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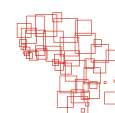
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## Message of Thanks

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## Glossary

|                |  |
|----------------|--|
| <b>AAU</b>     | Association of African Universities                        |
| <b>AfNOG</b>   | African Network Operators Group                            |
| <b>AfriNIC</b> | African Network Information Centre                         |
| <b>AFTLD</b>   | Africa Top Level Domains Organisation                      |
| <b>ARTP</b>    | Agence de Regulations des Télécommunications et des Postes |
| <b>ASN</b>     | Autonomous System Number                                   |
| <b>ASO</b>     | Address Supporting Organisation                            |
| <b>CCG</b>     | Communication Coordination Group                           |
| <b>DNS</b>     | Domain Name Server   |
| <b>EAIGF</b>   | East Africa Internet Governance Forum                      |
| <b>ECG</b>     | Engineering Coordination Group                             |
| <b>IANA</b>    | Internet Assigned Numbers Authority                        |
| <b>ICANN</b>   | Internet Corporation for Assigned Names and Numbers        |
| <b>IETF</b>    | Internet Engineering Task Force                            |
| <b>IGF</b>     | Internet Governance Forum                                  |
| <b>IP</b>      | Internet Protocol  |
| <b>IPv4</b>    | Internet Protocol version 4                                |
| <b>IPv6</b>    | Internet Protocol version 6                                |
| <b>ISOC</b>    | Internet Society   |
| <b>ISP</b>     | Internet Service Provider                                  |
| <b>ITU</b>     | International Telecommunication Union                      |
| <b>IXP</b>     | Internet Exchange Point                                    |
| <b>LIR</b>     | Local Internet Registry                                    |
| <b>NRO</b>     | Number Resource Organization                               |
| <b>NSRC</b>    | Network Startup Resource Center                            |
| <b>OIF</b>     | Organisation Internationale de la francophonie             |
| <b>ONCF</b>    | Office National des Chemins de fer                         |
| <b>PDP</b>     | Policy Development Process                                 |
| <b>PKI</b>     | Public Key Infrastructure                                  |
| <b>RIR</b>     | Regional Internet Registry                                 |
| <b>RPKI</b>    | Resource Public Key Infrastructure                         |
| <b>RR</b>      | Routing Registry   |



# Messages

From the Chairman  
From the Chief Executive Officer

1



Djemaa el Fnaa Square - Morocco

## From Chairman



**Dr. Viv Padayatchy**  
Chairman

Fellow community members,

This has been another eventful year in the life of our young organisation. I am pleased to say, as you will yourself find out in this report, that AfriNIC is well engaged on the path of growth and maturity. AfriNIC has achieved financial sustainability and is now a well-established player in the field of Internet-related matters both within Africa and in the world at large.

Among some of the highlights of 2009 for AfriNIC, we can list the participation of AfriNIC in various international events like the IGF where AfriNIC organised one workshop on the theme “Mitigating the Financial Crisis with Opensource” and participated to the panel of several others. AfriNIC was also represented at various international forums such as ICANN and ITU meetings. Within our community, AfriNIC held its public policy meetings in Cairo and Dakar. It also intensified its training programmes in eight (8) countries (countries where training was conducted).

Internally, the organisation continued to engage in capacity building and a number of positions were created. The executive management was organised into three main sections: the Business Area, Communication Area and Technical Area with each “area” under the responsibility of a senior manager reporting directly to the CEO.

As Board we have approved the appropriation of funds for the setting up of a new office for AfriNIC at the Ebene Cybercity of Mauritius.

On many core Internet-related issues such as Internet governance and IPv4 address depletion, AfriNIC has come forward and provided a strong African voice in favour of keeping the Internet open and accessible to all. AfriNIC has initiated the African Government Working



Group (AfWG) in an effort to bridge the gap between government policy makers and the Internet community at large.

Although, primarily, set up as an IP resource management registry organisation, AfriNIC has been solicited by various organisations, especially within Africa, to play a more active role in various matters related to Internet governance and its development on the continent in general. Thus AfriNIC has been involved in various educational, research and policy development programmes outside its core responsibility of IP address resource management.

None of the above would have been possible without the dedication and commitment of our staff and support of the board members and the community.

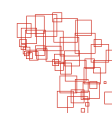
I therefore thank all of you wholeheartedly.

Thank you



Dr. Viv Padayatchy

Chairman





## From the Chief Executive Officer



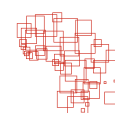
**Adiel A. Akplogan**  
Chief Executive Officer

Dear Colleagues and Members,

It is always an honour and a pleasure for me at the end of each year to look back into what we have done and report on our achievements. Once again we have completed a very successful operations year and that would not have been possible without your committed support.

As mentioned at the end of last year, in 2009 we have continued our restructuring in line with the outcome of our strategic plan. The year 2009 is our fifth year as an existing Organisation and the fourth serving as Regional Internet Registry (RIR). It is encouraging to see that, coming from very far we have been able to transform the dream of many African Internet Community members into reality. AfriNIC membership has reached 579, representing a 20% growth from 2008. Even though our budget for the year was the tightest we have had, we have managed to execute our activities with positive results where we increased our revenue by 24%. One of the key activity in which we have once again invested this year is training and awareness. In total, eight (8) training sessions (IPv6, LIR and DNSSEC) have been conducted by our team around the continent; in Accra, Lagos, Tunis, Algiers, Cairo, Libreville, Bujumbura and Dakar, with more than 150 participants.

AfriNIC presence and involvement in the global Internet governance policy discussions have earned us more legitimacy and recognition from the local community to address related issues in the region. This comes with another challenge that we will have to address in our operations by providing an appropriate framework for multistakeholder consultations while reinforcing the input and contribution from our non-conventional stakeholders such as governments and policy makers. Subsequently, we took the initiative to set up a Government Working Group within our structure to formalise our discussions and exchange with governments and create a common ground for cooperation and mutual support. Through this working group, we intend to achieve a new voluntary-based membership category that



will cover institutional organisations. We believe that it is the right time to enhance our relationship with governments and better share with them our missions which are complementary to theirs in this emerging and fast growing numeric era. We all need to put our effort together to support the region filling the gap of the electronic (and particularly Internet technology) divide.

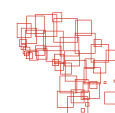
Furthermore 2010 will be another exiting year with us getting closer to the global exhaustion of IPv4 addresses, as a result, the need for more information and training around IPv6. We will also focus on putting more effort by being proactive in our communication strategy to get the media more aware of our activities. Projects such as Resource Certification, DNSSec, and Business continuity will hold a high level of attention in our 2010 activity plan.

To conclude, I would like to use this opportunity to thank all the organisations and individuals who, voluntarily supported some aspects of community initiatives, the community in general that continues to trust us in what we are trying to achieve, and finally, our very vibrant and dynamic staff which supports our day-to-day operations. We will continue to try hard and not disappoint any of you.

*Adiel A. Akplogan*

Adiel A. Akplogan

Chief Executive Officer

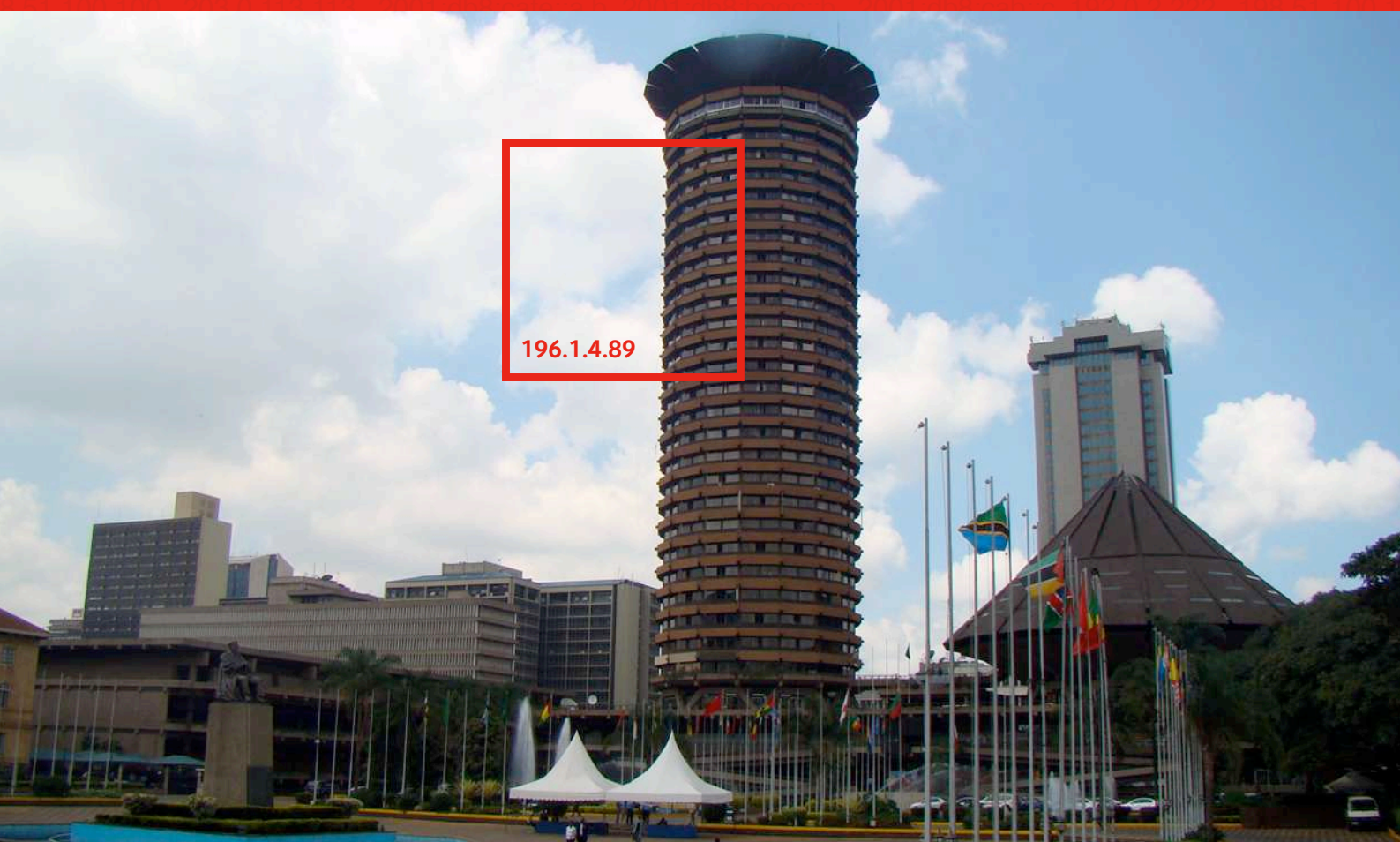




# AfriNIC at a Glance

Role, vision, mission and core values  
Board Composition

2



Kenyatta International Conference Center, Kenya

## Role, Vision, Mission

AfriNIC is a non-government, not-for-profit, membership-based organisation, headquartered in Mauritius. As the African Regional Internet Registry (RIR), AfriNIC's role is to promote the fair distribution and responsible management of Internet Protocol (IP) addresses and Autonomous System Numbers (ASN).

These resources are required for the operation of the global Internet. We do this according to policies developed by our community, in an open, transparent, and bottom-up policy development process. The allocation and registration of Internet number resources are AfriNIC's core activities. We provide training and education services, develop and promote basic technical and business practice standards related to Internet service provision for members, and collaborate with other regional and international organisations.

### Vision

Spearheading Internet Technology and Policy Development in the African Region.

### Mission

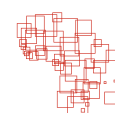
To serve the African community by providing professional and efficient management of Internet number resources, supporting Internet technology usage and development, and promoting Internet self governance.

### AfriNIC's Core Values are:

- We operate with transparency, professionalism and efficiency.
- We are committed to integrity in all that we do, always and everywhere.
- We recognise and value individual contribution and teamwork.
- We recognise cultural and language diversity in our region.
- We are a technology-driven organisation that encourages continuous learning and innovation.
- We value collaboration and cooperation with related organisations.

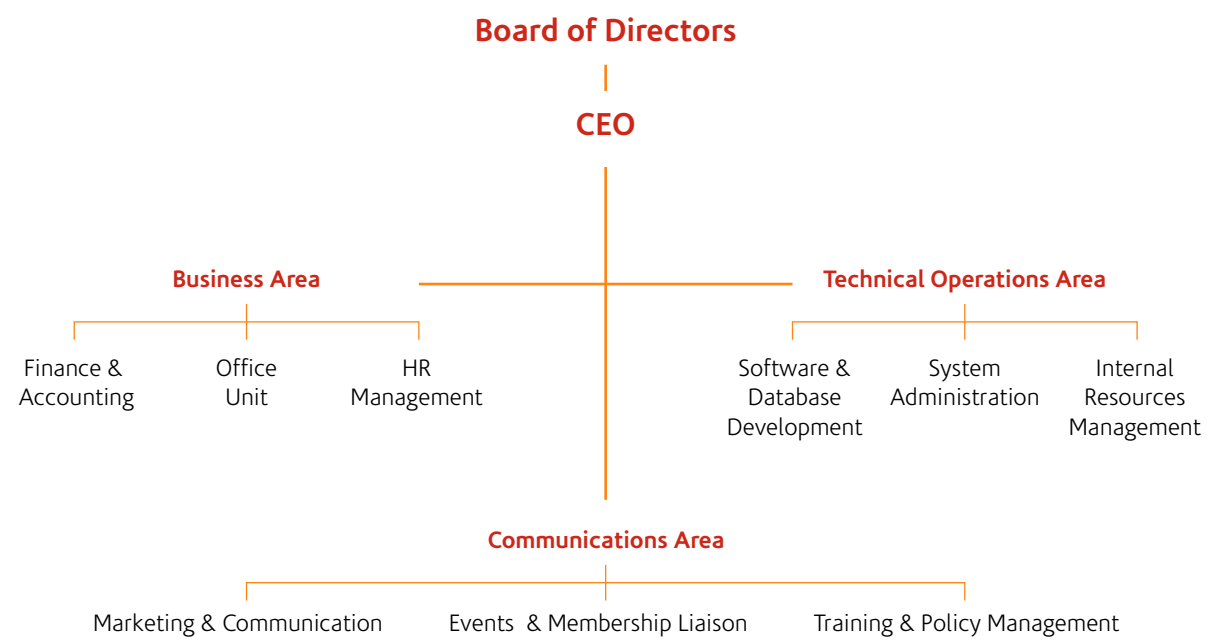
Established in 2004, AfriNIC's headquarters is in Mauritius but its activities and region of coverage span across the whole African region. It is administered by a Board of Directors and managed by an appointed Chief Executive Officer.

The AfriNIC organisational structure is set to encourage a bottom-up self governance management model, where policies and other organisational functions are determined by the community in general and by members who elect representatives that sit on the Board



of Directors. The discussions are conducted via both public meetings and email discussion lists. There are no requirements or prerequisites for any person or entity to participate. AfriNIC has a General Assembly which meets once a year whereas Public Policy Meetings are organised twice a year (one back-to-back with the General Assembly).

**AfriNIC Organisational Structure**



## Board Composition

We would like to thank all AfriNIC board members for their contribution and commitment to the smooth running of the organisation; special thanks go to our outgoing members.

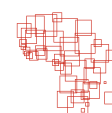
During 2009, the Board of Directors was composed of:

### Primary

| Name                    | Region               | Terms              |
|-------------------------|----------------------|--------------------|
| Rachida Jouhari         | Northern Africa      | 07/2007 to 06/2010 |
| Pierre Dandjinou        | Western Africa       | 07/2007 to 06/2010 |
| Didier R. Kasole        | Central Africa       | 07/2008 to 06/2011 |
| John Walubengo Nyongesa | East Africa          | 07/2009 to 06/2012 |
| Mark J. Elkins          | Southern Africa      | 07/2009 to 06/2012 |
| Viv Padayatchy          | Indian Ocean (chair) | 07/2008 to 06/2011 |
| Adiel Akplogan          | CEO                  | Appointed          |

### Alternate

| Name                    | Region          | Terms              |
|-------------------------|-----------------|--------------------|
| Jean Philemon Kissangou | Central Africa  | 07/2008 to 06/2011 |
| Lala Andriamampianina   | Indian Ocean    | 07/2008 to 06/2011 |
| Mokthar Hamidi          | Northern Africa | 07/2007 to 06/2010 |
| Sunday Folayan          | Western Africa  | 07/2007 to 06/2010 |
| Lillian Wambui Karanja  | Eastern Africa  | 07/2009 to 06/2012 |
| Silvio Cabral Almada    | Southern Africa | 07/2009 to 06/2012 |





# Business Area

Introduction to the Business Area  
and Key Activities

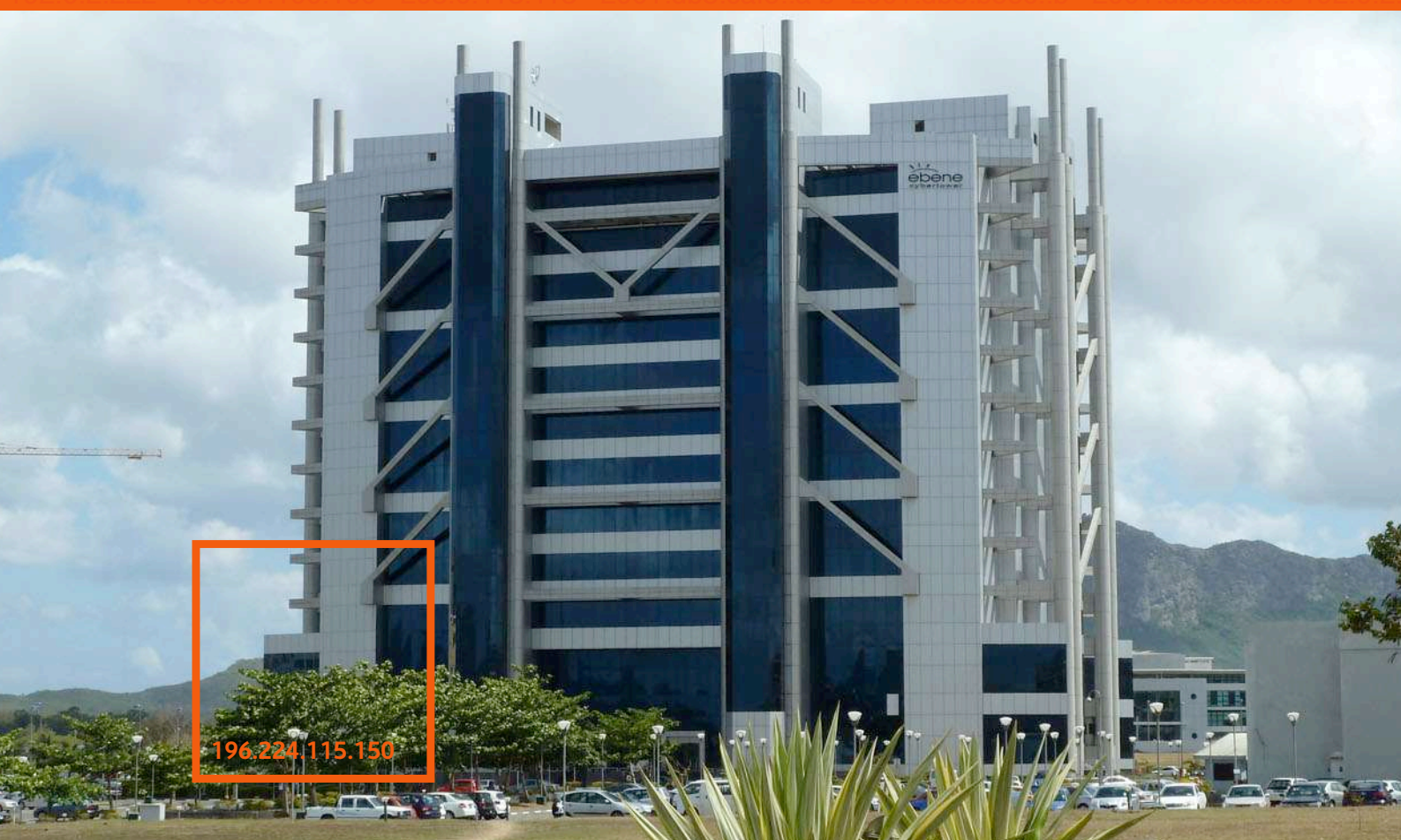
Financial Reports and analysis

Auditors Report

Continued Implementation of  
the Organisational Structure

Overview of staffing

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Ebene Cyber City, Mauritius

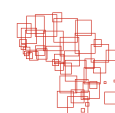
## Introduction to the Business Area and Key Activities

The Business Area is responsible for accounting, billing, budget management, contract administration, financial administration, legal affairs, human resource management, office management, office security, and travel administration. Led by Razi Muslun, the Business Area manager, the members of this team are:

| Name            | Position/Role                               |
|-----------------|---|
| Razi Muslun     | Business Area Manager                       |
| Kiran Cunniah   | Office Unit Manager                         |
| Nathacha Rennel | Front Desk Assistant and Travel Coordinator |
| Veena Nursiah   | Accounting Officer                          |



*Adiel A. Akplogan, Lillian O. Sharpley, Razi A. Muslun and Nishal D. Goburdhan*



# Financial Reports and Analyses

## Key Features – Four Year Overview

|                                  | 2009             | 2008      | 2007      | 2006      |
|----------------------------------|------------------|-----------|-----------|-----------|
|                                  | US \$            | US \$     | US \$     | US \$     |
| Fee Income                       | <b>1,754,902</b> | 1,365,891 | 1,346,027 | 832,131   |
| Total Operating Expenses         | <b>1,767,422</b> | 1,311,707 | 1,042,925 | 623,425   |
| Finance (Income) and Other Costs | <b>125,312</b>   | (174,271) | 140,757   | (51,418)  |
| Surplus/ (Deficit) for the year  | <b>14,157</b>    | 292,426   | 273,861   | 469,374   |
| Total Reserves as at end of year | <b>1,387,942</b> | 1,373,345 | 1,254,802 | 962,025   |
| Closing cash at bank             | <b>1,270,636</b> | 1,343,229 | 1,254,878 | 1,020,981 |
| Reinvestment in infrastructure   | <b>29,827</b>    | 34,230    | 31,195    | 62,537    |

## Membership Fees

Our Fee income reflected a marked increase of 28.5% from last year and more than 100% as compared to 2006. This is a direct result of the membership fee structures review undertaken in 2008. An increase of 11% was also recorded in the number of members. In addition changes in membership categories which can be attributed to the approaching of the IPv4 exhaustion have equally contributed to the favourable movement.

## Operating Costs

Our total operating costs have equally recorded a substantial increase of 34.7%, from \$ 1,311,707 to \$ 1,767,422. In spite of the positive improvement on our Fee Income for the year under review, the increase in our operating expenses has negatively impacted our results. Consequently, our Reserves have grown marginally from \$1,373,345 to 1,387,942.

The movement in our operating costs represents our focus to consolidate our human resources, started in 2008, to better position ourselves to face the challenges which lie ahead. This factor coupled with the planned relocation of our operations to more spacious space has been the major reason behind the increase in our operating expenses. The increased in staff costs amounted to 65% over last year. Furthermore, the rate of Exchange US Dollar to the Mauritian Rupee has had an adverse effect on our bottom line (a loss of US\$ 140,218 in 2009 compared to a gain of US\$ 135,001 in 2008).

During the year under review, US\$ 32,300 (2008 US\$ 34,230) was spent on infrastructure replacements & additions. These were all in line with projections and part of the long-term technical refresh to maintain and improve existing capacity.





The Financial statements were audited by Ernst & Young and a copy of their report has been appended in this section.

### **Prospects**

Overall, 2009 was another good year...The encouraging results in the past years has been the results of sound management decisions that have been complemented by a sustainable and effective cost control. The coming year will be characterised by our continued focus on our human resources consolidation and the relocation to more spacious office space. With the approaching of the IPv4 exhaustion, our continued effort to provide IPv6 training in the region will also be at the centre of our focus. Given the positive responses that we have received from the community, we have all the reason to be excited as we move to the next stage of our operational evolution without losing sight of our main objective of providing an efficient and professional service to our members.



## Statement Of Assets And Liabilities, Year Ended 31 December 2009, Financial Summary

|                                     | Year Ended<br>31 December 2009 |                  | Year Ended<br>31 December 2008 |                  |
|-------------------------------------|--------------------------------|------------------|--------------------------------|------------------|
|                                     | MRU                            | US\$             | MRU                            | US\$             |
| <b>ASSETS</b>                       |                                |                  |                                |                  |
| <b>Non-current assets</b>           |                                |                  |                                |                  |
| Plant and equipment                 | 2,226,931                      | 74,231           | 2,332,575                      | 73,455           |
| Intangible assets                   | 89,910                         | 2,997            | 73,115                         | 2,303            |
|                                     | <b>2,316,841</b>               | <b>77,228</b>    | <b>2,405,690</b>               | <b>75,758</b>    |
| <b>Current assets</b>               |                                |                  |                                |                  |
| Trade and other receivables         | 8,375,739                      | 279,191          | 6,194,863                      | 195,083          |
| Deposits                            | -                              | -                | 39,693,750                     | 1,250,000        |
| Cash and cash equivalents           | 38,119,090                     | 1,270,636        | 2,960,492                      | 93,229           |
|                                     | <b>46,494,830</b>              | <b>1,549,828</b> | <b>48,849,105</b>              | <b>1,538,312</b> |
| <b>Total assets</b>                 | <b>48,811,671</b>              | <b>1,627,056</b> | <b>51,254,795</b>              | <b>1,614,070</b> |
| <b>EQUITY AND LIABILITIES</b>       |                                |                  |                                |                  |
| Revenue reserves                    | 1,944,514                      | 64,817           | 1,519,796                      | 47,860           |
| Other reserves                      | 39,693,750                     | 1,323,125        | 39,693,750                     | 1,250,000        |
| Grant                               | 1,484,268                      | 49,476           | 2,397,035                      | 75,485           |
| <b>Total equity</b>                 | <b>43,122,532</b>              | <b>1,437,418</b> | <b>43,610,581</b>              | <b>1,373,345</b> |
| <b>Current liabilities</b>          |                                |                  |                                |                  |
| Trade and other payables            | 5,689,139                      | 189,638          | 7,644,214                      | 240,725          |
|                                     | <b>5,689,139</b>               | <b>189,638</b>   | <b>7,644,214</b>               | <b>240,725</b>   |
| <b>Total equity and liabilities</b> | <b>48,811,671</b>              | <b>1,627,056</b> | <b>51,254,795</b>              | <b>1,614,070</b> |



## Surplus And Loss Statement - Year Ended 31 December 2009

Annex (USD comparatives)

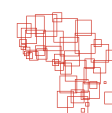
|                                      | Year Ended<br>31 December 2009 |                   | Year Ended<br>31 December 2008 |                  |
|--------------------------------------|--------------------------------|-------------------|--------------------------------|------------------|
|                                      | MRU                            | US\$              | MRU                            | US\$             |
| <b>Income</b>                        |                                |                   |                                |                  |
| Membership fees                      | 52,647,061                     | 1,754,902         | 40,976,717                     | 1,365,891        |
| Grants                               | 4,559,671                      | 151,989           | 1,919,132                      | 63,971           |
|                                      | <b>57,206,732</b>              | <b>1,906,891</b>  | <b>42,895,849</b>              | <b>1,429,862</b> |
| <b>Administrative expenses</b>       |                                |                   |                                |                  |
| Human Resources                      | -21,446,178                    | -714,873          | -13,026,471                    | -434,216         |
| Telephone and Communications         | 1,505,313                      | -50,177           | -1,286,904                     | -42,897          |
| Computer expenses                    | -60,833                        | -2,028            | -53,881                        | -1,796           |
| Office expenses                      | -4,018,184                     | -133,939          | -1,524,090                     | -50,803          |
| Motor Vehicles expenses              | -137,623                       | -4,587            | -139,981                       | -4,666           |
| Insurances                           | -165,069                       | -5,502            | -127,875                       | -4,263           |
| Printing, postage and stationery     | -585,558                       | -19,519           | -242,184                       | -8,073           |
| Bank charges                         | -536,845                       | -17,895           | -241,291                       | -8,210           |
| Audit fees                           | -120,000                       | -4,000            | -90,000                        | -3,000           |
| Depreciation                         | -1,057,725                     | -35,258           | -891,861                       | -29,729          |
| Legal and Consulting fees            | -554,360                       | -18,479           | -1,011,750                     | -33,725          |
| Sponsorship                          | -443,782                       | -14,793           | -1,058,110                     | -35,270          |
| LIR Training                         | -255,969                       | -8,532            | -1,354,318                     | -45,144          |
| <b>Total Administration Expenses</b> | <b>-30,887,439</b>             | <b>-1,029,582</b> | <b>-21,053,718</b>             | <b>-701,791</b>  |



## Surplus And Loss Statement - Year Ended 31 December 2009

Annex (USD comparatives)

|  | Year Ended<br>31 December 2009 |                   | Year Ended<br>31 December 2008 |                   |
|--|--------------------------------|-------------------|--------------------------------|-------------------|
|  | MRU                            | US\$              | MRU                            | US\$              |
| <b>Distribution expenses</b>             |                                |                   |                                |                   |
| Advertising expenses                     | -838,150                       | -27,938           | -889,818                       | -29,661           |
| Bad debts                                | -                              | -                 | -869,861                       | -28,995           |
| Meeting and seminars expenses            | -8,786,967                     | -292,899          | -4,304,542                     | -143,485          |
| Contribution                             | -492,248                       | -16,408           | -864,820                       | -28,827           |
| Travelling and<br>Accommodation expenses | -11,797,268                    | -393,242          | -10,675,994                    | -355,866          |
| Entertaining expenses                    | -75,634                        | -2,521            | -375,143                       | -12,505           |
| Car rental                               | -144,960                       | -4,832            | -1,300                         | -43               |
| Discounts allowed                        | -                              | -                 | -316,000                       | -10,533           |
| <b>Total Distribution<br/>Expenses</b>   | <b>-22,135,227</b>             | <b>-737,840</b>   | <b>-18,297,477</b>             | <b>-609,916</b>   |
| <b>Total Operating expenses</b>          | <b>-53,022,666</b>             | <b>-1,767,422</b> | <b>-39,351,196</b>             | <b>-1,311,707</b> |
| <b>Other Income/Expenses</b>             |                                |                   |                                |                   |
| Interest income                          | 447,232                        | 14,906            | 1,178,110                      | 39,270            |
| Exchange (Loss)/Gain                     | -4,206,580                     | -140,218          | 4,050,028                      | 135,001           |
| Total Other<br>Income/Expenses           | -3,759,348                     | -125,312          | 5,228,138                      | 174,271           |
| <b>Surplus for the period</b>            | <b>424,718</b>                 | <b>14,157</b>     | <b>8,772,792</b>               | <b>292,426</b>    |



# Auditors Report



## AUDITORS' REPORT TO THE MEMBERS OF AFRICAN NETWORK INFORMATION CENTRE (AfrinIC) LTD

### Report on the Financial Statements

We have audited the financial statements of African Network Information Centre (AfrinIC) Ltd on pages 5 to 21 which comprise the statement of financial position as at December 31, 2009 and the statement of comprehensive income, statement of changes in equity and statement of cash flows for the year then ended and a summary of significant accounting policies and other explanatory notes.

### *Directors' Responsibility for the Financial Statements*

The directors are responsible for the preparation and fair presentation of these financial statements in accordance with International Financial Reporting Standards and in compliance with the requirements of the Companies Act 2001. This responsibility includes: designing, implementing and maintaining internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error; selecting and applying appropriate accounting policies; and making accounting estimates that are reasonable in the circumstances.

### *Auditors' Responsibility*

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with International Standards on Auditing. Those Standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgement, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditors consider internal control relevant to the Company's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by the directors, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.



# Auditors Report



## AUDITORS' REPORT TO THE MEMBERS OF AFRICAN NETWORK INFORMATION CENTRE (AfrinIC) LTD

### Report on the Financial Statements (*continued*)

#### *Opinion*

In our opinion, the financial statements on pages 5 to 21 give a true and fair view of the financial position of the Company as at December 31, 2009 and of its financial performance and its cash flows for the year then ended in accordance with International Financial Reporting Standards and comply with the Companies Act 2001.

#### *Other matter*

This report, including the opinion, has been prepared for and only for the Company's members, as a body, in accordance with Section 205 of the Companies Act 2001 and for no other purpose. We do not, in giving this opinion, accept or assume responsibility for any other purpose or to any other person to whom this report is shown or into whose hands it may come save where expressly agreed by our prior consent in writing.

### Report on Other Legal and Regulatory Requirements

#### *Companies Act 2001*

We have no relationship with or interest in the Company other than in our capacity as auditors and dealings with the Company in the ordinary course of business.

We have obtained all the information and explanations we have required.

In our opinion, proper accounting records have been kept by the Company as far as it appears from our examination of those records.

  
ERNST & YOUNG

  
ANDRE LAI WAN LOONG, A.C.A.

Ebene,

Mauritius

28 JUN 2010

Date: .....

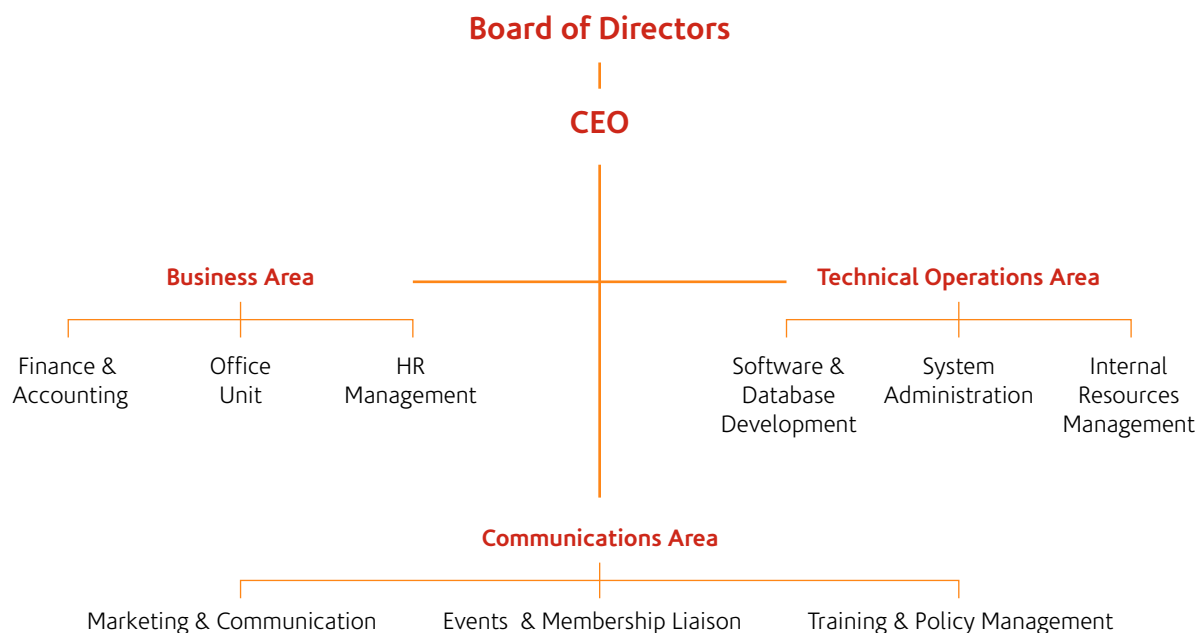


Annual Report  
2009



## Continued Implementation of the Organisational Structure

In September 2007, AfriNIC, in its quest to move to the next level and to implement the new business strategy, set as an objective to have a new organisational structure that will help to improve the overall efficiency of the organisation and address the numerous challenges faced in delivering on our mission. Consequently, the CEO presented a new organisational structure to the board, and after being approved, it was implemented in May 2008. The new structure is shown below:

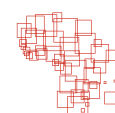


In 2009, AfriNIC continued to work on the consolidation of the new structure, reviewing the organisational chart as required to adapt to its evolving needs. There was heavy investment in capacity building and recruitment activities to include staff of different nationalities.

### Brief Description of the Areas

The Communications Area is responsible for outreach to our members and the Internet community, design and management of the AfriNIC website, development and execution of external training, running election process, event planning and providing support for the policy development process.

The Business Area is responsible for accounting, billing, budget management, contract administration, financial administration, legal affairs, human resource management, office management, office security, and travel administration.





The Technical Area writes and maintains the code that supports the effective management of Internet number resources, system development as well as equipment maintenance and upgrades required to keep AfriNIC operational. The Internet number resources unit is responsible for the allocation and assignment of all IP resources within the AfriNIC region.



## Overview of Staffing and Staff Activities

AfriNIC staff is composed of dynamic team members from different nationalities around the world. At December 2009, we had staff from eight nationalities namely, Uganda, Mauritius, Kenya, Nigeria, United States, South Africa, Cameroon and Togo. All our staff are highly qualified with extensive experience in their respective fields. We also ensure continuous training to keep abreast with new technologies and systems to better serve our members and fulfill our mission. Dedicated and professional service in all we do remains our top priority. The following staff activities took place during 2009.

### Management Retreat, September 2009

We organised a management retreat in September 2009. The main objective of the retreat was to revisit AfriNIC's overall Action Plan at the management level. It was a very constructive meeting, out of which we identified our challenges and ways to address the issues ahead of the coming year. We also identified our major strengths and built on them in order to consolidate what we actually have in order to move forward as an organised team.

### Staff Gathering and Mid Year Action

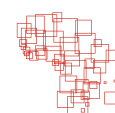
An AfriNIC staff gathering that included all staff and their family members was organised in December 2009 at the Casela Bird Park, Mauritius. It was an opportunity for our staff to meet the families of their colleagues out of the office environment to know each other in a more friendly and convivial atmosphere.

### Implementation of HR policies

During the year, AfriNIC implemented several HR policies, including a comprehensive Employee Handbook in line with the Employment Rights Act.

### Staff Training

AfriNIC sent its staff to attend various courses as per its Training Plan in order to enhance capabilities to deliver at the high level that is expected of its employees. Staff attended seminars in relation to the new enactments including the Income Tax Act to accommodate the changes that were brought in 2009.



# Communications Area

- Introduction to the Communications Area and Key Activities
- Public Policy Meetings
- Policy Development
- Training and Capacity Building
- Outreach and Collaborations

4



African Renaissance Monument, Senegal

## Introduction to the Communications Area and Key Activities

AfriNIC's Communications Area is a new department and has a central role in achieving AfriNIC's mission and goals. The Communication Area is in charge of maintaining and facilitating the bottom-up policy development process, developing and implementing training programmes, organising annual public policy meetings and ensuring the overall representation of AfriNIC locally and worldwide while promoting AfriNIC as a brand. The Communications Area is composed of four dynamic staff:

| Name                    | Position                                  |
|-------------------------|---|
| Lillian O. Sharpley     | Area Manager                              |
| Mukom Tamon             | Training Manager and Policy Liaison       |
| Kheeran Bahadoor        | Marketing and Communication Officer       |
| Stephanie Morgan-Brenon | Event Coordinator and Sponsorship Manager |



*Mukom Tamon, Kheeran Bahadoor, Lillian O. Sharpley and Stephanie Morgan-Brenon*



## Public Policy Meetings

AfriNIC organises two face-to-face public policy meetings every year. These meetings provide an opportunity for the community at large to participate in knowledge sharing, networking and policy discussions and are open to all interested parties. AfriNIC-10 and AfriNIC-11 were organised in Cairo-Egypt and Dakar-Senegal respectively.

AfriNIC-10 was held jointly with AfNOG from 21–27 November 2009, at the InterContinental Citystars Hotel, Cairo, Egypt. Hosted by the National Telecommunications Regulatory Authority (NTRA) and the Ministry of Communications and Information Technology (MCIT) of Egypt, the meeting was attended by 135 participants representing 35 countries in Africa and 15 other countries outside of the region.

One (1) policy proposal was discussed but failed to reach consensus and thus was returned to the mailing list for further discussion. The participants also enjoyed a three-day training session - one day of Local Internet Registry (LIR) training and two days of IPv6 as well as a few technical tutorials on Internet technology.



*AfriNIC-11 Opening ceremony*





AfriNIC-11 was held at the Radisson Blue hotel in Dakar, Senegal from 21–27 November 2009. Hosted by l'Agence de Régulation des Télécommunications et des Postes (ARTP), the meeting was attended by some 150 delegates coming from 20 different countries around the world. During this meeting, the first Africa Asia Forum on Network Engineering event took place with a focus on Internet measurements. There were also Birds of a Feather (BoF) sessions on IPv6 deployments, introduction to Resource Public Key Infrastructure (RPKI) and Cyber Security, including DNSSEC.

Four (4) policy proposals were discussed during AfriNIC-11 and out of these, consensus was reached on two, one was rejected and one failed to reach consensus.

During the meeting in Dakar, AfriNIC signed a second MoU with the African Association of Universities (AAU) which would enable universities and research institutions in Africa to get the remaining 50% of their AfriNIC membership fees covered by a fund provided by FRENIA and TENET.



*Adiel. A. Akplogan, CEO AfriNIC*

## Policy Development

An update regarding the policy discussions in 2009 follows. There was one proposal that reached consensus and was implemented during the year. This was a global policy "The Global Policy for Allocation of the Remaining IPv4 address space".

The proposal was discussed across the RIRs and adopted as a global policy.

In summary, this proposal has a direct consequence of instructing IANA to issue one /8 to every RIR when the IANA pool reaches a critical minimum of /8s equal to the number of RIRs at that moment in time.

It was proposed by Roque Gagliano, Francisco Obispo, Haitham El Nakhal, Didier Alain Kla and the JPNIC IPv4 policy team.



*AfriNIC-11 Session in progress*





### Proposals that Were Implemented

| Proposal   | Author(s)  | Date Proposed |
|--|--|---------------|
| Global Policy for the Allocation of the Remaining IPv4 Address Space.<br>( <a href="http://www.afrinic.net/docs/policies/AFPUB-2009-v4-001.html">http://www.afrinic.net/docs/policies/AFPUB-2009-v4-001.html</a> ) | Roque Gagliano, ANTEL<br>Francisco Obispo, CENIT<br>Haitham EL Nakhal, MCIT<br>Didier Allain Kla, ISOC Cote d'Ivoire<br><br>JPNIC IPv4 countdown policy team:<br>Akinori Maemura, Akira Nakagawa,<br>Izumi Okutani, Kosuke Ito, Kuniaki Kondo,<br>Shuji Nakamura, Susumu Sato, Takashi Arano,<br>Tomohiro Fujisaki, Tomoya Yoshida | 09.06.2007    |

### Proposals that Reached Consensus and are Awaiting Board Ratification

|  |   |            |
|--|---|------------|
| Global Policy for the Allocation of IPv4 Blocks to Regional Internet Registries<br>( <a href="http://www.afrinic.net/docs/policies/AFPUB-2009-v4-002.htm">http://www.afrinic.net/docs/policies/AFPUB-2009-v4-002.htm</a> ) | Adiel A. Akplogan, AfriNIC<br>Raul Echeberria, LACNIC<br>Maemura Akinori, APNIC<br>Geoff Huston, APNIC<br>Axel Pawlik, RIPE NCC<br>Ray Plzak, ARIN<br>Oscar A. Robles-Garay, LACNIC<br>Nigel Titley, RIPE NCC<br>Paul Wilson, APNIC | 05.03.2009 |
| (Amendment) IANA Policy for Allocation of ASN Blocks to RIRs<br>( <a href="http://www.afrinic.net/docs/policies/AFPUB-2009-ASN-001.htm">http://www.afrinic.net/docs/policies/AFPUB-2009-ASN-001.htm</a> )                  | Andrew de la Haye<br>Stacy Hughes   | 28.08.2009 |

### Proposals that Reached Consensus and were Rejected

|  |               |            |
|--|---------------|------------|
| IPv6 Allocations to Non-Profit Networks<br>( <a href="http://www.afrinic.net/docs/policies/AFPUB-2009-v6-001.htm">http://www.afrinic.net/docs/policies/AFPUB-2009-v6-001.htm</a> ) | Graham Beneke | 27.01.2009 |
|--|---------------|------------|

### Proposals that Failed to Reach Consensus

|   |                 |            |
|---|-----------------|------------|
| IPv4 Soft Landing Policy<br>( <a href="http://www.afrinic.net/docs/policies/AFPUB-2009-v4-003.htm">http://www.afrinic.net/docs/policies/AFPUB-2009-v4-003.htm</a> ) | Douglas Onyango | 07.01.2009 |
|---|-----------------|------------|

### New Policy Proposals

|   |              |            |
|---|--------------|------------|
| Policy Development Process in the AfriNIC service region<br>( <a href="http://www.afrinic.net/docs/policies/AFPUB-2009-GEN-001.htm">http://www.afrinic.net/docs/policies/AFPUB-2009-GEN-001.htm</a> ) | S. Moonesamy | 10.12.2009 |
|---|--------------|------------|



## Training and Capacity Building

In 2009, we conducted nine (9) workshops covering IPv6, DNSSEC and LIR. Training was conducted in Accra (Ghana), Lagos (Nigeria), Tunis (Tunisia), Algiers (Algeria), Cairo (Egypt), Libreville (Gabon), Bujumbura (Burundi), Dakar (Senegal) and Nouakchott (Mauritania). In total, an estimated 350 participants attended these training workshops. Most of these training used the AfriNIC virtual IPv6 lab for hands-on practice. In its initiative to help operators move to IPv6, an advanced training workshop was conducted in Mauritius for Emtel (a local mobile service provider).

During the third quarter of 2009, a Training Manager was hired to further direct and develop our training and capacity building programme.

The outcome of our new training plan is a curriculum for the IPv6 fundamentals course that focuses on transition techniques and interior gateway routing protocols. In the advanced curricula, we will focus on deploying IPv6-enabled network services, BGPv4+ and security.

For more information, see our training page <http://www.afrinic.net/training/index.htm> and IPv6 portal <http://www.afrinic.net/IPv6/> as we will be updating these with relevant new content to help the community build and share IPv6 competence.



## Outreach and Collaboration

The year 2009 was quite dynamic for AfriNIC in terms of outreach and collaboration on a regional and international level. Some of the key highlights include: the organisation and facilitation by AfriNIC of a successful West Africa Internet Governance Forum (WAIGF) in Accra, Ghana which saw the creation of the AfriNIC Government Working Group (AfGWG), the signing of the second Memorandum of Understanding (MoU) with the Association of African Universities and the increased participation at IGF by organising and sponsoring a workshop on Open Source. We have also continued to provide support to other regional organisations involved in Internet governance such as AfNOG and AfTLD.

AfriNIC held the chair of the NRO in 2009 and as such represented all the RIRs at different international fora including hosting the Internet community both at the ITU and World Telecom.

### The AfriNIC Government Working Group (AfGWG)

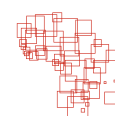
The AfriNIC Government Working Group was established in 2009 to provide a platform for AfriNIC, government and regulatory representatives to discuss issues related to Internet number resource management, exchange on challenges and issues/concerns on related matters in respective countries, explore ways to collaboratively address them, and obtain direct feedback. The first AfGWG meeting was the round table meeting which was held on 16 October 2009 and was back-to-back with the WAIGF event that took place in Accra, Ghana, 14–16 October 2009.

### West Africa Internet Governance Forum (WAIGF)

The second annual West Africa Internet Governance Forum (WAIGF) organised by AfriNIC was held from 14–16 October 2009, at La Palm Royal Beach Hotel, Accra, Ghana. It was attended by 90 participants drawn from regulatory agencies, governments, academia, civil society, the private sector and other leaders and stakeholders of the Internet community. Countries represented were, Ghana, Senegal, South Africa, Tanzania, Côte d'Ivoire, Nigeria, Niger, Mauritius, Mali, Togo, Egypt, and United Kingdom. There were 31 followers on Tweeter, some of whom asked questions and gave comments and suggestions.

The forum was hosted by the Ghana Ministry of Communications, with additional sponsorship from the Internet Society (ISOC), OSIWA, Institut Panos Afrique de l'Ouest (IPAO), ICANN, MTN-Ghana and Diplo Internet governance community.

There were presentations from the Ghana Ministry of Communications, Ghana National Communications Authority, NEPAD, OSIWA, ICANN, AfriNIC, AfTLD, AfNOG, ISOC, AAU, ECOWAS, Diplo-Foundation, MTN-Ghana, FOSSFA, Balancing Act-Africa, IGF, EAIGF, and others.



One key output from the forum was the WAIGF Communiqué which was an agreed-upon way forward from the participants and panellists during the event. This communiqué urges the West African stakeholders:

- to actively participate at IGF to be held in Sharm El Sheikh;
- to increase their participation with ICANN especially the governments with the GAC so they can fully participate in the new oversight and evaluation mechanism;
- to broaden popular awareness of the IGF issues in general and particularly, West Africa's priorities, as well as building Internet resource management capacities with continental partners, such as, FOSSFA, OSIWA, PIWA, ECOWAS, governments, regulators, academia, civil society, private sector, and technical community, and;
- to further engage Internet governance experts and local bodies such as AfriNIC, AfNOG, AfREN, AfTLD and AfriSPA in the region's global policy decision-making process.

An overview of this event and the communiqué were reported at IGF 2009, Sharm El Sheikh by the Ghana Ministry of Communications.

### **Strengthening the Internet Infrastructure for Research and Education, AfriNIC and AAU MoU**

In recognition of the invaluable potential of research and education institutions in the African region and to further Internet development processes, AfriNIC and AAU have signed an MoU to support the membership cost of registration for IP resources through AfriNIC.



*AfriNIC-AAU-MOU signing*



In this agreement, which is now effective, the AAU will cover the remaining 50% of the setup and first year membership fees (up to a maximum of \$5000 USD per member) for eligible African academic and research institutions, as well as Research and Education Networks (RENs) that request IP address resources. These members will then have to make provisions for subsequent year membership fees.

This incentive builds on the already existing and permanent benefits that AAU members and other African educational and research institutions enjoy, which is a 50% discount offered by AfriNIC for their annual membership fees for IP number resource allocations or assignments. This new agreement between AAU and AfriNIC is expected to make African universities and academic institutions more visible on the Internet.

### **Participation at IGF 2009, Sharm El Sheikh Egypt**

AfriNIC was proud to have played an active role at IGF 2009 by organising a workshop, participating in panel discussions, panellists, moderators, organising the NRO booth, and representing the NRO at the Taking Stock session on the continuation of IGF.

AfriNIC organised a workshop titled “Mitigating the Financial Crisis with Open Source Applications” to create awareness on open source applications/technology and how they can be used to reduce the financial burden on an organisation’s IT infrastructure, especially with the challenges that have been brought about by the global financial crisis. Emphasis was placed on Africa and developing nations.

AfriNIC also submitted a report on the outcome of this workshop to the IGF for a follow-up workshop at IGF 2010.

### **Activities Sponsored by AfriNIC in 2009**

AfriNIC sponsors initiatives which are intended to contribute to Internet development in the African region and is also in line with our mission of supporting Internet technology usage and development. Moreover, this gives us the opportunity to increase awareness about our services and cooperate in capacity building in our region by sharing resources and knowledge. Below are some of the activities that were sponsored by AfriNIC during 2009.

### **Contribution to “A ccTLD For Every Country in Africa” event in Mauritius**

The forum on ‘A ccTLD for Every Country in Africa’ was held on from 17–19 March 2009 in Pailles, Mauritius. This forum was organised by the African Telecommunication Union (ATU) and the Information and Communication Technologies Authority (ICTA) under the



aegis of the Ministry of Information and Communication Technology, Mauritius and in collaboration AfriNIC, the Internet Corporation for Assigned Names and Numbers (ICANN), the African Top Level Domains Association (AfTLDs) and the Internet Society (ISOC).

Delegates from some 20 African countries including South Africa, Burundi, the Republic of the Congo and the Democratic Republic of the Congo, Ivory Coast, Egypt, the Gambia, Kenya and Malawi participated in the forum. Apart from the ccTLD issue, the forum covered topics such as the operational stability, reliability, security and global interoperability of the Internet. Beyond the implications of the technological and technical complexities, the African policy makers also addressed the flow of information, intellectual property, multilingualism, accessibility, privacy, security and spam.

As this was a local event for AfriNIC, we were able to increase participation by AfriNIC staff and provide assistance with some of the meeting organisation.

### **AfTLD, Arusha, Tanzania**

The AfTLD held its 3rd Annual African ccTLD meeting from 13–17 April 2009, Arusha, Tanzania. The theme for the meeting was “Securing Africa’s Internet Infrastructure” and included an Attack/Disaster Contingency Recovery Planning workshop, a two-day security hands-on training workshop, IPv6/DNSSEC training, and two Annual General Meeting. The event was organised and generously hosted by the Tanzania Network Information Centre (.tzNIC) and supported by the Tanzania Communication Regulatory Authority and the Ministry of Communication, Science & Technology.

AfriNIC participated in the meeting and provided financial support of the meeting activities.

### **EA-IGF, Nairobi, Kenya**

The East African Internet Governance Forum was held from 7–9 September, in Nairobi, Kenya. The theme was “Advancing the Internet Governance Debate for Meaningful Participation”. There were over 200 participants representing 15 countries. AfriNIC participated in this event by sponsoring the social dinner as well as making a presentation. The event also gave AfriNIC the opportunity to exchange ideas with the regulators and governments represented at the event and to promote the WAIGF event.

### **AfriNIC’s Fellowship Programme**

AfriNIC’s Fellowship Programme is an outreach initiative that was established since 2006 with the objective of increasing awareness about AfriNIC through its public policy meetings



and to increase participation in the policy development process. Today, it has grown to also provide a mechanism for individuals to gain knowledge about Internet development issues and to transfer the knowledge in their respective countries and ultimately lead to a positive contribution to IP address management awareness in the African region and for overall Internet development.

The fellowship is reserved for individuals representing small organisations, universities, and journalists who are involved in Internet development in the African region or ICT policy in their countries and the community who are actively involved in Internet development initiatives in the African region.

In 2009, AfriNIC spent an amount of 16,000 USD on 10 participants across the continent. There were five (5) fellowship recipients for AfriNIC-10 and four (4) for AfriNIC-11.

### **IPv6 - African IPv6 Day**

Since 2006, AfriNIC has been devoting a full day of its public policy meetings to IPv6 and its development around the world and in Africa particularly. In 2009 we had the IPv6 Day during AfriNIC-11 in Dakar, Senegal and saw the participation of more than 120 people. One of the key outcomes of that meeting was the need expressed by the participants to set up an African IPv6 Task Force. AfriNIC is currently working on the project.

### **Partnership with 6deploy**

AfriNIC has been a partner of the 6deploy consortium since 2008. The project, which is funded by the European Union, is composed of thirteen (13) supporting organisations, which aims to provide support for the deployment of IPv6 in Europe and developing countries. Our participation in this project has helped to provide more training within our region, leveraging labs and expertise from our partners in Europe.





# Technical Operations Area

Introduction to the Technical Operations Area  
and Key Activities

MyAfriNIC update

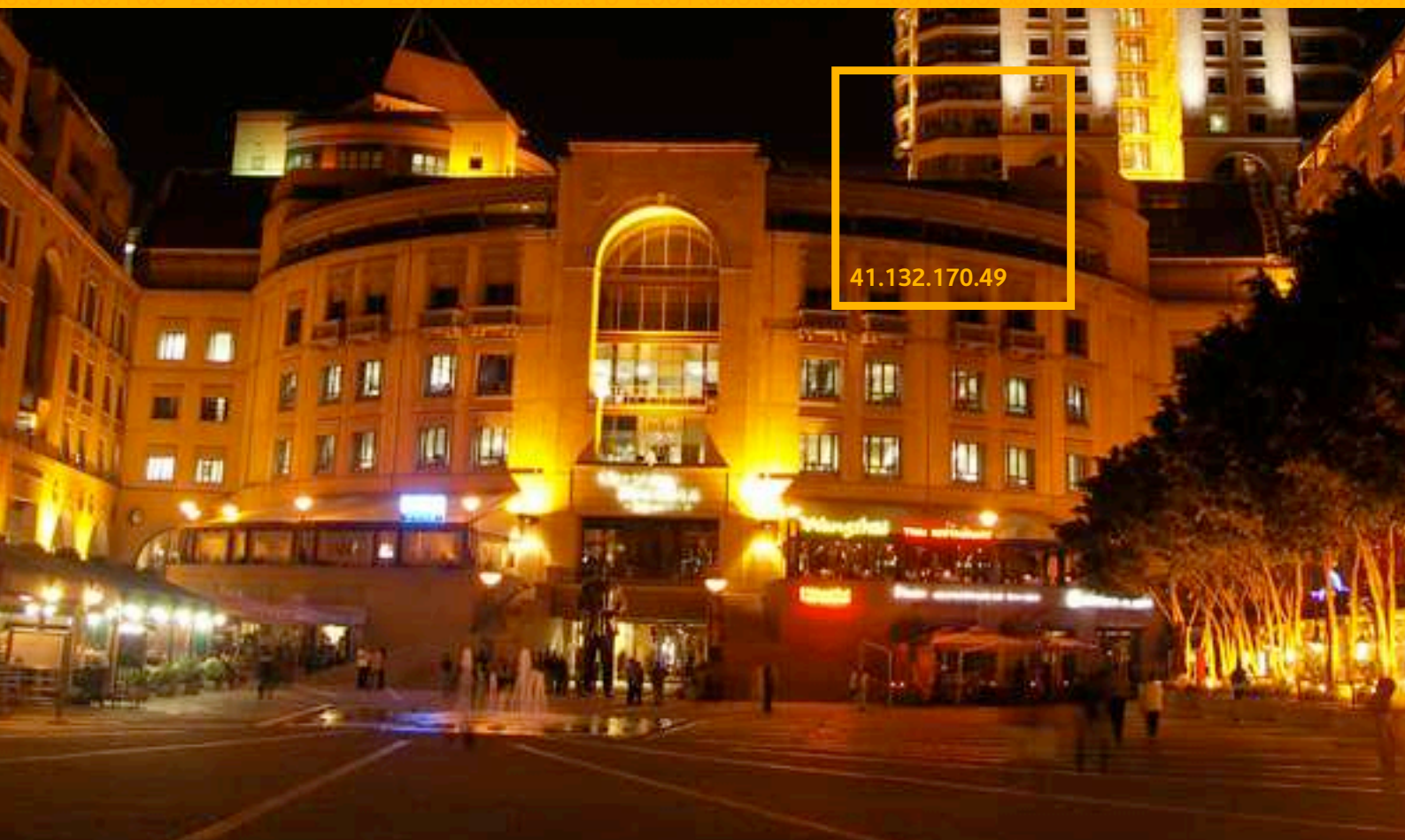
Special project Update

IETF and NRO ECG Activities

Membership Update

Number Resource Management Update  
and Statistics

5



Nelson Mandela Square, South Africa

## Introduction to the Technical Operations Area and Key Activities

The Technical Operations Area is responsible for establishing and maintaining all technical aspects and infrastructure necessary for running a Regional Internet Registry.

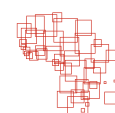
In 2009, the main function of the Technical Operations Area has been to ensure that AfriNIC maintains its services efficiently and reliably through the maintenance of AfriNIC's existing software and databases and by improving the MyAfrinic portal service. Our focus was also to consolidate the team, to meet the challenges of AfriNIC's growing technical environment, and delivering on goals and projects in AfriNIC's Technical Area.

| Name                                       | Position                                |
|--|---|
| Goburdhan Nishal - (joined in August)      | Technical Operations Area Manager       |
| Kimotho Laban Mwangi - (joined in July)    | Database Manager and Software Developer |
| Lawani Alexander Itopa - (joined in April) | Software Engineer                       |
| Aina Alain Patrick                         | Special Project Manager                 |
| Ahadjitse Mawulanam Yaovi                  | Database Manager and Software Developer |
| Kurup Harikrishnan                         | System Administrator                    |
| Ramphul Radha                              | IP Analyst and Webmaster                |
| Byaruhanga Ernest                          | Membership Services Manager             |

Bridging the gap between technical operations and policy, AfriNIC technical staff showed representation at the ITU-SG3 meeting in Kampala, Uganda in September as invited expert panellists on the subject of Internet Exchange points, and BGP. We were invited as panellists to different panels at the Internet Governance Forum (IGF) in Sharm El Sheik, Egypt in November, where AfriNIC staff helped demystify DNS, BGP, Exchange Points, and provided insight into the economics of networks and IPv6 deployment in our region.

AfriNIC technical staff worked in conjunction with AfNOG to support PHEA (Forum for Higher Education in Africa), in Accra, Ghana in December 2009, by providing essential training skills.

During this reporting period, we concluded negotiations for AfriNIC to migrate to a new hosting site in South Africa. As we improve our infrastructure, and participate in new and additional projects, our equipment and bandwidth needs will increase steadily, and we are very confident that at the new site, we will be able to offer better uptime and services to our members.



In 2009, we have gone through a restructuring phase with more than 50% of the team being appointed new. In 2010, our focus will be on staff retention, and on improving internal systems and infrastructure, while still participating in essential activities and continuing development of new services, like RPKI at AfriNIC. We are also planning to bring changes to our Registration Services area that will help smooth the process of new member registrations at AfriNIC.



## MyAfriNIC update

MyAfriNIC is a web portal from which members can manage their registration information. Amongst other capabilities, it enables members to manage and view their contact information, view the resources allocated to them, create and manage reverse delegations, request and manage sub-allocations, request new resources as well as view and manage their financial transactions.

Our technical team continues to improve the system, fixing bugs as they are discovered and adding new features based on requests from our members.

The most important new feature on the external side was the re-enabling of credit card payments. The latter feature should make it easier and convenient for members to settle their bills using their credit cards. The vast majority of other bug fixes and feature requests are more internally focused, and allow the internal registrations team to perform resources management related tasks faster and more efficiently. Also, fixes were made so that all members trouble ticket numbers appeared in the ticket history.

Going forward, we will be introducing the following features:

- Integration of resource certification link to enable members to perform various RPKI functions.
- New workflow that obviates the need for members to create nic-hdls beforehand.
- Creation and embedding of an RT ticket number in the RSA.
- Ability to simultaneous request both membership and resources.



## Special Projects updates

During 2009, the Special Projects Manager also acted as acting CTO, in charge of the coordination of the work of the Technical Area. In terms of Special projects, the following activities have been done.

### 6deploy IPv6 Virtual Lab

The Technical Area coordinated with the Communication Area and the CEO to carry out its activities inside the 6deploy project. With the assistance of CISCO systems, we deployed the first 6deploy IPv6 virtual lab in the African service region. The lab is to be used by interested parties from the African region for IPv6 trainings or deployment experiments. A reservation system has been installed to manage the lab. The lab has been used for AfriNIC IPv6 training during AfriNIC-11 meeting in Dakar.

More information on the virtual lab at: <http://www.afrinic.net/projects/cvl.htm>

More information of the 6deploy project at: <http://www.6deploy.eu/>

### The Root Servers Anycast project

AfriNIC launched a project to help Exchange Points (IXP) and big transit points in our service region to deploy copies of root servers. The project aimed to increase the number of the root servers copies.

The AfriNIC technical team met at various events and meetings with some root servers operators, mainly F,I,K-root. AfriNIC concluded and signed several collaboration agreements with root servers operators. A call for hosting had also been sent to the community. The project received a positive response and proposal from the Tanzania Internet Service Providers Association (TISPA) to host a root server at an IXP in Dar es Salam. The first AfriNIC-sponsored K-root server was installed in Tanzania, through a great collaboration among AfriNIC, RIPE NCC and TISPA. The project also received a hosting proposal from the Mozambique Internet Exchange Point (MOIX).

More information of the K-root in Tanzania at: <http://k.root-servers.org/nodes/tix/>

More information on this project at: [http://www.afrinic.net/projects/project\\_anycast.htm](http://www.afrinic.net/projects/project_anycast.htm)

### The AIRRS project

The African Internet Resources and Routing Statistics (AIRRS) is a project conducted by AfriNIC which consists of providing reports, and tools for generating statistics on Internet resources allocation and routing in AfriNIC service region.





In 2009, AfriNIC continued the works to improve and add more tools and features to the AIRRS. IPv6 was a priority for the project. AfriNIC furthermore contributed to the addition of IPv6 peerings and BGP resources.

For more information on the AIRRS, please see: <http://www.afrinic.net/airrs/index.htm>

### **RPKI project**

Year 2009 has been a critical path for the RPKI project road. Protocols specification at the SIDR Working Group has been boosted and codes made available by APNIC, RIPE NCC, ISC and BBN. The NRO has been giving more attention to the certification project and released the NRO declaration on RPKI on 27 July 2009.

For more information on the NRO declaration on RPKI, please see <http://www.nro.net/news/nro-declaration-on-rpki>

AfriNIC has been an active participant on the discussions at both working group and NRO levels. We started our planning for RPKI deployment at AfriNIC to meet the deadline of 1 January 2011 decided by the NRO as per its declaration.



## IETF and NRO ECG Activities

AfriNIC like other RIRs is interested by IETF activities, mainly by the working groups which affect its role.

The SPM represented AfriNIC at IETF-74 and IETF-75 meetings in 2009. Its main focus has always been around the following working groups: 6man, v6ops, sidr, dnsext, dnsop.

IETF meetings are a platform to attend NRO ECG face-to-face meetings and meet partners to discuss about opportunities for projects and collaboration.

ECG meetings focused on its activity plan which covered the following NRO technical coordinated projects: DNSSEC, RPKI, ERX amongst others.



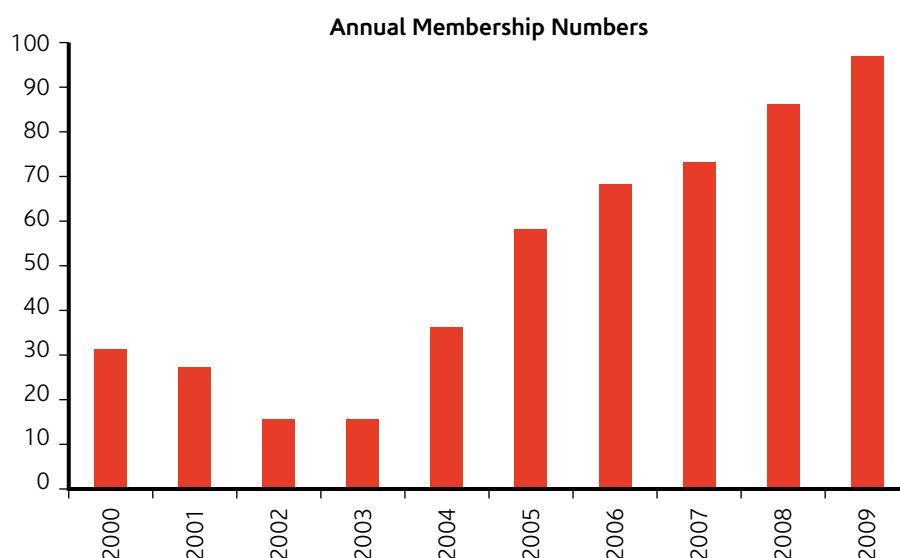
## Membership Update

The number resource management policies mandate that AfriNIC issue Internet numbers only to member organisations. Any ISP or other company which intends to request IPv4/IPv6 addresses and/or an AS Number will therefore have to go through the process of applying for AfriNIC membership, with the professional guidance of AfriNIC staff.

Membership is currently only open to companies which are located in the AfriNIC region of service, and 'individual' applications are not possible. Our members are categorised into two types – Local Internet Registries (LIR) and End Users (EU), the key difference being that LIR members can assign address space from the requested block to third parties, such as their customers, while EU members would only be having the intent of using the requested resources strictly within their corporate network. As such, most ISPs automatically fall in the LIR membership type, which indeed constitutes 72% of AfriNIC membership.

We received 226 applications for AfriNIC membership in 2009, of which, 99 were processed and approved as AfriNIC members. These were composed of 73 LIRs and 22 End Users. The total number of members as at 31 December 2009 stood at 597, representing a 20% growth from 2008.

In September 2009, AfriNIC along with RIPE NCC conducted an exercise to transfer resources of African region entities from the RIPE database. These were legacy organisations that did not have any contract with RIPE NCC. Twelve of such companies along with their associated resources were successfully transferred to AfriNIC after the exercise.



Owing to the awareness in the community around IPv4 address exhaustion, there was a large gap between the number of applications for membership that were received against



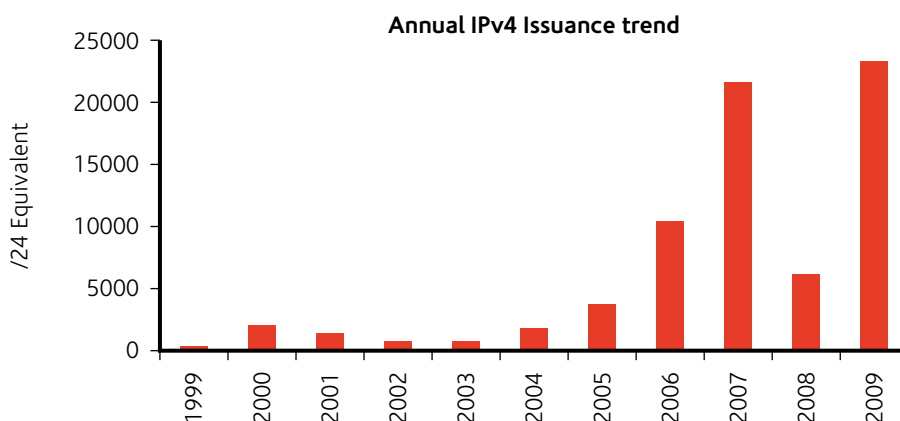
those which got approved. Several entities did submit requests that, unfortunately, did not meet the minimum criteria for AfriNIC membership and/or resource issuance.



## Number Resource Management Update and Statistics

### IPv4

The average address consumption rate in the region has grown from 300/24s per month in 2005 to about 2000/24s per month in 2009, a factor that can be attributed to the growing demand and reduced costs for Internet connectivity around the continent. We utilised close to 30% of a /8 in 2009 where we issued a total of approximately 6 million IP addresses (an equivalent of approximately 25,000/24s).



As of December 2009, our records indicate that there were approximately 27 million IPv4 addresses that have been issued within the AfriNIC service region. This data excludes any addresses that a network operator has received from an LIR/ISP located outside the AfriNIC service region. Such addresses will be counted as part of the region where the ISP that assigned them is located.

We have one /8s from where most of our allocations have been issued: 41/8. Statistics also indicate that more than 90% of all the space issued from these blocks is indeed advertised, which is a good thing. A brief summary of the utilisation from the AfriNIC IPv4 address pool follows:

| Block | Addresses Allocated | Utilised | Advertised |
|-------|---------------------|----------|------------|
| 41/8  | 14,812,160          | 88%      | 89%        |

The increased demand for address space also certainly comes with many overly optimistic requests, and many that are not policy-compliant. The process for evaluating AfriNIC membership applications and consequent address space requests has therefore been revised to ensure that our allocation principles remain needs based as the policy stipulates, while ensuring that the addressing requirements of our members are optimally met. We ensure that apart from the requesting company having legal presence in the AfriNIC region of service,

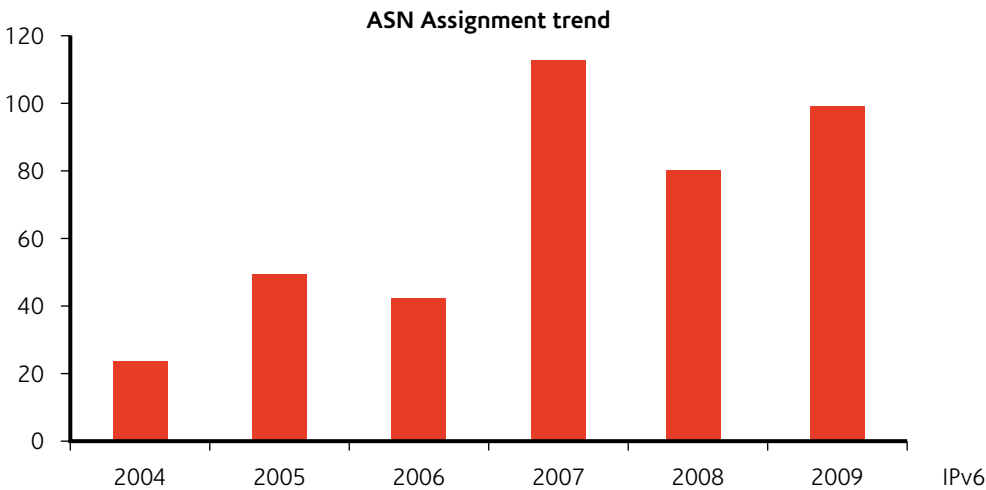




they provide evidence of an IP network and associated addressing demands (such as customers), within the region. Several cases of “RIR-shopping” have already been received, and a detailed evaluation actually determined that they cannot receive address space from us.

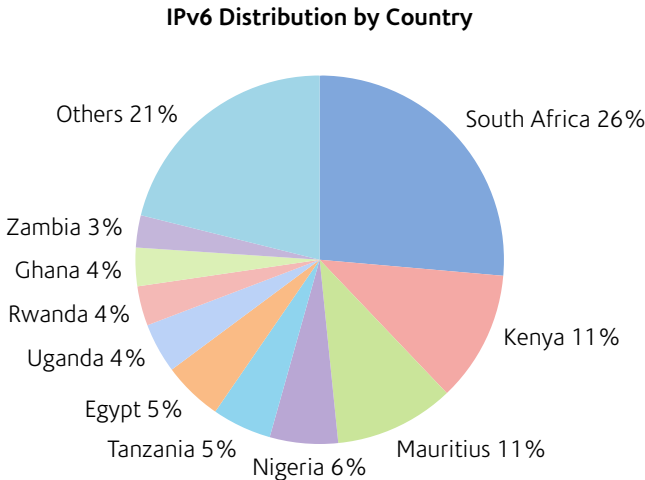
More IPv4 Allocation Statistics AS Numbers

A total of 525 AS numbers are assigned within the region. For the year 2009, a total of 100 AS numbers were issued, of which 8 are 32-bit. This represents a 30% increase in the ASN consumption for 2009 from 2008, and a similar increase regarding the demand for 32-bit ASNs.



IPv6

As at end of 2009, there was a total of 79 organisations in 26 different African countries that had been issued with IPv6 address space. Among these, 14 allocations were issued in 2009. There has been a general decreased interest in IPv6 since 2007. We have been concentrating our efforts on evangelising IPv6 to the community through various activities, such as conducting hands-on IPv6 workshops and encouraging all applicants of IPv4 space to consider requesting for an IPv6 prefix if the policy criteria are met (which usually are), and hope to start seeing increased interest in IPv6 soon.



## Message of Thanks

AfriNIC wishes to express its sincere recognition to organisations which supported and contributed as sponsors and local host to the success of our meetings in 2009. We want all our sponsors and partners to know that their support has been beneficial to us and that their contribution to the Internet development in the African region is highly recognised.

We also thank all our local hosts who supported the organisation of our free training workshops in year 2009. Some of our working partners are as follows: CISCO, ISOC, ICANN, ONCF, TANBERG, DCL, Mauritius Telecom, Méditel, Organisation Internationale de la Francophonie, Centre National pour la Recherche Scientifique et Technique, Network Startup Resource Centre, Ecole Mohammadua d'Ingénieurs.

We hope to continue to have you and many other organisations with us in our mission throughout the region.



## Annual Report 2009

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