# 1  INTRODUCTION

Following our application sent to ICANN on September 30th 2004, we are hereby submitting a summary of that initial application along with updated information regarding the implementation status of the AfriNIC transition plan.

AfriNIC, a registered regional not-for-profit, non-governmental membership based organisation, has worked in collaboration with the local community and the NRO (Number Resource Organisation) to be accredited by ICANN as the fifth Regional Internet Registry (RIR). AfriNIC is currently performing all functions of a RIR in service to the African Internet community and is ready to perform those functions in an official capacity following final recognition by ICANN as the fifth RIR.

## 2  About AfriNIC

### 2.1  Coverage

*ICP-2:1- 'The region of coverage should meet the scale to be defined by ICANN, given the need to avoid global address fragmentation –'*

AFRINIC will operate in Africa at the continental level. By doing this, AfriNIC will offer a single management point and operational location for the region. The establishment of this unique RIR in our region will clearly help to have:

- Better aggregation of Addresses allocated to our region;
- Better coordination of resources allocation in our region;
- A single point of contact for Address space and number requests.
- A proximity service by taking into account the real needs of our local registries
- Development of products/services unique to the needs of African operators

The list of countries covered by AfriNIC can be found at:
http://www.afrinic.net/countries.htm

AfriNIC is managed out of a single location in Mauritius.

### 2.2  Community support

*ICP-2:2 - 'The new RIR must demonstrate that it has the broad support of the LIRs (ISP community) in the proposed region'*

Since 1997 the idea of having a regional registry in Africa has gained momentum. At each major event, AfriNIC has received strong support from the local community. The first manifestation of interest received was at the May 2000 meeting in Cape Town where more than 68 organisations (from ISP,

Academic and Telecommunications organisations) expressed their public support to the organisation by signing the founding membership chart (see http://www.afrinic.net/foundmembers.htm). Then AfriNIC asked them to formalise this support by requesting founding members to send a formal support letter. As of today, we have received about 40 formal letters of support from different organisations across the continent (see www.afrinic.net/support/).

AfriNIC has actively communicated with existing LIRs in the new region to generate support.   Methods of contact have included direct email communication, physical meetings, the AfriNIC website, and archived mailing lists.  We are still receiving support letters from the community. Our first public policy meeting (May 2004) and the regional meetings organised by the RIRs serving our region in late June and July of 2004 were also used as opportunities for the community to express their support to AfriNIC as a RIR.

During the member meeting in Dakar, a transition plan from the existing RIRs to the new forming organisation was presented to the community. This plan was approved and endorsed unanimously by the members present.

## 2.3  *Policies and Decision making process*

*ICP-2:3 - 'Bottom-up self-governance structure for setting local policies'*

AfriNIC's structure and organisation is fully based on a bottom-up process with broad participation of the local community composed of members. The process is fully documented in its bylaws (http://www.afrinic.net/bylaws2000.htm) and other related documents publicly available online (www.afrinic.net) .

To formalise that, a policy development process (PDP) was also created. This PDP was followed for the adoption of the first set of AfriNIC policies in Dakar in May 2004 where AfriNIC held its first public policy meeting. There were about 120 registered participants including representatives of more than 30 LIRs from Africa.

AfriNIC has developed and will continue to develop its own policies through the same process in order to ensure a participative and open environment:

- A public and open policy mailing list.
- A public policy meeting wherein members and community will discuss proposed policies and agreement is based on consensus. The meeting will also feature educational activities on AfriNIC related subjects.

The policies are framed within the general objectives of IP number resource allocation, especially with regards to the conservation of IP address space and aggregation of routing information. These are and will be based on the internationally established standards and best practices commonly agreed and used by the International community (RIRs). AfriNIC is fully committed to following policies based on the key global address management principles:

Conservation, Aggregation and Registration. To better understand and endorse these principles, AfriNIC has appointed observers in the ASO AC and the NRO EC.

## Policy Development Process:
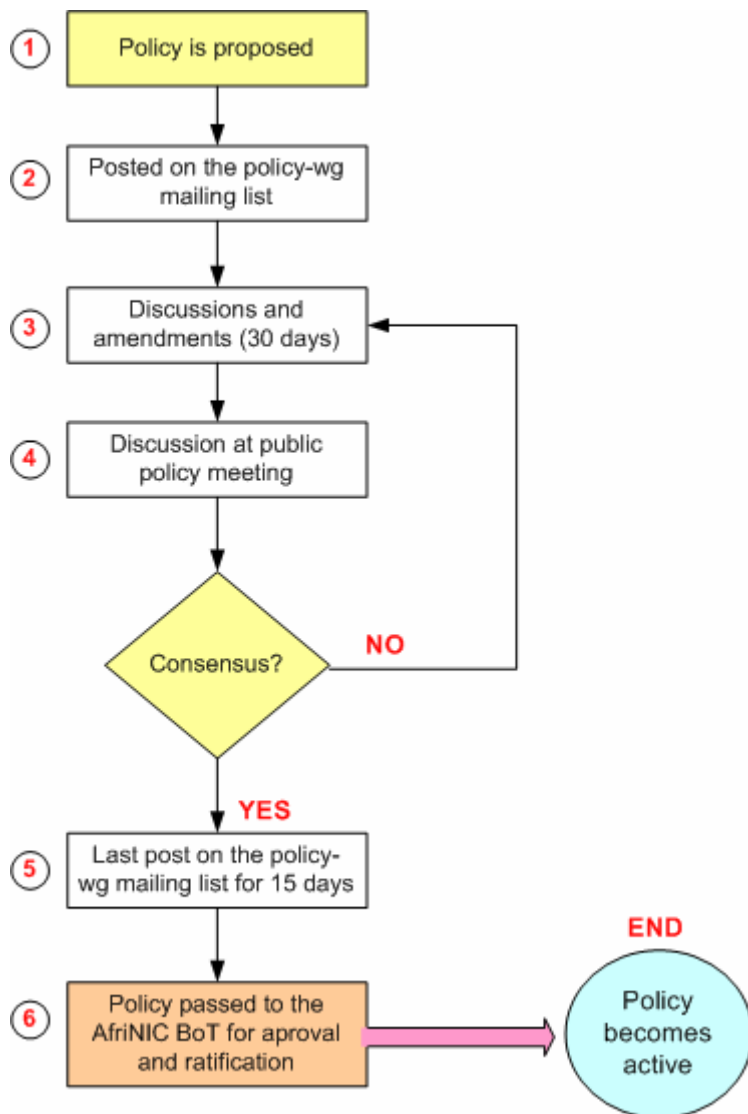


**1.** A policy is proposed (by anyone).

**2**. It is posted to the AfriNIC policy-wg mailing list for discussion. (The policy-wg list will from now onwards be open to community at all times, and anyone can join the list for discussion).

**3**. After at least 30 days of discussion and comments on the mailing list, the policy is brought to the public open-policy (face to face) meeting for community and members' endorsement through consensus. (The first meeting was the AfriNIC-1 meeting in Dakar, Senegal, May 23 and 24, 2004).

  * *Consensus is general agreement of the group and is not measured by a majority vote.*

**4**. If there is consensus at the meeting, go to step 5, if not, back to step 3.

**5**. A last call for comments on the policy will be announced on the policy-wg list. A period of 15 days will be allowed for the community to suggest any final changes and amendments.

**6**. The Board of Trustees will then ratify and adopt the policy for use.

*Figure 1: AfriNIC Policy Development process*

In addition to holding public policy meetings and hosting open archived mailing lists for policy discussion, AfriNIC is ready and capable of undertaking its responsibility to host an Address Council General Assembly Meeting, as described in Section 5 of the ASO MoU. To illustrate that point, the next meeting of the ASO AC will be held during the AfriNIC-2 public policy meeting in Maputo (Mozambique).

### 2.4  Neutrality and Impartiality

***ICP-2:4 – 'Neutrality and impartiality in relation to all interested parties, and particularly the LIRs'***

AfriNIC is a non-governmental and not-for-profit membership based organization. The structure of the organisation gives full control of the organisation to its members. AfriNIC is accountable to the members by the way it applies adopted policies. All the rules applied for resource allocation will be strictly based on these policies and will be fair for anyone. AfriNIC is neutral from any governmental or institutional entity.

### 2.5  Expertise and skills

***ICP-2:5 – 'The new RIR must be technically capable of providing the required allocation and registration services to the community in its region'***

According to the above structure, the team in charge of AfriNIC is composed of experienced people who have proved their sound knowledge in technical, policy and Internet governance areas. The actual team composition is below.

**Board of Directors:**

The newly elected AfriNIC board is composed:

**1. Southern Africa:**
o  Primary: Alan Barret  (SA)
o  Alternate: Alan Levin, (SA)

**2. Northern Africa:**
o  Primary: Kamal Okba (MA)
o  Alternate: Mokhtar Hamidi (DZ)

**3. Eastern Africa:**
o  Primary: Brian Longwe (KE)
o  Alternate: Charles Musisi (UG)

**4. Western Africa:**
o  Primary: Pierre Dandjinou (BJ)
o  Alternate: Sunday Folayan (NG)

**5. Central Africa:**
o  Primary: Didier Kasole, (RDC)
o  Alternate: Pierre Mutumbe (CD)

**6. Indian Ocean:**
o  Primary: Viv Padayatchy (MU)
o  Alternate: Kenneth Yiptong (MU)

All of these people are very well known by the community for their active participation in Internet community and build up.

**AfriNIC Staff:**

Today AfriNIC Staff is composed of four persons:

***CEO:***  Adiel A. Akplogan
***CFO:*** Harish Gowrinsunkur,
***Registration Service & Engineering:***  Ernest Byaruhanga
***Administrative/Business Assistant:*** Nooriah Woozeer

A human resource development plan is on-going. Two more people are planed to join AfriNIC shortly as CTO and IP analyst.

### 2.5.1 AfriNIC Organisational Structure

AfriNIC is structured as described in the flow chart below. At the upper level of control are the members. The members elect their representatives to be seated on the Board of Directors committee. The board of Directors will appoint an Executive Director who is in charge of the day-to-day management of the organisation.

**The Technical Operations Department** will be composed of the highly skilled Engineers. Today this department is composed of an experienced Engineer who has spent time at RIPE NCC to gain better experience of various operational areas of RIR business. We are in the process of hiring additional technical staff to complete the organisational structure. This department will also be in charge of Registration Services. AfriNIC is also getting strong technical support from the South African CSIR during its incubation period.

**The Financial and Administrative Department** will supervise all day-to-day business, financial and human resources management. Today the responsibility of this department is handled by the CEO and an administrative assistant.

**The Communications & Training Department** will be in charge of AfriNIC communication strategy and organisation of the training program. This department will also be in charge of liaising with members and meeting organisation. The training team will work in close relationship with the Registration Services.
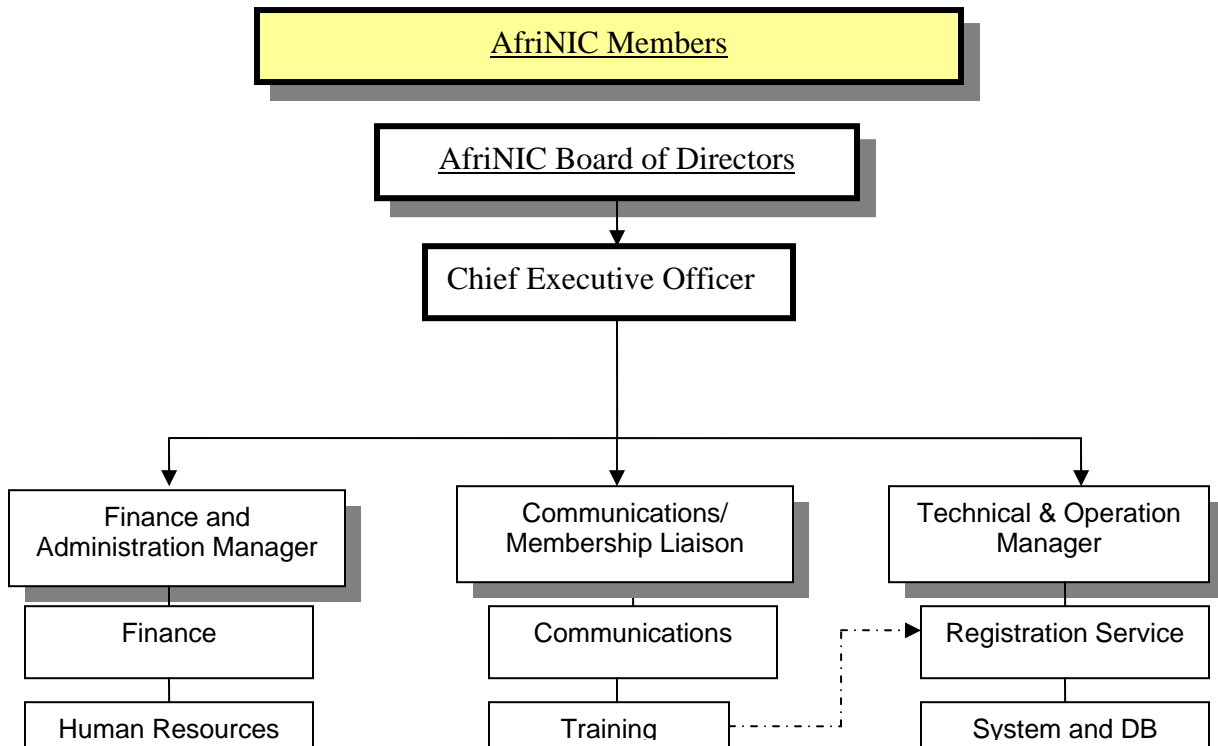


*Figure 2: AfriNIC organisation structure*

### 2.5.2 AfriNIC Technical Operation structure

*Infrastructure*

AfriNIC's Infrastructure is based on a distributed architecture. The core applications and database is located at the AfriNIC Operations Center (Computing Centre at CSIR in South Africa). The data will be replicated to the front-end servers with good Internet access. At the moment we have one replication site at the UUnet-SA Data Centre in Johannesburg (South Africa). A second replication site with load balancing is planned to be set up in another ISP premise in South Africa and Mauritius. We should also point out that all of this infrastructure will be replicated in Egypt for disaster recovery and off-site backup purposes.

A VPN connection will is set up between AfriNIC offices (Port-Louis) and the core network in South Africa.

Server Technology: All of our servers are based on Intel technology with full redundancy. Our servers run Open source software.

## 2.6 Adherence to global address allocation policy

*ICP-2:6 – 'adherence to global policies regarding address space conservation, aggregation and registration'*

AfriNIC fully adheres to the principles of Internet Number Registration which are conservation, aggregation and registration. The first set of policies proposed by the community and adopted at the member meeting in Dakar express AfriNIC obedience to these principles. AfriNIC will continue to follow these principles by attending all the other registry meetings and actively participating in the IETF, ASO and other relevant organisation activities.

### Working Languages

To allow a better communication with its members and good understanding of how its works, AfriNIC will officially work in English and French (the most common languages on the continent). However, AfriNIC is planning to gradually allow communication in other languages used in the region it serves such as Arabic, Portuguese and Spanish.

Language policy in Step 1:

(1) Templates and procedure instructions: Will have French and English official versions. The templates may be in the format of webpage forms, which can be in any of the languages.

(2) Mails that refer to procedures (related to IP users): Can be in French or English.

(3) Support and training: May be provided in English and French.

(4) Policy documents: These will have official English and French versions.

(5) Bylaws: These will have an official English version.

(6) Minutes of Meetings: These will be in English

(7) Internal procedures related to the administration of addresses: Will be in English

(8) Accounting Documentation: This must be in the languages of the country where AfriNIC is incorporated (French or English in Mauritius)

(9) Participation spaces (mailing lists, web and meetings): These will be multilingual, admitting all regional language variations, and in the case of massive public meetings, there will be simultaneous French and English translations or any other according to the location and provisions by the local host.

(10)    Databases with registration data: Access interface in French and English.

(11)    Files with justification information on the IP space requests: These may be in English or French.

Language policy in Step 2:

(1) Templates and procedure instructions: Will have Arabic and Portuguese official versions. The templates may be in the format of webpage forms, which can be in any of the languages.

(2) Support and Training: May be provided in Arabic, English, French and Portuguese.

(3) Databases with registration data: Access interface in French, English, Portuguese and Arabic

(4) Files with justification information on the IP space requests: These may be in English, French, Portuguese or Arabic.

## 2.7  Activity plan

*ICP-2:7 – 'With its application for recognition, the new RIR should provide a published activity plan containing activities that are clearly within the purview of an RIR, and which is explicitly supported by the community of organisations supporting the new RIR'.*

At this point AfriNIC has successfully completed the major phases of the transition plan.  All operational aspects of RIR service; including resource record administration, in-addr.arpa maintenance, WHOIS service, and all other points of customer interface have been transferred to AfriNIC management by the existing RIRs in accordance with the agreed to plan of transition.  The existing RIRs currently coordinate with AfriNIC to provide a "second opinion" on resource allocation decisions.  This activity will continue until the time AfriNIC has been formally recognized as a RIR by ICANN.

In a longer term, AfriNIC has planed many key activities essentially focused on awareness and training of the local community on IP resource management, request process and common Internet related technical governance. We have already organized our first LIR training in Africa in November 2004.

AfriNIC in its mission statement also plans to support Internet technology usage and development across the continent and strengthening self Internet governance by encouraging participative policy development.  **Section 3** of this document gives more details about activities performed by AfriNIC so far and the complete transition plan.  This information has been published on the AfriNIC website.

Due to the entirely different user communities, geographic boundaries, policy environments, and business models which are involved; AfriNIC will not become involved in forward domain name assignment or administration.

## 2.8  Funding model and Business plan

*ICP-2:8 – 'The new RIR should be established as a not-for-profit association. A budget related to the activity plan must be drawn up and published'*

AfriNIC's funding is based on membership fees. The fee structure (http://www.afrinic.net/documents/membership/afadm-fee200405.pdf) is based on 5 categories of membership linked with quantity and type of resources held by the LIR.

To ease the start-up funding of its operations, AfriNIC has concluded an incubation agreement with three supporting organisations across the continent. These organisations agreed to support part or entire costs of the first two years of operations.

Four areas of support were identified and shared among these entities:

- o **Administration and Management:** Mauritius ISP association with the support of the Ministry of Telecommunications
- o **Technical Operation**: South African Department of Communication in partnership with CSIR.
- o **Disaster recovery and Data replication:** Egyptian Ministry of Information and Communication Technology.
- o **Training coordination:** GH-NIC (Ghana)

These four entities are actively involved in the start-up process and formal agreements are soon to be signed with each one of them.

AfriNIC's Headquarters are in Mauritius (where the legal entity is established) and will employ at this stage three persons (the CEO, the Administrative Assistant, and the Finance Manager) with the mission to handle and conduct the administrative transition from the various registries serving Africa.

At the technical Operations location (In South Africa) AfriNIC will have at this stage one Engineer and one Hostmaster to conduct the technical transition.

AfriNIC is independent and autonomous in its operations from these supporting entities. After the two years of incubation period, AfriNIC is expected to take over the whole management of these four locations both administratively and financially, on its own revenues supported by its membership. The **business plan** provided with the initial application to ICANN shows that, at the time the full financial responsibility will be handed over to AfriNIC, the company will have the necessary financial strength to handle it.


## 2.9  Record Keeping

*ICP-2:9 – 'All RIRs must maintain proper records of all registry activities, including the archiving of all information collected from LIRs in the process of making IP address space assignments'*

All AfriNIC's Information/Data on any type of support (Paper or Electronic) will be recorded and saved in a safe place for Internal use and any mandated usage requested by either ICANN or any auditing plan.

A backup policy is developed to ensure that data generated by the registration activity is stored and archived. The Backup process is designed to be implemented on rotation basis.

In addition to this regular backup procedure, AfriNIC will set up a replication system at its various operating locations with the main disaster recovery in Egypt.

All core documentation of AfriNIC will be maintained in the English language.

### *2.10 Confidentiality and security*

*ICP-2:10 – 'Information collected by a RIR in the registration process must be kept in strict confidence, and used for registration purposes only'*

AfriNIC has created a Security and Backup Policy to ensure the highest reliability of information and Data under its responsibility.

Confidentiality**:** Every piece of information collected by AfriNIC from members or any other entity will be processed and managed according to a non-disclosure agreement which should be signed between the two parties. All AfriNIC's staff has signed a non-disclosure and confidentiality agreement at the start of work in the company.

**Record keeping**: All Paper documents will be archived in a safe location with a fireproof feature. All electronic documents will be stored in the Database and backed up according to the AfriNIC backup policy.

**Physical Security:** Access to AfriNIC's premises will be granted only after valid authentication by magnetic access card and/or manual identification. Access to Databases and technical Infrastructure is granted only to dully authorised persons. AfriNIC has signed security and access procedure agreements with various entities (UUNet and Computing Centre on CSIR Campus) collocating its servers.

# 3  Activities and Transition plan

### 3.1  Activities accomplished so far

Since last year, AfriNIC has taken many actions with the goal of strengthening the organisation's awareness in the community and moving ahead in the process of becoming the fifth Regional Internet Registry. Below are some actions and activities:

1. **February 2003**:  The acting Board of Trustees launched a call for proposals to any entity in the African service region to host AfriNIC's offices.

2. **June 2003**. The RIRs conducted a workshop for AfriNIC and its core organisational team, in Montevideo, Uruguay. The workshop was organised by LACNIC and all expenses were funded by the RIRs, including the travel of their own staff and 8 representatives from Africa.

3. **June 2003**. During a members update meeting held in conjunction with AfNOG IV, AfriNIC's board determined the location of the various elements of AfriNIC, as follows:

    a. Mauritius. Place of incorporation. Administrative, business, legal and association operations.
    b. Ghana. Training coordination and outreach functions.
    c. South Africa. Registration services and engineering functions.
    d. Egypt. Replication and disaster recovery functions.

4. **December 2003**. Hostmaster training was completed for 2 AfriNIC staff, each for a period of 6 months, full-time. Training was conducted in Amsterdam by RIPE NCC, and funded by RIPE NCC.

5. **October 2003**. Adiel Akplogan was appointed as the Project Manager for AfriNIC. His duties were primarily those of an interim CEO and primary point of contact for AfriNIC.

6. **November 2003**. The NRO Executive Council appointed Adiel Akplogan as an observer to the EC, providing him with all privileges except voting. Furthermore he was appointed observer to the NRO Engineering Coordination Group.

7. **January 2004**: A workshop was conducted at ARIN with AfriNIC project Manager.

8. **January 2004**. A policy working group was set up by AfriNIC to discuss resource management policies. A related public mailing list (policy-wg@afrinic.org) was launched to allow the local community to participate in the policy development process.

9. **February 2004**. AfriNIC was incorporated in Mauritius as a not-for-profit organisation in accordance with its bylaws available at: www.afrinic.net/bylaws2000.htm.

10. **March 2004**. The NRO and AfriNIC signed an MoU regarding financial support from the NRO. A total of USD $100,000 will be donated by the RIRs, contingent upon the completion of specific activities by AfriNIC. Adiel Akplogan also participated this month to the RIRs' Business Managers meeting.

11. **April 2004**. In preparation for the first Open Policy Meeting for the African continent, AfriNIC I, supportive documents regarding resources policies and corporate governance were published at www.afrinic.net

12. **May 2004**. AfriNIC held its first public policy meeting in Dakar (Senegal) with more than 85 participants from 30 different countries. The policy meeting was followed by an AGM where the board was renewed and the final constitution of the Organisation was adopted. Representatives from all the RIRs, ICANN and ISOC attended the meeting.

13. The Board appointed Adiel Akplogan as the CEO of AfriNIC and was endorsed at the AGM

14. **September 2004.** AfriNIC submitted its official application for recognition to ICANN.

15. **September 2004.** AfriNIC started co-evaluation of resource requests from Africa region.

16. **October 2004.** AfriNIC received provisional recognition from ICANN.

17. **January 2005.** AfriNIC board appointed two new observers to the ASO AC.

18. **January 2005.** NRO EC representatives visit AfriNIC facilities in Mauritius.

19. **February 2005.** AfriNIC start Phase-II of the transition plan.

All of these activities are accomplished in relation to the AfriNIC transition process and plan. It is also important to note the active participation of AfriNIC's representative in the ASO AC. The representative also participates in ICANN activities by attending and reporting on all ICANN meetings since 2000.

### 3.2  AfriNIC Transition plan

AfriNIC has completed the items in the transition plan that was submitted with its application for recognition in September, 2004. AfriNIC is currently operating as a fully functional RIR and follows a "second opinion" process with the existing RIRs when making allocation decisions for numbering resources while awaiting final recognition as a RIR by ICANN.

## 4  CONCLUSION

AfriNIC has demonstrated its readiness to be officially recognized as a RIR by meeting all criteria of ICP-2. AfriNIC has taken the steps to demonstrate readiness by moving beyond the planning stage and actually performing the work of a RIR.

AfriNIC is currently operating as a fully functional RIR serving Africa and is ready to be formally recognized by ICANN. AfriNIC looks forward to a continuing strong relationship with ICANN, the existing RIRs, and the Internet community as a whole; and is proud to serve Africa as a newly recognized Regional Internet Registry.