

# RADIO SITE DESIGN DOCUMENTATION

Region : North SG1595

ERICSSON #		
CAPTION LIST	Document List	
001 53-IPA 166 0346 Uen Date Rev.		
2019-06-25 A		
	Site Documents	
SITE		
INSTALLATION		
DOCUMENT	Plant Specification	
tolonor		
telenor	Cabling Diagram	
Telenor Myanmar		
SG1595	External Alarm	
Sagaing		
G900+U2100	Check Lists	
	Test Documents	
	l est 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 0346 Uen Checked Date Rev. SDD\_SG1595\_Rev.A 2019-06-25

Project: **Telenor Myanmar** 

SG1595 Site:

	Document name	Document number	Rev.
	SITE INSTALLATION DOCUMENT	001 53-IPA 166 0346 Uen	Α
1	DOCUMENT LIST Document List	001 51-IPA 166 0346 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 0346 Uen 153 38-IPA 166 0346 Uen 153 12-IPA 166 0346 Uen 193 34-IPA 166 0346 Uen 193 24-IPA 166 0346 Uen	A A A A
3 3.1	PLANT SPECIFICATION Plant Specification (RBS)	1/127 11-IPA 166 0346 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 0346 Uen	Α
6 6.1 6.2	CHECK LISTS Installation Check List OHS Check List	153 11-IPA 166 0346 Uen 176 27-IPA 166 0346 Uen	A A
7 7.1 7.2	TEST DOCUMENTS RBS Test Report - G900 RBS Test Report - W2100	1/153 83-IPA 166 0346 Uen 2/153 83-IPA 166 0346 Uen	A A
8	ACCEPTANCE CERTIFICATE Product List Site Photos Acceptance Certificate	1/193 32-IPA 166 0346 Uen PHT-09:0001-IPA 166 0346 Uen 179 61-IPA 166 0346 Uen	A A A





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7-2	Prepared (also subject responsible if other)		Document No.		
14-0	EMZ Zaw Myo Aung		1/127 04-IPA 166 0346 Uen		
2	Doc respons/Approved	Checked	Date	Rev.	File
Ą	FMZ Manoi Kumar A		2019-06-25	Α	SDD SG1595 Rev.A

Project: **Telenor Myanmar** 

Site: SG1595

#### **GENERAL SITE DATA** 1

1.1 Geographical coordinates N 22º 54' 18.97" - E 94º 2' 4.74"

12 Region North

1.3 Thang Pho village, Kalay TSW Address

Type of Site Equipment location Floor material Green Field Outdoor cabinet Concrete 1.4 1.5 1.6

#### **TECHNICAL DATA RBS GSM SYSTEM**

0.4	0	0014
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 ka

2.11 Power supply -48V DC

2.12 Power consumption (maximum) 437 W (MU) 300 W (RRUs) 15A + 3x 25A 340 W (MU) 300 W (RRUs) 2.13 Mains circuit breaker 2.14 Heat dissipation (maximum)

#### TECHNICAL DATA RBS WCDMA SYSTEM

2.4	Custom	MCDMA
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
2.0	DDI I time	DDIIC 40 I

RRUS 12 B1 470x190x518 3.6 3.7 RRU type Mechanical Dimensions RRUS (mm) WxDxH Weight for one RRU (kg)
Mechanical Dimensions MU(mm) WxDxH 3.8 22.4 483x355x66 3.9

3.10 Weight for one Main Unit (fully equiped)
3.11 Power supply
3.12 Power consumption (maximum) 10 kg -48V DC 437 W (MU) 300 W (RRUs)

15A + 3x 25A 340 W (MU) 300 W (RRUs) 3.13 Mains circuit breaker 3.14 Heat dissipation (maximum)

#### **TECHNICAL DATA CABINET** 5

Mechanical Dimensions (mm) WxDxH 0

5.2 Free space for equipment





8	ERICSSON 📕		CONFIGURATIO	ON DATA F	RBS telenor
7-2	Prepared (also subject responsible if other)		Document No.		
140	EMZ Zaw Myo Aung		1/127 04-IPA 160	6 0346 Uer	า
8	Doc respons/Approved	Checked	Date	Rev.	File
PA3	EMZ Manoj Kumar A		2019-06-25	Α	SDD_SG1595_Rev.A

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SG1595 Site:

#### 6 TECHNICAL DATA RBS ANTENNA SYSTEM

B= 47 B= 150° B=  $2^{0}/0^{0}$ 6.1 Antenna height (m.a.g.l.) A= 47 C= 47 Antenna directions
Mech/Elec Downtilt, deg
Quantity of RRU
Antenna type
Antenna model A = 47  $A = 70^{\circ}$   $A = 2^{0}/0^{0}$ 6.2 C= 340°  $C = 2^0/0^0$ 6.3

6.4

6.5

A=270 B=270 C=270 6 pcs ADU451807v01 DXX-790-960/1710-2180-65/65-17.5i/18.5i-M/M 2535 x 259 x 135 6.6

6.7

6.8 21

Antenna dimensions (mm)
Weight of one antenna (kg)
Wind load (N) Frontal: 6.9 Lateral:

910 (at 150 km/h) 470 (at 150 km/h) 1200 (at 150 km/h) Rear:

6.10 No. of Fiber Optic

#### TECHNICAL DATA RBS ANTENNA SUPPORT STRUCTURE

Tower/mast/pole type



## SITUATING PLAN



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EMZ Zaw Myo Aung
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EMZ Manoj Kumar A Document No. 153 38-IPA 166 0346 Uen Checked 2019-06-25 SDD\_SG1595\_Rev.A

Telenor Myanmar SG1595 Project:

Site:

Geographical coordinates Address

N 22º 54' 18.97" - E 94º 2' 4.74" Thang Pho village, Kalay TSW





# ANTENNA PLACEMENT INFORMATION



28	Prepared (also subject responsible if other)	Document No. 153 12-IPA 166 0346 Uen			
4-07-	EMZ Zaw Myo Aung				
201	Doc respons/Approved	Checked	Date	Rev.	File
-A3	EMZ Manoi Kumar A		2019-06-25	Α	SDD SG1595 Rev.A

**Project:** Telenor Myanmar

Site: SG1595

Geographical coordinates N 22° 54′ 18.97″ - E 94° 2′ 4.74″ Address Thang Pho village, Kalay TSW

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TSSR RND Info	Bearing	Antenna Mid Ht	Tower/Pole Hight (m)	Tower Type	Building High	M Tilt	E Tilt
SG1595_C01_1	70	47	50	GBT 🗸		2	0
SG1595_C01_2	150	47	50	GBT ✓		2	0
SG1595_C01_3	340	47	50	GBT 🗸		2	0



#### **GROUNDING INFORMATION**

	telenor

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28	Prepared (also subject responsible if other)	Document No.			
4-07-	EMZ Zaw Myo Aung		193 34-IPA 166 034	46 Uen	
	Doc respons/Approved	Checked	Date	Rev.	File
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**Project:** Telenor Myanmar

Site: SG1595

Geographical coordinates N 22° 54′ 18.97″ - E 94° 2′ 4.74″ Address Thang Pho village, Kalay TSW

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No Grounding info is available.



#### **CABLE WAY DRAWING**

1	telenor

			OADLE WAT DI	tAIIII O	
28	Prepared (also subject responsible if other)	Document No.			
4-07-	EMZ Zaw Myo Aung		193 24-IPA 166 0346 Uen		
201	Doc respons/Approved	Checked	Date	Rev.	File
PA3	EMZ Manoj Kumar A		2019-06-25	Α	SDD_SG1595_Rev.A

**Project:** Telenor Myanmar

Site: SG1595

Geographical coordinates N 22° 54′ 18.97" - E 94° 2′ 4.74" Address Thang Pho village, Kalay TSW

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Not Available.







-28	Prepared (also subject responsible if other)		Document No.			
4-07	EMZ Zaw Myo Aung		1/127 11-IPA 166 0346 Uen			
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Project: Site: **Telenor Myanmar** 

SG1595

	Product number	Description	Quantity
1 1.1 1.2 1.3 1.4 1.5	RBS 6601 for 2G 1/BFL901009/4 KDU137569/1 KDU137739/1 KRC11871/2 SXK1250245/1 EMZ-RRU-PC	EQUIPPED MAGAZINE/SUP 6601; EQUIPPED MAG PROCESSOR UNIT/DUG 20 01;DIGITAL UNIT PROCESSOR UNIT/TCU 02 01;TRANSPORT CONNE TRANSCEIVER/RRUS 01 B8;RADIO UNIT POLE MOUNTING FIXTURE CEU Power Connector for RRU	1 1 1 3 3 3
1	RBS 6601 for 3G (W21.1)		
2.1	1/BFL901009/4	EQUIPPED MAGAZINE/SUP 6601; EQUIPPED MAG	1
2.2	KDU127174/3	PROCESSOR UNIT/DUW 31 01;DIGITAL UNIT	1
2.3	KRC161297/2	TRANSCEIVER/RRUS 12 B1;Radio Unit	3
2.4 2.6	SXK1250245/1 EMZ-RRU-PC	POLE MOUNTING FIXTURE CEU Power Connector for RRU	3 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		
		AISG Cable For Outdoor Use,5m,AISG VF 8PIN,AISG	
4.1	4050228	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





ERICSSON #		PLANT SPEC	IFICATIO	N (RBS) telenor
Prepared (also subject responsible if other) EMZ Zaw Myo Aung		Document No. 1/127 11-IPA	166 0346	Uen
Doc respons/Approved EMZ Manoj Kumar A	Checked	Date 2019-06-25	Rev.	File SDD SG1595 Rev.A

Project: **Telenor Myanmar** 

Site: SG1595

<b>5</b> 5.4 5.5	CABINET ESOA300FBG10 50V500AH_CABINET	OUTD-6602-RF SERIES RBS 6601 2.0M BATTERY CABINET DC FAN 50V 500AHCYCLIC	1 1
6 6.1 6.3 6.4 6.5 6.6 6.7 6.8 6.9 6.10	INSTALLATION MATERIAL TFL492324/500M TSR95170/3 NTM2013727/1 LTRFSEAL300 EAB-LTACCTIECV4830 EAB-LTPWACCLUGM825 EAB-LTACBOLTM6ZERC TFL492324/500M EMZ-AC 4x16mm2	POWER CABLE/2X6 MM2;UL;LSOH;ALU+CU-SCREE JUMPER CABLE/COMMSCOPE 1/2" JUMPER CABLE SET OF MATERIALS/TUBE KIT 8,5M Silicon box Plastic tie Strap, 100 pcs/package, ACC -25MM2 GROUNDING CABLE 16X CABL 10X NUTS,SCREWS, WASHERS- MOUNTING POWER CABLE/2X6 MM2;UL;LSOH;ALU+CU-SCREE AC power cable	5 M 12 2 1 2 4 2 405 10
<b>7</b> 7.1	OTICAL CABLE RPM2531610/70M	CABLE WITH CONNECTOR/2F LC(FullAXS)-LC S	6



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



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Document No.

1/193 18-IPA 166 0346 Uen

Checked

Date

EMZ Manoj Kumar A

Checked

Date

2019-06-25

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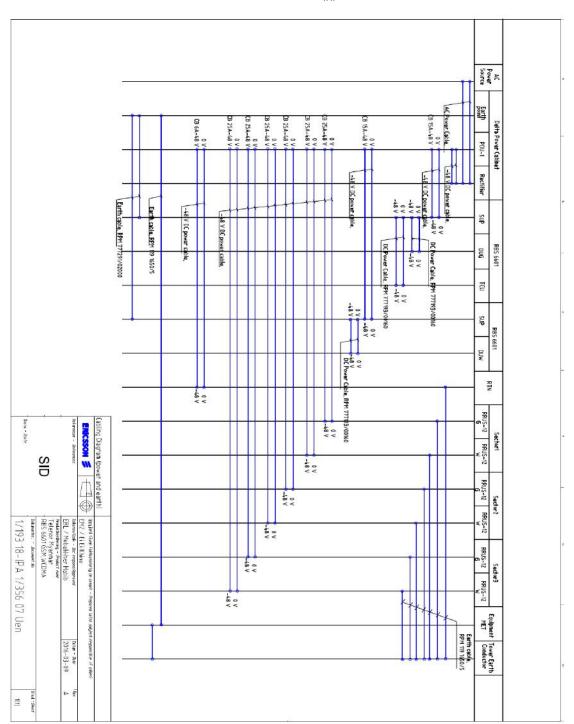
SDD\_SG1595\_Rev.A

**Project:** Telenor Myanmar

Site: SG1595

Geographical coordinates Address N 22º 54' 18.97" - E 94º 2' 4.74" Thang Pho village, Kalay TSW

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



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2/193 18-IPA 166 0346 Uen

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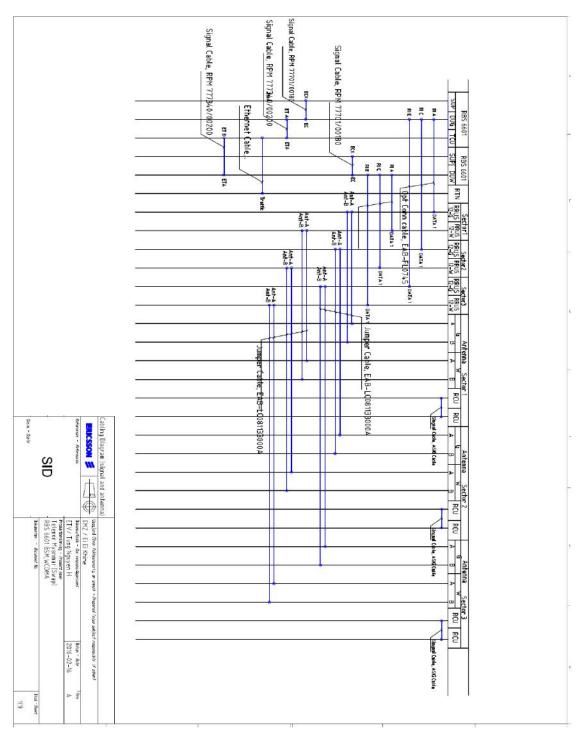
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#### **ALLOCATION DRAWING (CABINET)**



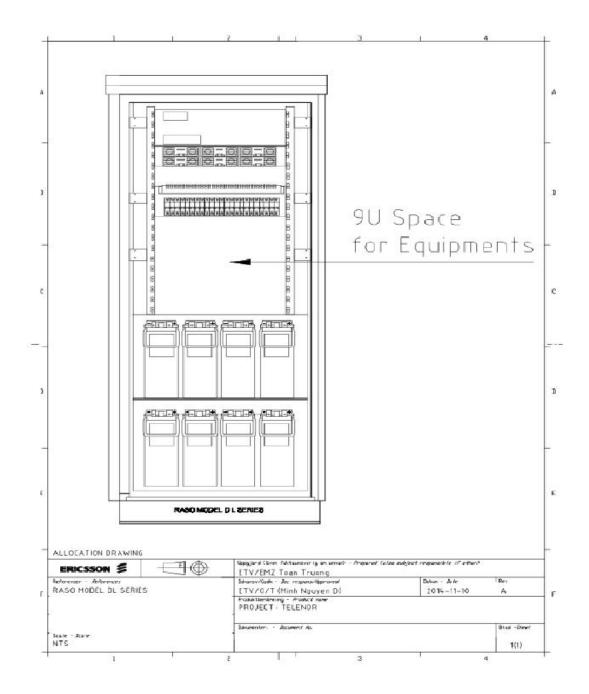
<u></u>	ALLOCATION DIVAMING ( CABINET)						
Prepared (also subject responsible if other)		Document No.	Document No.				
EMZ Zaw Myo Aung	EMZ Zaw Myo Aung		193 26-IPA 166 0346 Uen				
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**Project:** Telenor Myanmar

Site: SG1595

Geographical coordinates Address N 22º 54' 18.97" - E 94º 2' 4.74" Thang Pho village, Kalay TSW

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## **ALLOCATION DRAWING**

Prepared (also subject respons EMZ Zaw Myo Aung Doc respons/Approved EMZ Manoj Kumar A Prepared (also subject responsible if other) 193 19-IPA 166 0346 Uen Checked Date Rev. 2019-06-25 SDD\_SG1595\_Rev.A

Project: **Telenor Myanmar** 

SG1595 Site:

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

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

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

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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EMZ Zaw Myo Aung
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EMZ Manoj Kumar A Document No. 153 11-IPA 166 0346 Uen Checked Rev. Date 2019-06-25 Α SDD\_SG1595\_Rev.

Project: **Telenor Myanmar** 

Site: SG1595

#### **INSTALLATION CHECK LIST**

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

## **INSTALLATION CHECK LIST**

Oł	OK = Correctly installed, NOK = Not Correctly installed, N/A = Not applicable						
A.	CABINET	ОК	NOK	N/A	COMMENTS		
1.	Cabinet clean and undamaged	✓					
2.	Cabinet installed according to SID	✓					
	Cable lead-in (cable gland)	✓					
4.	PDUs connected to correct fuse	<b>√</b>					
5.	DC cable for RRUs and MU properly connected	✓					
6.	Grounded, washers in place and bolts tightened	✓			torque of 15 Nm		
7.	Grounding cable insulation undamaged	✓					
		_	_				
В.	MAIN UNIT (MU)	OK	NOK	N/A	COMMENTS		
1.	Equipment clean and undamaged	✓					
2.	Installed according to allocation drawing	✓					
3.	Minimum 50mm between MU & cabinet door	✓					
4.	Minimum 50 mm at the rear of MU	✓					

15. III are order (iiio)	0.1	 	O CHILLETT O
Equipment clean and undamaged	✓		
Installed according to allocation drawing	✓		
3. Minimum 50mm between MU & cabinet door	✓		
4. Minimum 50 mm at the rear of MU	✓		
5. Power cable connected to correct fuse	✓		
All cables in the front properly connected	✓		
7. All screws tightened to correct torque	✓		
8. No cables damaged	✓		
Equipment labeled according to SID	✓		
10. Grounded, washers in place and bolts tightened	✓		
11. Grounding cable insulation undamaged	✓		
12 All cables have enough extra length to enable the	✓		
removal of the main unit without damaging or			

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



## **INSTALLATION CHECK LIST- RBS**



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EMZ Manoj Kumar A Document No. 153 11-IPA 166 0346 Uen Checked Date Rev. File 2019-06-25 Α SDD\_SG1595\_Rev.

Project: **Telenor Myanmar** 

Site: SG1595

D. ANTENNA SYSTEM - RADIO	OK	NOK	N/A	COMMENTS
Antenna system installed as specified in SID	✓			
Height, Azimuth and Tilt checked	✓			
No cables or connectors damaged	✓			
4. RF cables properly labeled	✓			
5. Connectors properly connected	✓			
6. Minimum bending of the RF cables correct	✓			radius of 50mm
7. Correct cable connected to correct antenna port	✓			
RET cable correctly connected & tightened	✓			
Optical cables properly connected and strapped	✓			
0. Minimum bending of the optical cables correct	✓			radius of 40mm
11. Antenna support bonded to tower	✓			
2. Tower legs earthed (minimum 2 legs)	✓			
E. CONCLUDING ROUTINES	ОК	NOK	N/A	COMMENTS
. SID marked for as-built	✓			
2. Labeling of the external cables	✓			
Painting of cabinet scratching	✓			
Site area cleaned	✓			
5.				
All installation activities have been completed [ NO	] [ YES	] (if no	o, speci	fy below)
		] (if no	o, speci	fy below)
		] (if no	o, speci	fy below)
		] (if no	o, speci	fy below)
All installation activities have been completed [ NO Problems/Comments (Refer to applicable activity nur		] (if no	o, speci	fy below)
		] (if no	o, speci	fy below)
Problems/Comments (Refer to applicable activity nur	mbers)		o, speci	
Problems/Comments (Refer to applicable activity nur			o, speci	fy below)
Problems/Comments (Refer to applicable activity nur	mbers)		o, speci	



## **CHECK LIST (OHS)**



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EMZ Zaw Myo Aung
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EMZ Manoj Kumar A Document No. 176 27-IPA 166 0346 Uen Checked Rev. SDD\_SG1595\_Rev.A 2019-06-25

Project: **Telenor Myanmar** 

Site: SG1595

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

EQUII	EQUIPMENT USED N					
1 R	ope	1				
2 Pt	ılley	1				
3 G	PS	1				
4 To	ool Kits	1				
	iptop	1				
6	_					

EQUIPMENT USED	NOS.				
7					
8					
9					
10					
11					
12					

wo	RK	ACTI	VIT	IES:

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

## **OTHER MATTERS / ISSUES:**

OHS confirmed by (ASP):	Checked and Verified by: Ericson Myanmar Co. Ltd.
Crid committee by (AGI ).	One one and vermed by. Encour Myanmar Go. Etc.
Signature:	Signature:
Print Name:	Print Name:
Date:	Date:



## TEST REPORT RBS - G900



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-28	Prepared (also subject responsible if other)			Document No.		
14-0	EMZ Zaw Myo Aung	0		1/153 83-IPA 16	6 0346 Ue	n
Ŕ	Doc respons/Approved		Checked	Date	Rev.	File
PA3	EMZ Manoj Kumar A			2019-06-25	Α	SDD_SG1595_Rev.A

**Project:** Telenor Myanmar

Site: SG1595

# **Test Record for Site Installation Verification**

Date:	Site Name:				
Site No.: SG1595	Cell Configuratio		6601		
RBS Type: <b>RBS 6601</b>	Testers Name:				
NE Standalone test	Pass	Fail	N/A	Remark	
Incoming voltage verified	✓				
Circuit breaker with correct rating	$\checkmark$				
Cable connection inspected	<b>✓</b>				
Cables properly labeled	$\checkmark$				
IDB parameter set	$\checkmark$				
Fault Status Read	$\checkmark$				
Internal alarm tested	<b>✓</b>				
External alarm tested	<b>✓</b>				
Antenna system test	$\checkmark$				
Notes:					
Responsible Engineer (Ericsson)					
Name		5	Signature	)	Date
Accepted by (Telenor)					
Name		5	Signature	<del></del>	Date

# **Test Record for Antenna System Tests**

Date:	Site name	Site name:					
Site No.:	Cell Confi						
SG1595	GSM9	00	<b>RBS 6601</b>				
Testers Name:							
RBS Type:	Serial Nu	mber (Site	Master):				
RBS 6601							
Installation check	Cell A						
Jumper Marking:	DX1	1	DX2	)	]		
Jumper Length:	3		3		m		
Optical Cable Length :					m		
VSWR :	1.1		1.1		< 1.4		
Cable Attenuation:					db		
	Cell B						
Jumper Marking:	DX1	1	DX2	)	]		
Jumper Length:	3		3		m		
Optical Cable Length:					m		
VSWR:	1.1		1.1		< 1.4		
Cable Attenuation:					db		
	Cell C						
Jumper Marking:	DX1	1	DX2	)	]		
Jumper Length:	3		3		m		
Optical Cable Length :					l m		
VSWR:	1.1		1.1		< 1.4		
Cable Attenuation:					db		
	Sector A	Se	ector B	Se	ector C		
Direction	70		150		340		
Mechanical Tilt	2		2		2		
Electrical Tilt-GSM	0		0		0		
Mounting Height							
Responsible Engineer (Erics:	son)						
Name			Signature			Date	
Accepted by (Telenor)							

Signature

Name

Date

# **Test Record for Site Integration**

				Io.									
Date:				Site name:									
Site No.:				Cell Configura	ition:								
SG1595				GSM900	RE	3S 660	1						
RBS Type:				Testers Name									
<b>RBS 660</b>	1												
					IP					VLA	١N		
Abis o	over IP												
OAM													
VOICE, S	SMS, M	MS, SPEE	D TES	ST				ΙΤЬ	IRC	UGHPL	JT/S	PEED TE	ST
Cell	MC	D/MT Voice	e Call	SMS		MMS				aod		Jpload	
Cell 1													
Cell 2													
Cell 3													
Cell 4													
Cell 5													
Cell 6													
HANDO													
Α.	to B	A to C		B to A	B t	to C	C to	A		C to B		Remark	(
FXTFRN	ΔΙ ΔΙ Δ	ARM TEST	г										
Alm#		signation					Туре	Pa	ISS	Fail	F	Remarks	
01 0	_	o.ga					Closing	<del>                                     </del>					
02 0							Breaking	1					
03 0							Droaming	-					
04 0													
05 0													
06 0													
07 0								+					
08	1												
Remarks	:												
Responsi	ble Engi	neer (Erics	sson)										
Name						Signat	ure						Date
Accepted	by (Tele	enor)											
Name						Signat	ure						Date

# **Test Record for Site Hardware Status**

<b>.</b>	lo:	
Date:	Site name:	
Site No.:	Cell Configuration:	
SG1595	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	N01540002931
Sector B	ADU451807v01	SN DAMAGED
Sector C	ADU451807v01	SN DAMAGED
Octor C	/\D0401001V01	CIA DI MINICED
RBS Cabinet		
Unit	Product number	Serial
RBS 6601	1/BFL901009/4	C970008130
DUG 20 01	KDU137569/1	CD3C194451
TCU-02 01	KDU137739/1	TU8XV94429
RRU 01 B8,sector A	KRC11871/2	CB4U232596
RRU 01 B8,sector B	KRC11871/2	D820822766
RRU 01 B8,sector C	KRC11871/2	D820114749
Remarks:		
iveillaiks.		
Pennanciale Engineer (Exico-	Λ.	
Responsible Engineer (Ericsson		
Name	Signature	Date
Accepted by (Telenor)		
Name	Signature	Date



**TEST REPORT RBS - W2100** 



ω			IESI KEPUKI	KDO - WZ	100
	Prepared (also subject responsible if other)		Document No.		
	EMZ Zaw Myo Aung		2/153 83-IPA 16	6 0346 Ue	n
		Checked	Date	Rev.	File
PA3	EMZ Manoj Kumar A		2019-06-25	Α	SDD SG1595 Rev.A

**Project:** Telenor Myanmar

Site: SG1595

# **Test Record for Site Installation Verification**

Date:	Site name:				
Site No.: SG1595 RBS Type: RBS 6601	Cell Config W2100 Testers Na	2	2/2/2		
NE Standalone test	Pass	Fail	N/A	Remark	
Incoming voltage verified	$\checkmark$				
Circuit breaker with correct rating	$\checkmark$				
Cable connection inspected	$\checkmark$				
Cables properly labeled	<b>√</b>				
Check configuration	$\checkmark$				
Fault Status Read	✓				
Internal alarm tested	✓				
External alarm tested	$\checkmark$				
Antenna system test	$\checkmark$				
Notes:					
Responsible Engineer (Ericsson)					
Name		,	Signature	9	Date
Accepted by (Telenor)					
Name			Signature	 <del>?</del>	 Date







80			TEST REPORT	<b>RBS - W2</b>	100
7-2	Prepared (also subject responsible if other)		Document No.		
	EMZ Zaw Myo Aung		2/153 83-IPA 16	6 0346 Ue	n
20	Doc respons/Approved	Checked	Date	Rev.	File
-A3	EMZ Manoi Kumar A		2019-06-25	Α	SDD SG1595 Rev.A

Project: **Telenor Myanmar** 

Site: SG1595

# **Test Record for Antenna System Tests**

Date:	Site name:			
Site No.:	Cell Configuration	n:		
SG1595	W2100	2/2/2		
Testers Name:		<b></b>		
RBS Type:	Serial Number (S	Site Master):		
RBS 6601				
Installation check	]			
	Sector 1			
Jumper Marking :	A	В		
Jumper Length :	3	3	m	
VSWR:	1.1	1.1	< 1.4	
DTF:			< 1.05	
Cable Attenuation:			db	
Jumper Marking: Jumper Length: VSWR: DTF: Cable Attenuation:  Jumper Marking: Jumper Length: VSWR: DTF: Cable Attenuation:	Sector 2  A 3 1.1  Sector 3  A 3 1.1	B 3 1.1 B 3 1.1	m < 1.4 < 1.05 db m < 1.4 < 1.05 db	
Responsible Engineer (Ericsson)  Name  Accepted by (Telenor)		Signature		Date
Name		Signature		Date
		Č		





28			TEST REPORT	<b>RBS - W2</b>	100
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	EMZ Zaw Myo Aung		2/153 83-IPA 16	6 0346 Ue	n
	Doc respons/Approved	Checked	Date	Rev.	File
PA3	EMZ Manoj Kumar A		2019-06-25	Α	SDD_SG1595_Rev.A

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		Test	Record for	Site Integ	gration			
Date:			Site name:					
Site No.:			Cell Configurati	on.				
SG1595			W2100	2/2/2				
RBS Type:			Testers Name:					
RBS 660	1							
		Ī			IP			Checked
NODE								
OAM								
RNC	Name							
OICE, V	IDEO, SI	MS, MMS, SF						
			RIGINATING/I			G		GHPUT/SPEEI
Sector	Carrier	Voice call	Video call	SMS	MMS		Downloa	d Upload
Sector 1	2	+						
Sector 2	1							
Sector 2	2							
Sector 3	2			_				
	1							
Sector 4	2							
Sector 5	1							
	2							
Sector 6	2							
IANDOV	ED TECT	<u> </u>			<u> </u>		1	
1 to	ER TEST	1 to 3	2 to 1	2 to 3	3 to 1		3 to 2	Remark
1 10		1100	2 10 1	2100	0 10 1		0 10 2	Roman
YTERN	AL ALAR	M TEST						
Alm#		gnation			Туре	Pass	Fail	Remarks
01	,				Closing			
02					Breaking			
03								
04 05								
06								
07								
80								
Remarks								
Responsi	ble Engin	eer (Ericsson	)					
lame				Signa	ature			L
ccented	by (Telen	or)		-				
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ane				Signa	วเนเ <del>ย</del>			E







8			TEST REPORT	<b>KB2 - M2</b>	100
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		Checked	Date	Rev.	File
PA3	EMZ Manoi Kumar A		2019-06-25	Α	SDD SG1595 Rev.A

Project: **Telenor Myanmar** 

Site: SG1595

# **Test Record for Site Hardware Status**

Date:	Site name:
Site No.:	Cell Configuration:
SG1595	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-N ADU451807v01	N01540002931
DXX-790-960/1710-2180-65/65-17.5i/18.	5i-N ADU451807v01	SN DAMAGED
DXX-790-960/1710-2180-65/65-17.5i/18.	5i-N ADU451807v01	SN DAMAGED

## **RBS Cabinet**

Unit	Product number	Serial
RBS 6601	1/BFL901009/4	D820068597
DUW31	KDU127174/3	CD3C659660
RRU 12 B1,sector A	KRC161297/2	D823362298
RRU 12 B1,sector B	KRC161297/2	D822091708
RRU 12 B1,sector C	KRC161297/2	CD3L120903

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



PRODUCT LIST

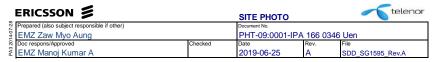


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ຮັ FMZ Manoi Kumar A		2019-06-25	Α	SDD_SG1595_Rev A

Telenor Myanmar SG1595 Project:

Site: SG1595 -

<u>UNIT</u>	PRODUCT CODE	REV	SERIAL No.	MFG.DATE
GSM 900				
RBS 6601	1/BFL901009/4		C970008130	
DUG 20 01;Digital Unit	KDU137569/1		CD3C194451	
TCU 02 01;Transport Con. Unit	KDU137739/1		TU8XV94429	
RRU 01 B8, sector A	KRC11871/2		CB4U232596	
RRU 01 B8, sector B	KRC11871/2		D820822766	
RRU 01 B8, sector C	KRC11871/2		D820114749	
WCDMA 2100				
RBS 6601	1/BFL901009/4		D820068597	
'DUW31	KDU127174/3		CD3C659660	
RRUS 12 B1,sector A	KRC161297/2		D823362298	
RRUS 12 B1, sector B	KRC161297/2		D822091708	
RRUS 12 B1,sector C	KRC161297/2		CD3L120903	
ANTENNA				
Sec1- DXX-790-960/1710-2180-65/65-17.			N01540002931	
Sec2- DXX-790-960/1710-2180-65/65-17.			SN DAMAGED	
Sec3- DXX-790-960/1710-2180-65/65-17.	5i/1; ADU451807v01		SN DAMAGED	
RET				
RCU136 Cell A GSM	27150136		SN DAMAGED	
RCU136 Cell B GSM	27150136		HWB4534448616107	ΓR41
RCU136 Cell C GSM	27150136		SN DAMAGED	
RCU136 Cell A UMTS	27150136		SN DAMAGED	
RCU136 Cell B UMTS	27150136		SN DAMAGED	
RCU136 Cell C UMTS	27150136		SN DAMAGED	
CABINET				
ESOA300FBG10	ESOA300FBG10		SN DAMAGED	
EAB-ESR4856BAS	DPR 2900C		VI161405617W0	
EAB-ESR4856BAS	DPR 2900C		VI153509608W0	
EAB-ESR4856BAS	DPR 2900C		VI161405578W0	
LAD ECITOOODAO	D1 11 20000		V1101700070VV	



Project: **Telenor Myanmar**Site: **SG1595**Site Location





SITE PHOTO



PHT-09:0001-IPA 166 0346 Uen

Project: **Telenor Myanmar**Site: **SG1595 Vertical Cable Ladder** 













SITE PHOTO



	SILE FRUID	SILE PHOTO			
		Document No.	Document No.		
₹ EMZ Zaw Myo Aung		PHT-09:0001-I	PHT-09:0001-IPA 166 0346 Uen		
□ Doc respons/Approved	Checked	Date	Rev.	File	
₹ EMZ Manoi Kumar A		2019-06-25	Α	SDD SG1595 Rev.A	

oject: Telenor Myanmar te: SG1595 Antenna Cell C Project: Site:











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FMZ Manoi Kumar A	Checked	2019-06-25	A	SDD_SG1595_Rev.	
	· ·	1-21.2 22 -2		[0000]0000	
Project: Telenor Myanmar					
ite: SG1595					
		Earth Bar for	RRU		
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SITE PHOTO



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Project: Telenor Myanmar Site: SG1595 RRUS 12 B1 Cell A











SITE PHOTO



PHT-09:0001-IPA 166 0346 Uen

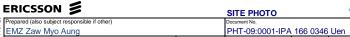
Project: Telenor Myanmar Site: SG1595 RRU01 B8 Cell A











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Project: **Telenor Myanmar**Site: **SG1595**Cabinet (Close)









telenor







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PA3	EMZ Manoj Kumar A		2019-06-25	Α	SDD SG1595 Rev.A

Project: Telenor Myanmar
Site: SG1595

External Alarm connection (with clear Label)











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EMZ Manoj Kumar A PHT-09:0001-IPA 166 0346 Uen

Project: Site: Telenor Myanmar SG1595

AC Power cable at Telecom Cabinet





AC Power cable at AC Box











**Documents Number** 

Title:

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EMZ Manoj Kumar A

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Checked

Date

Rev. File

2019-06-25

A SDD\_SG1595\_Rev.A

**Project:** Telenor Myanmar

Site: SG1595

#### NETWORK ELEMENT ACCEPTANCE CERTIFICATE

This is to certify that Ericsson Radio Systems AB has delivered, installed and tested the Network Elements on site SG1595 as defined in PO\_NS\_000017 and PO\_NS\_000018

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

PO Antenna:

**TEST DOCUMENTS** 

Title:

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 2/153 83-IPA 166 0346 Uen rev A Test Report (TRM Functional) Date: for for **Telonor Ericsson Myanmar** (The Vendor) (The Buyer) Name: Name: .....