

# RADIO SITE DESIGN DOCUMENTATION

Region : North MG1641

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CAPTION LIST	Document List	
Occument No. 001 53-IPA 166 0352 Uen Date Rev.		
2019-07-04 A	Site Documents	2
SITE		
DESIGN		
DOCUMENT	Plant Specification	;
telenor	Cabling Diagram	
Telenor Myanmar MG1641	External Alarm	
Magway	External Alarm	·
G900+U2100+L2100	Check Lists	
	Test Documents	
	Acceptance Certificate	



## **DOCUMENT LIST**



Prepared (also subject responsible if other)
EMZ Zaw Myo Aung
Doc respons/Approved
EMZ Manoj Kumar A Document No. 001 51-IPA 166 0352 Uen Checked Date Rev. SDD\_MG1641\_Rev.A 2019-07-04

Project: **Telenor Myanmar** 

Site: MG1641

	Document name	Document number	Rev.
	SITE DESIGN DOCUMENT	001 53-IPA 166 0352 Uen	Α
1	DOCUMENT LIST Document List	001 51-IPA 166 0352 Uen	Α
2 2.1 2.2 2.3 2.4 2.5	SITE DOCUMENTS Configuration Data RBS Situating Plan Antenna Placement Information Grounding Information Cable way Drawing	1/127 04-IPA 166 0352 Uen 153 38-IPA 166 0352 Uen 153 12-IPA 166 0352 Uen 193 34-IPA 166 0352 Uen 193 24-IPA 166 0352 Uen	A A A A
3 3.1	PLANT SPECIFICATION Plant Specification (RBS)	1/127 11-IPA 166 0352 Uen	Α
4 4.1 4.2 4.3	CABLING DIAGRAM Cabling Diagram (power and earth) Cabling Diagram (signal and antenna) Allocation Drawing (Cabinet)	1/193 18-IPA 1/356 07 Uen 2/193 18-IPA 1/356 08 Uen 193 26-IPA 1/356 09 Uen	A A A
5	EXTERNAL ALARM Allocation Table	193 19-IPA 166 0352 Uen	Α
6 6.1 6.2	CHECK LISTS Installation Check List OHS Check List	153 11-IPA 166 0352 Uen 176 27-IPA 166 0352 Uen	A A
7 7.1 7.2	TEST DOCUMENTS RBS Test Report - G900 RBS Test Report - W2100	1/153 83-IPA 166 0352 Uen 2/153 83-IPA 166 0352 Uen	A A
8	ACCEPTANCE CERTIFICATE Product List Site Photos Acceptance Certificate	1/193 32-IPA 166 0352 Uen PHT-09:0001-IPA 166 0352 Uen 179 61-IPA 166 0352 Uen	A A A





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≝ EMZ Manoj Kumar A		2019-07-04	Α	SDD_MG1641_Rev.A

**Project:** Telenor Myanmar

Site: MG1641

#### 1 GENERAL SITE DATA

1.1 Geographical coordinates N 21° 23′ 39.62″ - E 95° 10′ 34.28″

1.2 Region North

1.3 Address Ma Gyi Pin Pu Village Group, Nan Tal Village

,Pakokku Township.

14/00144

340 W (MU) 300 W (RRUs)

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 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)	3
3.6	RRU type	RRUS 12 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

#### 5 TECHNICAL DATA CABINET

3.14 Heat dissipation (maximum)

0.4

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





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Site: MG1641

#### **6 TECHNICAL DATA RBS ANTENNA SYSTEM**

6.1	Antenna height (m.a.g.l.)	A = 53.5	B = 53.5	C=53.5
6.2	Antenna directions	A= 10°	B= 210°	C= 290°
6.3	Mech/Elec Downtilt, deg	$A = 2^{0}/0^{0}$	$B=2^{0}/0^{0}$	$C = 2^{0}/0^{0}$
6.4	Quantity of RRU	6 pcs		
6.5	Antenna type	ADU451807	7v01	
6.6	Antenna model	DXX-790-9	60/1710-2180	-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 1	50 km/h)
		Lateral:	470 (at 1	50 km/h)
		Rear:	1200 (at 1	50 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



#### **SITUATING PLAN**



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153 38-IPA 166 0352 Uen

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**Project:** Telenor Myanmar

Site: MG1641

Geographical coordinates

Address

N 21° 23' 39.62" - E 95° 10' 34.28" Ma Gyi Pin Pu Village Group,Nan Tal Village





# ANTENNA PLACEMENT INFORMATION



88	Prepared (also subject responsible if other)	Document No.			
4-07-	EMZ Zaw Myo Aung		153 12-IPA 166 0352 Uen		
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**Project:** Telenor Myanmar

Site: MG1641

Geographical coordinates

Address

N 21° 23′ 39.62″ - E 95° 10′ 34.28″

Ma Gyi Pin Pu Village Group, Nan Tal Village

,Pakokku Township.

TSSR RND Info	Bearing	Antenna Mid Ht	Tower/Pole Hight (m)	Tower Type	Building High	M Tilt	E Tilt
MG1641_C01_1	10	53.5	60	GBT 🗸		2	0
MG1641_C01_2	210	53.5	60	GBT 🗸		2	0
MG1641_C01_3	290	53.5	60	GBT V		2	0



#### **GROUNDING INFORMATION**

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4-07-	EMZ Zaw Myo Aung		193 34-IPA 166 0352 Uen		
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Project: Telenor Myanmar

Site: MG1641

Geographical coordinates N 21° 23′ 39.62″ - E 95° 10′ 34.28″

Address Ma Gyi Pin Pu Village Group,Nan Tal Village

,Pakokku Township.

No Grounding info is available.



#### **CABLE WAY DRAWING**

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	telenor

			CABLE WAT	DLAMIIM	3
28	Prepared (also subject responsible if other)		Document No.		
4-07-	EMZ Zaw Myo Aung		193 24-IPA 16	6 0352 U	en
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Site: MG1641

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Address Ma Gyi Pin Pu Village Group,Nan Tal Village

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Not Available.







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È EMZ Zaw Myo Aung		1/127 11-IPA 16	6 0352 Ue	en
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Project: Site: Telenor Myanmar MG1641

	Product number	Description	Quantity
1 1.1 1.2 1.4 1.5	RBS 6601 for 2G 1/BFL901009/4 KDU137925/31 KRC11871/2 SXK1250245/1 EMZ-RRU-PC	EQUIPPED MAGAZINE/SUP 6601; EQUIPPED MAG PROCESSOR UNIT/Baseband 5216; Digital Un TRANSCEIVER/RRUS 01 B8;RADIO UNIT POLE MOUNTING FIXTURE CEU Power Connector for RRU	1 1 3 3 3
1 2.1 2.2 2.3 2.4 2.6	RBS 6601 for 3G (W21.1) 1/BFL901009/4 KDU137925/31 KRC161297/2 SXK1250245/1EMZ-RRU-PC	EQUIPPED MAGAZINE/SUP 6601; EQUIPPED MAG PROCESSOR UNIT/Baseband 5216; Digital Un TRANSCEIVER/RRUS 12 B1;Radio Unit POLE MOUNTING FIXTURE CEU Power Connector for RRU	1 1 3 3 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	4050228	AISG Cable For Outdoor Use,5m,AISG VF 8PIN,AISG 4core Cable-24AWG(2C)+18AWG(2C),AISG VM 8PIN,Black	3
4.2	04045920	Single cable,AISG cable,0.5m,RC8SM(S)-	3
4.3	27150136	Antenna Feeder Accessories,RCU136,Agisson RET Antenna RCU,Antenna,10~30V	6







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Project: Telenor Myanmar

Site: MG1641

7.1 RPM2531610/70M

5	CABINET		
5.6	EAB-ESOF009EAE01	1.2M ALUMINUM FAN COOLED CAB 16U SPACE	1
6	INSTALLATION MATERIAL	.s	
6.1	TFL492324/500M	POWER CABLE/2X6 MM2;UL;LSOH;ALU+CU-SCREE	5 M
6.3	TSR95170/3	JUMPER CABLE/COMMSCOPE 1/2" JUMPER CABLE	12
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	445
7	OTICAL CARLE		

CABLE WITH CONNECTOR/2F LC(FullAXS)-LC S



#### **CABLING DIAG. ( POWER AND EARTH )**



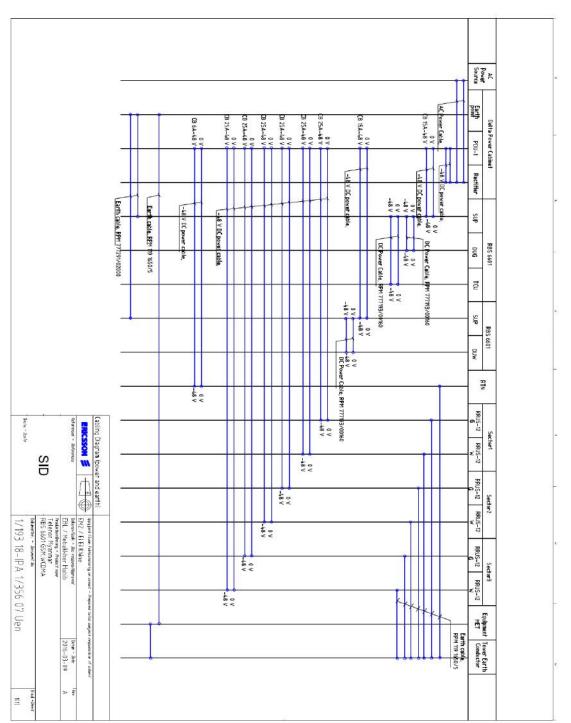
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**Project:** Telenor Myanmar

Site: MG1641

Geographical coordinates Address N 21° 23′ 39.62″ - E 95° 10′ 34.28″ Ma Gyi Pin Pu Village Group,Nan Tal Village

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**CABLING DIAG. (SIGNAL AND ANTENNA)** 



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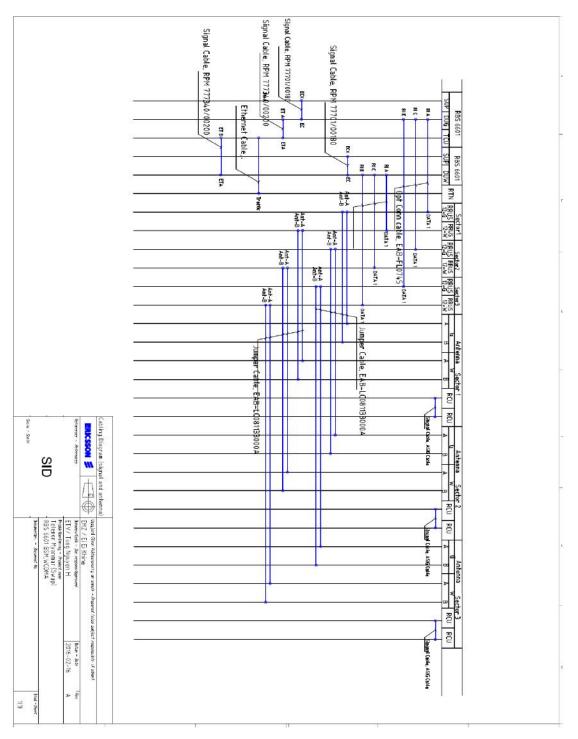
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Geographical coordinates Address N 21° 23' 39.62" - E 95° 10' 34.28" Ma Gyi Pin Pu Village Group,Nan Tal Village

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#### **ALLOCATION DRAWING (CABINET)**



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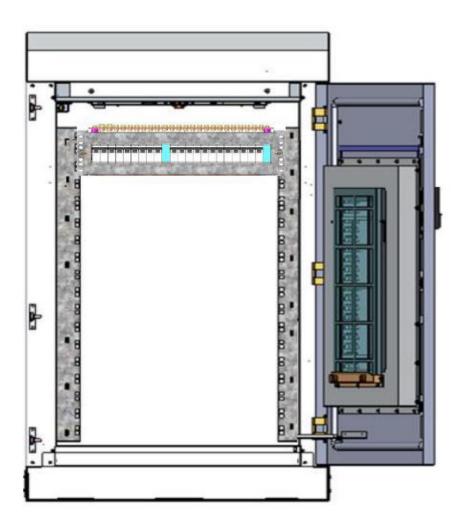
Site: MG1641

Geographical coordinates

Address

N 21º 23' 39.62" - E 95º 10' 34.28" Ma Gyi Pin Pu Village Group,Nan Tal Village

,Pakokku Township.



6140 New Cabinet



#### **ALLOCATION DRAWING**

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7-28	Prepared (also subject responsible if other)		Document No.		
14-0	EMZ Zaw Myo Aung		193 19-IPA 166	0352 Uen	
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**Project:** Telenor Myanmar

Site: MG1641

#### **ALLOCATION TABLE: ALARMS**

## 1 RBS 6601 for 2G (G900)

SI.	Alarm	Туре	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

<sup>\*\*</sup> Need to mark from site after alarm configuration



#### **INSTALLATION CHECK LIST- RBS**



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Date

2019-07-04

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**Project:** Telenor Myanmar

Site: MG1641

#### **INSTALLATION CHECK LIST**

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

INSTALLATION CHECK LIST OK = Correctly installed, NOK = Not Correctly installed	ed, N/A =	= Not ap	plicable	e
A. CABINET	ОК	NOK	N/A	COMMENTS
Cabinet clean and undamaged	ОК			
Cabinet installed according to SID	ОК			
Cable lead-in (cable gland)	OK	†		
4. PDUs connected to correct fuse	OK			
5. DC cable for RRUs and MU properly connected	ОК			
6. Grounded, washers in place and bolts tightened	ОК			torque of 15 Nm
7. Grounding cable insulation undamaged	ОК			·
	•	•		
B. MAIN UNIT (MU)	OK	NOK	N/A	COMMENTS
Equipment clean and undamaged	OK			
Installed according to allocation drawing	OK			
3. Minimum 50mm between MU & cabinet door	OK			
4. Minimum 50 mm at the rear of MU	OK			
Power cable connected to correct fuse	OK			
All cables in the front properly connected	OK			
<ol><li>All screws tightened to correct torque</li></ol>	OK			
No cables damaged	OK			
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	ок			
removal of the main unit without damaging or	U.V.			
C. REMOTE RADIO UNIT (RRU)	OK	NOK	N/A	COMMENTS
RRUS clean and undamaged	OK			
RRU installed as specified in SID	OK			
3. RRU properly aligned horizontally & vertically	OK			
RRU mounting bracket tightened properly	OK			torque of 41 Nm
5. RRU Grounding installed and connected to MET	OK			
Connector jumper tightened and sealed	OK			torque of 25 Nm
7. Installation cover for optical cable tightened	OK			torque of 1.7 Nm
RET cables routed correctly and tightened	OK			
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	ок			
plugs are installed on unused ports?		1		
14 RET cable is correctly connected to ALD ctrl	ок			
connector and tightened	J.,			



#### **INSTALLATION CHECK LIST- RBS**



Date

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Project: **Telenor Myanmar** 

MG1641

Name

Site: MG1641				
D. ANTENNA SYSTEM - RADIO	ОК	NOK	N/A	COMMENTS
Antenna system installed as specified in SID	OK	- TOIL	14,7 1	
2. Height, Azimuth and Tilt checked	OK			
No cables or connectors damaged	OK			
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			
RET cable correctly connected & tightened	OK			
Optical cables properly connected and strapped	OK			
Minimum bending of the optical cables correct	OK			radius of 40mm
11. Antenna support bonded to tower	OK			Total Control Control
12. Tower legs earthed (minimum 2 legs)	OK			
		1		
E. CONCLUDING ROUTINES	oĸ	NOK	N/A	COMMENTS
. SID marked for as-built	OK			
Labeling of the external cables	oĸ			
Painting of cabinet scratching	OK			
Site area cleaned	OK			
Problems/Comments (Refer to applicable activity nun	nbers)			
Responsible Engineer (Ericsson)				
Name	Signatu	uro.		Data
variie	Signatu	16		Date
Accepted by (Telenor)				

Signature



# CHECK LIST (OHS)



		CITECK EIST	(0113)	
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Site: MG1641

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
10 Tie Cutter	2
11 U-ring Wrench -8~32	1 Set
12 Socket Sets	1 Set

12	12 So	1 Set			
WORK ACTIVITIES:					
Health & Safety Observation/Check list	lok	NOK	IN/A	Comments	
1 Safety Shoe	OK	11011	1 47.7		
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):	Checked and Verified by:	Ericson Myanmar Co. Ltd.
	,	
Olamat was	0:	
	Signature:	
Print Name:	Print Name:	
Date:	Date:	
	-	







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14-07	EMZ Zaw Myo Aung	0		1/153 83-IPA 16	6 0352 Ue	en
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PA3	EMZ Manoj Kumar A			2019-07-04	Α	SDD MG1641 Rev.A

Project: Site: Telenor Myanmar MG1641

# **Test Record for Site Installation Verification**

Date:	Site Name:				
Site No.:	Cell Configuration	on:			
MG1641	G900	RBS	6601		
RBS Type:	Testers Name:				
RBS 6601					
NE Standalone test	Pass	Fail	N/A	Remark	
Incoming voltage verified	٧				
Circuit breaker with correct rating	٧				
Cable connection inspected	٧				
Cables properly labeled	٧				
IDB parameter set	٧				
Fault Status Read	٧				
Internal alarm tested	٧				
External alarm tested	٧				
Antenna system test	٧				
Notes:					
Responsible Engineer (Ericsson)					
Name			Signature	<del>)</del>	Date
Accepted by (Telenor)					
Name			Signature	<del>)</del>	Date

# **Test Record for Antenna System Tests**

Date:	Site name:			
Site No.:	Cell Configu	uration:		
MG1641	GSM90			
Testers Name:	COMISO	0 1100 0001		
RBS Type:	Serial Num	ber (Site Master):		
RBS 6601				
stallation 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				
sponsible Engineer (Ericss	on)			
me		Signature		Date
cepted by (Telenor)				
me		Signature		Date

# **Test Record for Site Integration**

Date:			Site name:									
Date:			Site name.									
Site No.:			Cell Configura	ation:								
MG1641			GSM900		RBS 660	)1						
RBS Type:			Testers Name	e:								
RBS 6601												
				ΙΡ					VL	ΔΝ		
Abis over	IP								V L/	11.4		
OAM	··											
						I						
<b>VOICE, SMS</b>	, MMS, SP	EED TE	ST									
											SPEED TE	ST
	MO/MT Vo	oice Call	SMS		MMS		Do	wn	aod		Upload	
Cell 1												
Cell 2												
Cell 3												
Cell 4												
Cell 5												
Cell 6												
HANDOVED	TEOT											
HANDOVER		· C	D to A		D to C	C to A			C to D		Domori	
A to B	A to		B to A		B to C	C to A	١		C to B		Remark	ζ
EXTERNAL A	ΔΙ ΔΡΜ ΤΕ	ST										
Alm#	Designation					Туре	Pa	SS	Fail		Remarks	
01 0						Closing						
02 0						Breaking						
03 0						Broaking						
04 0												
05 0												
06 0												
07 0												
08												
00							<u> </u>		<u> </u>			
Remarks:												
Responsible I	Engineer (E	ricsson)										
Name					Signa	ture						Date
Accepted by (	Telenor)											
Name					Signa	ture						Date
					_							

# **Test Record for Site Hardware Status**

Date:	Site name:							
Site No.:	Cell Configuration:							
MG1641	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	can't read serial						
Sector B	ADU451807v01	can't read serial						
Sector C	ADU451807v01	can't read serial						
RBS Cabinet								
Unit	Product number	Serial						
RBS 6601	1/BFL901009/4	D821325345						
DUG 20 01	KDU137569/1	CD3H355538						
TCU-02 01	KDU137739/1	TU8XV92093						
RRU 01 B8,sector A	KRC11871/2	CD3D470169						
RRU 01 B8,sector B	KRC11871/2	D820802691						
RRU 01 B8,sector C	KRC11871/2	CD3E583536						
Remarks:								
rtomanto.								
Responsible Engineer (Ericsso	n)							
	,							
Name	Signature	Date						
Accepted by (Telenor)								

Signature

Date

Name







	ERICSSON #		TEST REPORT	RBS - W2	telenor
7-28	Prepared (also subject responsible if other)		Document No.		
14-0	EMZ Zaw Myo Aung		2/153 83-IPA 16	6 0352 Ue	en
		Checked	Date	Rev.	File
PA3	EMZ Manoj Kumar A		2019-07-04	Α	SDD_MG1641_Rev.A

Project: **Telenor Myanmar** 

Site: MG1641

# **Test Record for Site Installation Verification**

Date:	Site name:	
Site No.: MG1641	Cell Configuration: W2100 2/2/2	
RBS Type: RBS 6601	Testers Name:	
KBS 6601		
NE Standalone test	Pass Fail N/A Rem	nark
Incoming voltage verified	▼ □ □ _	
Circuit breaker with correct rating	☑ □ □	
Cable connection inspected	✓ 🗆 🗆	
Cables properly labeled	V 🗆 🗆	
Check configuration	▼ □ □	
Fault Status Read	V 🗆 🗆	
Internal alarm tested	V 🗆 🗆	
External alarm tested	▼ □ □ _	
Antenna system test	☑ □ □	
Notes:		
Responsible Engineer (Ericsson)		
Name	Signature	Date
Accepted by (Telenor)		
Name	Signature	Date







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PA3	EMZ Manoj Kumar A		2019-07-04	Α	SDD_MG1641_Rev.A

Project: Site: Telenor Myanmar MG1641

Date:	Site name:				
Site No.:	Cell Configuration:				
MG1641	W2100	2/2/2			
Testers Name:					
RBS Type:	Serial Number (S	Site Master):			
RBS 6601					
Installation check					
	Sector 1				
Jumper Marking :	Α	В			
Jumper Length:	3	3	m		
VSWR:			< 1.4		
DTF:			< 1.05		
Cable Attenuation :			db		
	Sector 2				
Jumper Marking:	A	В			
Jumper Length:	3	3	m		
VSWR:			< 1.4		
DTF:			< 1.05		
Cable Attenuation :			db		
	Sector 3				
Jumper Marking :	A	В			
Jumper Length :	3	3	m		
VSWR:	3	3	< 1.4		
DTF:					
			< 1.05		
Cable Attenuation :			db		
D					
Responsible Engineer (Ericsso	n)				
Name		Signature		Date	
Accepted by (Telenor)					
Name		Signature		Date	







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Si

		Test	Record for	Site Inte	gration				
ate:			Site name:						
ite No.:			Cell Configura	tion:					
/IG1641			W2100	2/2/2					
BS Type:			Testers Name:						
RBS 660	1								
		ſ			IP				Checked
NODE	В								
OAM									
RNC	Name								
OICE, V	IDEO, S	MS, MMS, SI	PEED TEST RIGINATING	MORII E TI	ΕΡΜΙΝΙΔΤΙΝ	IG	ITHROI	ICHI	PUT/SPEED
Sector	Carrier	Voice call	Video call		MMS		Downlo		Upload
Sector 1	1								2  - 1 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5
sector i									
Sector 2	2								
	1								
Sector 3	2								
Sector 4	1								
	2								
Sector 5	2								
040	1								
Sector 6	2								
IANDOV	ER TES	т							
1 to		1 to 3	2 to 1	2 to 3	3 to 1 3		3 to 2 Remark		Remark
YTEDN	ΛΙ ΛΙ ΛΕ	RM TEST							
Alm#		gnation			Туре	Pass	Fail	R	emarks
01	B001	gridion			Closing	1 400	ı un		omano
02					Breaking				
03									
04									
05 06									
07									
08									
Remarks					•	•			
Responsi	ble Engin	eer (Ericsson)	)						
lame				Signa	ature				Dai
				3					







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7-28	Prepared (also subject responsible if other)		Document No.		
14-07	EMZ Zaw Myo Aung		2/153 83-IPA 16	6 0352 Ue	en
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PA3	EMZ Manoj Kumar A		2019-07-04	Α	SDD_MG1641_Rev.A

Project: **Telenor Myanmar** 

Site: MG1641

## **Test Record for Site Hardware Status**

Date:	Site name:
Site No.:	Cell Configuration:
MG1641	W2100 2/2/2
RBS Type:	Testers Name:
RBS 6601	

## **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-l ADU451807v01	can't read serial
DXX-790-960/1710-2180-65/65-17.5i/18	.5i-1 ADU451807v01	can't read serial
DXX-790-960/1710-2180-65/65-17.5i/18	.5i-1 ADU451807v01	can't read serial

#### **RBS Cabinet**

Unit	Product number	Serial
RBS 6601	1/BFL901009/4	C970003869
BB5216	KDU137925/31	CD3N560525
RRU 12 B1,sector A	KRC161297/2	D823401296
RRU 12 B1,sector B	KRC161297/2	D821221604
RRU 12 B1,sector C	KRC161297/2	D821161798

Remarks:		
Responsible Engineer (Ericss	on)	
Name	Signature	Date
Accepted by (Telenor)		
Name	Signature	Date



#### PRODUCT LIST



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1/193 32-IPA 166 0352 Uen

Date

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2019-07-04 A SDD\_MG1641\_Rev.A

**Project:** Telenor Myanmar

Site: MG1641 - MG1641 -

<u>UNIT</u>	PRODUCT CODE REV		SERIAL No.	MFG.DATE	
			_		
GSM 900					
RBS 6601	1/BFL901009/4		D821325345		
DUG 20 01;Digital Unit	KDU137569/1		CD3H355538		
TCU 02 01;Transport Con. Unit	KDU137739/1		TU8XV92093		
RRU 01 B8, sector A	KRC161297/2		CD3D470169		
RRU 01 B8, sector B	KRC161297/2		D820802691		
RRU 01 B8, sector C	KRC161297/2		CD3E583536		
WCDMA 2100					
RBS 6601	1/BFL901009/4		C970003869		
Baseband	KDU137925/31		CD3N560525		
RRUS 12 B1,sector A	KRC161297/2		D823401296		
RRUS 12 B1,sector B	KRC161297/2		D821221604		
RRUS 12 B1,sector C	KRC161297/2		D821161798		
ANTENNA	05 1 A DI 145 100 7 01				
Sec1- DXX-790-960/1710-2180-65/			can't read serial		
Sec2- DXX-790-960/1710-2180-65/			can't read serial		
Sec3- DXX-790-960/1710-2180-65/65-1ADU451807v01			can't read serial		
RET					
RCU136 Cell A GSM	27150136		HWB65005888514G42ER		
RCU136 Cell B GSM	27150136		HWB207738951610U3E1		
RCU136 Cell C GSM	27150136		HWB6259376391436620		
RCU136 Cell A UMTS	27150136		HWB3870190241553AJ8		
RCU136 Cell B UMTS	27150136		HWB96972167314C42CE		
RCU136 Cell C UMTS	27150136		HWB0852852941532SCK		
CABINET					
	Type I Cobinet		7.04.536.044.00\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		
EAB-ESOF009EAE01	Type I Cabinet		ZA2153601189W0		





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EMZ Manoj Kumar A Document No. PHT-09:0001-IPA 166 0352 Uen Checked File Date Rev. 2019-07-04 SDD\_MG1641\_Rev.A

Project: **Telenor Myanmar** 

MG1641 Site:

#### **Site Location**



#### Tower View





65.00	
	telenor

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Project: **Telenor Myanmar** 

Site: MG1641

# **Vertical Cable Ladder**



Antenna Cell A



**Horizontial Cable Ladder** 



Antenna Cell B



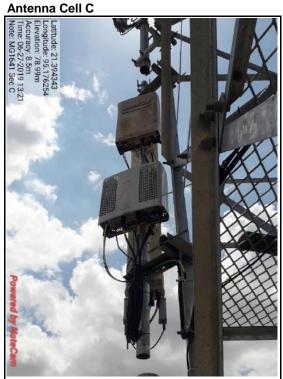




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**Telenor Myanmar** Project:

Site: MG1641



#### RCU Cell B



#### **RCU Cell A**



#### RCU Cell C







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Project: **Telenor Myanmar** 

Site: MG1641







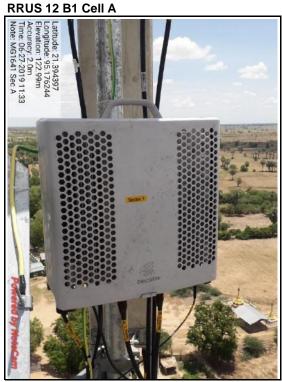
Earth Bar for RRU





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EMZ Manoj Kumar A Document No. PHT-09:0001-IPA 166 0352 Uen Checked Rev. File Date 2019-07-04 SDD\_MG1641\_Rev.A

**Telenor Myanmar** Project: Site: MG1641



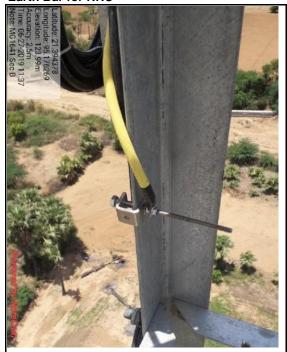
RRUS 12 B1 Cell C



RRUS 12 B1 Cell B



Earth Bar for RRU





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**Telenor Myanmar** Project:

Site: MG1641

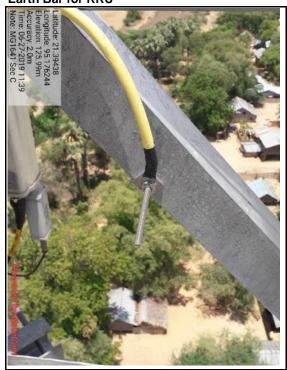




#### RRU01 B8 Cell B



Earth Bar for RRU





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Project: **Telenor Myanmar** 

Site: MG1641





#### DUG+BB5216



#### DCDU





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Project: **Telenor Myanmar** 

Site: **MG1641** 

#### **External Alarm connection (with clear Label)**



Cable inlet outdoor



**External Alarm connection (with clear Label)** 



Cable inlet outdoor





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**Telenor Myanmar** Project:

MG1641 Site:



**Main Earth Bar for Cabinet** 



#### AC Power cable at AC Box



**Earth Bar Cabinet** 







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Project: **Telenor Myanmar** 

Site: MG1641



#### **Site Cleaned Photo**







**Documents Number** 

ω					
7-2	Prepared (also subject responsible if other)		Document No.		
14-0	EMZ Zaw Myo Aung		179 61-IPA 166	0352 Uen	
	Doc respons/Approved	Checked	Date	Rev.	File
PA3	EMZ Manoj Kumar A		2019-07-04	Α	SDD_MG1641_Rev.A

**Project:** Telenor Myanmar

Site: MG1641

#### NETWORK ELEMENT ACCEPTANCE CERTIFICATE

This is to certify that Ericsson Radio Systems AB has delivered, installed and tested the Network Elements on site MG1641 as defined in PO\_NS\_000017 and PO\_NS\_000018

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

**TEST DOCUMENTS** 

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.

RBS 6601 Test Report - G900 RBS 6601 Test Report - W2100 Test Report (TRM Functional)	## 2/153 83-IPA 166 0352 Uen rev A ##
Date:	
for	for
<b>Telonor</b> (The Buyer)	Ericsson Myanmar (The Vendor)
No	No
Name:	Name:
Title:	Title: