



RADIO SITE DESIGN DOCUMENTATION

Region : North
MD1131

ERICSSON 			
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Document No. 001 53-IPA 166 0025 Uen			
Date 2018-07-26	Rev. A		
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Prepared (also subject responsible if other) EMZ Kyaw Htwe Naing		Document No. 001 51-IPA 166 0025 Uen		
Doc respons/Approved EMZ Manoj Kumar A	Checked	Date 2018-07-26	Rev. A	File SDD_MD1131_Rev.A

Project: Telenor Myanmar
Site: MD1131

	Document name	Document number	Rev.
	SITE INSTALLATION DOCUMENT	001 53-IPA 166 0025 Uen	A
1	DOCUMENT LIST Document List	001 51-IPA 166 0025 Uen	A
2	SITE DOCUMENTS		
2.1	Configuration Data RBS	1/127 04-IPA 166 0025 Uen	A
2.2	Situating Plan	153 38-IPA 166 0025 Uen	A
2.3	Antenna Placement Information	153 12-IPA 166 0025 Uen	A
2.4	Grounding Information	193 34-IPA 166 0025 Uen	A
2.5	Cable way Drawing	193 24-IPA 166 0025 Uen	A
3	PLANT SPECIFICATION		
3.1	Plant Specification (RBS)	1/127 11-IPA 166 0025 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 166 0025 Uen	A
6	CHECK LISTS		
6.1	Installation Check List	153 11-IPA 166 0025 Uen	A
6.2	OHS Check List	176 27-IPA 166 0025 Uen	A
7	TEST DOCUMENTS		
7.1	RBS Test Report - G900	1/153 83-IPA 166 0025 Uen	A
7.2	RBS Test Report - W2100	2/153 83-IPA 166 0025 Uen	A
8	ACCEPTANCE CERTIFICATE		
	Product List	1/193 32-IPA 166 0025 Uen	A
	Site Photos	PHT-09:0001-IPA 166 0025 Uen	A
	Acceptance Certificate	179 61-IPA 166 0025 Uen	A

Prepared (also subject responsible if other)		Document No.		
EMZ Kyaw Htwe Naing		1/127 04-IPA 166 0025 Uen		
Doc respons/Approved	Checked	Date	Rev.	File
EMZ Manoj Kumar A		2018-07-26	A	SDD_MD1131_Rev.A

Project: Telenor Myanmar
Site: MD1131

1 GENERAL SITE DATA

1.1	Geographical coordinates	N 21° 58' 36.3" - E 96° 4' 42.4"
1.2	Region	North
1.3	Address	Bet (30x31) Street, Bet (83x84) Street, Aung Nan Yeik Thar West Ward, Chan Aye Thar San Township
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	2/2/2
2.5	No. of Remote Radio Unit (RRU)	3
2.6	RRU type	RRUS 2219 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	RRUS 2219 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)

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
4.10	Weight for one Main Unit (fully equipped)	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	750x 750 x 2000
5.2	Free space for equipment	9U

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Doc respons/Approved EMZ Manoj Kumar A	Checked	Date 2018-07-26	Rev. A	File SDD_MD1131_Rev.A

Project: Telenor Myanmar
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6 TECHNICAL DATA RBS ANTENNA SYSTEM

6.1	Antenna height (m.a.g.l.)	A= 31	B= 31	C= 31
6.2	Antenna directions	A= 90°	B= 160°	C= 280°
6.3	Mech/Elec Downtilt, deg	A= 3°/2°	B= 3°/2°	C= 3°/2°
6.4	Quantity of RRU	9 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	12 pcs		

7 TECHNICAL DATA RBS ANTENNA SUPPORT STRUCTURE

7.1	Tower/mast/pole type	Rooftop pole 9m
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Project: Telenor Myanmar
Site: MD1131

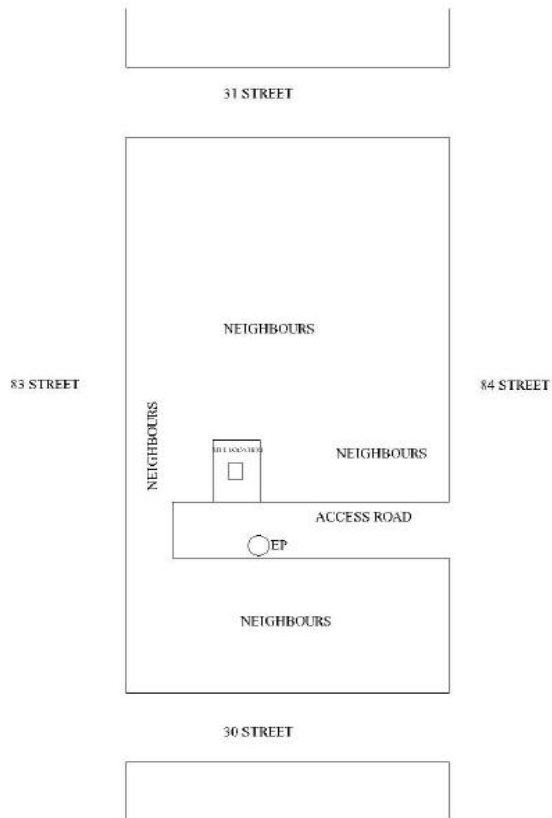
Geographical coordinates
Address

N 21° 58' 36.3" - E 96° 4' 42.4"
Bet (30x31) Street,Bet (83x84) Street,Aung Nan Yei
Thar West Ward,Chan Aye Thar San Township



NORTHING
SITE AZIMUTH

180



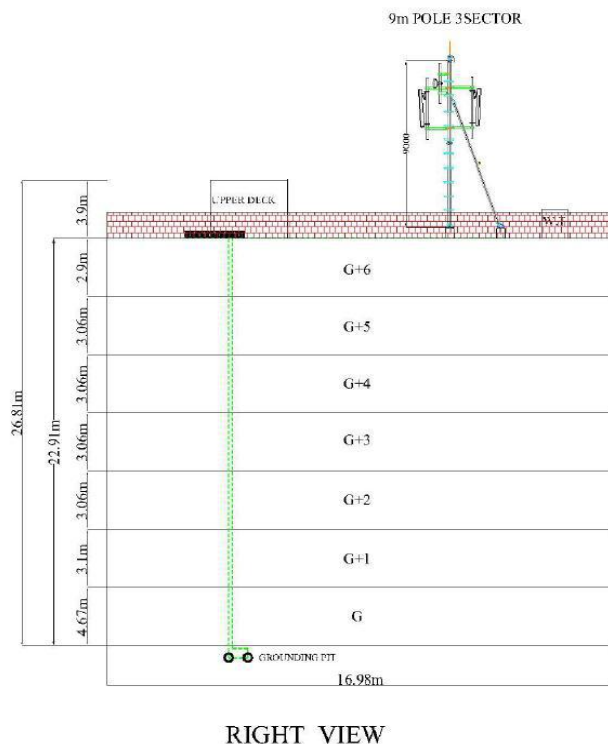
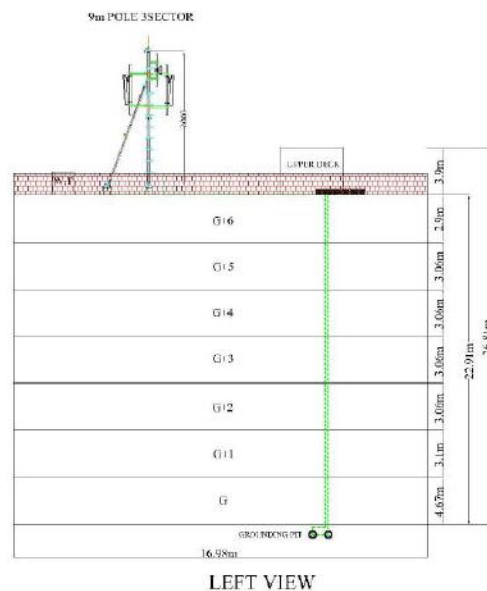
PA3 2014-07-28

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Doc respons/Approved EMZ Manoj Kumar A	Checked	Date 2018-07-26	Rev. A	File SDD_MD1131_Rev.A

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Site: MD1131

Geographical coordinates
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N 21° 58' 36.3" - E 96° 4' 42.4"
 Bet (30x31) Street, Bet (83x84) Street, Aung Nan Ye
 Thar West Ward, Chan Aye Thar San Township

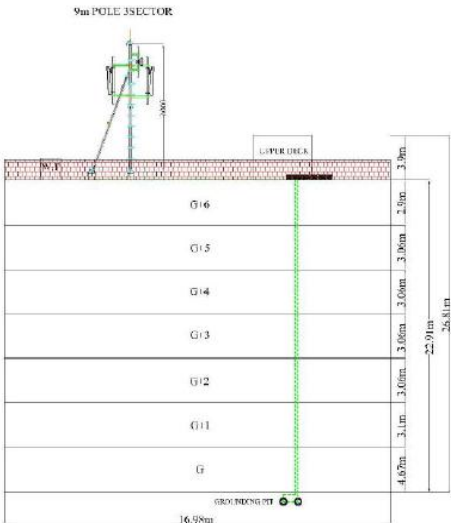


PAS 2014-07-28

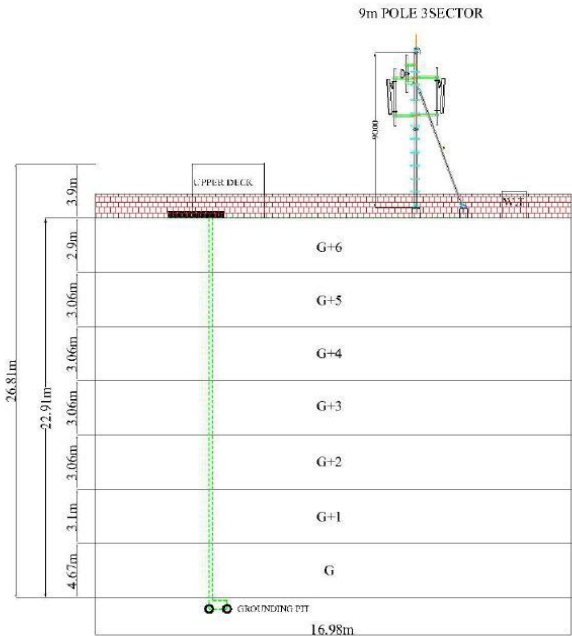
Prepared (also subject responsible if other) EMZ Kyaw Htwe Naing		Document No. 193 34-IPA 166 0025 Uen		
Doc respons/Approved EMZ Manoj Kumar A	Checked	Date 2018-07-26	Rev. A	File SDD_MD1131_Rev.A

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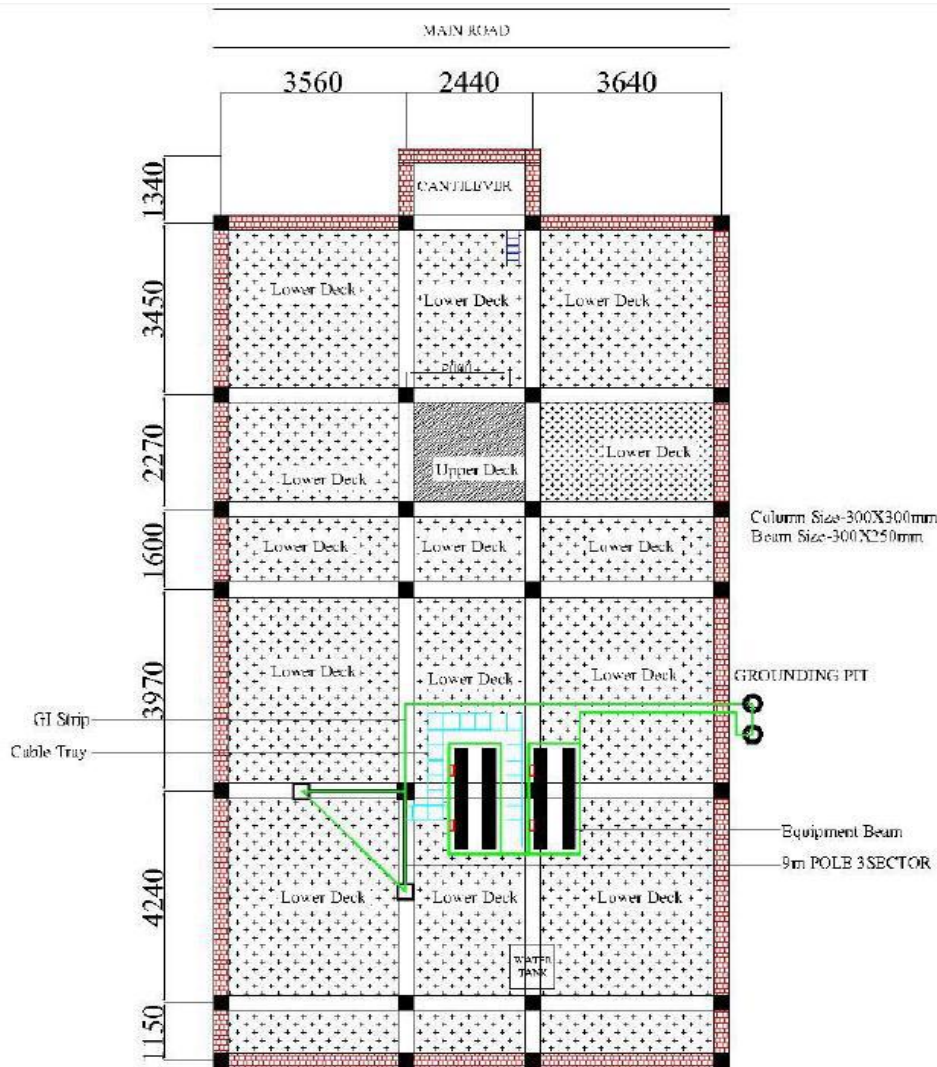


LEFT VIEW



RIGHT VIEW

N 21° 58' 36.3" - E 96° 4' 42.4"
Bet (30x31) Street,Bet (83x84) Street,Aung Nan Ye
Thar West Ward,Chan Aye Thar San Township



SITE LAYOUT PLAN

Prepared (also subject responsible if other) EMZ Kyaw Htwe Naing		Document No. 1/127 11-IPA 166 0025 Uen		
Doc respons/Approved EMZ Manoj Kumar A	Checked	Date 2018-07-26	Rev. A	File SDD_MD1131_Rev.A

Project: Telenor Myanmar
Site: MD1131

	Product number	Description	Quantity
1	RBS 6601 for 2G		
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
2	RBS 6601 for 3G (W21.1)		
2.1	20/BFL901009/733	6601 with Baseband 5216	1
2.2	..KDU137925/31	PROCESSOR UNIT/Baseband 5216; Digital Un	1
2.3	..RPM777193/00200	CABLE WITH CONNECTOR/DC POWER CABLE	1
2.4	..RPM77701/00300	CABLE WITH CONNECTOR/SIGNAL CABLE	1
2.5	KRC161622/1	TRANSCEIVER/Radio 2219 B1;Radio Unit	3
2.6	..KRC161619/1	TRANSCEIVER/Radio 2219 B3;Radio Unit	3
2.7	..EMZ-RRU-PC	Power Connector for RRU	3
2.8	..SXK1072896/1	Pole Bracket, Steel	3
2.9	E11F05P8202	CommScope Combiner	3
3	ANTENNA SYSTEM		
	RVV65D-C3-3XR	RVV65D-C3-3XR Tri band antenna	3
	ATCB-B01-005	RET cable	3

PA3 2014-07-28

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Project: Telenor Myanmar
Site: MD1131

5 CABINET

5.3 ESOA300FBG10 OUTD-6602-RF SERIES RBS 6601 2.0M 1

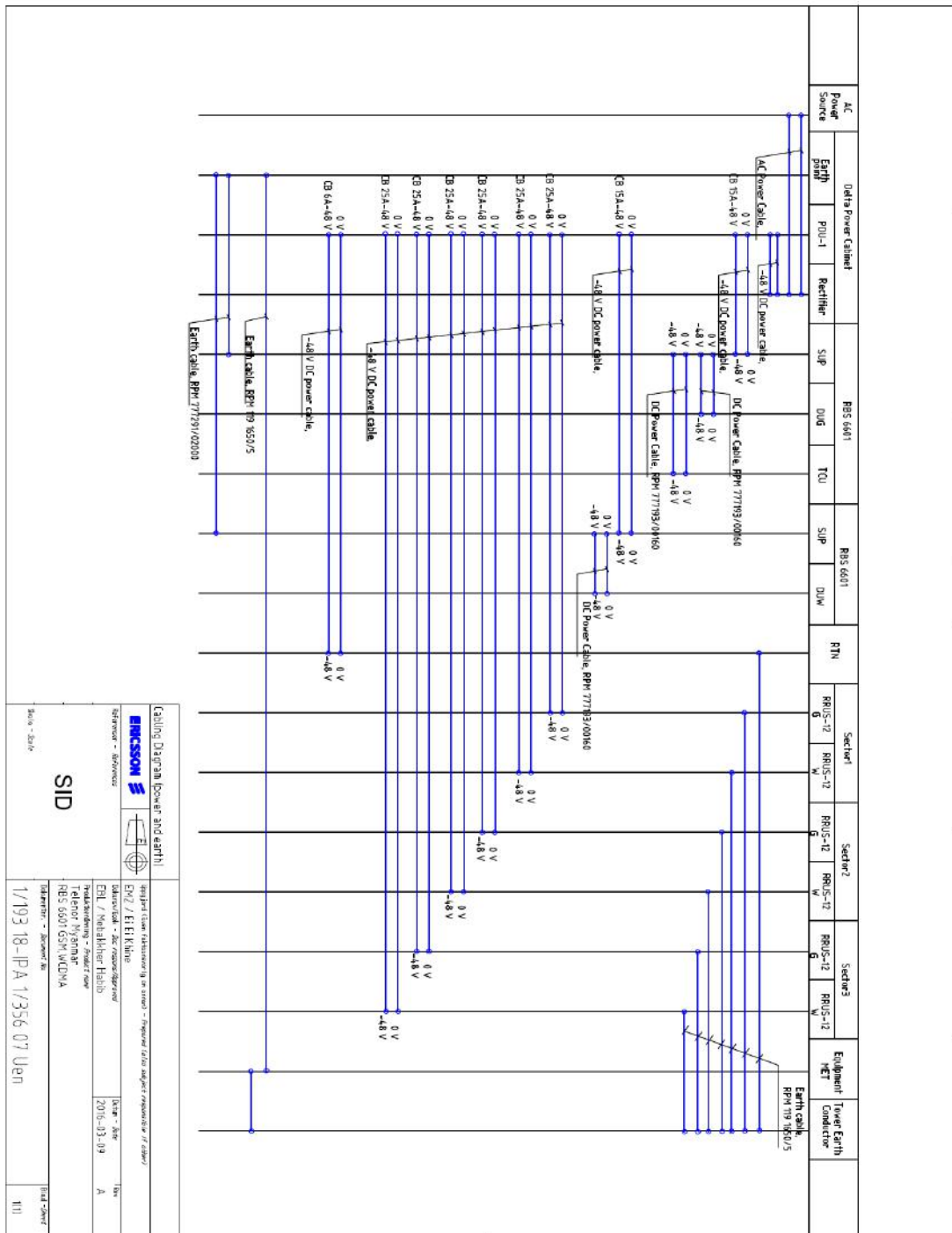
6 INSTALLATION MATERIALS

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	12
6.3	NTM2013727/1	SET OF MATERIALS/TUBE KIT 8,5M	2
6.4	LTRFSEAL300	Silicon box	1
6.5	EAB-LTACCTIECV4830	Plastic tie Strap, 100 pcs/package,	1
6.6	EAB-LTPWACCLUGM825	ACC -25MM2 GROUNDING CABLE 16X CABL	1
6.7	EAB-LTACBOLTM6ZERC	10X NUTS,SCREWS, WASHERS- MOUNTING	1
6.8	TFL492324/500M	POWER CABLE/2X6 MM2;UL;LSOH;ALU+CU-SCREE	545
6.9	EMZ-AC 4x16mm2	AC power cable	7

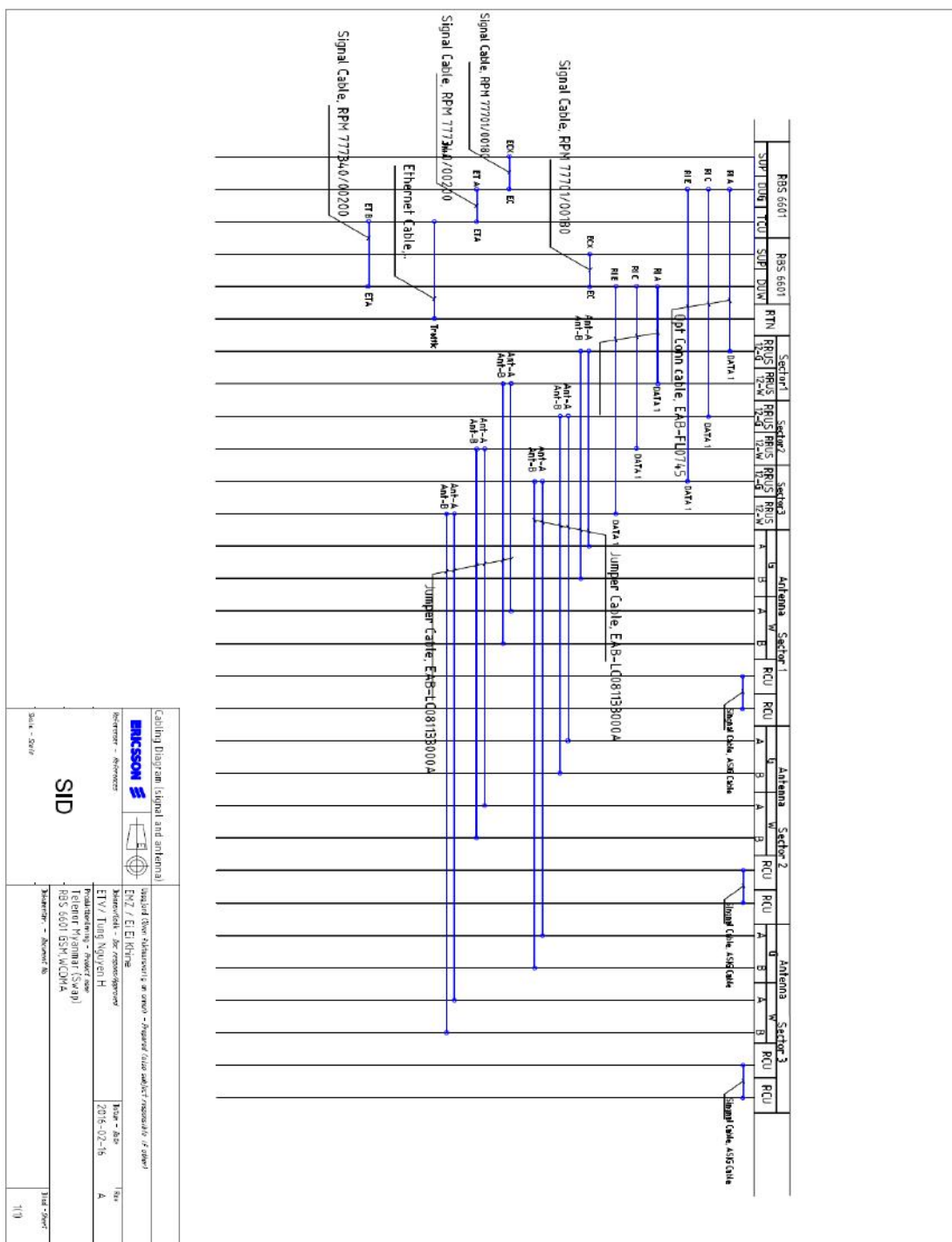
6.10	EAB-ESR4856BAS	HE 96 PERCENT 2900W RECTIFIER	3
6.11	MPG12V170F	NARADA MPG12V170F 12V BATTERY 170AH	8

7 OTICAL CABLE

7.1	RPM2531512/70M	CABLE WITH CONNECTOR/2F LC(FullAXS)-LC S	3
7.1	RPM2531610/70M	CABLE WITH CONNECTOR/2F LC(FullAXS)-LC S	6



Bet (30x31) Street,Bet (83x84) Street,Aung Nan Yei
##



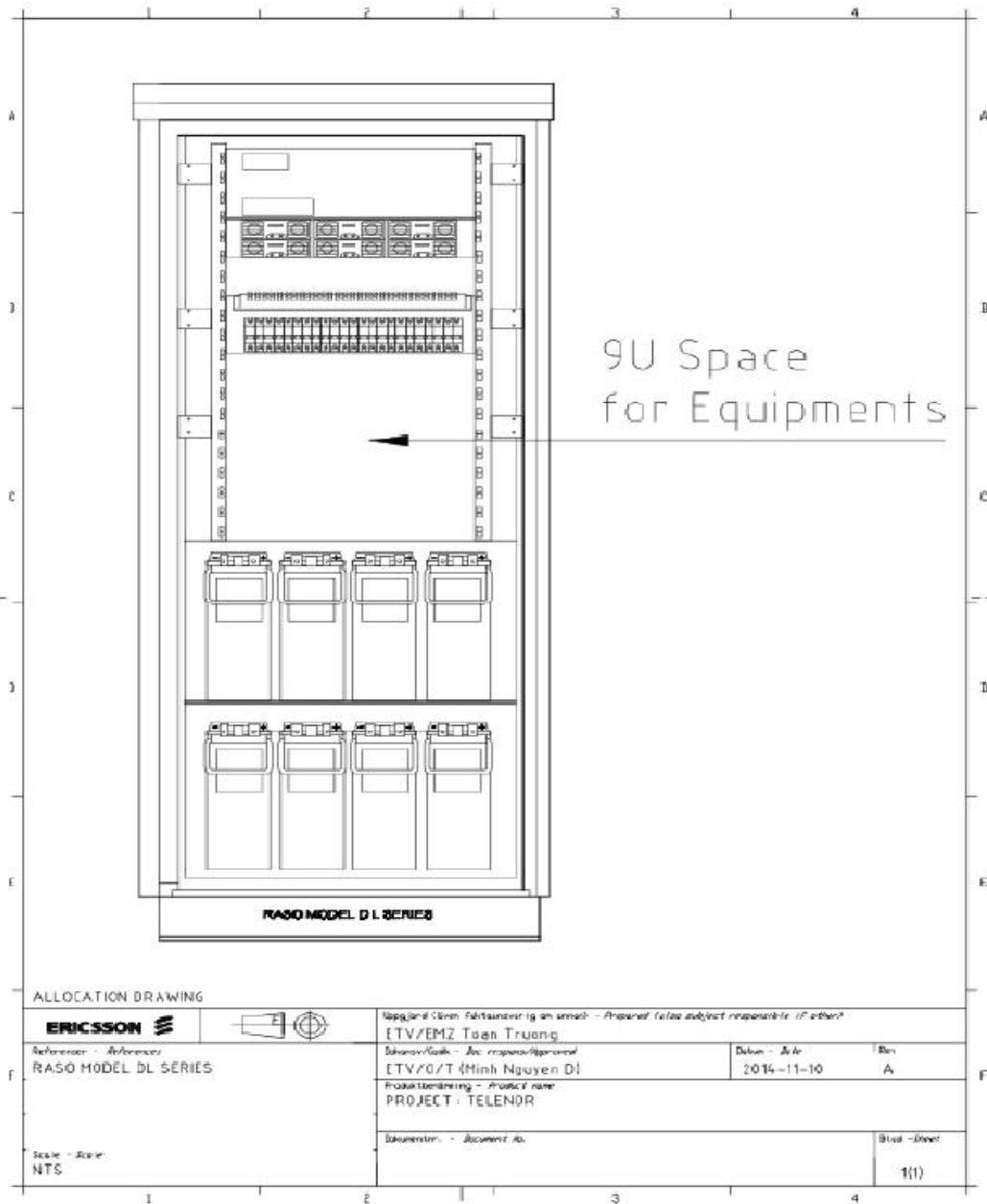
PA3 2014-07-28

Prepared (also subject responsible if other) EMZ Kyaw Htwe Naing		Document No. 193 26-IPA 166 0025 Uen		
Doc respons/Approved EMZ Manoj Kumar A	Checked	Date 2018-07-26	Rev. A	File SDD_MD1131_Rev.A

Project: Telenor Myanmar
Site: MD1131

Geographical coordinates
Address

N 21° 58' 36.3" - E 96° 4' 42.4"
Bet (30x31) Street,Bet (83x84) Street,Aung Nan Yeik
Thar West Ward,Chan Aye Thar San Township



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Doc respons/Approved EMZ Manoj Kumar A	Checked	Date 2018-07-26	Rev. A	File SDD_MD1131_Rev.A

Project: Telenor Myanmar
Site: MD1131

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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Doc respons/Approved EMZ Manoj Kumar A	Checked	Date 2018-07-26	Rev. A	File SDD_MD1131_Rev

Project: Telenor Myanmar
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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: MD1131

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 Kyaw Htwe Naing		Document No. 176 27-IPA 166 0025 Uen		
Doc respons/Approved EMZ Manoj Kumar A	Checked	Date 2018-07-26	Rev. A	File SDD_MD1131_Rev.A

Project: **Telenor Myanmar**
Site: **MD1131**

MANPOWER	NOS.
1 Site Supervisor	1
2 Team Leader	2
3 Technician	2
4 Laborers	1
5 Others	

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

EQUIPMENT USED	NOS.
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 Kyaw Htwe Naing 0		Document No. 1/153 83-IPA 166 0025 Uen		
Doc respons/Approved EMZ Manoj Kumar A	Checked	Date 2018-07-26	Rev. A	File SDD_MD1131_Rev.A

Project: Telenor Myanmar
Site: MD1131

Test Record for Site Installation Verification

Date:	Site Name:
Site No.: MD1131	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.: MD1131	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)

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

Accepted by (Telenor)

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

Test Record for Site Integration

Date:	Site name:
Site No.: MD1131	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.: MD1131	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	RVV65D-C3-3XR	18CN1023229811
Sector B	RVV65D-C3-3XR	18CN1023229812
Sector C	RVV65D-C3-3XR	18CN1023229813

RBS Cabinet

Unit	Product number	Serial
RBS 6601	305/BFL901009	D820582183
DUG 20 01	KDU137569/1	CD3G478874
TCU-02 01	KDU137739/1	TU8XR93922
RRUS 2219 B8,sector A	KRC161670/1	CD3W477604
RRUS 2219 B8,sector B	KRC161670/1	CD3W462546
RRUS 2219 B8,sector C	KRC161670/1	CD3W477593

Remarks: _____

Responsible Engineer (Ericsson)

Name _____ Signature _____ Date _____

Accepted by (Telenor)

Name _____ Signature _____ Date _____

Prepared (also subject responsible if other)

Document No.

EMZ Kyaw Htwe Naing

2/153 83-IPA 166 0025 Uen

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Checked

Date

Rev.

File

EMZ Manoj Kumar A

2018-07-26

A

SDD_MD1131_Rev.A

Project: Telenor Myanmar

Site: MD1131

Test Record for Site Installation Verification

Date:	Site name:
Site No.: MD1131	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
------	-----------	------

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Document No.

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2/153 83-IPA 166 0025 Uen

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Date

Rev.

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2018-07-26

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SDD_MD1131_Rev.A

Project: Telenor Myanmar

Site: MD1131

Test Record for Antenna System Tests

Date:	Site name:
Site No.: MD1131	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.

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2/153 83-IPA 166 0025 Uen

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Checked

Date

Rev.

File

EMZ Manoj Kumar A

2018-07-26

A

SDD_MD1131_Rev.A

Project: Telenor Myanmar

Site: MD1131

Test Record for Site Integration

Date:	Site name:
Site No.: MD1131	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 166 0025 Uen

Doc respons/Approved

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Date

Rev.

File

EMZ Manoj Kumar A

2018-07-26

A

SDD_MD1131_Rev.A

Project: Telenor Myanmar

Site: MD1131

Test Record for Site Hardware Status

Date:	Site name:
Site No.: MD1131	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
694-960/2x1695-2690 MHz-65°	RVV65D-C3-3XR	18CN1023229811
694-960/2x1695-2690 MHz-65°	RVV65D-C3-3XR	18CN1023229812
694-960/2x1695-2690 MHz-65°	RVV65D-C3-3XR	18CN1023229813

RBS Cabinet

Unit	Product number	Serial
RBS 6601	305/BFL901009	C970007497
Baseband 5216	KDU137925/31	CD3M307906
Baseband 5216	KDU137925/31	CD3T751160
RRUS 2219 B1,sector A	KRC161622/1	CD3T886499
RRUS 2219 B1,sector B	KRC161622/1	CD3T886501
RRUS 2219 B1,sector C	KRC161622/1	CD3T886500
RRUS 2219 B3,sector A	KRC161619/1	CD3X241824
RRUS 2219 B3,sector B	KRC161619/1	CD3X241822
RRUS 2219 B3,sector C	KRC161619/1	CD3X241821

Remarks:

Responsible Engineer (Ericsson)

Name	Signature	Date
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Accepted by (Telenor)

Name	Signature	Date
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PA3 2014-07-28

Prepared (also subject responsible if other) EMZ Kyaw Htwe Naing		Document No. 1/193 32-IPA 166 0025 Uen		
Doc respons/Approved EMZ Manoj Kumar A	Checked	Date 2018-07-26	Rev. A	File SDD_MD1131_Rev.A

Project: Telenor Myanmar
Site: MD1131 MD1131 -

<u>UNIT</u>	<u>PRODUCT CODE</u>	<u>REV</u>	<u>SERIAL No.</u>	<u>MFG.DATE</u>
GSM 900				
RBS 6601	305/BFL901009		D820582183	
DUG 20 01;Digital Unit	KDU137569/1		CD3G478874	
TCU 02 01;Transport Con. Unit	KDU137739/1		TU8XR93922	
RRUS 2219 B8,sector A	KRC161670/1		CD3W477604	
RRUS 2219 B8,sector B	KRC161670/1		CD3W462546	
RRUS 2219 B8,sector C	KRC161670/1		CD3W477593	
WCDMA 2100				
RBS 6601	305/BFL901009		C970007497	
Baseband 5216;Digital Unit	KDU137925/31		CD3M307906	
Baseband 5216;Digital Unit	KDU137925/31		CD3T751160	
RRUS 2219 B1,sector A	KRC161622/1		CD3T886499	
RRUS 2219 B1,sector B	KRC161622/1		CD3T886501	
RRUS 2219 B1,sector C	KRC161622/1		CD3T886500	
RRUS 2219 B3,sector A	KRC161619/1		CD3X241824	
RRUS 2219 B3,sector B	KRC161619/1		CD3X241822	
RRUS 2219 B3,sector C	KRC161619/1		CD3X241821	
ANTENNA				
Sec1- 694–960/2x1695–2690 MHz-65° RVV65D-C3-3XR			18CN1023229811	
Sec2- 694–960/2x1695–2690 MHz-65° RVV65D-C3-3XR			18CN1023229812	
Sec3- 694–960/2x1695–2690 MHz-65° RVV65D-C3-3XR			18CN1023229813	
CABINET				
EAB-ESR4856BAS	DPR 2900C		VI164710835W0	
EAB-ESR4856BAS	DPR 2900C		VI162407300W0	
ESOA300FBG10	ESOA300FBG10		HY5175000063WE	

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EMZ Kyaw Htwe Naing		PHT-09:0001-IPA 166 0025 Uen		
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EMZ Manoj Kumar A		2018-07-26	A	SDD_MD1131_Rev.A

Project: **Telenor Myanmar**Site: **MD1131****Site Location****Tower View**

PA3 2014-07-28

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Project: **Telenor Myanmar**
Site: **MD1131**

Vertical Cable Ladder



Horizontal Cable Ladder



Antenna Cell A



Antenna Cell B



PA3 2014-07-28

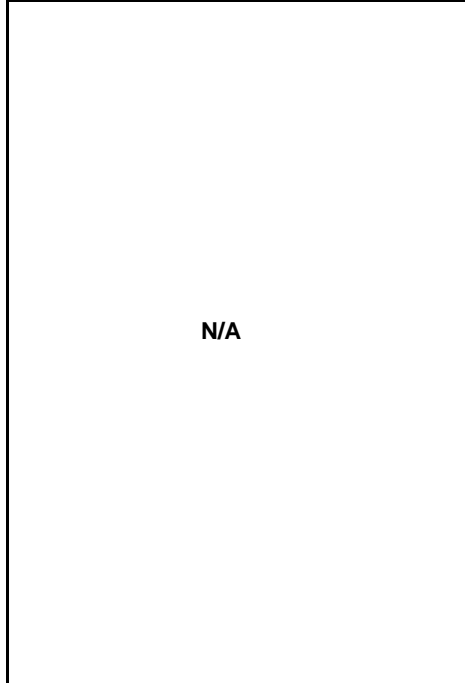
Prepared (also subject responsible if other) EMZ Kyaw Htwe Naing		Document No. PHT-09:0001-IPA 166 0025 Uen		
Doc respons/Approved EMZ Manoj Kumar A	Checked	Date 2018-07-26	Rev. A	File SDD_MD1131_Rev.A

Project: **Telenor Myanmar**
Site: **MD1131**

Antenna Cell C

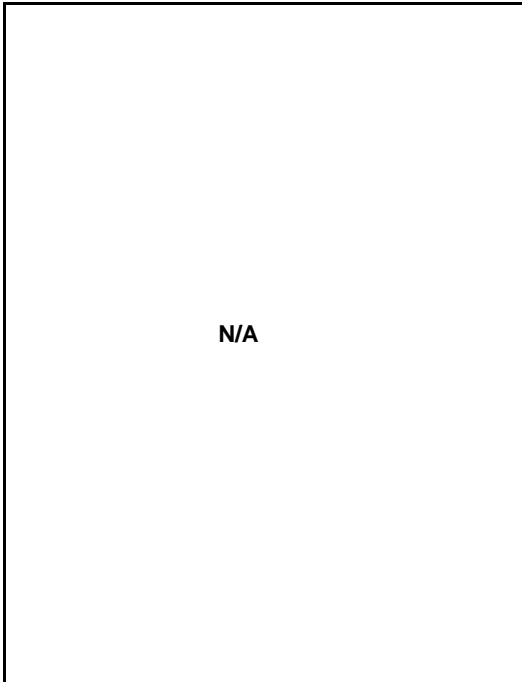


RCU Cell A



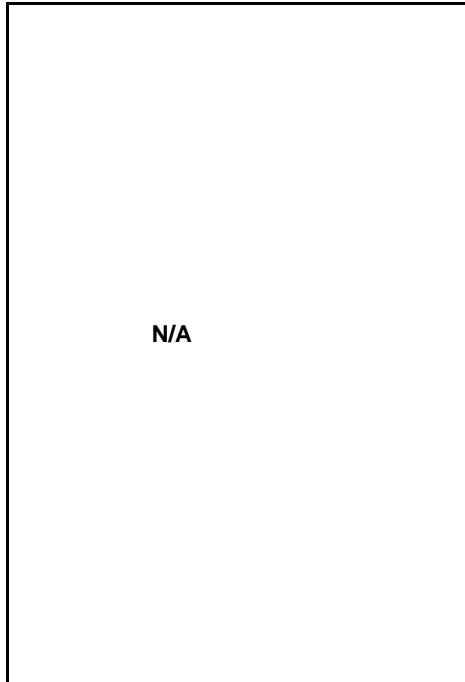
N/A

RCU Cell B



N/A

RCU Cell C



N/A

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Doc respons/Approved EMZ Manoj Kumar A	Checked	Date 2018-07-26	Rev. A	File SDD_MD1131_Rev.A

Project: **Telenor Myanmar**
Site: **MD1131**

RRUS 2219 B3 Cell A



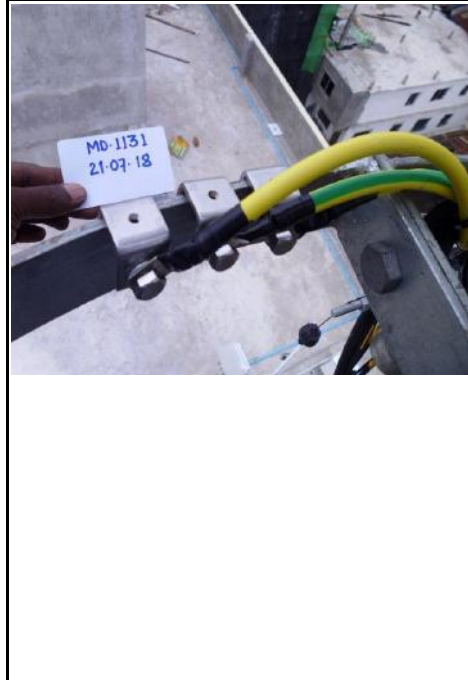
RRUS 2219 B3 Cell B



RRUS 2219 B3 Cell C



Earth Bar for RRU



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Doc respons/Approved EMZ Manoj Kumar A	Checked	Date 2018-07-26	Rev. A	File SDD_MD1131_Rev.A

Project: **Telenor Myanmar**
Site: **MD1131**

RRUS 2219 B1 Cell A



RRUS 2219 B1 Cell B



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EMZ Manoj Kumar A		2018-07-26	A	SDD_MD1131_Rev.A

Project: **Telenor Myanmar**
Site: **MD1131**

RRUS 2219 B1 Cell C



Earth Bar for RRU



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Doc respons/Approved EMZ Manoj Kumar A	Checked	Date 2018-07-26	Rev. A	File SDD_MD1131_Rev.A

Project: **Telenor Myanmar**
Site: **MD1131**

RRUS 2219 B8 Cell A



RRUS 2219 B8 Cell B



RRUS 2219 B8 Cell C



Earth Bar for RRU

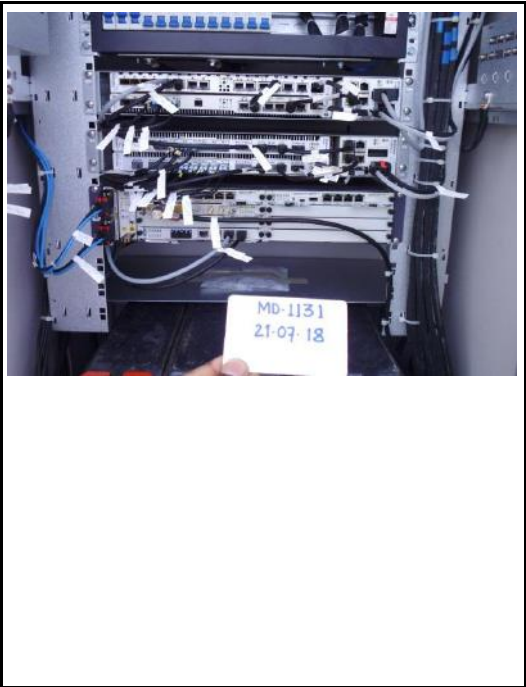


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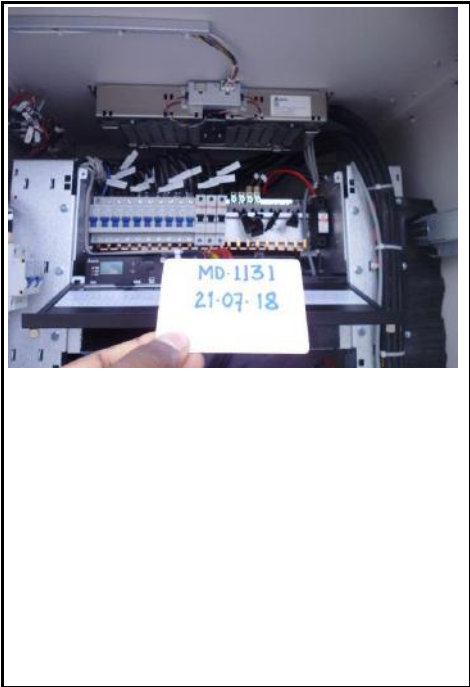
Prepared (also subject responsible if other)		Document No.		
EMZ Kyaw Htwe Naing		PHT-09:0001-IPA 166 0025 Uen		
Doc respons/Approved	Checked	Date	Rev.	File
EMZ Manoj Kumar A		2018-07-26	A	SDD_MD1131_Rev.A

Project: Telenor Myanmar
Site: MD1131

DUG + BB 5216



DCDU

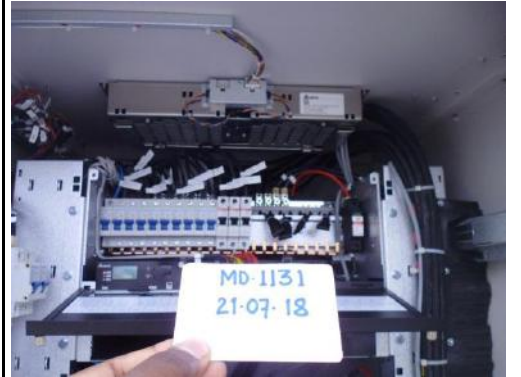


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Doc respons/Approved EMZ Manoj Kumar A	Checked	Date 2018-07-26	Rev. A	File SDD_MD1131_Rev.A

Project: **Telenor Myanmar**
Site: **MD1131**

External Alarm connection (with clear Label)



External Alarm connection (with clear Label)



Cable inlet outdoor



Cable inlet outdoor



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Doc respons/Approved EMZ Manoj Kumar A	Checked	Date 2018-07-26	Rev. A	File SDD_MD1131_Rev.A

Project: **Telenor Myanmar**
Site: **MD1131**

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 2018-07-26	Rev. A	File SDD_MD1131_Rev.A

Project: **Telenor Myanmar**
Site: **MD1131**

Site Cleaned Photos



Site Cleaned Photo



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Doc respons/Approved EMZ Manoj Kumar A	Checked	Date 2018-07-26	Rev. A	File SDD_MD1131_Rev.A

Project: Telenor Myanmar
Site: MD1131

NETWORK ELEMENT ACCEPTANCE CERTIFICATE

This is to certify that Ericsson Radio Systems AB has delivered, installed and tested the Network Elements on site **MD1131** 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 0025 Uen rev A
##

Date:

for

Telenor
(The Buyer)

Name:

Title:

for

Ericsson Myanmar
(The Vendor)

Name:

Title: