

Port Louis, July 25th 2007

To our Members,

Dear Members,

RE: IPv4 global Exhaustion: Transitioning to IPv6

First of all, allow me to express our full recognition for your continuous support to our activities in the region. Through this letter we would like to draw your attention to a very important situation related to the future of Internet number resources.

According to studies published by several experts¹ and the paper released by AfrinIC in April 2007², it clearly appears that the central pool of Internet Protocol version 4 (IPv4) addresses will be exhausted within three to four years from now. This situation calls upon us, as Internet Protocol Resource Registry in the African region, to draw the attention of our community to the situation with emphasis on the long term solution which is the use of IPv6.

AfrinIC advise Operators for immediate action on IPv6

Internet Protocol version 4 (IPv4), the protocol used today to run the Internet for more than 20 years now has started showing its limit with mainly the running out of number resources associated to it, known as Internet Protocol addresses (IP addresses). This is essentially due to the steady growth of Internet usage during the past few years. Only 18% of the total IPv4 space is now available and at the rate of actual consumption despite the very strict evaluation measures implemented by all Regional Internet Registries, this would not last longer than till 2010-2011.

Soon (within three to four years), AfrinIC will not be able to continue to allocate IPv4 addresses to Network Operators with a guarantee for aggregation. It is our responsibility, to avoid such a situation where the development of our region's network infrastructure is drawn back by the unavailability of these version 4 addresses, to urge Network Operators in the Africa region to take clear actions toward implementing Internet Protocol version 6 (IPv6) in their Network Infrastructure in cohabitation with IPv4. While the time is not for panic, it is rather important that action be taken NOW to avoid a situation of urgency later.

¹ <http://www.potaroo.net/tools/ipv4/> (by Geoff Huston - APNIC),

http://www.cisco.com/web/about/ac123/ac147/archived_issues/ipj_8-3/ipv4.html (Tony Hain - Cisco Systems)

² http://www.afrinic.net/news/ipv4_exhaustion.htm (Adiel A. Akplogan & Alain P. Aina – AfrinIC)

IPv6, the protocol designed and defined as a standard by the Internet Engineering Task Force (IETF) since the late 90s, allows the availability of Billions of Billions of IP addresses with an improvement of several embedded features of the protocol as the result of lessons learned and experiences gained from IPv4 deployment and usage. It is a fact that the long term solution and strategic move for emerging economies like in our region is to not struggle with IPv4 only network deployment any more, but rather deploy IPv6-Ready infrastructure as from now.

Since 2005, AfriNIC has launched a campaign to introduce IPv6 to Operators and Policy Makers around the African continent. This campaign has taken us for training sessions in more than 12 countries with more than 500 people trained and informed about IPv6.

The AfriNIC Board has approved a plan to intensify this campaign by reaching out to every country and Operators across the continent by the end of 2010. This includes training of technical resources on various transition mechanisms for smooth deployment of IPv6. This decision will also imply the use of different means of communication to reach the majority of stakeholders by the targeted date.

Since advanced planning is a key factor for a successful and affordable transition, we are hereby urging operators in the AfriNIC region to take immediate action.

To support early adopters by mitigating possible financial burden of deploying IPv6, the Board has also decided to extend the waiver of fees associated to IPv6 first allocations from AfriNIC.

AfriNIC staff is available for any further information on IPv6 and issue related to IPv4 exhaustion.

Sincerely,

Adiel A. Akeplogan

Chief Executive Officer, AfriNIC