9212 Uen		
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Project: Telenor Myanmar
Site: SG0592

Geographical coordinates
Address

N 23° 6' 32.44" - E 94° 2' 27.24"
Tho Mar Village, Kalay TSP, Sagaing
0

Not Available.

PA3 2014-07-28

Prepared (also subject responsible if other) EMZ Zaw Myo Aung		Document No. 1/127 11-IPA 165 9212 Uen		
Doc respons/Approved EMZ Manoj Kumar A	Checked	Date 2019-05-23	Rev. A	File SDD_SG0592_Rev.A

Project: Telenor Myanmar
Site: SG0592

	Product number	Description	Quantity
1	RBS 6601 for 2G		
1.1	20/BFL901009/1748	RBS 6601;ASO	1
1.2	KDU137569/1	PROCESSOR UNIT/DUG 20 01;DIGITAL UNIT	1
1.3	KDU137739/1	PROCESSOR UNIT/TCU 02 01;TRANSPORT CONNE	1
1.4	KRC11871/2	TRANSCEIVER/RRUS 01 B8;RADIO UNIT	3
1.5	SXK1250245/1	POLE MOUNTING FIXTURE CEU	3
1.6	..EMZ-RRU-PC	Power Connector for RRU	3
1	RBS 6601 for 3G (W21.1)		
2.1	20/BFL901009/1748	RBS 6601;ASO	1
2.2	KDU127174/3	PROCESSOR UNIT/DUW 31 01;DIGITAL UNIT	1
2.3	KRC161622/1	TRANSCEIVER/Radio 2219 B1;Radio Unit	3
2.5	SXK1072896/1	Pole Bracket, Steel	3
2.6	..EMZ-RRU-PC	Power Connector for RRU	3
3	ANTENNA SYSTEM		
3.1	27010881-001	Directional Antenna,DXX-790-960/1710-2180-65/65-15i/17.5i-M/M,4*7/16 DIN Female,Downtilt kit packed separately	3
3.1	27150243	Downtilt Kit-B Type	3
4	RET MATERIAL		
4.1			
4.2	4050228	AISG Cable For Outdoor Use,5m,AISG VF 8PIN,AISG 4core Cable-24AWG(2C)+18AWG(2C),AISG VM 8PIN,Black	3
4.3	27150136	Antenna Feeder Accessories,RCU136,Agisson RET Antenna RCU,Antenna,10~30V	6

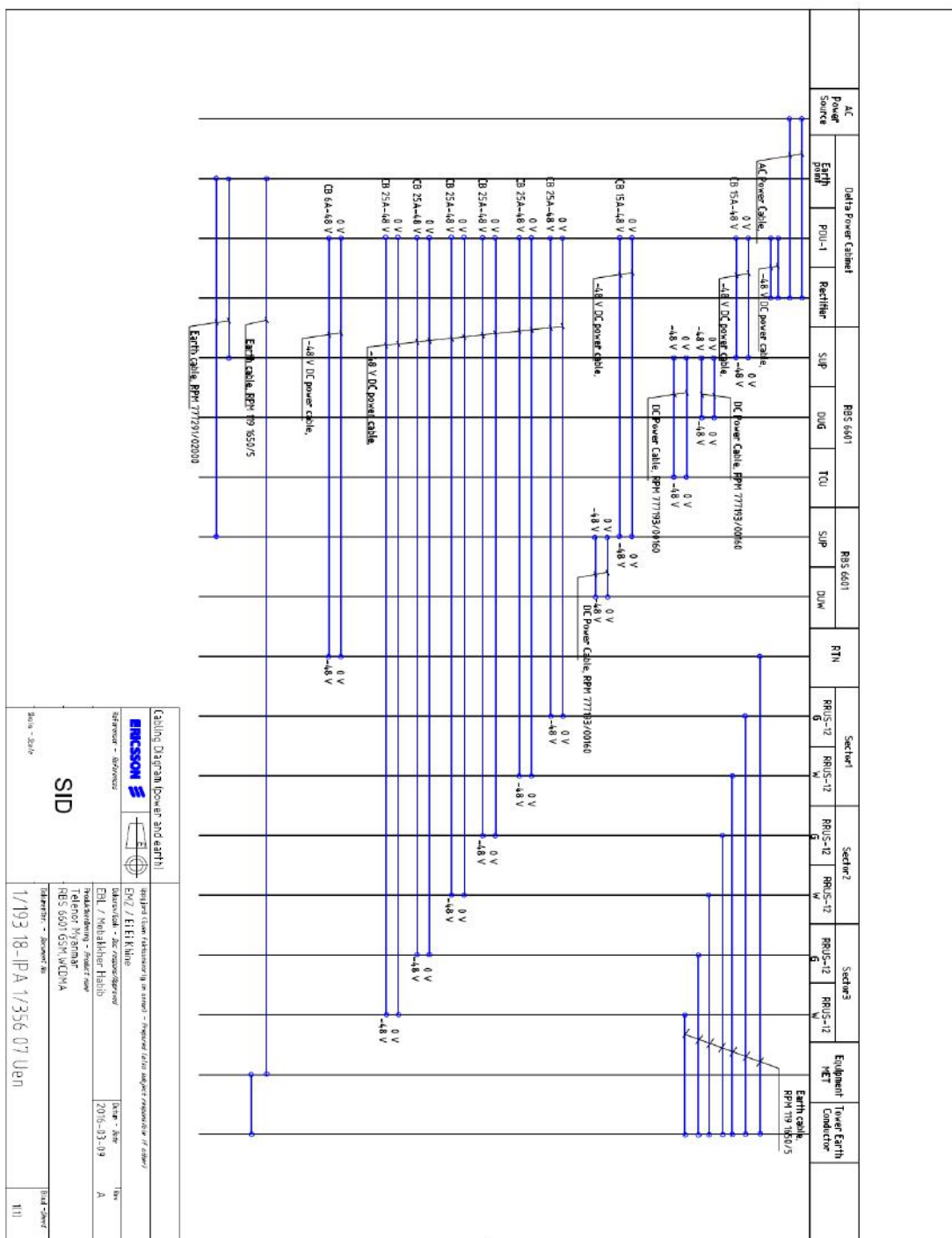
PA3 2014-07-28

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Doc respons/Approved EMZ Manoj Kumar A	Checked	Date 2019-05-23	Rev. A	File SDD_SG0592_Rev.A

Project: Telenor Myanmar
Site: SG0592

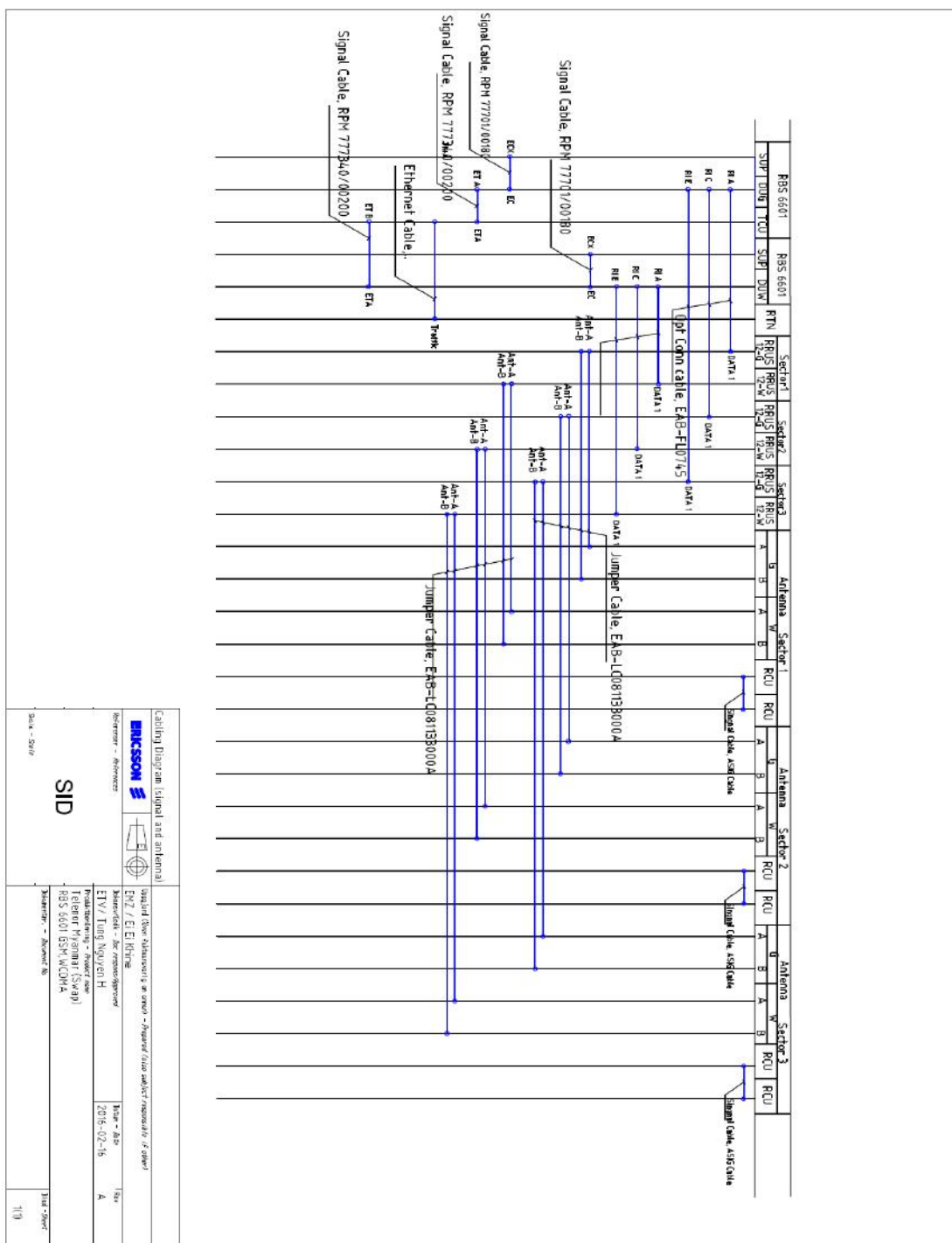
4.7			
4.9	04045920	Single cable,AISG cable,0.5m,RC8SM(S)-	3
5	CABINET		
5.5	180000399636	ZXDUPA-WR12(V2.6R03M15)outdoor power cabinet M(040	1
6	INSTALLATION MATERIALS		
6.1	TFL492324/500M	POWER CABLE/2X6 MM2;UL;LSOH;ALU+CU-SCREE	5 M
6.2	TSR95170/3	JUMPER CABLE/COMMScope 1/2" JUMPER CABLE	6
6.3	TSR951367/3	Jumper Cable, 1/2", 3m, 4.3/10 Male	6
6.4	NTM2013727/1	SET OF MATERIALS/TUBE KIT 8,5M	2
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	4
6.8	EAB-LTACBOLTM6ZERC	10X NUTS,SCREWS, WASHERS- MOUNTING	2
6.9	TFL492324/500M	POWER CABLE/2X6 MM2;UL;LSOH;ALU+CU-SCREE	380
6.10	EMZ-AC 4x16mm2	AC power cable	10
7	OTICAL CABLE		
7.1	RPM2531610/70M	CABLE WITH CONNECTOR/2F LC(FullAXS)-LC S	6

N 23° 6' 32.44" - E 94° 2' 27.24"
Tho Mar Village, Kalay TSP, Sagaing
##



SDD_SG0592_Rev.A

N 23° 6' 32.44" - E 94° 2' 27.24"
Tho Mar Village, Kalay TSP, Sagaing
##



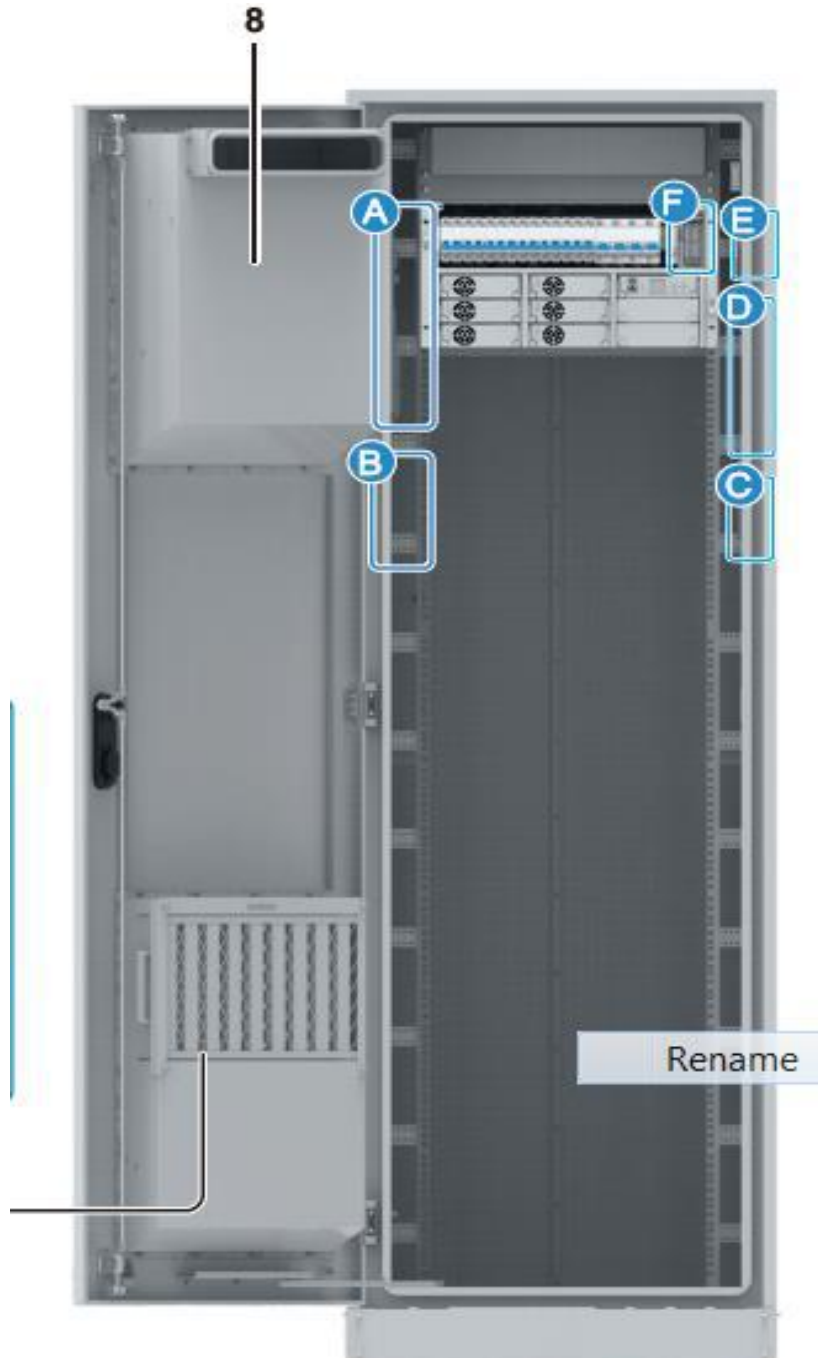
PA3 2014-07-28

Prepared (also subject responsible if other) EMZ Zaw Myo Aung		Document No. 193 26-IPA 165 9212 Uen		
Doc respons/Approved EMZ Manoj Kumar A	Checked	Date 2019-05-23	Rev. A	File SDD_SG0592_Rev.A

Project: Telenor Myanmar
Site: SG0592

Geographical coordinates
Address

N 23° 6' 32.44" - E 94° 2' 27.24"
Tho Mar Village, Kalay TSP, Sagaing
0



****Please update on site configuration. How many RTN and RBS did we use.

PA3 2014-07-28

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Doc respons/Approved EMZ Manoj Kumar A	Checked	Date 2019-05-23	Rev. A	File SDD_SG0592_Rev.A

Project: Telenor Myanmar
Site: SG0592

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

**** Need to mark from site after alarm configuration**

Prepared (also subject responsible if other) EMZ Zaw Myo Aung		Document No. 153 11-IPA 165 9212 Uen		
Doc respons/Approved EMZ Manoj Kumar A	Checked	Date 2019-05-23	Rev. A	File SDD_SG0592_Rev.

Project: Telenor Myanmar
Site: SG0592

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 or	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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Project: Telenor Myanmar
Site: SG0592

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)

Problems/Comments (Refer to applicable activity numbers)

Responsible Engineer (Ericsson)

Name _____ Signature _____ Date _____

Accepted by (Telenor)

Name _____ Signature _____ Date _____

Prepared (also subject responsible if other) EMZ Zaw Myo Aung		Document No. 176 27-IPA 165 9212 Uen	
Doc respons/Approved EMZ Manoj Kumar A	Checked	Date 2019-05-23	Rev. File A SDD_SG0592_Rev.A

Project: Telenor Myanmar
Site: SG0592

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 Drill	1
5 Heat Gun	1
6 Hexagon Key Set	1 Set
7 Screw Driver Set	1 Set
8 Knife	2
9 Cable Cutter	2
10 Tie Cutter	2
11 U-ring Wrench -8~32	1 Set
12 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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Prepared (also subject responsible if other) EMZ Zaw Myo Aung 0		Document No. 1/153 83-IPA 165 9212 Uen		
Doc respons/Approved EMZ Manoj Kumar A	Checked	Date 2019-05-23	Rev. A	File SDD_SG0592_Rev.A

Project: Telenor Myanmar
Site: SG0592

Test Record for Site Installation Verification

Date:	Site Name:
Site No.: SG0592	Cell Configuration: G900 RBS 6601
RBS Type: RBS 6601	Testers Name:

NE Standalone test

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

Notes:

Responsible Engineer (Ericsson)

Name _____ Signature _____ Date _____

Accepted by (Telenor)

Name _____ Signature _____ Date _____

Test Record for Antenna System Tests

Date:	Site name:
Site No.: SG0592	Cell Configuration: GSM900 RBS 6601
Testers Name:	
RBS Type: RBS 6601	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 :	DX1	DX2	
Jumper Length :	3	3	m
Optical Cable Length :			m
VSWR :			< 1.4
Cable Attenuation :			db

Cell C

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

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

Responsible Engineer (Ericsson)

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Accepted by (Telenor)

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Test Record for Site Integration

Date:	Site name:
Site No.: SG0592	Cell Configuration: GSM900 RBS 6601
RBS Type: RBS 6601	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.: SG0592	Cell Configuration: GSM900
RBS Type: ##	Testers Name:

Power System

Unit	Product number	Serial
DC power		
Rectifier Module #1		
Rectifier Module #2		
Rectifier Module #3		
Rectifier Module #4		
Battery		

Antenna

Unit	Product number	Serial
Sector A	ADU451807v01	101520006204
Sector B	ADU451807v01	Can't read serial
Sector C	ADU451807v01	Can't read serial

RBS Cabinet

Unit	Product number	Serial
RBS 6601	20/BFL901009/1748	D827779627
DUG 20 01	KDU137569/1	CD3A304380
TCU-02 01	KDU137739/1	CD3C536447
RRU 01 B8,sector A	KRC11871/2	D820546305
RRU 01 B8,sector B	KRC11871/2	CD3E209232
RRU 01 B8,sector C	KRC11871/2	CB4S894745

Remarks: _____

Responsible Engineer (Ericsson)

Name *Signature* *Date*

Accepted by (Telenor)

Name *Signature* *Date*

Prepared (also subject responsible if other)

EMZ Zaw Myo Aung

Document No.

2/153 83-IPA 165 9212 Uen

Doc respons/Approved

EMZ Manoj Kumar A

Checked

Date

2019-05-23

Rev.

A

File

SDD_SG0592_Rev.A

Project: Telenor Myanmar

Site: SG0592

Test Record for Site Installation Verification

Date:	Site name:
Site No.: SG0592	Cell Configuration: W2100 2/2/2
RBS Type: RBS 6601	Testers Name:

NE Standalone test

Pass Fail N/A Remark

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

Notes:

Responsible Engineer (Ericsson)

Name

Signature

Date

Accepted by (Telenor)

Name

Signature

Date

Prepared (also subject responsible if other)

Document No.

EMZ Zaw Myo Aung

2/153 83-IPA 165 9212 Uen

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Checked

Date

Rev.

File

EMZ Manoj Kumar A

2019-05-23

A

SDD_SG0592_Rev.A

Project: Telenor Myanmar

Site: SG0592

Test Record for Antenna System Tests

Date:	Site name:
Site No.: SG0592	Cell Configuration: W2100 2/2/2
Testers Name:	
RBS Type: RBS 6601	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)

Name

Signature

Date

Prepared (also subject responsible if other)

Document No.

EMZ Zaw Myo Aung

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2019-05-23

A

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Project: Telenor Myanmar

Site: SG0592

Test Record for Site Integration

Date:	Site name:
Site No.: SG0592	Cell Configuration: W2100 2/2/2
RBS Type: RBS 6601	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)

Name

Signature

Date

Accepted by (Telenor)

Name

Signature

Date

Prepared (also subject responsible if other)

Document No.

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2/153 83-IPA 165 9212 Uen

Doc respons/Approved

Checked

Date

Rev.

File

EMZ Manoj Kumar A

2019-05-23

A

SDD_SG0592_Rev.A

Project: Telenor Myanmar

Site: SG0592

Test Record for Site Hardware Status

Date:	Site name:
Site No.: SG0592	Cell Configuration: W2100 2/2/2
RBS Type: RBS 6601	Testers Name:

Power System

Unit	Product number	Serial
DC power		
Rectifier Module #1		
Rectifier Module #2		
Rectifier Module #3		
Rectifier Module #4		
Battery		

Antenna

Unit	Product number	Serial
DXX-790-960/1710-2180-65/65-17.5i/18.5i-I ADU451807v01		101520006204
DXX-790-960/1710-2180-65/65-17.5i/18.5i-I ADU451807v01		Can't read serial
DXX-790-960/1710-2180-65/65-17.5i/18.5i-I ADU451807v01		Can't read serial

RBS Cabinet

Unit	Product number	Serial
RBS 6601	20/BFL901009/1748	D827779621
DUW31	KDU127174/3	CD3F377564
RRU 2219 B1,sector A	KRC161622/1	CN31742009
RRU 2219 B1,sector B	KRC161622/1	CN31741941
RRU 2219 B1,sector C	KRC161622/1	CN31742006

Remarks: _____

Responsible Engineer (Ericsson)

Name

Signature

Date

Accepted by (Telenor)

Name

Signature

Date

Prepared (also subject responsible if other)		Document No.		
EMZ Zaw Myo Aung		1/193 32-IPA 165 9212 Uen		
Doc respons/Approved	Checked	Date	Rev.	File
EMZ Manoj Kumar A		2019-05-23	A	SDD_SG0592_Rev.A

Project: Telenor Myanmar

Site: SG0592

SG0592 -

<u>UNIT</u>	<u>PRODUCT CODE</u>	<u>REV</u>	<u>SERIAL No.</u>	<u>MFG.DATE</u>
GSM 900				
RBS 6601	20/BFL901009/1748		D827779627	
DUG 20 01;Digital Unit	KDU137569/1		CD3A304380	
TCU 02 01;Transport Con. Unit	KDU137739/1		CD3C536447	
RRU 01 B8, sector A	KRC161297/2		D820546305	
RRU 01 B8, sector B	KRC161297/2		CD3E209232	
RRU 01 B8, sector C	KRC161297/2		CB4S894745	
WCDMA 2100				
RBS 6601	20/BFL901009/1748		D827779621	
'DUW31	KDU127174/3		CD3F377564	
RRU 2219 B1,sector A	KRC161622/1		CN31742009	
RRU 2219 B1,sector B	KRC161622/1		CN31741941	
RRU 2219 B1,sector C	KRC161622/1		CN31742006	
ANTENNA				
Sec1- DXX-790-960/1710-2180-65/65-1 ADU451807v01			101520006204	
Sec2- DXX-790-960/1710-2180-65/65-1 ADU451807v01			Can't read serial	
Sec3- DXX-790-960/1710-2180-65/65-1 ADU451807v01			Can't read serial	
RET				
RCU136 Cell A GSM	27150136		HWB03412237661542XYX	
RCU136 Cell B GSM	27150136		HWB7476909351610E5Y	
RCU136 Cell C GSM	27150136		HWB2657284111532U5E	
RCU136 Cell A UMTS	27150136		HWB85081603114B38SA	
RCU136 Cell B UMTS	27150136		HWB500457195159310Q	
RCU136 Cell C UMTS	27150136		HWB4416871741483HNN	
CABINET				
ZTE Cabinet	180000399636		210094740559	

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Doc respons/Approved EMZ Manoj Kumar A	Checked	Date 2019-05-23	Rev. A	File SDD_SG0592_Rev.A

Project: **Telenor Myanmar**

Site: **SG0592**

Site Location



Tower View

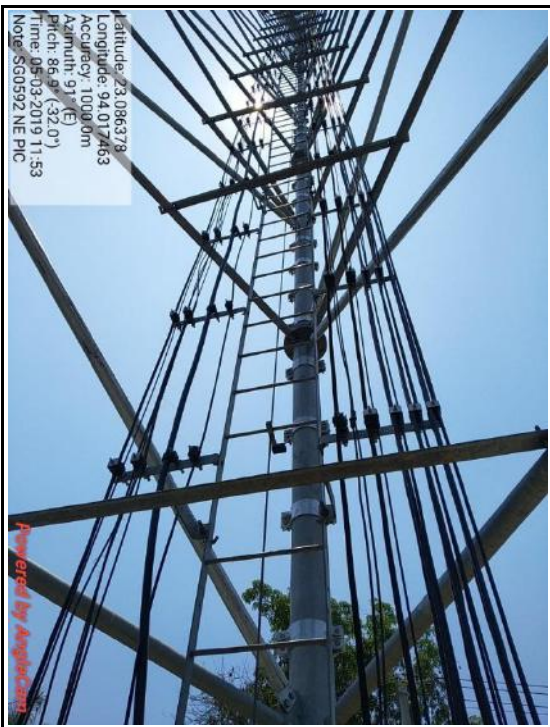


PA3 2014-07-28

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EMZ Zaw Myo Aung		PHT-09:0001-IPA 165 9212 Uen		
Doc respons/Approved	Checked	Date	Rev.	File
EMZ Manoj Kumar A		2019-05-23	A	SDD_SG0592_Rev.A

Project: **Telenor Myanmar**
Site: **SG0592**

Vertical Cable Ladder



Horizontal Cable Ladder



Antenna Cell A



Antenna Cell B

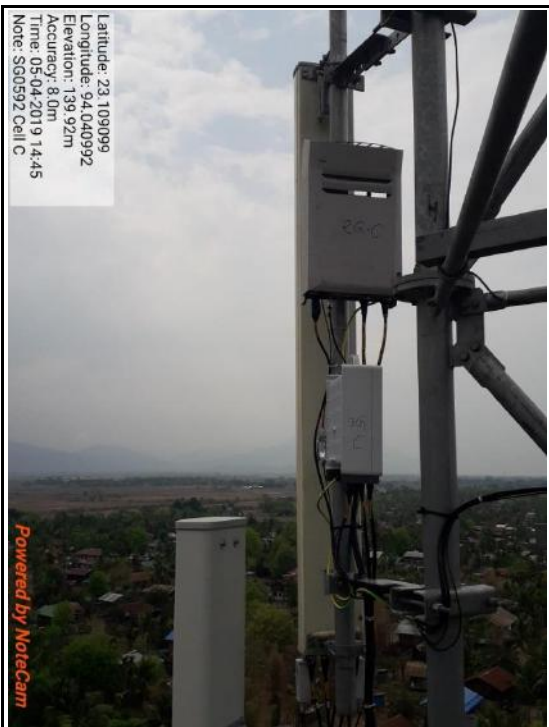


PA3 2014-07-28

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EMZ Zaw Myo Aung		PHT-09:0001-IPA 165 9212 Uen		
Doc respons/Approved	Checked	Date	Rev.	File
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Project: **Telenor Myanmar**
Site: **SG0592**

Antenna Cell C



RCU Cell A



RCU Cell B



RCU Cell C



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EMZ Manoj Kumar A		2019-05-23	A	SDD_SG0592_Rev.A

Project: **Telenor Myanmar**
Site: **SG0592**



Earth Bar for RRU



Latitude: 23.109091
Longitude: 94.040945
Elevation: 151.9m
Accuracy: 6.0m
Time: 05-04-2019 14:23
Note: SG0592 Cell C

Powered by NoteCam

PA3 2014-07-28

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EMZ Zaw Myo Aung		PHT-09:0001-IPA 165 9212 Uen		
Doc respons/Approved	Checked	Date	Rev.	File
EMZ Manoj Kumar A		2019-05-23	A	SDD_SG0592_Rev.A

Project: **Telenor Myanmar**
Site: **SG0592**

RRU2219 B1 Cell A



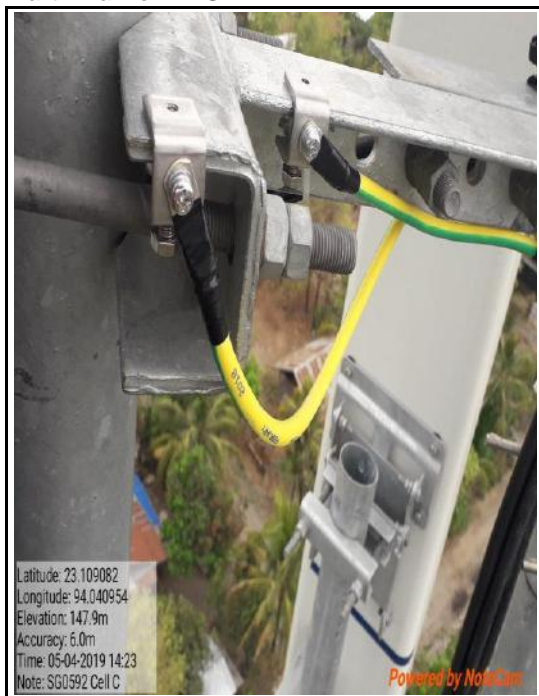
RRU2219 B1 Cell B



RRU2219 B1 Cell C



Earth Bar for RRU



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EMZ Zaw Myo Aung		PHT-09:0001-IPA 165 9212 Uen		
Doc respons/Approved	Checked	Date	Rev.	File
EMZ Manoj Kumar A		2019-05-23	A	SDD_SG0592_Rev.A

Project: **Telenor Myanmar**

Site: **SG0592**

RRU01 B8 Cell A



RRU01 B8 Cell B



RRU01 B8 Cell C



Earth Bar for RRU



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Doc respons/Approved	Checked	Date	Rev.	File
EMZ Manoj Kumar A		2019-05-23	A	SDD_SG0592_Rev.A

Project: **Telenor Myanmar**
Site: **SG0592**

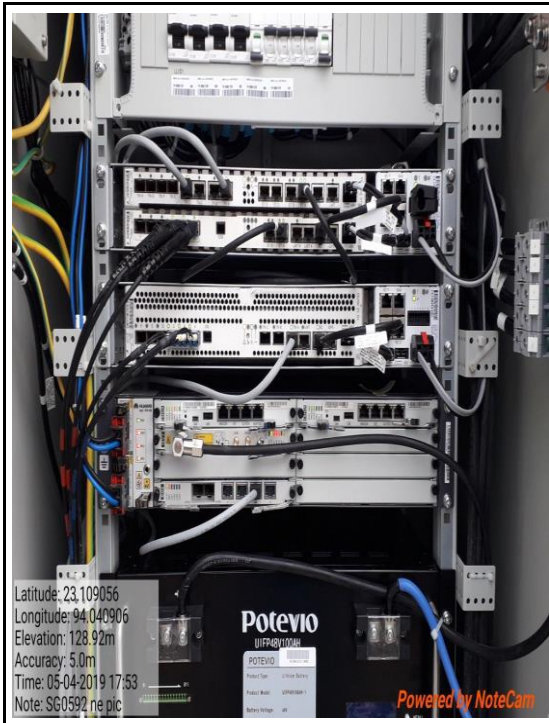
Cabinet (Close)



Cabinet (Open)



DUG+DUW



DCDU



PA3 2014-07-28

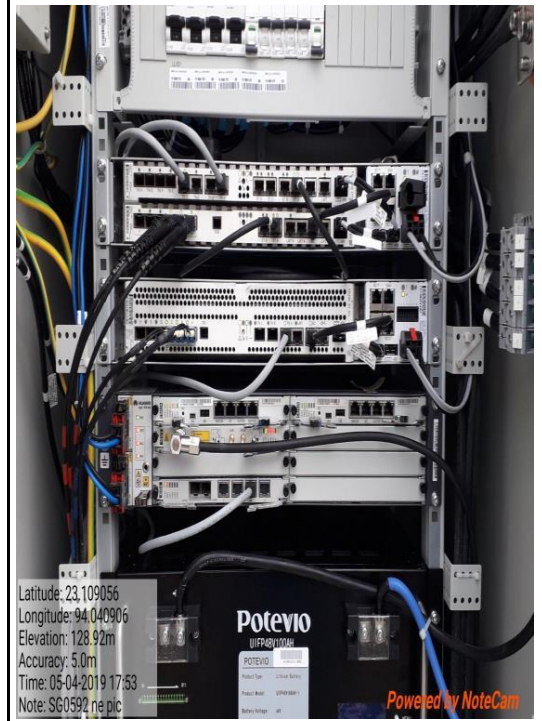
Prepared (also subject responsible if other) EMZ Zaw Myo Aung		Document No. PHT-09:0001-IPA 165 9212 Uen		
Doc respons/Approved EMZ Manoj Kumar A	Checked	Date 2019-05-23	Rev. A	File SDD_SG0592_Rev.A

Project: **Telenor Myanmar**
Site: **SG0592**

External Alarm connection (with clear Label)



External Alarm connection (with clear Label)



Cable inlet outdoor



Cable inlet outdoor



Prepared (also subject responsible if other)

EMZ Zaw Myo Aung

Doc respons/Approved

EMZ Manoj Kumar A

Checked

Document No.

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Date

2019-05-23

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A

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Project: **Telenor Myanmar**

Site: **SG0592**
AC Power cable at Telecom Cabinet

AC Power cable at AC Box

Main Earth Bar for Cabinet

Earth Bar Cabinet


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Doc respons/Approved EMZ Manoj Kumar A	Checked	Date 2019-05-23	Rev. A	File SDD_SG0592_Rev.A

Project: **Telenor Myanmar**

Site: **SG0592**

Site Cleaned Photos



Site Cleaned Photo



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Doc respons/Approved EMZ Manoj Kumar A	Checked	Date 2019-05-23	Rev. A	File SDD_SG0592_Rev.A

Project: Telenor Myanmar
Site: SG0592

NETWORK ELEMENT ACCEPTANCE CERTIFICATE

This is to certify that Ericsson Radio Systems AB has delivered, installed and tested the Network Elements on site **SG0592** 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 165 9212 Uen rev A
 ##

Date:

for

for

Telenor
 (The Buyer)

Ericsson Myanmar
 (The Vendor)

 Name:

 Name:

Title:

Title: