

ANNEX 4 – FINANCIAL ASSESSMENT OF TCN

1. INTRODUCTION

This Annex presents the financial assessment of TCN covering the recent past performance (2011 to 2013) and a “Minimum Funding” cash constrained operating budgets for TCN for 2014-15. The forecasts are prepared under the assumption that there will be no tariff increase in 2014-15 (i.e. MYTO II tariffs will apply throughout). TCN’s historical financial statements have not yet been audited and there is fundamental uncertainty regarding the reliability of these financial statements.

2. RECENT PERFORMANCE

Operational Performance

1. TCN’s key operational performance indicators over the last three years are indicated in Table 1 and Figure 1 below.

Table 1: Operational Indicators 2011-13

	2011	2012	2013
Peak generation (MW)	4,089	4,518	4,458
Average generation (MW)	3,082	3,298	3,297
Growth in peak generation	7.5%	10.5%	-1.3%
Energy wheeled (sent out by stations) (GWh)	26,999	28,890	28,879
Growth in energy sent out	10.8%	7.0%	0.0%
Transmission losses (%)	10.4%	12.1%	12.1%
Bulk supply to DisCos (GWh)	24,205	25,385	25,373
Number of staff at December 31	3,334	3,958	4,210
Energy wheeled (GWh) per staff	8.1	7.3	6.9

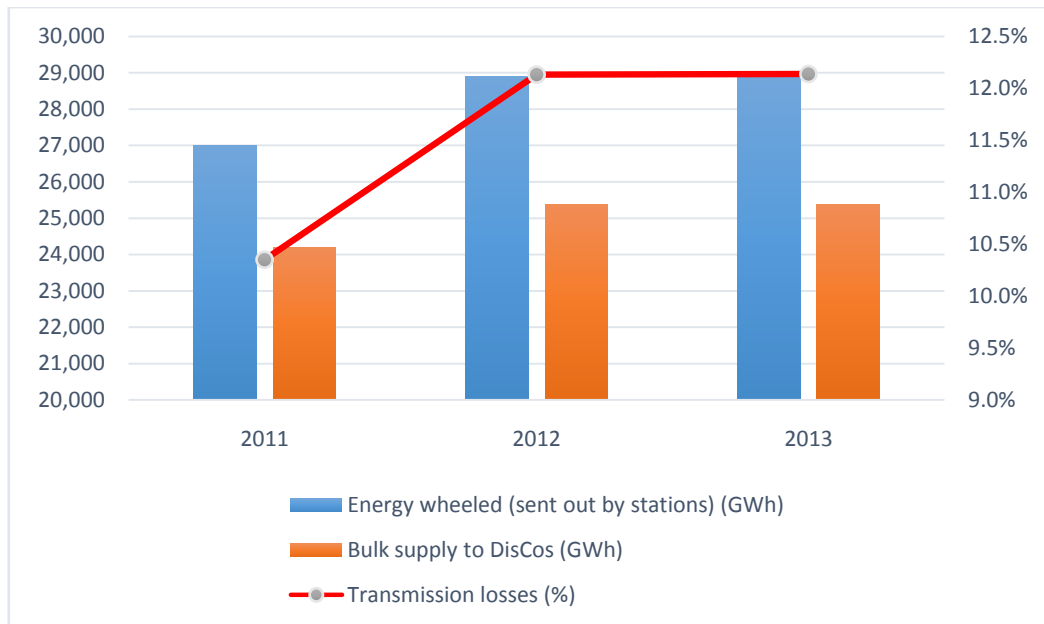


Figure 1: Operational Indicators 2011-13

2. Peak generation of around 4,500 MW in the last two years was more or less equal to the capacity of the transmission network to transmit the available generation to the distribution companies (DisCos).
3. Energy wheeled (sent out by stations) registered growth rates of 10.8% in 2011, 7.0% in 2012 and remained almost unchanged in 2013. Total wheeled energy in 2013 reached 28,879GWh. Performance in terms of transmission losses has deteriorated since 2011, increasing from 10.4% in 2011 to 12.1% in 2012/13. The high losses include non-technical losses attributable to illegal connections by some large industrial consumers. Inadequate maintenance of the transmission network over the years has resulted in high technical losses.
4. The number of staff employed by TCN increased from 3,334 in 2011 to around 4,210 by end 2013. The increase in staff numbers was far greater than the growth in wheeled energy and as a result the energy wheeled per staff declined from 8.1GWh in 2011 to 6.9GWh in 2013.

Financial Performance

5. TCN is technically insolvent as the existing MYTO transmission tariffs and billing collections are inadequate for the company to finance its operations. The company is consistently unable to meet its obligations to suppliers/contractors in compliance with terms of contracts. TCN is fortunate that the company has FGN backing. The present financial situation of the company is not sustainable.
6. Non-collection of tariff charges is a significant recurring problem for TCN. The Interim Market Rules (pre-TEM) provides for collection of 70% for TSP and 60% for SO and MO. However, the overall average collection rate in 2013 was

around 60%. Retail billing collections by DisCos have dropped to 45% in the last two months and this will impact on all the Market Participants and Service Providers, including TCN. Shows the monthly billing collection performance in 2013.

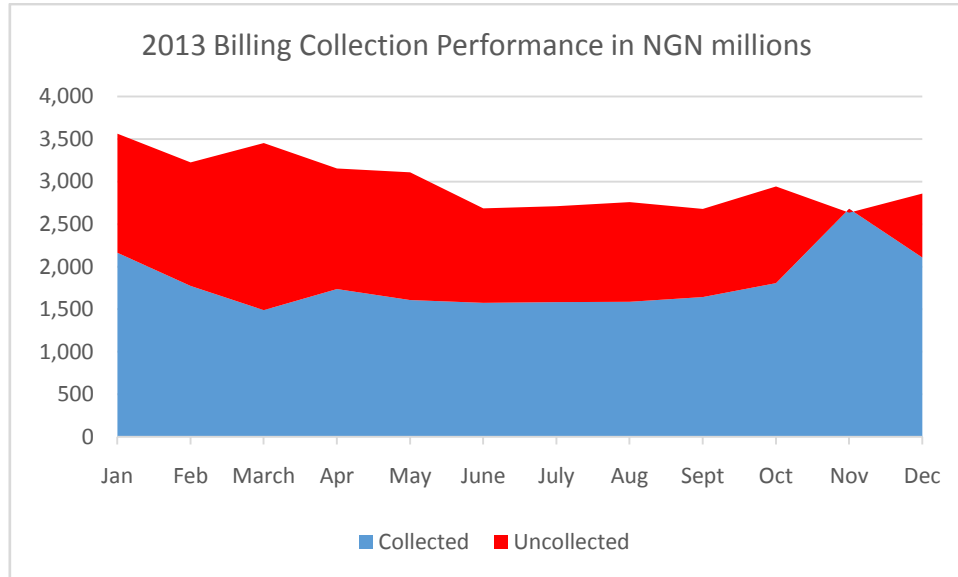


Figure 2: 2013 Monthly Billing Collection Performance

7. The company’s unpaid billing due from the market fund as at December 31, 2013 amounted to NGN50 billion (US\$315 million), equivalent to 138% – or 16 months – of TCN of 2013 annual revenues.
8. Table 2 below provides the key financial performance indicators over the past three years.

Table 2: Financial Indicators 2011-13

	2011	2012	2013
Av tariff (NGN/MWh)	1,331	1,445	1,490
Av tariff (US\$/MWh)	8.73	9.25	9.57
Av operating profit/(loss) (NGN/MWh)	449	(269)	(278)
Av operating profit/(loss) (US\$/MWh)	2.94	(1.72)	(1.79)
Net profit/(loss) (NGN millions)	10,968	(6,718)	(7,005)
Net profit/(loss) (US\$ millions)	72	(43)	(45)
Operating margin	29.5%	-18.1%	-18.2%
Return on equity	3.5%	-2.2%	-2.1%
Current ratio (times)		4.5	2.9
Debt/equity ratio		9.0%	11.2%

9. Transmission tariffs were applied in accordance with MYTO II tariffs pre-determined by NERC for the period June 2012 to May 2017. Although the revenue requirements of TCN are mostly of a fixed nature, the transmission

tariff determined by NERC is based on the volume of bulk supply to distribution companies. This means that TCN carries an element of generation risk. The company is financially exposed due to non-availability of expected generation capacity. The average transmission tariff increased by 11.9% compared with domestic inflation of 21.7% during the last two years to end 2013.

10. TCN made pre-tax losses of FGN13.7 billion (US\$88 million) in 2012/13 with negative operative margin of around 18%, based on unaudited financial statements. The company had a low debt/equity ratio of 11% as at December 31, 2013.

3. FINANCIAL OUTLOOK 2014/15

11. The financial outlook over the next few years will largely depend on the availability of generation capacity (and thus wheeled energy), refurbishment of existing the transmission network in the short-term, expansion of the transmission network in the medium-term, efficiency improvements in terms of transmission losses and operating expenses, financing costs of planned investments and tariff levels in particular.

Conclusions

12. The collected cash revenue is inadequate for TCN to embark on the required program of transformation. For the remainder of 2014 and into 2015, TCN will continue to operate under severe cash constraints if the existing MYTO II tariffs regime applied and tariffs are not revised upwards. The main takeaway is that existing tariff levels and cash collections on billed revenues are much too low to fund the operational and capital expenditures necessary for TCN to adequately perform its functions. Until the situation turns around, a minimum funding regime and strict austerity will have to be implemented.
13. TCN will make an application to NERC for higher tariffs to reflect changes since 2012. These include:
 - Poor billing collections (MYTO II assumes 100% collections)
 - Much higher annual network maintenance & operating requirements for proper operations
 - Depreciation on assets in service and returns on capital employed:
 - Planned heavy network investments (US\$7.7 billion) to 2018
 - Anticipated transfer of NIPP assets (US\$2.0 billion) in 2014
 - Transfer of transmission assets (US\$467 million) recorded in PHCN books
 - Transfer of transmission assets (\$147 million) recorded in PMU books

14. In view of the uncertainties concerning the outcome of the forthcoming tariff negotiations, the Minimum Funding financial projections of TCN presented in this Annex are limited to 2014-15.

Tariffs

15. MYTO II tariffs, which were pre-determined by NERC for 2012-17, are shown in Table 3 below. Tariffs are revised every June 1 and the percentages changes shown are implemented as per MYTO rules. Tariffs were reduced by 6.5% effective June 2013 and are expected to be reduced by 1.6% in June 2014 and revised upwards by 9.3% & 11.7% in June 2015 & 2016 respectively.

Table 3: MYTO II Tariffs 2012-16

	MYTO II Tariffs				
	June 2102	June 2103	June 2104	June 2105	June 2106
TSP wheeling charges	1,216	1,137	1,119	1,224	1,367
SO services	195	182	179	196	219
MO services	51	48	47	52	58
TCN charges	1,462	1,367	1,346	1,472	1,643
Ancillary charges	21	19	19	21	23
NERC fees	38	36	35	38	43
Transmission tariff	1,521	1,422	1,400	1,531	1,709
Change in tariff		-6.5%	-1.6%	9.3%	11.7%

16. The above tariffs have been assumed in the projected financial outcomes presented in this Annex.

Key Performance Indicators 2014-15

17. Table 4 below provides a summary of energy wheeled, revenues, operating costs, capital investments funded from internally generated revenues (IGR) and cash flows under the Minimum Funding projections for 2014-15 together with estimated actuals for 2013.

Table 4: Energy, Revenues & Cash Flows 2013-15

	Est Actual	Minimum Funding MYTO II Tariffs	
	2013	2014	2015
Energy			
Transmission losses	12.1%	10.0%	9.5%
Bulk supply to DisCos (GWh)	25,373	31,895	33,172
Growth in bulk supply	0.0%	22.7%	3.4%
Tariffs (excl Ancilliary & NERC charges)			
Date of tariff increase	June 1	June 1	June 1
Tariff increase	-6.5%	-1.6%	9.3%
Average tariff after increase (NGN/MWh)	1,367	1,346	1,472
Average tariff in year (NGN/MWh)	1,432	1,355	1,419
<u>All figures in NGN billions</u>			
Wheeling revenue:			
Billed	36.3	43.2	47.1
Collected	22.1	21.6	34.8
% collected/billed	61%	51%	75%
Operating costs	24.8	27.2	30.6
Capital expenditure from IGR	2.1	0.9	4.0
Incr/(decr) in inventory	(4.5)	(1.4)	0.0
Net cash inflow/(outflow)	1.1	(6.7)	0.2
Cash balance at Dec 31:	0	0	0
As forecast	8.4	1.7	1.9
Minimum required		1.7	1.9
Cash surplus/(shortfall)		0.0	0.0

18. The following observations can be made concerning the figures shown in the foregoing table:

- Energy wheeled is forecast on the basis of constrained gas supply. The increase in bulk supply to DisCos is projected to increase by 22.7% in 2014 and by 3.4% in 2015. The increases are due to a combination of additional generation capacities coming online and reduction in transmission losses. The energy losses are projected to decline by 2% in 2014 by targeting non-technical losses (i.e. theft by some major industrial consumers) and investments in the refurbishment of the network, a modest reduction of 0.5% is assumed in 2015.
- MYTO II tariffs are revised every June 1 and the percentage changes shown are implemented as per MYTO order. It should be noted that tariffs were reduced by 6.5% effective June 1, 2013 and are expected to be reduced by 1.6% effective June 1, 2014. MYTO II tariffs are expected to be revised upwards by 9.3% effective June 1, 2015.

- Billing collection rates are assumed under all scenarios at 45% from January to July 2014, 60% from August to December 2014 and 75% in 2015. The 45% figure represents the fact that retail billing collections by DisCos have dropped to 45% in the last two months and this will impact on all the Market Participants and Service Providers, including TCN. Non-collection of tariff charges is a persistent problem for TCN. The Interim Market Rules (pre-TEM), which provide for collection of 70% for TSP and 60% for SO and MO effective November 2013, have not been followed to date. The overall average collection rate in 2013 was around 61%
 - TCN's collected revenue varies directly with the amount of energy wheeled, whereas TCN's costs are nearly 100% fixed. Under the existing tariff levels and collection rates, the energy wheeled would need to be more than double the current amount to generate enough cash for proper funding of the business. Table 5 below provides a sensitivity showing the change in cash flows for changes to the amount of wheeled energy.
19. Operating costs and investments funded from internally generated revenues (IGR) have had to be scaled back significantly to levels that are affordable in terms of forecast cash inflows under the Minimum Funding budgets. Required minimum cash balances are maintained in 2014-15.
 20. TCN will have to operate under a tight financial regime or risk defaulting on cash obligations. Net cash outflows of NGN6,704 million in 2014 are forecast under the Minimum Funding budgets (MYTO II tariffs) and the cash balance by December 2014 declines to NGN1,731 million, which is equal to the minimum requirement.

Sensitivities to Minimum Funding Budgets

21. The Minimum Funding cash flows presented above were subjected to several key sensitivity tests and the results of these sensitivities are presented in Table 5 below.

Table 5: Cash Flow Impacts of Key Sensitivities 2014-15

	NGN millions			US\$ millions		
	2014	2015	Total	2014	2015	Total
Wheeled energy						
High Case	3,395	6,285	9,680	22	39	61
Low Case	(3,378)	(6,253)	(9,631)	(21)	(39)	(60)
Transmission losses						
Minimum Funding	10.0%	9.5%				
2013 level (i.e. no improvements)	12.0%	12.0%				
Lower losses (i.e. higher efficiency gains)	9.0%	8.0%				
Cash flow impact:						
2013 level (i.e. no improvements)	(411)	(933)	(1,345)	(3)	(6)	(8)
Lower losses (i.e. higher efficiency gains)	206	548	754	1	3	5
Collection rates (2013 = 61%, Dec 2013-Jan 2014 = 45%):						
Minimum Funding	51.3%	75.0%				
2013 level	61.0%	61.0%				
Present (Dec 2013/Jan 2014) level	45.0%	45.0%				
Improved collections	75.0%	90.0%				
Cash flow impact:						
2013 level	4,103	(6,606)	(2,503)	26	(41)	(15)
Present (Dec 2013/Jan 2014) level	(2,630)	(13,934)	(16,564)	(17)	(87)	(103)
Improved collections	9,995	6,967	16,961	64	43	107

22. Changes in assumptions relating to wheeled energy, transmission losses and collection rates have significant impacts on the financial outcomes for TCN. This is clearly illustrated in the results indicated in the above table.

TCN Unaudited Draft Financial Statements 2012-13

23. The unaudited draft financial statements of TCN for 2012 and 2013 are presented in the following pages.

Transmission Company Of Nigeria (TCN)		
Income Statements (Uaudited Draft)		
	2012	2013
Energy wheeled (sent out by stations) (GWh)	28,890	28,879
Transmission losses (%)	12.1%	12.1%
Bulk supply to DisCos (GWh)	25,385	25,373
Average tariff		
NGN/MWh	1,445	1,490
US\$/MWh	9.251	9.568
	NGN millions	
Operating revenue		
Wheeling charges	32,414	30,281
SO & MO administration services	3,982	6,044
NERC regulatory charges	148	908
SO ancillary services	145	575
PHCN HQ charges	263	0
Pension & other charges	0	0
Other operating revenue	709	882
Total operating revenue	37,661	38,690
Operating expenses		
Payroll	16,018	13,503
Repairs & maintenance	6,000	3,733
Ancillary services costs	145	575
Regulatory fees	148	908
Administration & overheads	4,091	7,593
Operating expenses before depreciation & provisions	26,402	26,311
Depreciation	10,679	12,034
Provisions for bad debts	7,415	7,401
Total operating expenses	44,496	45,746
Operating profit/(loss)	(6,835)	(7,056)
Net finance charges	(118)	(51)
Profit/(loss) before taxation	(6,718)	(7,005)
Taxation	0	0
Profit/(loss) after taxation	(6,718)	(7,005)
Ratios		
Av. operating profit/(loss) N/MWh	(269)	(278)
Av. operating profit/(loss) US\$/MWh	(1.724)	(1.786)
Operating margin (%)	-18.1%	-18.2%
Return on equity (%)	-2.2%	-2.1%

Transmission Company Of Nigeria (TCN)		
Balance Sheets (Uaudited Draft)		
	2012	2013
	NGN millions	
Fixed & other long-term assets		
Tangible assets at cost/valuation	281,614	374,557
Less: Accumulated depreciation	21,654	33,688
Net book value of fixed assets	259,961	340,870
Project funds & advances	44,296	54,060
Total long-term assets	304,256	394,930
Current assets		
Inventory	9,811	14,269
Customer accounts receivable	5,567	6,514
Other debtors & prepayments	898	5,805
Cash at bank and in hand	7,371	8,435
Total current assets	23,647	35,023
Current liabilities (amounts falling due within one year)		
Creditors	5,295	12,027
Corporate tax payable	0	0
Current Portion of long-term loans	0	0
Total current liabilities	5,295	12,027
Net current assets/(liabilities)	18,353	22,997
Total assets less current liabilities	322,609	417,927
Creditors (amounts falling due after more than one year)		
Long-term loans	25,872	41,872
Less: Current portion	0	0
Long-term portion	25,872	41,872
Legacy liabilities	1,300	1,300
Employee benefits scheme	1,981	3,671
Total creditors (amounts falling due after more than one year)	29,153	46,843
Net assets employed	293,456	371,084
Capital and reserves		
Capital & reserves	193,323	186,299
Grants & Government contribution for investments	100,133	184,784
Shareholders' equity	293,456	371,084
Ratios		
Current ratio (times)	4.5	2.9
Debt/equity ratio	9.0%	11.2%

Transmission Company Of Nigeria (TCN)		
Cash Flows (Uaudited Draft)		
	2012	2013
	NGN millions	
Net cash inflow/(outflow) from operating activities:		
Operating profit/(loss)	(6,835)	(7,056)
Depreciation	10,679	12,034
(Increase)/decrease in stocks	(1,666)	(4,457)
(Increase)/decrease in debtors	29,401	(5,854)
Increase/(decrease) in creditors	6,304	8,422
Other	(22,900)	(18)
Net cash inflow/(outflow) from operating activities	14,984	3,070
Returns from investments and servicing of finance:		
Interest received	118	51
Interest paid	0	0
Net cash outflow for returns on investments & servicing of finance	118	51
Taxation paid	0	0
Investing activities:		
Payments to acquire tangible fixed assets	(44,766)	(20,480)
Project funds & advances	6,833	(9,765)
Net cash outflow from investing activities	(37,933)	(30,245)
Net cash inflow/(outflow) before financing	(22,832)	(27,124)
Financing activities:		
Grants & Government contribution for investments	8,946	12,188
Borrowing	0	16,000
Borrowing repaid	0	0
Net cash inflow from financing activities	8,946	28,188
Increase/(decrease) in cash and cash equivalents	(13,886)	1,064
Cash and cash equivalents at beginning of year	21,257	7,371
Cash and cash equivalents at end of year	7,371	8,435
Ratios		
Self-financing ratio (%)	46%	4%
Debt service cover (times)	n/a	n/a