

ZAMREN Business Plan

Model bandwidth dependent

Financial overview Remarks

Parameters

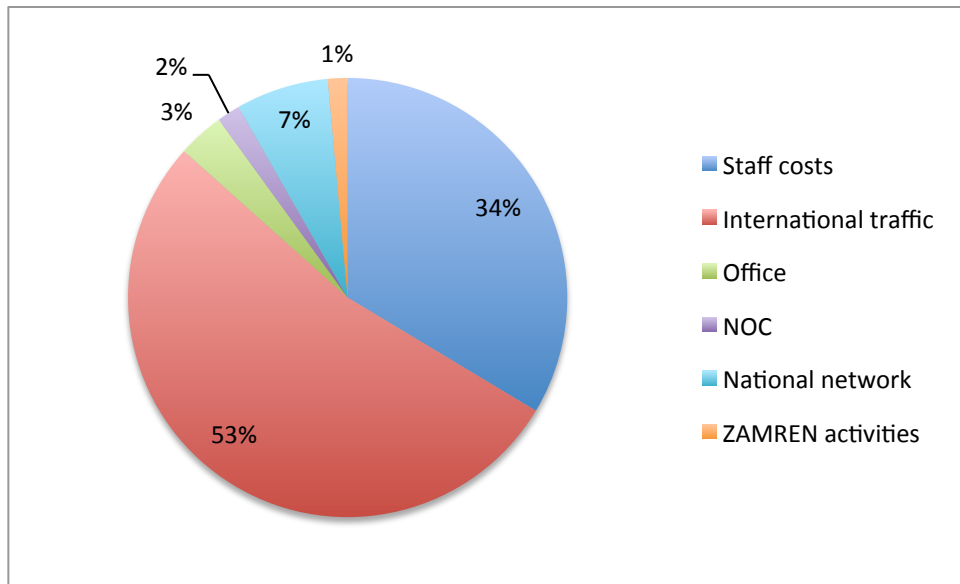
Year	2012	2013	2014	2015	2016	Totals	
Income							
Broadband services	\$327.500	\$1.200.000	\$1.976.500	\$2.165.000	\$2.165.000	\$7.834.000	
NICHE ZM072 6%	\$43.000	\$43.000	\$43.000			\$129.000	
NICHE ZM072 budget	\$62.500	\$90.000	\$75.000			\$227.500	
UNZA contribution	\$86.240	\$21.560				\$107.800	
CBU staff contribution	\$111.240	\$28.644				\$139.884	
Internet Exchange			\$25.000	\$40.000	\$50.000	\$115.000	
Zicta Africa Connect		\$360.000				\$360.000	
Zesco backbone	\$240.000	\$180.000	\$135.000	\$101.250	\$75.938	\$732.188	
Advance payment	\$130.000						
Total income	\$1.000.480	\$1.923.204	\$2.254.500	\$2.306.250	\$2.290.938	\$9.775.372	Total revenues
OPEX	\$1.020.495	\$1.827.462	\$2.068.993	\$2.055.361	\$2.133.108	\$9.105.419	Operational expenses from OPEX
Ebitda	(\$20.015)	\$95.743	\$185.507	\$250.889	\$157.830	\$669.953	Total income minus OPEX
Depreciation	\$0	\$97.833	\$113.667	\$138.250	\$156.583	\$506.333	Depreciation starts in the year following procurement
Amortisation	\$0	\$0	\$50.000	\$80.000	\$0		
EBIT per year	(\$20.015)	(\$2.091)	\$21.840	\$32.639	\$1.247		
Ebit cummulative	(\$20.015)	(\$22.106)	(\$266)	\$32.373	\$33.620		Cummulative loss or profit over given years!
CAPEX	\$428.000	\$100.000	\$135.000	\$110.000	\$60.000	\$833.000	Starting 2015 from ZAMREN equipment fund

Model number:	1
Bandwidth level multiplier:	1
Tariiff decrease factor:	0,625
Average \$/Mbps/Month Ph1:	\$909
Average \$/Mbps/Month Ph2:	\$523

	2012	2013	2014	2015	2016
Equipment fund	\$0	\$97.833	\$186.500	\$264.750	\$361.333
Cash flow	(\$20.015)	\$75.728	\$186.234	\$297.123	\$394.953

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Opex	2012	2013	2014	2015	2016	Total
Staff costs	255.595	676.062	695.593	715.711	736.433	\$3.079.394
Office	42.500	70.500	70.500	70.500	70.500	\$324.500
NOC	37.000	32.000	35.000	35.000	35.000	\$174.000
National network	268.400	186.400	141.400	107.650	82.338	\$786.188
International traffic	409.500	817.500	1.096.500	1.096.500	1.178.838	\$4.598.838
ZAMREN activities	7.500	45.000	30.000	30.000	30.000	\$142.500
Totals	\$1.020.495	\$1.827.462	\$2.068.993	\$2.055.361	\$2.133.108	\$9.105.419



	2014	
Staff costs	\$695.593	34%
International traf	\$1.096.500	53%
Office	\$70.500	3%
NOC	\$35.000	2%
National network	\$141.400	7%
ZAMREN activiti	\$30.000	1%

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Capex

Year	2012	2013	2014	2015	2016	Totals	
Depreciation period NOC & POP's	4	368.000	15.000	25.000	50.000	50.000	\$508.000
Vehicles		25.000					\$25.000
Office		10.000	10.000	10.000	10.000	10.000	\$50.000
ZAMREN training centre			25000				
Internet Exchange			25000				
Activity 3							
Subtotals		\$378.000	\$50.000	\$85.000	\$60.000	\$60.000	\$633.000
Depreciation per year		\$0	\$94.500	\$107.000	\$128.250	\$143.250	
Depreciation period FO	15						
Last mile connectivity		50.000	50.000	50.000	50.000	0	\$200.000
Sub total		50.000	50.000	50.000	50.000	0	
Depreciation/year		0	3.333	6.667	10.000	13.333	
Totals investments		\$428.000	\$100.000	\$135.000	\$110.000	\$60.000	\$833.000
Totals depreciation		\$0	\$97.833	\$113.667	\$138.250	\$156.583	\$506.333

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2012

Staff costs

Salaries	230.595		
Overhead	0	0%	
Training	25.000		Nuffic budget
Subtotal	255.595		

International connectivity

Ubuntunet transit	408.000		
Ubuntunet Membership	1.500		
Subtotal	409.500		

National connectivity

Private Network Licence	22.000		
Local Transit Charges	240.000		
AfriNIC IP Address Fees	6.400		
Subtotal	268.400		

NOC

Software Licences & Upgrades	25.000		Nuffic budget
Hardware maintenance	0		
Housing (incl. Insurance and power)	12.000		UNZA in kind
Subtotal	37.000		

OFFICE

Vehicle Maintenance	0		
Fuel	12.000		
Adverts and Publicity	2.500		
Office rental	10.000		UNZA in kind
Board Meetings	6.000		
Travel/lodging	10.000		Nuffic budget (50%)
General Assembly meeting	0		
Audit Fees	2.000		
Subtotal	42.500		

ZAMREN activities

Annual User Conference	0		Nuffic budget
Virtualisation training	7.500		Nuffic budget
			Nuffic budget
			Nuffic budget
Subtotal	7.500		

Total: 1.020.495

Total UNZA inkind 35.000

Total from Nuffic budget: 62.500

Investments

Budget

Office			
Lump sum		10.000	Nuffic budget
Subtotal		10.000	

Vehicles

Utility vehicle	0		No budget
Subtotal	0		

NOC

Spam filter		15.000	Nuffic budget
Bandwidthmanager		15.000	Nuffic budget
PoP Luska		97.500	Nuffic budget
PoP Kabwe		81.250	Nuffic budget
PoP Kitwe		81.250	Nuffic budget
Access switches		44.000	Nuffic budget
NOC flat screen		4.000	Nuffic budget
FO connectors		30.000	Nuffic budget
Subtotal		368.000	

Last mile

MU campus		50.000	Zicta

Subtotal 50.000

Total: 428.000

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2013

Staff costs

Salaries	591.874	
Overhead	59.187	10%
Training	25.000	Nuffic budget
Subtotal	676.062	

International connectivity

Ubuntunet transit	816.000	
Ubuntunet Membership	1.500	
Subtotal	817.500	

National connectivity

5-year Private Network Licence	0	
Local Transit Charges	180.000	
AfriNIC IP Address Fees	6.400	
Subtotal	186.400	

NOC

Software Licences & Upgrades	15.000	Nuffic budget
Hardware maintenance	5.000	
Housing (incl. Insurance and power)	12.000	
Subtotal	32.000	

OFFICE

Vehicle Maintenance	15.000	
Fuel	20.000	
Adverts and Publicity	5.000	
Office rental	10.000	
Board Meetings	6.000	
Travel/lodging	10.000	Nuffic budget (50%)
General Assembly meeting	2.500	
Audit Fees	2.000	
Subtotal	70.500	

ZAMREN activities

Annual User Conference	5.000	Nuffic budget
Lumpsum training	25.000	Nuffic budget
Project management training	7.500	Nuffic budget
Identity Management training	7.500	Nuffic budget
Subtotal	45.000	

Total: 1.827.462

UNZA in kind

Total from Nuffic budget: 90.000

Investments

Budget

Office

Lumpsum	10.000	Nuffic budget
subtotal	10.000	

Utility vehicle	25.000	Nuffic budget (?)
subtotal	25.000	

NOC

Radio links Uni.colleges	15.000	Nuffic budget
subtotal	15000	

Last mile

New institutions	50.000	Zicta
subtotal	50.000	

Total: 100.000

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2014

Staff costs

Salaries	609.630	
Overhead	60.963	10%
Training	25.000	Nuffic budget
Subtotal	695.593	

International connectivity

Ubuntunet Transit	1095000	
Ubuntunet Membership	1.500	
Subtotal	1.096.500	

National connectivity

5-year Private Network Licence	0	
Local Transit Charges	135.000	
AfriNIC IP Address Fees	6.400	
Subtotal	141.400	

NOC

Software Licences & Upgrades	15.000	Nuffic budget
Hardware maintenance	10.000	
Housing (incl. Insurance and power)	10.000	
Subtotal	35.000	

OFFICE

Vehicle Maintenance	15.000	
Fuel	20.000	
Adverts and Publicity	5.000	
Office rental	10.000	
Board Meetings	6.000	
Travel/lodging	10.000	Nuffic budget (50%)
General Assembly meeting	2.500	
Audit Fees	2.000	
Subtotal	70.500	

ZAMREN activities

Annual User Conference	5.000	Nuffic budget
Lump sum training	25.000	Nuffic budget
Subtotal	30.000	

Total: 2.068.993

Total from Nuffic budget: 75.000

Investments

Budget

Office

Lump sum	10.000	Nuffic budget
Subtotal	10.000	

NOC

Lumpsum	25.000	
Subtotal	25.000	

Last mile

New institutions	50.000	Zecto
Subtotal	50000	

ZAMREN activities

Training Centre	30000	
Internet Exchange	25000	
Subtotal	55000	

Total 115.000

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2015

Staff costs

Salaries	627.919		
Overhead	62.792	10%	
Training	25.000		
Subtotal		715.711	

International connectivity

Ubuntunet Transit	1095000		
Ubuntunet Membership	1.500		
Subtotal		1.096.500	

National connectivity

5-year Private Network Licence	0		
Local Transit Charges	101.250		
AfriNIC IP Address Fees	6.400		
Subtotal		107.650	

NOC

Software Licences & Upgrades	15.000		
Hardware maintenance	10.000		
Housing (incl. Insurance and power)	10.000		
Subtotal		35.000	

OFFICE

Vehicle Maintenance	15.000		
Fuel	20.000		
Adverts and Publicity	5.000		
Office rental	10.000		
Board Meetings	6.000		
Travel/lodging	10.000		
General Assembly meeting	2.500		
Audit Fees	2.000		
Subtotal		70.500	

ZAMREN activities

Annual User Conference	5.000		
Lumpsum training	25.000		
Subtotal		30.000	

Total: 2.055.361

Total from Nuffic budget: 0

Investments

Budget

Office

Lumpsum			10.000
Subtotal			10.000

Vehicles

Subtotal			0
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NOC

Lumpsum			50.000
Subtotal			50000

Last mile

New institutions			50.000
Subtotal			50.000

Total 110.000

ZAMREN Business Plan

2016

Staff costs

Salaries	646.757		
Overhead	64.676	10%	
Training	25.000		
Subtotal		736.433	

International connectivity

Ubuntunet Transit	1095000		
Ubuntunet Membership	1.500		
Subtotal		1.096.500	

National connectivity

5-year Private Network Licence	0		
Local Transit Charges	75.938		
AfriNIC IP Address Fees	6.400		
Subtotal		82.338	

NOC

Software Licences & Upgrades	15.000		
Hardware maintenance	10.000		
Housing (incl. Insurance and power)	10.000		
Subtotal		35.000	

OFFICE

Vehicle Maintenance	15.000		
Fuel	20.000		
Adverts and Publicity	5.000		
Office rental	10.000		
Board Meetings	6.000		
Travel/lodging	10.000		
General Assembly meeting	2.500		
Audit Fees	2.000		
Subtotal		70.500	

ZAMREN activities

Annual User Conference	5.000		
Lumpsum training	25.000		
Subtotal		30.000	

Total: 2.050.770

Total from Nuffic budget: 0

Investments

Budget

Office

Lumpsum			10.000
Subtotal			10.000

Vehicles

Subtotal				0
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NOC

Lumpsum			50.000
Subtotal			50000

Last mile

New institutions			0
Subtotal			0

Total 60.000

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Salaries

	2012	2013	2014	2015	2016	Salaries
2011 CEO						
2012 Secretary						
2012 Orderly						
2012 Driver						
2012 Fin. Officer						
2012 Assist. Accoun						
2012 CTO Ntw						
2012 CTO Serv						
2012 Netw. Eng. 1						
2013 Netw. Eng. 2						
2012 Serv. Eng. 1						
2013 Serv. Eng. 2						
2013 PR officer						
2013 Proj. Assist						
2013 Students						
Totals	230.595	591.874	609.630	627.919	646.757	
Overhead		0%				
Inflation compensatic		3%				

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Institution	Staff	Student	Points	Points				Factor			
				2012	2013	2014	2015-2016	2012	2013	2014	2012-2016
UNZA	2.050	12.820	3.332	3.332	3.332	3.332	3.332	66%	44%	44%	44%
CBU	723	6.045	1.328	1.328	1.328	1.328	1.328	26%	18%	18%	18%
Mulungushi	216	1.454	361	361	361	361	361	7%	5%	5%	5%
Nkrumah	100	800	180	0	180	180	180		2%	2%	2%
Coteco	100	800	180	0	180	180	180		2%	2%	2%
University Teaching Hospital	100	800	180	0	180	180	180		2%	2%	2%
Evelyn Hone College	30	150	45	0	45	45	45		1%	1%	1%
National Institute for Public Administration	100	800	180	0	180	180	180		2%	2%	2%
Mount Makulu Research	100	0	100	0	100	100	100		1%	1%	1%
Zambia Institute for Economic and Social Research	100	800	180	0	180	180	180		2%	2%	2%
Chainama College of Health Science	100	800	180	0	180	180	180		2%	2%	2%
National Scientific Research Station	100	800	180	0	180	180	180		2%	2%	2%
Chalimbana Teachers Training College	100	800	180	0	180	180	180		2%	2%	2%
National Resources for Development College	100	800	180	0	180	180	180		2%	2%	2%
Northern Technical College	100	800	180	0	180	180	180		2%	2%	2%
ZESCO Training Centre	50	300	80	0	80	80	80		1%	1%	1%
ZAMTEL Training College	100	800	180	0	180	180	180		2%	2%	2%
Luanshya Trades Institute	100	800	180	0	180	180	180		2%	2%	2%
Mwekera College of Forestry College	50	400	90	0	90	90	90		1%	1%	1%
Totals:	4.419	30.769	7.496	5.021	7.496	7.496	7.496	100%	100%	100%	100%

Weight of students (0 - 1.0):

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MOREnet Building Blocks

PoP		
	Router	\$125.000
	Cabinet	
	UPS	
	Sub-total	\$125.000
	35%	\$43.750
	Total:	\$81.250

PoP Lusaka		
	Router	\$150.000
	Cabinet	
	UPS	
	Sub-total	\$150.000
	35%	\$52.500
	Total:	\$97.500

NOC		
	Switch	
	Server	
	X-terminals	
	HD screen	
	Cabinet	
	UPS	
	Total:	\$0

Transit		
	Router	
	Cabinet	
	UPS	
	Total:	\$0

Service		
	Switch	
	Server-1	
	Server-2	
	Cabinet	
	UPS	
	Total:	\$0

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ZAMREN International circuits

	Installation	2012	2013	2014	2015	2016
Bandwidth after off load		70	110	345	345	345
CC Liquid						
STM-1 to Jo'burg		\$408.000	\$816.000	\$816.000	\$816.000	\$816.000
Ubutunet Africa Connect				\$279.000	\$279.000	\$279.000
Totals International traffic		\$408.000	\$816.000	\$1.095.000	\$1.095.000	\$1.095.000

GeANT transit tariff €3.000 per year per Mbps

Off load factor 100%

Bandwidth	155	155	155	155	155
Buying tariff Mbps/Month	\$438,71	\$438,71	\$588,71	\$588,71	\$588,71

	Mbps/mon	Mbps/STM-1
Africa Connect	\$150	\$279.000

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ZAMREN national circuits

	Installation	2012	2013	2014	2015	2016
Zesco STM-1		\$240.000	\$180.000	\$135.000	\$101.250	\$75.938
Total:		\$240.000	\$180.000	\$135.000	\$101.250	\$75.938

Tariff 2012 \$240.000
Tariff erosion 25%

ZAMREN Business Plan

Model User and Bandwidth dependent

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Institution	2012		2013		2014		2015		2016	
	Bandwidth	Tariff	Bandwidth	Tariff	Bandwidth	Tariff	Bandwidth	tariff	Bandwidth	tariff
UNZA	40	575.996	40	620.932	80	597.695	80	624.973	80	622.932
CBU	20	251.019	20	268.922	40	291.443	40	302.311	40	301.498
Mulungushi	10	92.480	10	97.354	20	109.521	20	112.480	20	112.258
Nkrumah	0		5	48.591	10	54.677	10	56.150	10	56.040
Coteco	0	0	5	48.591	10	54.677	10	56.150	10	56.040
University Teaching Hospital	0	0	5	48.591	10	54.677	10	56.150	10	56.040
Evelyn Hone College	0	0	5	32.023	10	38.513	10	38.881	10	38.854
National Institute for Public Administration	0	0	5	48.591	10	54.677	10	56.150	10	56.040
Mount Makulu Research	0	0	5	38.773	10	45.098	10	45.917	10	45.856
Zambia Institute for Economic and Social Research	0	0	5	48.591	10	54.677	10	56.150	10	56.040
Chainama College of Health Science	0	0	5	48.591	10	54.677	10	56.150	10	56.040
National Scientific Research Station	0	0	5	48.591	10	54.677	10	56.150	10	56.040
Chalimbana Teachers Training College	0	0	5	48.591	10	54.677	10	56.150	10	56.040
National Resources for Development College	0	0	5	48.591	10	54.677	10	56.150	10	56.040
Northern Technical College	0	0	5	48.591	10	54.677	10	56.150	10	56.040
ZESCO Training Centre	0	0	5	36.318	10	42.703	10	43.358	10	43.309
ZAMTEL Training College	0	0	5	48.591	10	54.677	10	56.150	10	56.040
Luanshya Trades Institute	0	0	5	48.591	10	54.677	10	56.150	10	56.040
Mwekera College of Forestry College	0	0	5	37.546	10	43.901	10	44.638	10	44.583
New institutions in 2014 (25)					250	198.750	250	198.750	250	198.750
Totals:	70	919.495	110	1.351.085	345	1.511.201	345	1.562.438	345	1.558.604

National part of OPEX

Donor contribution

International connectivity

National part of OPEX	\$610.995	\$1.009.962	\$972.493	\$958.861	\$954.270
Donor contribution	\$62.500	\$90.000	\$75.000	\$0	\$0
International connectivity	\$409.500	\$817.500	\$1.096.500	\$1.096.500	\$1.178.838

Fee:

2012-2013		2014-2016	
Multiplier	1	Multiplier	1
Average:	\$1.024 Mbps/Month	Factor	0,625
		Average	\$365
Mbps	Tariff/year	Mbps	Tariff/year
0	0	0	0
5	26500	5	16562,5
10	53000	10	33125
20	106000	20	66250
40	212000	40	132500
60	318000	60	198750