

AfriNIC Involvement for Southern Africa

The Criticality

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A brief introduction to AfriNIC

- Became the 5th Regional Internet Registry in 2005
- Membership based structure – It's YOUR organisation
- Assigns IP address ranges from the African region and also handles reverse DNS delegations for the region.
- Currently has more IPv4 address space still available than any other RIR – by a large margin
- Is also involved in training and various outreach programs

Governance Structures

- AfriNIC's board oversees the running of the company as a corporate entity.
- The board is bound in its actions by the AfriNIC Bylaws (the company constitution)
- The members may choose to modify the bylaws at an AGMM or an SGM by means of a special resolution requiring a 75% majority of those voting.
- The members may also elect to set policies binding the board without changing the bylaws through an ordinary resolution (simple majority).
- Policies for IP address allocation, while ratified by the board are set by the community through the policy development process.

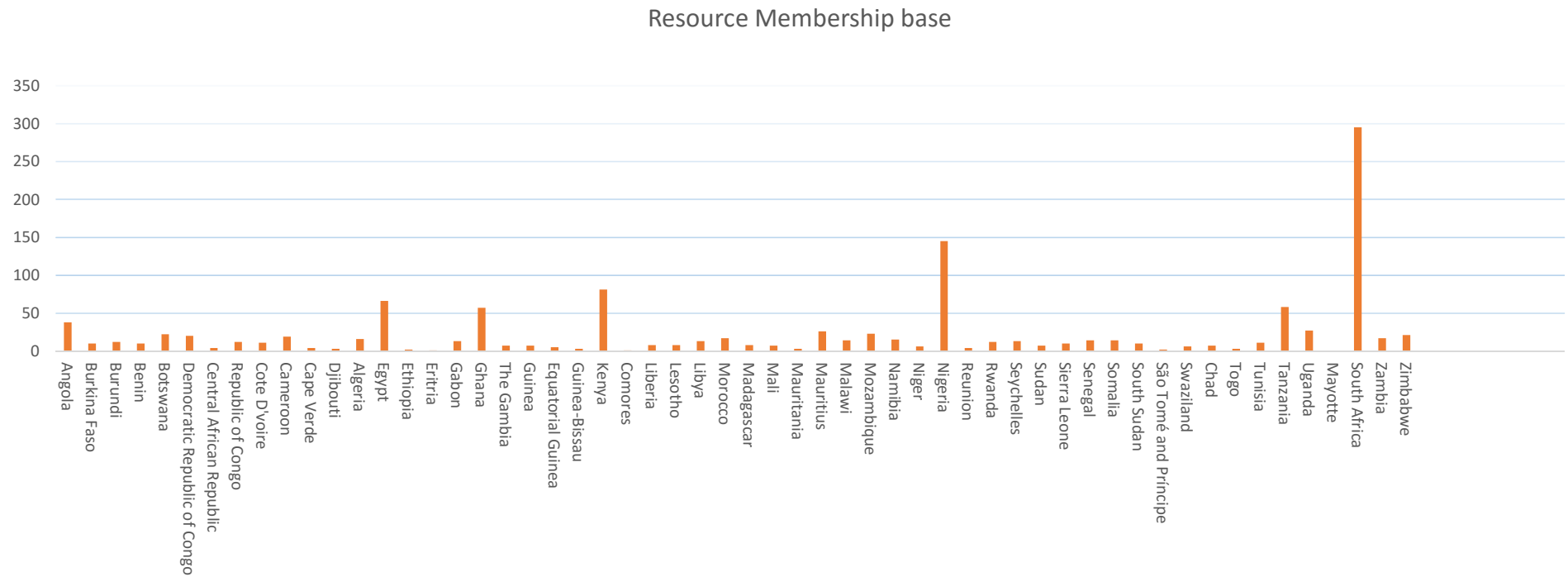
The Board of Directors

- AfriNIC's board is elected by the members
- Different types of membership, the largest group being the resource members.
- The board is appointed on a regional basis, and comprises of the following demographic:
 - Eastern Africa
 - Southern Africa
 - Western Africa
 - Northern Africa
 - Central Africa
 - Indian Ocean region
 - Two Region Independent directors.

The Membership

- Three Types of Membership
 - Resource Members (Any person or entity that has signed the registration services agreement and receives resources from AfriNIC. Generally divided into Local Internet Registries and End Users)
 - Non-resource holding members (These members do not receive resources from AfriNIC, have no vote at an SGM or AGMM, but may attend as observers)
 - Registered Members – The Directors.

Membership by the numbers



The Policy Development Process

- Address allocation policies are set by the community at large – basically anyone who is interested and opts to use their voice
- Participation in the policy process does not require membership of AfriNIC
- Policy is set by consensus, and the chairs of the policy development process judge consensus
- Policy that is ratified is binding on all members and may cover ANY aspect of IP allocations (other than fees which are the domain of the board)

The potential effect of bad policy

- A policy that is ambiguous leads to subjective allocation of space – if you get your space or not could be based on how the policy is interpreted by the hostmaster handling your case.
- A policy may be fine for some, and badly hurt others
 - Example: The current soft landing policy says that once we hit the last /8, members will only be able to get a /22 at a time. This could badly hurt some companies while being fine for others
 - Example 2: A policy that prohibits the use of AfriNIC space outside of Africa would be fine for some, but could badly hurt African companies expanding outwards.

Why does any of this matter?

- IP addresses (v4 and v6) are a requirement of doing business in the industry.
- As African providers, there are three ways to get addresses, from AfriNIC, from your upstream (but you probably can't multi-home that way) or on the secondary market
- The policies that dictate what address space you qualify for and the requirements of qualification are in YOUR hands as the community
- **A choice to not get involved is a choice to put your destiny in the hands of others you may or may not know!**

The current state of affairs in AfriNIC

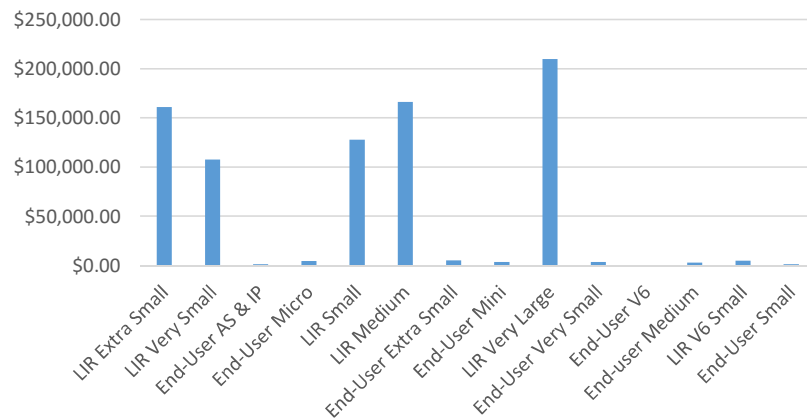
- There are approximately 1250 current AfriNIC members.
- AfriNIC has an annual income of approximately \$3.6 million dollars from membership fees.
- The approximate expenditure as of end of 2014 was \$3.9 million dollars
- The remainder of the money was made up primarily through meeting sponsorship – but operationally without the sponsorship, AfriNIC would be in deficit.
- **THERE IS VERY LITTLE CASH RESERVE – IT CAN BE INTERPRETED THAT WE ARE RUNNING ON THE WIRE**

South African participation in AfriNIC

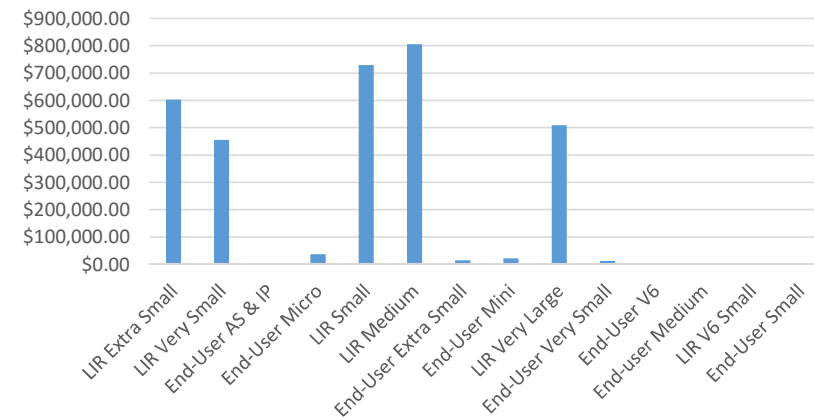
- There are 295 South African members (23.5% of the membership base)
- South African entities contribute 22.5% of AfriNIC membership fees (or around \$800,000 USD annually, or an annual average of \$2711 per member)
- The larger Southern African block including South Africa contributes around 35.5% of the AfriNIC membership fees (or around \$1.275 million dollars annually)
- South Africa holds approximately 33% of total IPv4 address space allocated by AfriNIC
- The larger Southern African block holds 38% of the total space allocated

Who puts in the money?

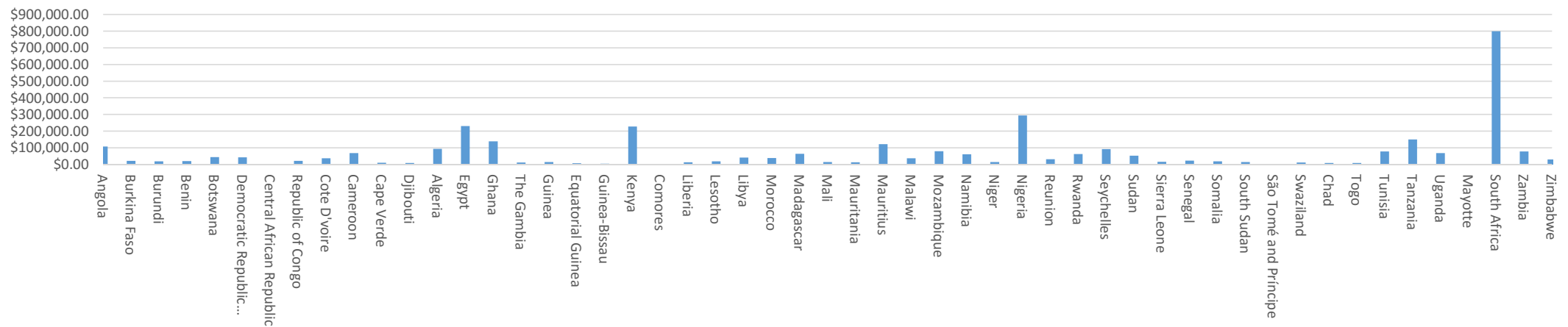
South African Contributions



All Member Contributions



All Member Contributions



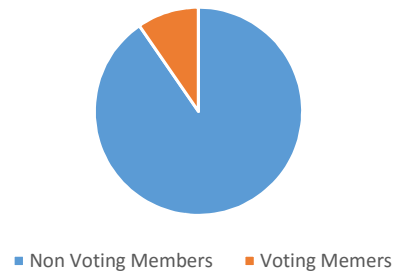
So does South Africa actually participate?

- South African participation in the policy development process is negligible, less than 10% of members in South Africa ever get involved
- In board elections and governance matters, less than 10% of members total actually vote, and a very small fraction of those are from South Africa.
- **The South African members contribute financially, but are handing their companies futures to others through their lack of participation in governance and policy issues.**

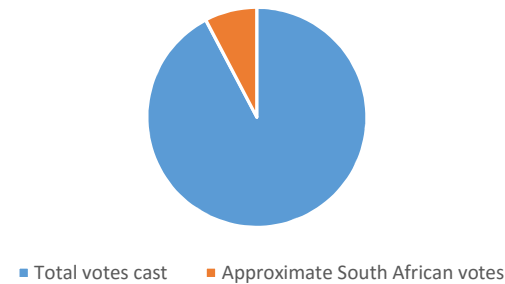
Voting by the numbers – Who is in control?

(Numbers based on last election – South African numbers are approximates)

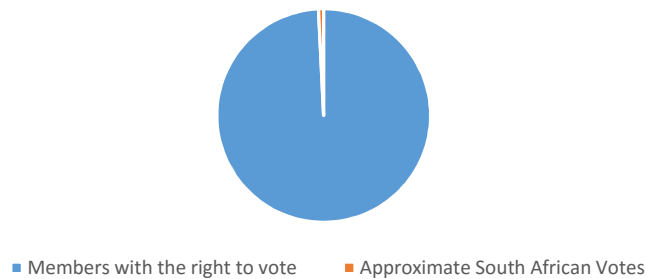
Members who can vote vs those who DO vote



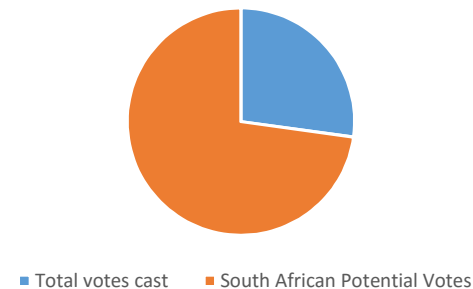
Voting as it happens



Voting as it happens



If All South Africans voted by the current numbers



So back to the state of affairs...

- The rest of the world is running (or has run out) of IPv4 addresses.
- Because of the price of address space on the secondary market, its far cheaper to get it from AfriNIC
- Guess what? The current policies allow the rest of the world to take it if they spend the time to analyse the policies.
- If we don't change the policies, the space will be disappear long before we are truly ready for IPv6.
- Changing policy requires consensus, that means numbers, **THAT MEANS YOU!!!!**
- Currently we're letting the rest of the continent control policy by the **conscious lack of participation.**

What about the current financial situation?

- As stated, the costs are out stripping the revenue if you remove the sponsorship components.
- A strong board with financial savvy and good corporate sense is required, else AfriNIC is in trouble.
- Fee increases are now inevitable, and South Africa as the largest member base will end up carrying the bulk of those.
- Without more revenue and/or a reduction in costs the organisation will not be sustainable

What if AfriNIC failed?

- You have the option of turning to the secondary market for space.
 - Far more expensive – it can cost as much as \$800,000 US per /16 on the secondary market – and the cost is rising (fast)
 - The secondary market is finite, as available space diminishes, the price will go up, the nature of supply and demand.
- What happens to your reverse DNS?
- What happens to your RPKI?
- What happens to your route registry (especially if the RIPE policy to potentially remove African routes goes through?)
- **THIS IS NOT A SCENARIO WE CAN AFFORD**

So what about other risks to AfriNIC?

- The bylaws state that 5% of the membership base (approximately 70 members) can force a special general meeting.
- The quorum for such a meeting is effectively 10 members.
- Scheduled at the right time and the right place, attendance would be incredibly low.
- 75% of members voting at that meeting (or online) could rewrite the AfriNIC bylaws and give themselves TOTAL control of AfriNIC and all its resources. (Worst case scenario, its possible for 8 people to take over YOUR organisation and all the space you may need one day)

AfriNIC by the numbers.

Up to 25 Aug 2015 (IPv4 Address Information)					
Statistic	Number of Addresses	Percentage of Total Allocated	Value On the Secondary Market	Addresses Per Member in Good Standing	Addresses Per Member (Total)
Total Allocated	79,163,904	100.00%	\$791,639,040.00	82,035.13	63,483.48
Northern Africa	31,725,056	40.08%	\$317,250,560.00	323,725.06	251,786.16
Southern Africa	30,117,376	38.04%	\$301,173,760.00	77,822.68	65,758.46
South Africa	26,409,216	33.36%	\$264,092,160.00	101,966.08	89,827.27
Eastern Africa	6,807,296	8.60%	\$68,072,960.00	40,519.62	31,661.84
Indian Ocean	5,820,928	7.35%	\$58,209,280.00	135,370.42	111,940.92
Western Africa	3,856,640	4.87%	\$38,566,400.00	18,541.54	12,770.33
Central Africa	836,608	1.06%	\$8,366,080.00	13,714.89	8,900.09

Up to 2nd of September 2015 (Member Information by Region)				
Region	Total Members	Members in Good Standing	Members Not in Good Standing	Percentage in Good Standing
Southern Africa	458	387	71	84.50%
South Africa	295	259	36	87.80%
Indian Ocean	52	43	9	82.69%
Eastern Africa	215	168	47	78.14%
Northern Africa	126	98	28	77.78%
Western Africa	302	208	94	68.87%
Central Africa	94	61	33	64.89%
Totals	1247	837	410	67.12%

Up to 2nd September 2015 (Member Information by Language)			
Language Demographic	Total Members	Members in Good Standing	Percentage
Portuguese	70	60	85.71%
English	829	664	80.10%
Arabic	160	122	76.25%
French	188	119	63.30%
TOTAL	1247	965	77.39%

Some further figures.

- There are approximately 40 million addresses still in the AfriNIC pool.
- The average membership fee paid by South African organisations equates to 3c US per address.
- 87.7% of South African members have paid their bills and are in good standing.
- Only 5 countries have a better good standing percentage than South Africa (Libya, Namibia, São Tomé and Príncipe, Reunion and Angola)

So How to Get Involved in Policy

- Look at the current policies – understand them
- Subscribe to the policy development list and participate in it
- If you feel the desire or the need, propose new policy!
- Voice your support or lack thereof on both policy and resolutions, unless you speak, you will not be heard!
- If possible attend or have representatives at the policy meetings
- If you can't be at the meeting physically, attend it online, they are always streamed.
- If you feel you don't understand things, work with others who do – find a twinning partner.

Involvement in Governance

- When the meeting notifications go out on the members list – READ THEM CAREFULLY, STUDY THE AGENDA
- Look at any proposed resolutions and special resolutions, debate these on the members list – THEY CAN AFFECT YOUR FUTURE
- Get to know the candidates for elections when they are announced – read their bio's, look at their histories, decide who can best serve AfriNIC
- **IF THERE IS A VOTE – YOU HAVE ONE AS A MEMBER – DO NOT WASTE IT. VOTING IS YOUR VOICE**

How to Vote

- You have three options as it stands
 - Be physically present at an AGMM/SGM and cast your vote there.
 - You can vote electronically – this requires registering for a BPKI certificate and voting through the my.afrinic system. This is fairly complex to get setup, but AfriNIC is committed to making this simpler and eventually even making BPKI optional.
 - If you can't be there, and you know members who you trust that are, you may assign them a proxy through the my.afrinic system and they can vote on your behalf. Remember, there are ALWAYS people who can carry proxies, just ask around.
 - **WHICHEVER WAY YOU CHOOSE TO VOTE – JUST MAKE SURE YOU USE THE VOICE YOUR MONEY HAS BOUGHT YOU.**

Conclusions

- Without AfriNIC, getting more space becomes more difficult and extremely costly.
- South Africans have an option – exercise your rights as members and ensure a sustainable well run organisation, or hand control to the rest of the continent and accept whatever happens.
- Only through participation can South Africa ensure they are getting what they need from the organisation
- **WE ARE NOT POWERLESS TO MAKE A DIFFERENCE – WE HAVE SIMPLY CHOSEN TO RELINQUISH OUR POWER – THIS MUST CHANGE**

Final Thoughts

- This is not about South Africa vs Africa
- This is about the destiny of the African ISP Industry – Remember, without address space, we cannot function.
- There are many across the continent who have fought for better governance, more transparent financials, greater involvement and stronger policy – but due to lack of support from YOU the battle is being lost right now – we have to turn the tide.
 - YOUR MONEY
 - YOUR ORGANISATION
 - YOUR TIME TO CHOSE YOUR DESTINY.