

# Procurement Plan for Grid Component

By

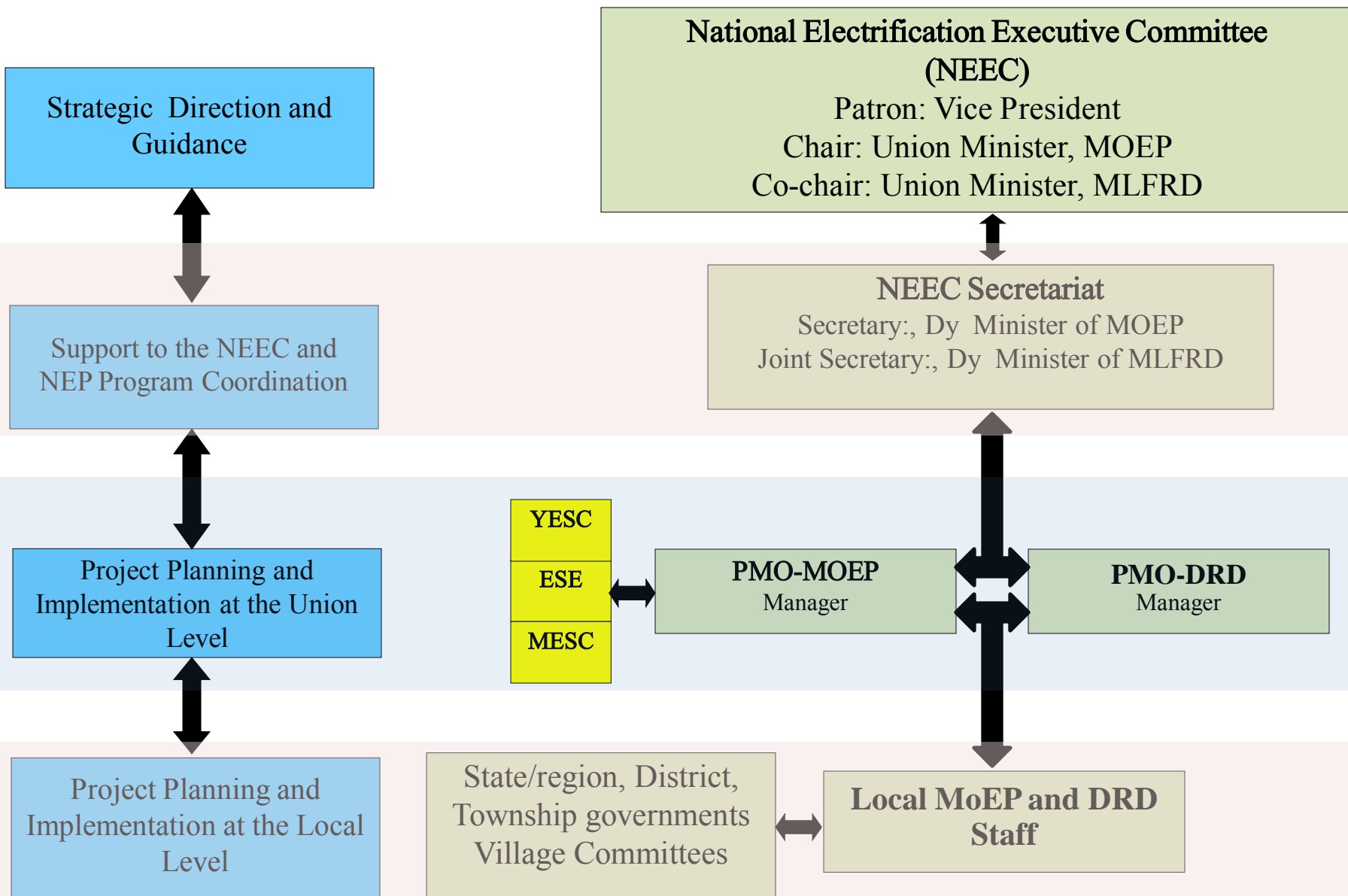
**Thuya Aung Bo**

**Deputy Chief Engineer**

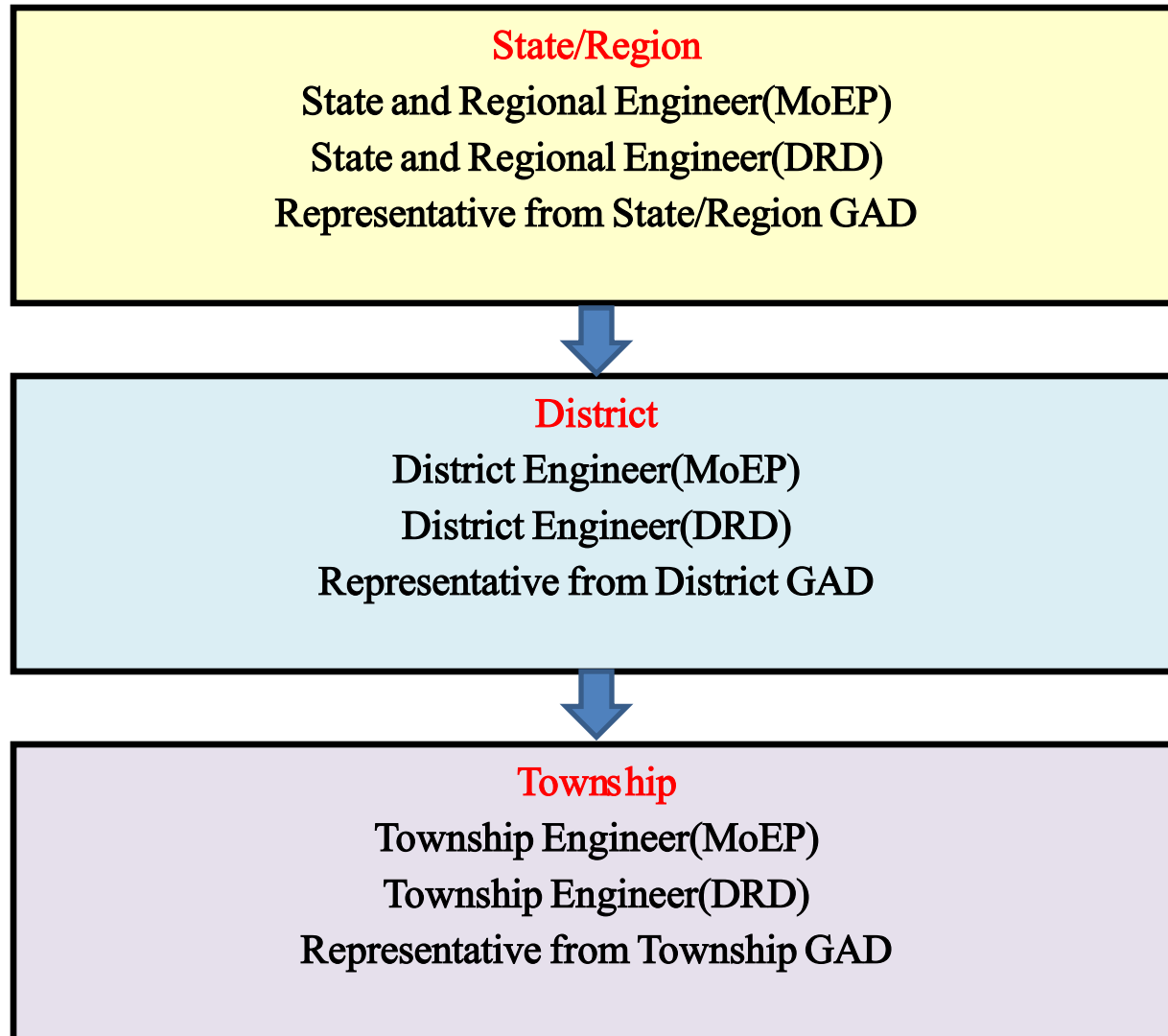
**Project Management Office (NEP)**

**Ministry of Electric Power**

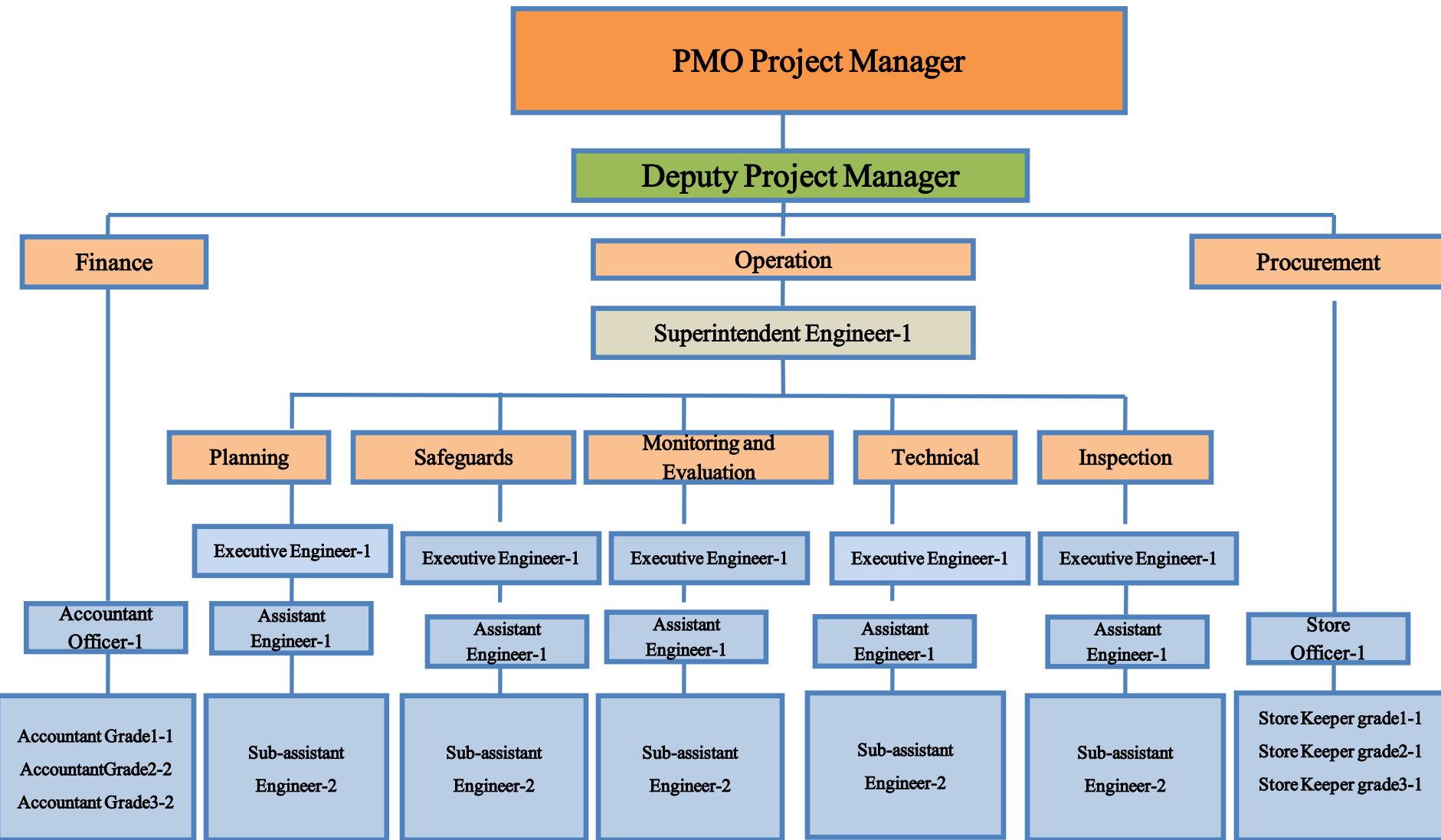
# Institutional Framework for National Electrification Plan and Project



# Organization of Project Management Committee for State and Region



# Organization of Grid Project Management Office(PMO) MoEP Nay Pyi Taw



## PMO Tasks to handle Procurement

- Complete setting up PMO office and staffing.
- Purchase office equipment.
- Hire individual procurement consultant.
- Hire Supervision consulting firm by March 2016.
- Collect project implementation data (YESC, MESC , States and Regions).
- Complete Procurement plan
- Complete materials contract Packaging & prepare BDs.
- Prepare for bid evaluation
- Expedite GOM internal Bid evaluation approvals.

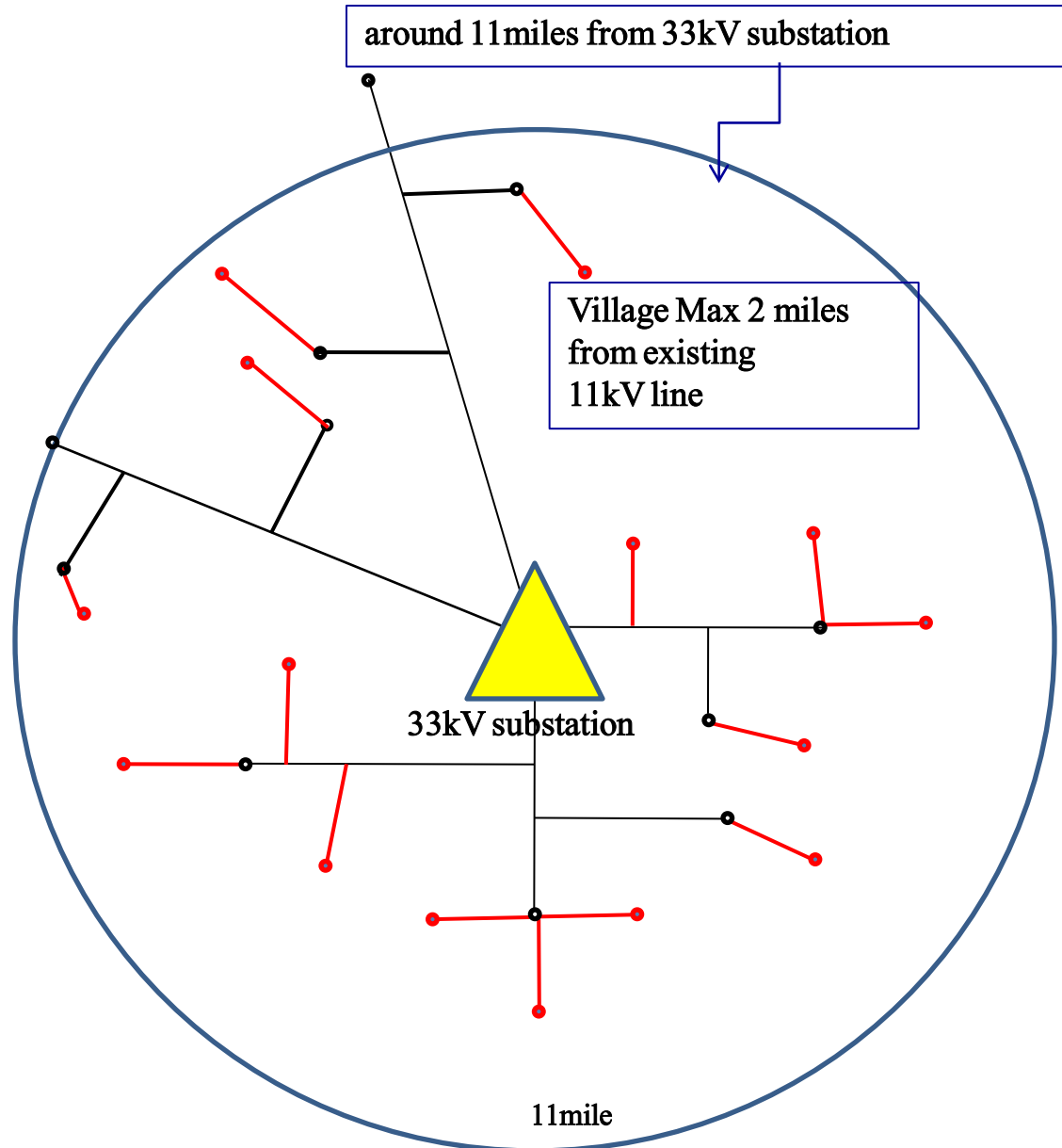
# NEP Stage-1 electrification 2 miles

## Phase1 – Simple MV works”

- ✓ Within 2 miles of existing MV line,
- ✓ No S/S reinforcement
- ✓ Not further than 11 miles from 33kV substation

## Phase2 – Substation Reinforcement”

- ✓ As phase 1 but requiring S/S reinforcement



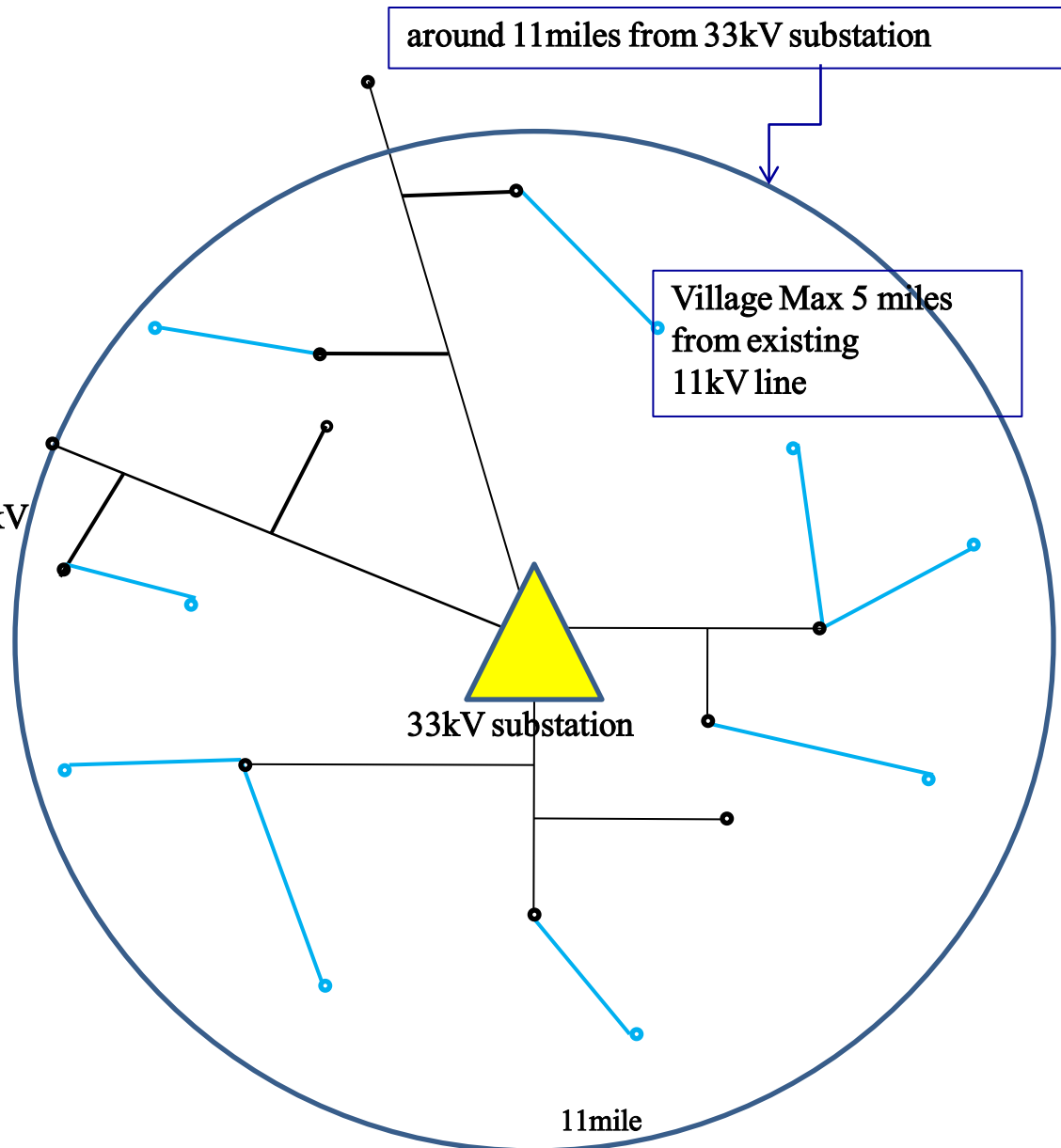
# NEP Stage-2 electrification 5 miles

## Phase1 – Simple 5 mile MV works”

- ✓ Within 5 miles of existing MV line,
- ✓ No S/S reinforcement
- ✓ Not further than 11 miles from 33kV substation

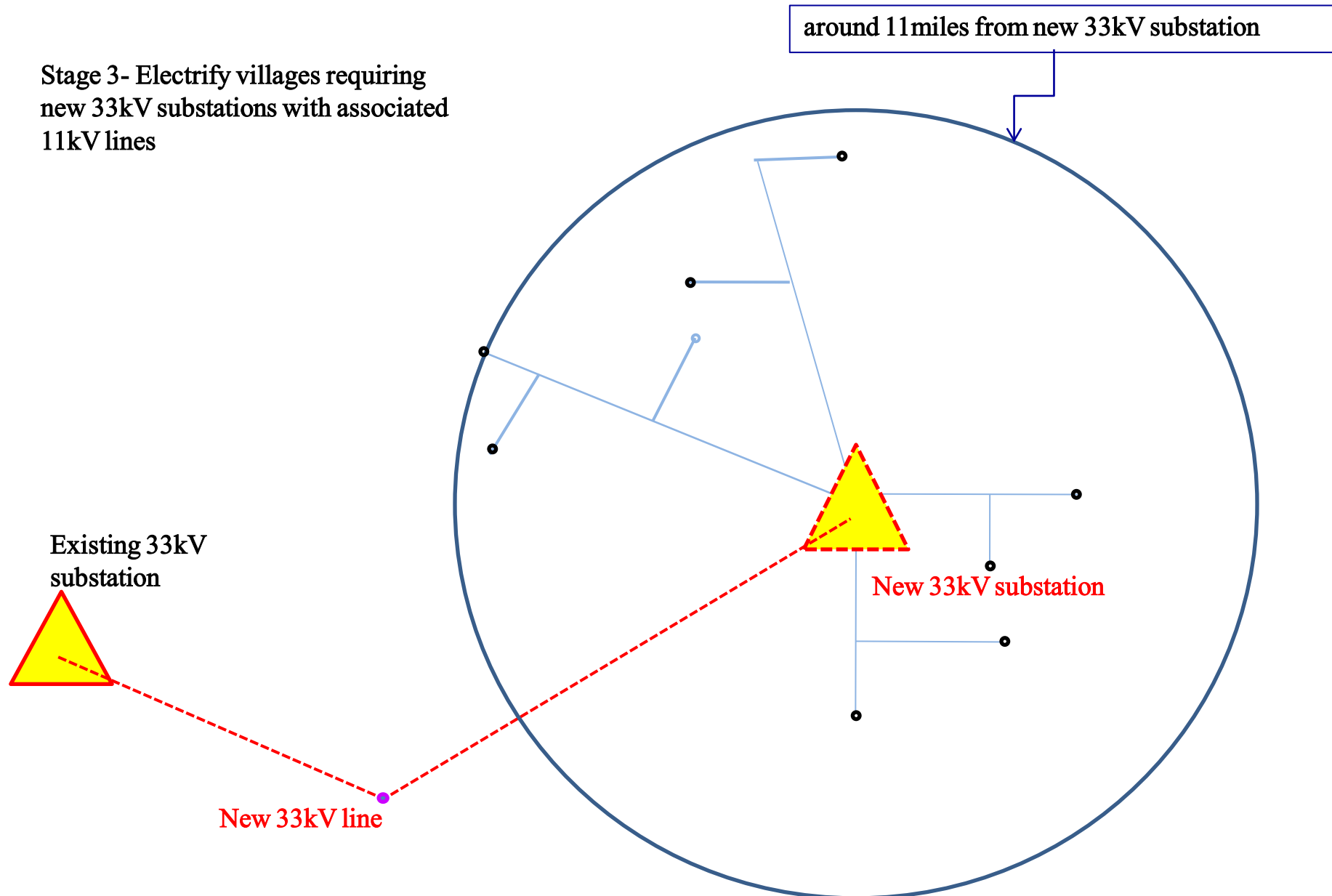
## Phase2 – Substation Reinforcement”

- ✓ As phase 1 but requiring S/S reinforcement of 63/33 and or 33/11kV



# NEP Stage-3 New 33kV substations

Stage 3- Electrify villages requiring new 33kV substations with associated 11kV lines



around 11 miles from new 33kV substation

Existing 33kV substation

New 33kV substation

New 33kV line



# Details of NEP Stage-1 electrification 2 miles (Phase 1)

Sr	State/ Region	No. of villages to be Electrified	House Hold (Nos)	Popul- ation (Nos)	11 kV Lines and Transformers by NEP			Total cost for 400 V lines (M Kyats)	Grand Total (M Kyats)
					Total Cost for 11 kV Line (M kyats)	Total Cost for 11/0.4 KV Transformer (M kyats)	Total Estimated cost (M Kyats)		
1	Kachin	7	176	928	200.36	81.16	281.52	224.45	505.97
2	Kayah	5	185	1118	58.08	47.17	105.25	103.24	208.49
3	Kayin	67	7610	39801	1899.09	935.80	2834.89	3061.43	5896.32
4	Chin	4	181	801	232.30	45.35	277.65	112.22	389.87
5	Mon	80	13095	72209	1986.42	1189.77	3176.19	3473.26	6649.45
6	Rakhine	21	2563	14351	881.16	392.00	1273.16	871.97	2145.13
7	Shan(S)	287	25811	119546	10050.69	12331.19	22381.88	15523.07	37904.95
8	Shan(N)	187	12852	61382	4622.88	2584.28	7207.16	7323.19	14530.35
9	Shan(E)	20	1841	7008	498.51	265.37	763.88	827.30	1591.18
10	Sagaing	1005	129454	603146	31806.45	14153.46	45959.91	36503.73	82463.64
11	Mandalay	412	50554	181210	13490.47	7603.20	21093.67	15247.45	36341.12
12	Magway	665	87502	412928	20573.42	9597.11	30170.53	25532.86	55703.39
13	Naypyitaw	68	12721	44415	2177.85	1455.00	3632.85	2267.79	5900.64
14	Pago(E)	625	79129	314419	19466.20	8658.42	28124.62	22794.73	50919.35
15	Pago(W)	866	77795	282559	22213.78	10564.89	32778.67	28307.89	61086.56
16	Ayarwaddy	719	96364	384186	26642.37	8944.49	35586.86	27361.70	62948.56
17	Yangon	236	27804	120092	7978.19	3466.83	11445.02	7169.69	18614.71
	<b>Total</b>	<b>5,274</b>	<b>625,637</b>	<b>2,660,099</b>	<b>164,778.2</b>	<b>82,315.5</b>	<b>247,093.72</b>	<b>196,705.96</b>	<b>443799.68</b>

# Details of NEP Stage-1 electrification 2 miles (Phase 1)

Sr	State/ Region	Scope to be funded under WB funds (materials only)									LV Lines (M Kyats)			
		11 kV Line				11/0.4 kV Transformer					Miles	Material Cost	Constru- ction cost	Total (M Kyats)
		Mile	Material Cost (M Kyats)	Constru- ction cost	Total (M Kyats)	KVA	No	Material Cost	Constru- ction cost	Total (M Kyats)				
1	Kachin	6.90	164.97	35.40	200.36	460	7	72.06	9.10	81.16	5.00	196.45	28.00	224.45
2	Kayah	2.00	47.82	10.26	58.08	250	4	36.76	10.41	47.17	2.30	90.36	12.88	103.24
3	Kayin	65.40	1563.58	335.50	1899.09	8620	69	856.40	79.40	935.80	68.20	2679.51	381.92	3061.43
4	Chin	8.00	191.26	41.04	232.30	250	4	40.75	4.60	45.35	2.50	98.22	14.00	112.22
5	Mon	65.15	1635.49	350.93	1986.42	11080	81	1091.92	97.85	1189.77	73.69	3039.97	433.30	3473.26
6	Rakhine	28.90	725.49	155.67	881.16	2800	28	336.00	56.00	392.00	18.50	763.19	108.78	871.97
7	Shan(S)	329.64	8275.08	1775.61	10050.69	38280	326	11228.52	1102.67	12331.19	345.81	13586.53	1936.54	15523.07
8	Shan(N)	151.62	3806.18	816.70	4622.88	14820	221	2207.45	376.83	2584.28	163.14	6409.61	913.58	7323.19
9	Shan(E)	16.35	410.44	88.07	498.51	2460	21	232.34	33.03	265.37	18.43	724.10	103.21	827.30
10	Sagaing	1043.18	26187.36	5619.09	31806.45	127690	1027	12972.41	1181.05	14153.46	813.20	31949.81	4553.92	36503.73
11	Mandalay	464.58	11107.18	2383.30	13490.47	62410	396	6870.60	732.60	7603.20	339.67	13345.29	1902.15	15247.45
12	Magway	708.50	16938.82	3634.61	20573.42	76100	756	8732.58	864.53	9597.11	568.80	22347.58	3185.28	25532.86
13	Naypyitaw	75.00	1793.10	384.75	2177.85	12985	77	1262.00	193.00	1455.00	65.00	1903.79	364.00	2267.79
14	Pago(E)	670.37	16027.21	3439.00	19466.20	90230	664	7788.02	870.40	8658.42	653.35	19135.97	3658.76	22794.73
15	Pago(W)	764.99	18289.38	3924.40	22213.78	67620	915	9548.79	1016.10	10564.89	811.37	23764.22	4543.67	28307.89
16	Ayarwady	917.50	21935.59	4706.78	26642.37	84730	839	8121.48	823.01	8944.49	784.25	22969.90	4391.80	27361.70
17	Yangon	274.75	6568.72	1409.47	7978.19	35270	236	3138.00	328.83	3466.83	205.50	6018.89	1150.80	7169.69
	<b>Total</b>	<b>5592.83</b>	<b>135667.6</b>	<b>29110.5</b>	<b>164778.2</b>	<b>636055</b>	<b>5671</b>	<b>74536.09</b>	<b>7779.41</b>	<b>82315.5</b>	<b>4938.71</b>	<b>169023.4</b>	<b>27682.59</b>	<b>196705.96</b>

# Details of NEP Stage-1 electrification 2 miles **(Phase 2)**

Sr	State/ Region	Construction works								The effective area (New Connection)			Estimated cost (million kyats)		
		66kV line (mile)	33kV line (mile)	66/33kV substation		66/11kV substation		33/11kV substation		Villages	House hold	Popul- ation	material cost	Installation Charges	Total cost
				MVA	No	MVA	No	MVA	No						
1	Kachin	1.2				10	3	3	1	94	14658	76788	6787.83	717.56	7505.39
						5	3								
2	Kayah							5	1	65	3177	16205	755	136.9	891.9
								1.25	1						
3	Kayin	11	0.5			10	1	5	1	60	8908	55370	3083.83	404.9	3488.73
4	Chin														
5	Mon					10	1			20	2101	11882	706	14	720
6	Rakhine	7.5				5	2			46	3314	7280	3741.66	524.93	4266.58
7	Tanintharyi		30	20	1			5	1	64	16432	85934	4209.25	505.73	4714.98
8	Shan(South)														
9	Shan(East)														
10	Shan(North)					10	1			10	484	2242	698.63	127.47	826.1
11	Sagaing							10	4	292	36074	175579	437	31	468

# Details of NEP Stage-1 electrification 2 miles (Phase 2)

Sr	State/ Region	Construction works								The effective area (New Connection)			Estimated cost (million kyats)		
		66 kV line (mile)	33 kV line (mile)	66/33 kV substation		66/11 kV substation		33/11 kV substation		Villages (Nos)	House Hold (Nos)	Popul- ation (Nos)	material cost	Installation Charges	Total cost
				MVA	No	MVA	No	MVA	No						
12	Mandalay		5					10	4	171	5320	84964	4726.66	362.1	5088.76
								5	3						
13	Magway	12.8	12.5			20	1	10	1	88	22518	83814	3729.58	455.4	4185
						10	1	5	1						
14	Naypyitaw							10	1	25	7224	28774	711.63	127.77	840
15	Bago(East)		17					10	1	236	31402	132406	5810.09	804.78	6614.87
								5	7						
16	Bago(West)	1.6	31			10	1	10	3	720	78997	290203	11894.6	1520.9	13415.5
						5	2	5	7						
17	Ayeyarwaddy	1.2	20			5	2	10	3	198	22799	92228	8428.51	1154.73	9583.25
								5	4						
18	Yangon		63.6					10	1	211	15676	75823	5079.16	812.60	5891.80
								5	3						
<b>Total</b>		<b>35.3</b>	<b>179.6</b>	<b>20</b>	<b>1</b>	<b>135</b>	<b>17</b>	<b>334.25</b>	<b>49</b>	<b>2300</b>	<b>269084</b>	<b>1219312</b>	<b>60799.43</b>	<b>7700.77</b>	<b>68500.86</b>

# Summary for the 11 kV system and 66-33 Systems Upgrading on electrification

Sr	Description	No. of Village	No. of House-hold	Population (x10 <sup>6</sup> )	Total Estimated cost (M Kyats)	Total Estimated cost (M USD)
1	Materials cost for 11 kV system within 2 miles from the Grid	5,274	625,637	2.66	210,203.7	164.2
2	66 and 33 kV substation Upgrading	2,300	269,048	1.21	68,500.8	53.5
	<b>Total</b>	<b>7,574</b>	<b>894,685</b>	<b>3.87</b>	<b>278,704.5</b>	<b>217.7</b>

# Proposal for Usage of World Bank Loan USD 310 million

Sr	Description	Total Cost (million USD)
1	Material Cost for 11 kV Line and Distribution Transformer (First Phase-Priority)	164.2
2	66 and 33 kV substation Upgrading (Second Phase)	53.5
3	Contingency for above(10%)	21.7
	<b>Total for above</b>	<b>239.4</b>
4	TA and Project Management	10
5	Loan amount	310
6	Remaining amount( For .....?)	<b>60.6</b>

# Draft Procurement Plan for 11 kV network materials

Sr	Type of Materials	Cost (Million USD)	Procurement Methods	Comment Lot	Expected Contract dated
1	Transformer	28.79	ICB	10 Lot	Mar-2016
2	Concrete Pole	25.58	ICB	13 Lot	Apr-2016
3	ACSR Conductor	21.29	ICB	11 Lot	May-2016
4	11 kV Insulator	10.08	ICB	7 Lot	May-2016
5	LA,D/S,Fuse and Accessories	78.48	ICB	3 Lot	May-2016
6	Office Equipment	0.05	Shopping	2 package	Jan-2016
7	Vehicles	0.2	NCB	1	Jan-2016
	<b>Total</b>	<b>164.47</b>			

ICB –International Competitive Bidding

NCB –National Competitive Bidding

# Transformer Package

LOT	Quantity	Estimated Amount (M USD)	Delivery Site
1	915	4.6	Bago West-District, PMO Office
2	1038	5.3	Kachin,Chin,Sagaing District, PMO Office
3	221	1.1	Shan(N) -District, PMO Office
4	351	1.8	Kayar, Shan(E),Shan(S) District, PMO Office
5	784	4	Magway,Rakhine District, PMO Office
6	741	3.8	Bago(E),NayPyiTaw District, PMO Office
7	150	0.8	Kayin,Mon,Tanintharyi District, PMO Office
8	839	4.3	Ayeyarwaddy-District, PMO Office
9	236	1.2	Yangon
10	396	2.	Mandalay
<b>Total</b>	<b>5,671</b>	<b>28.8</b>	



# Defining contract package to Bid the Concrete Pole

Lot No	No. of Materials	Estimated Amount (M USD)	Delivery Site
1	311	0.03	Kachin -District, PMO Office
2	2950	0.3	Kayin-District, PMO Office
3	2963	0.3	Mon,Tanintharyi-District, PMO Office
4	15666	1.6	Kayar, Shan(E),Shan(S) District, PMO Office
5	47263	4.8	Chin,Sagaing-District, PMO Office
6	6962	0.7	Shan(N)-District, PMO Office
7	33276	3.4	Magway,Rakhine-District, PMO Office
8	30154	3.1	Bago(E)-District, PMO Office
9	34725	3.5	Bago(W)-District, PMO Office
10	41131	4.2	Ayeyarwaddy-District, PMO Office
1	3379	0.4	NayPyiTaw- ESE Store
12	12286	1.3	Yangon
13	20769	2.1	Mandalay
<b>Total</b>	<b>251,834</b>	<b>25.6</b>	

# Defining contract Package to Bid the ACSR Conductor

Lot No	Tons	Estimated Amount (M USD)	Delivery Site
1	348	1.3	Kayar,Shan(E),Shan(S) -District, PMO Office
2.	1058	4.0	Kachin,Chin,Sagaing -District, PMO Office
3.	152	0.6	Shan(N)-District, PMO Office
4.	737	2.8	Magway,Rakhine-District, PMO Office
5.	670	2.6	Bago(E)-District, PMO Office
6.	765	2.9	Bago(W)-District, PMO Office
7.	917	3.5	Ayeyarwaddy-District, PMO Office
8.	131	0.5	Kayin,Mon,Tanintharyi -District, PMO Office
9.	75	0.3	NayPyiTaw- ESE Store
10.	275	1.1	Yangon
11.	465	1.8	Mandalay
<b>Total</b>	<b>5593</b>	<b>21.3</b>	

# Defining Contract Package to Bid the 11 kV Insulator

Lot No	Estimated Amount (M USD)	Delivery Site
1.	1.9	<b>Kachin,Chin,Sagaing,</b> -District, PMO Office
2.	1.3	<b>Magway,Rakhine</b> -District, PMO Office
3.	3.1	<b>Bago(W),Ayeyarwaddy</b> -District, PMO Office
4.	2.4	<b>Kayar,Kayin,Mon,Shan(E),Shan(N), Shan(S)-,Bago(E),Tantharyi</b> District, PMO Office
5.	0.2	<b>NayPyiTaw-</b> ESE Store
6.	0.5	<b>Yangon</b>
7.	0.8	<b>Mandalay</b>
<b>Total</b>	<b>10.1</b>	

# Defining Contract Package to Bid the LA,D/S, Fuse and Accessories

No. of Lot	Estimated Amount (Mil USD)	Delivery Site
1	67.6	NayPyiTaw- ESE Store
1	3.6	Yangon
1	7.3	Mandalay
<b>Totals</b>	<b>78.5</b>	

## Scope of procurement activities- Consultants

Sr	Contract Description	Estimated Amount (USD)	Method of Procurement
1	Policy making and Regulations for rural electrification	1 M	QCBS
2	a. Geospatial Least Cost Planning for distributions system expansion; b. Geospatial Plan update and data collection for off-grid electrification	2 M	QCBS
3	Development of grid standards and technical specifications	1 M	QCBS
4	Project management and implementation support	5 M	QCBS
5	International Procurement Consultant	500,000	IC
6	International FM Consultant	500,000	IC
7	E&S Safeguard Advisors	500,000	IC
8	Monitoring and Impact Evaluation	500,000	IC

**QCBS –Quality and cost-based selection**

**IC –Individual Consultant**

# PLAN FOR CONSULTANCY ASSIGNMENT

Sr	Description of Assignment	Estimated Cost(USD)	Expected Proposals Date	Remark
1	International Procurement Consultants	500,000	Nov-2015	Support to the Grid PMO to procure goods, works and consultant for the project, and build general procurement capacity in the distribution utilities.
2	Development of grid standards and technical specifications	1,000,000	Feb-2016	Support the Grid PMO to develop and adopt state-of-the-art technical standards, including a distribution grid code to prepare standard technical specifications for key grid extension including ML and LV distribution lines and transformer s.
3	Project management and implementation support	5,000,000	May -2016	Support to the Grid PMO and distribution utilities in overall project management and implementation, including management of inventories of goods supplied for rural electrification, scheduling and commissioning of distribution assets and verification of results on the ground.

## PLAN FOR CONSULTANCY FIRM ASSIGNMENT

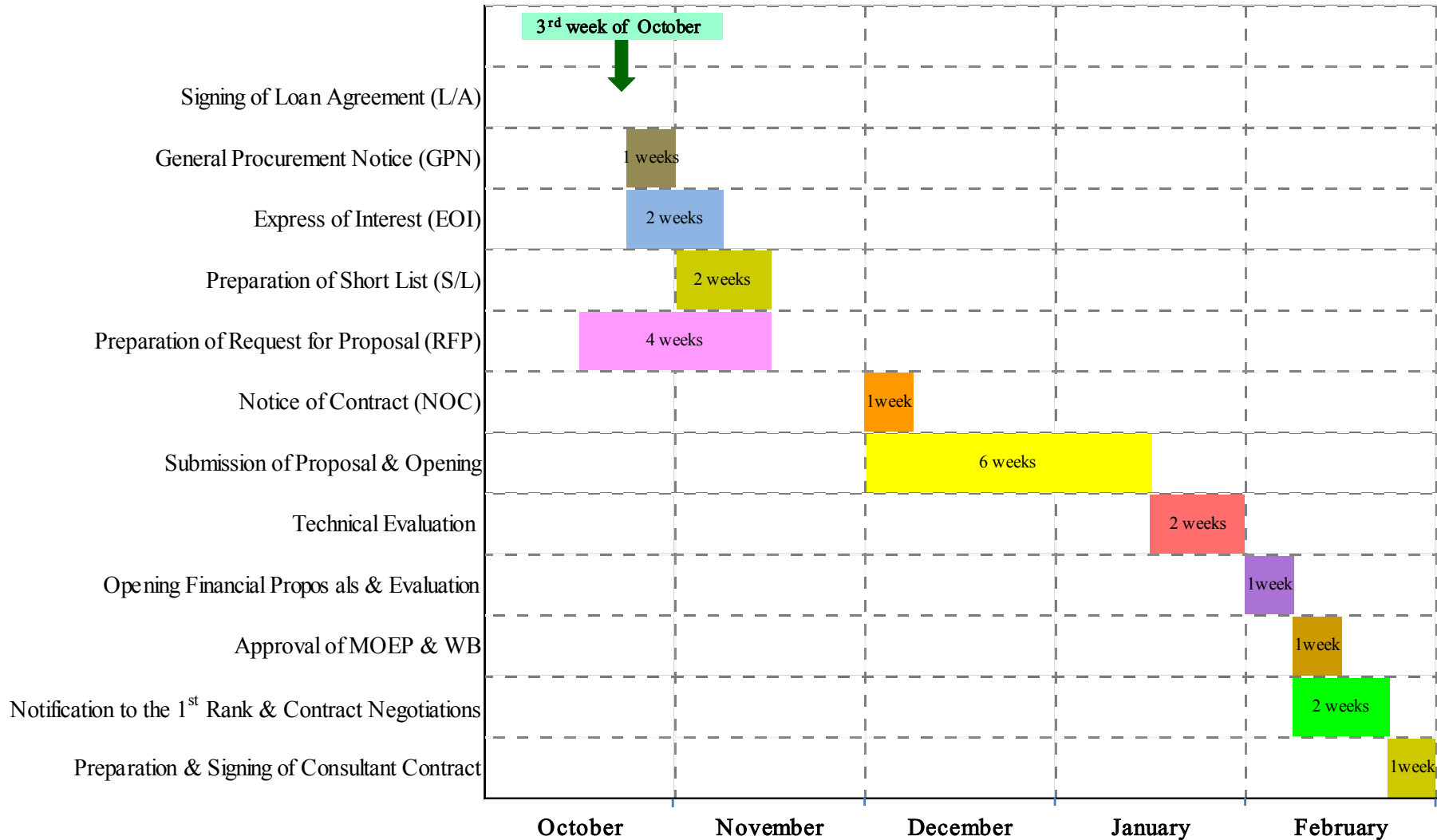
Sr	Description of Assignment	Estimated Cost(USD)	Expected Proposals Date	Remark
4	Monitoring and impact evaluation	500,000	June -2016	Support the Grid PMO to monitor, evaluate and report on progress in implementation , including evaluation of project impacts in newly electrified areas.
5	International Financial Management Consultants	500,000	June-2016	Support the Grid PMO manage Project finances, and build general financial management capacity in the distribution utilities, including billing and collection systems.
6	E & S safeguard Advisors	500,000	Jan-2017	Support the Grid PMO manage Project safeguards instruments and build the distribution utilities capacity to manage environmental and social impacts

# PLAN FOR CONSULTANCY ASSIGNMENT

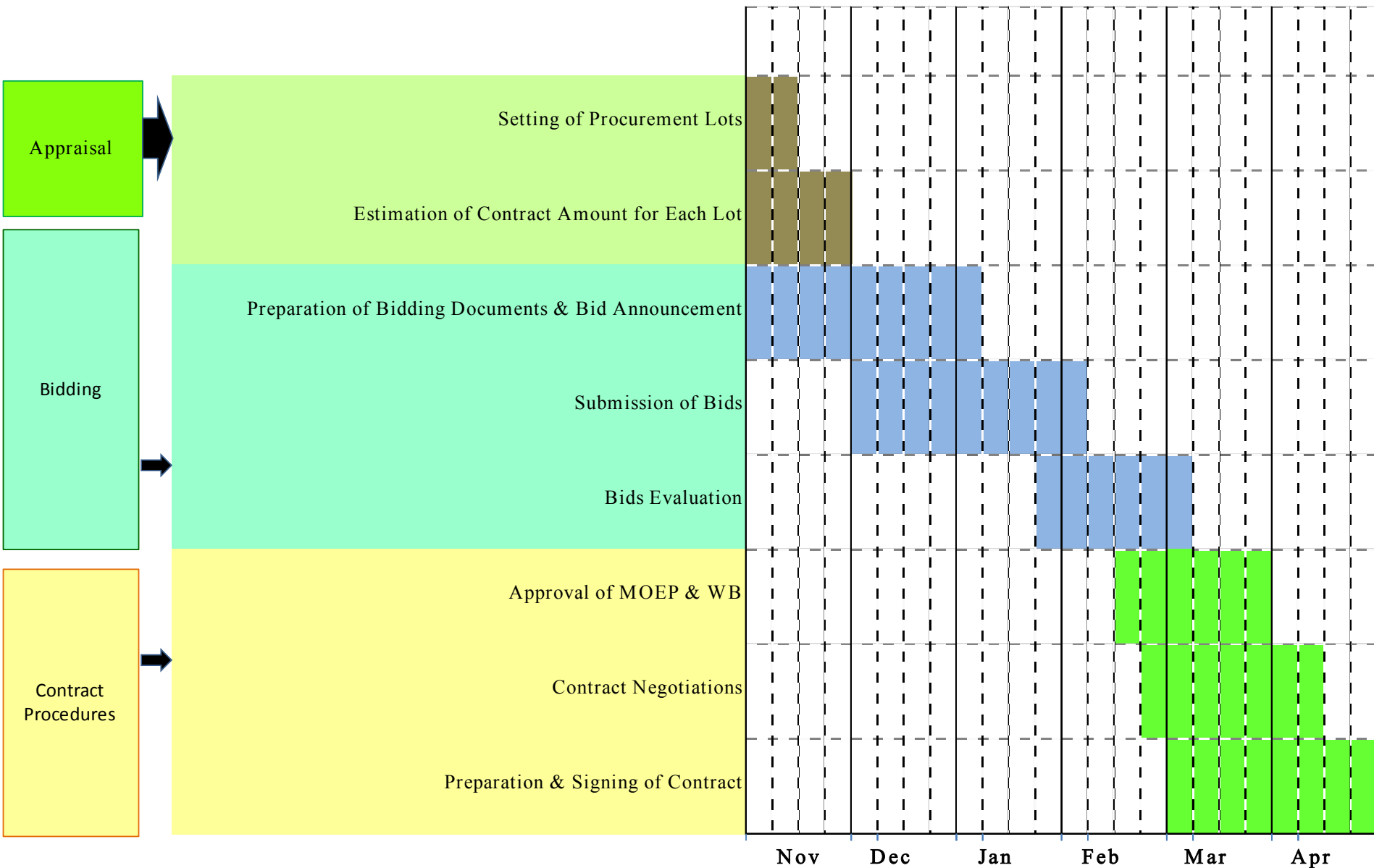
Sr	Description of Assignment	Estimated Cost(USD)	Expected Proposals Date	Remark
7	Policy making and regulation for Rural electrification	1,000,000	March-2017	Support MOEP to Develop policies and regulation for rural Electrification, including design of “power of poor” scheme for electrification of poor households, corporatization and commercialization of the distribution sector and introduction of performance- based regulation in power distribution
8	(a)Geospatial least cost planning for distribution system expansion and (b)Geospatial Plan Update and data collection for off-grid electrification	2,000,000	Dec-2016	Support the Union and local Grid PMO to introduce and least-cost geospatial planning for grid extension



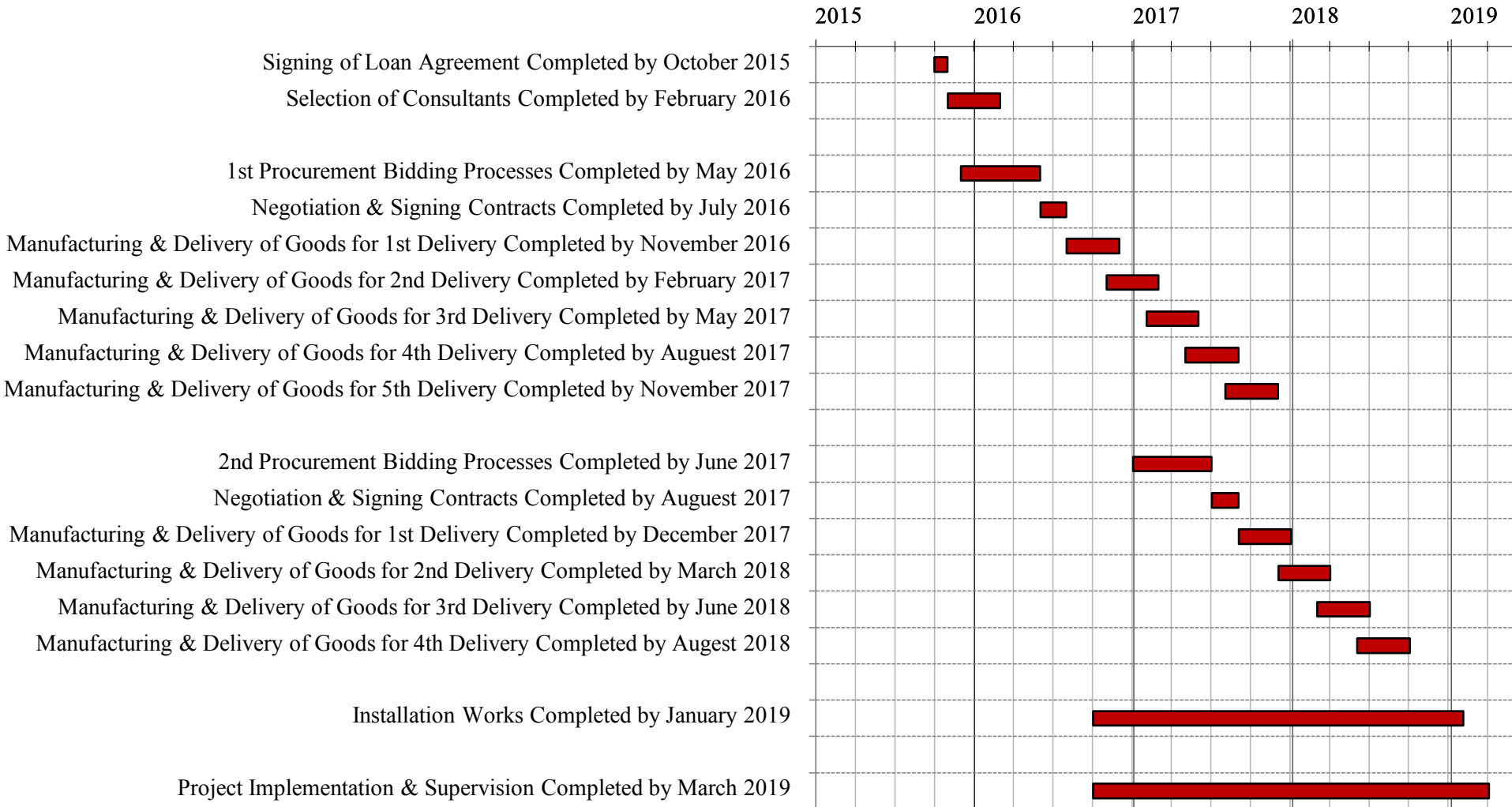
# PROPOSED PLAN FOR CONSULTANT FIRM



# PROPOSED PLAN FOR PROCUREMENT OF GOODS



# PROPOSED OVERALL PROJECT IMPLEMENTATION ON USD 164 MILLION



**Thank you for your kind attention**

# The Statement of 2014-2015 Fiscal Year Regional Budget and Electrified Connection for States and Regions

Sr	State/ Region	State /Region Capital Budget for ESE (M Kyats)			State / Region Capital Budget for DRD (M Kyats)	Electrified Connection			
		Total Cost for 11kV Line & 11/0.4 TR	Total Cost for 400V Line	Total	Off Grid	ON Grid		Off Grid	
						Village (Nos)	Consumer (Nos)	Village (Nos)	Consumer (Nos)
1	Kachin	5790.66	6967.35	12758.01	1172	171	16587	77	5860
2	Kayah	5901.27	702.49	6603.76	441.42	95	6923	120	4418
3	Kayin	1875.60	327.50	2203.10	936.95	44	3080	65	4918
4	Chin	147.51	62.05	209.56	1149.96	4	344	68	6225
5	Mon	521.41	-	521.41	738.20	24	1560	29	3691
6	Rakhine	2636.57	1677.20	4313.77	2186.28	53	4240	126	16506
7	Tannintharyi	0.47	0.04	0.51	1349.37	-	-	91	7747

# The Statement of 2014-2015 Fiscal Year Regional Budget and Electrified Connection for States and Regions

Sr	State/ Region	State /Region Capital Budget for ESE (M Kyats)			State /Region Capital Budget for DRD (M Kyats)	Electrified Connection			
		Total Cost for 11kV Line& 11/0.4TR	Total Cost for 400V Line	Total	Off Grid	ON Grid		Off Grid	
						Village (Nos)	Consumer (Nos)	Village (Nos)	Consumer (Nos)
8	Shan(S)	1629.85	2444.78	4074.63	7437.95	10	3230	573	5630
9	Shan(N)	655.24	445.78	1101.02	3614.54	26	1820	260	16457
10	Shan(E)	409.03	454.25	863.28	679.10	-	-	112	19962
11	Sagaing	429.87	363.66	793.53	4187.80	217	32348	269	21926
12	Mandalay	1343.18	-	1343.18	2523.77	189	23247	154	7392
13	Magway	537.27	362.49	899.76	2784.53	42	8389	71	8998
14	Naypyitaw	398.49	280.23	678.72	1480.72	15	1488	32	8026

# The Statement of 2014-2015 Fiscal Year Regional Budget and Electrified Connection for States and Regions

Sr	State/ Region	State /Region Capital Budget for ESE (M Kyats)			State / Region Capital Budget for DRD (M Kyats)	Electrified Connection			
		Total Cost for 11kV Line& 11/0.4TR	Total Cost for 400V Line	Total	Off Grid	ON Grid		Off Grid	
						Village (Nos)	Consumer (Nos)	Village (Nos)	Consumer (Nos)
15	Pago(E)	-	-	-	2918.32	9	890	71	14131
16	Pago(W)	276.57	105.24	381.81	6745.51	5	472	97	57154
17	Ayarwaddy	607.63	257.03	864.66	6043.36	63	6500	196	32702
18	Yangon	-	-	-	-	-	-	-	-
	<b>Total</b>	<b>23160.62</b>	<b>14450.09</b>	<b>37610.71</b>	<b>46389.78</b>	<b>967</b>	<b>111118</b>	<b>2411</b>	<b>241743</b>

# The Statement of 2015-2016 Fiscal Year Regional Budget and Electrified Connection for States and Regions

Sr	State/ Region	State /Region Capital Budget for ESE (M Kyats)			State / Region Capital Budget for DRD (M Kyats)	Electrified Connection			
		Total Cost for 11kV Line& 11/0.4 TR	Total Cost for 400V Line	Total	Off Grid	ON Grid		Off Grid	
						Village (Nos)	Consumer (Nos)	Village (Nos)	Consumer (Nos)
1	Kachin	8652.20	10159.99	18812.19	1641.20	140	13320	206	11330
2	Kayah	9401.54	2697.60	12099.14	247.25	114	6948	44	1210
3	Kayin	3783.55	1509.35	5292.90	1027.6	93	6510	74	5138
4	Chin	275.59	98.65	374.25	430.40	5	152	79	2139
5	Mon	2452.81	305.53	2758.34	1400.60	50	3250	68	6837
6	Rakhine	11972.09	8282.90	20254.99	2719.20	107	14427	155	13596
7	Tannintharyi	1846	946	2792	889.77	-	-	130	12731



# The Statement of 2015-2016 Fiscal Year Regional Budget and Electrified Connection for States and Regions

Sr	State/ Region	State /Region Capital Budget for ESE (M Kyats)			State /Region Capital Budget for DRD (M Kyats)	Electricfied Connection			
		Total Cost for 11kV Line& 11/0.4TR	Total Cost for 400V Line	Total	Off Grid	ON Grid		Off Grid	
						Village (Nos)	Consumer (Nos)	Village (Nos)	Consumer (Nos)
8	Shan(S)	3650.94	5476.39	9127.33	5520.43	115	35600	516	4950
9	Shan(N)	2416.78	2548.00	4964.78	2841.85	77	4625	242	13537
10	Shan(E)	229	122.50	351.50	761.24	-	-	126	20261
11	Sagaing	2906.19	625.11	3531.30	4436.80	250	29500	227	18677
12	Mandalay	1353.33	-	1353.33	2316.03	22	2706	-	-
13	Magway	10645.43	2209.45	12854.88	3283.61	264	33831	185	12559
14	Naypyitaw	3197.79	-	3197.79	-	66	13147	-	-

# The Statement of 2015-2016 Fiscal Year Regional Budget and Electrified Connection for States and Regions

Sr	State/ Region	State /Region Capital Budget for ESE (M Kyats)			State / Region Capital Budget for DRD (M Kyats)	Electrified Connection			
		Total Cost for 11kV Line&11/0.4T R	Total Cost for 400V Line	Total	Off Grid	ON Grid		Off Grid	
						Village (Nos)	Consumer (Nos)	Village (Nos)	Consumer (Nos)
15	Pago(E)	43.03	30.40	73.43	1441.37	18	1786	68	5915
16	Pago(W)	1059.67	700.25	1759.92	1980.43	30	3139	168	44965
17	Ayarwaddy	413.13	197.88	611.01	3054.12	125	13100	212	15425
18	Yangon	252.70	580.11	832.81	-	24	3287	-	-
	<b>Total</b>	64551.77	36490.1 1	101041. 88	33991.93	1500	185328	2500	189270

# The Statement of 2016-2017 Fiscal Year Estimated Regional Budget and Electrified Connection for States and Regions

Sr	State/ Region	State /Region Capital Budget for ESE (M Kyats)			State / Region Capital Budget for DRD (M Kyats)	Electrified Connection			
		Total Cost for 11kV Line& 11/0.4 TR	Total Cost for 400V Line	Total	Off Grid	ON Grid		Off Grid	
						Village (Nos)	Consumer (Nos)	Village (Nos)	Consumer (Nos)
1	Kachin	6334.04	5506.18	11840.22	-	60	5580	21	1785
2	Kayah	456.38	2104.96	2561.34	801.30	25	1625	80	2671
3	Kayin	7577	861	8438.00	-	148	10360	203	24649
4	Chin	1970.53	509.77	2480.30	2977.20	17	1334	516	14886
5	Mon	1814.46	138.80	1953.26	6768.00	21	1365	173	22560
6	Rakhine	19356.25	9881.03	29237.28	-	178	23140	785	115622
7	Tannintharyi	13047	6549	19596	6189.90	-	-	360	41367

# The Statement of 2016-2017 Fiscal Year Estimated Regional Budget and Electrified Connection for States and Regions

Sr	State/ Region	State /Region Capital Budget for ESE (mil Kyats)			State /Region Capital Budget for DRD (mil Kyats)	Electricfied Connection				
		Total Cost for 11kV Line& 11/0.4TR	Total Cost for 400V Line	Total		Off Grid	ON Grid		Off Grid	
							Village (Nos)	Consumer (Nos)	Village (Nos)	Consumer (Nos)
8	Shan(S)	4780.54	6354.57	11135.11	6520.55	70	22400	540	5230	
9	Shan(N)	3661.23	3786.40	7447.63	6452.40	48	3120	508	27617	
10	Shan(E)	640.20	342.02	982.22	1756.20	-	-	197	42230	
11	Sagaing	18378.10	5313.86	23691.96	6633.92	357	54645	301	33165	
12	Mandalay	-	-	-	-	-	-	-	-	
13	Magway	9508.40	1497.42	11005.82	19093.67	198	36468	554	74998	
14	Naypyitaw	1396.97	752.21	2149.18	-	17	5234	-	-	