

ITU FORUM ON IMPLEMENTATION OF DECISIONS OF WTSA-08

(Accra, Ghana, 16-17 June 2009)

Internet Numbers allocations in Africa

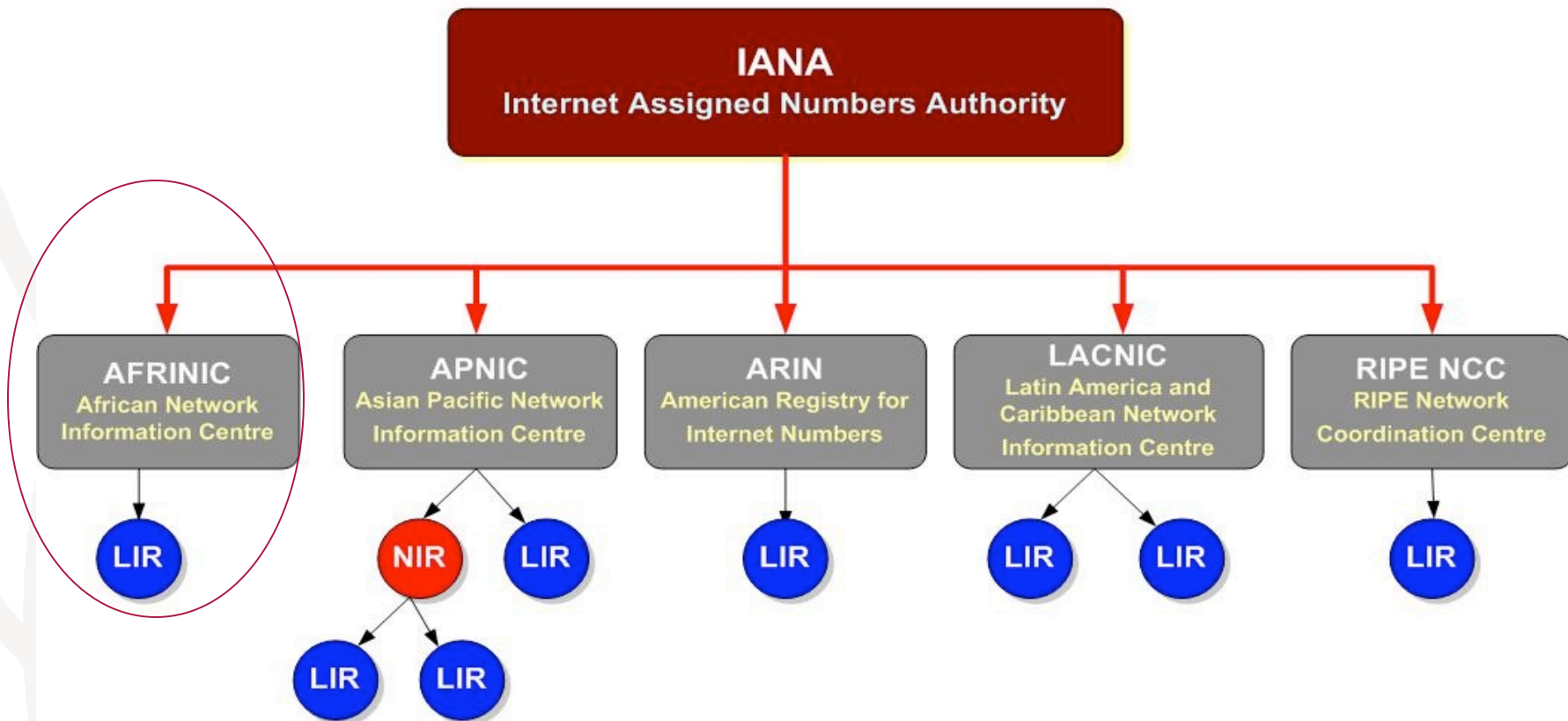
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Global Registry Hierarchy

Internet Resources Allocation



Numbers allocation in AFRICA

- **Managed and coordinated by AfriNIC since April 2005.**
- **One of the 5 RIRs**
- **Not for Profit**
- **Open Membership (from entities located legally within countries in the AfriNIC service region)**
- **<http://www.afrinic.net>**

Services offered by AfriNIC

- Allocation & Assignment of internet numbers:
 - IPv4 and IPv6 addresses
 - 2-byte, 4-byte AS Numbers
 - Number Resource Registration:
 - whois.afrinic.net port 43
 - Management of reverse DNS
 - ip6.arpa.
 - in-addr.arpa.
 - Coordination of policy development
 - F2F Meetings (bi-annual)
 - Involvement with the ASO, ICANN.
 - Training: IPv6, DNS and Member Courses

Resources held by AfriNIC

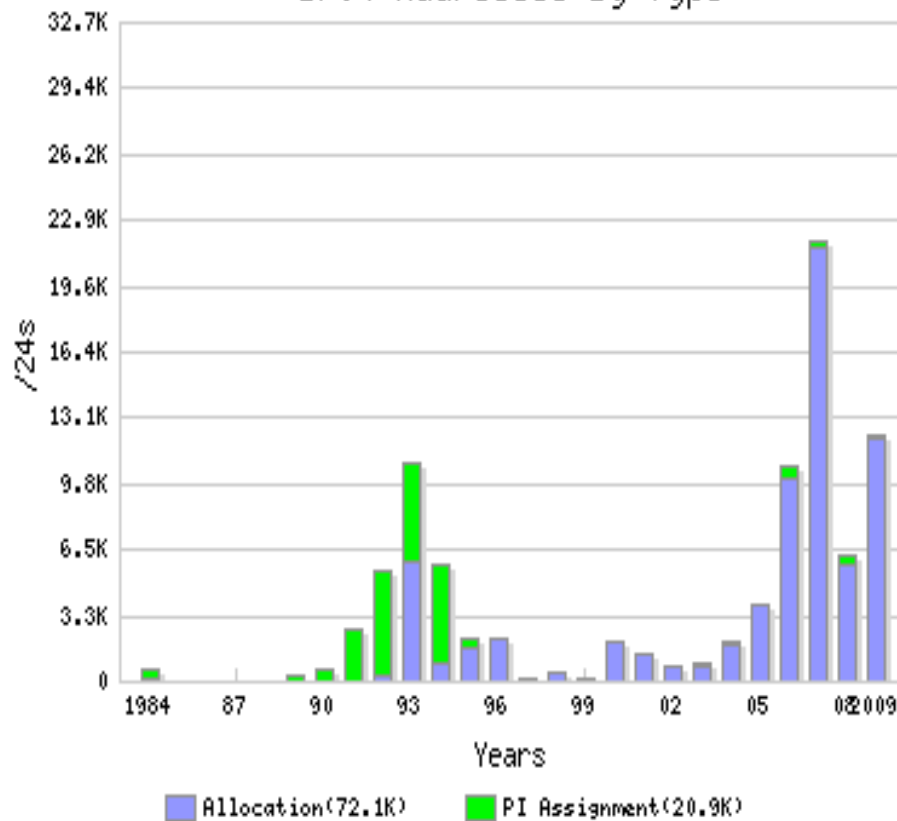
	Date Received from IANA	Minimum size issued
IPv4		
41/8	APR 2005	/22
197/8	OCT 2008	/22
IPv6		
2001:4200::/23	JUN 2004	/32 PA ALLOCATIONS /48 PI ASSIGNMENTS from 2001:43f8::/29
2C00:0000::/12	OCT 2006	/32
AS Numbers		
AS32768 - AS33791	FEB 2005	
AS36864 - AS37887	AUG 2005	
5.0 - 5.1023	NOV 2006	
Legacy		
196/8	April 2005	/24
	Legacy block obtained after AfriNIC Recognition. Used for PI assignments and other requirements.	



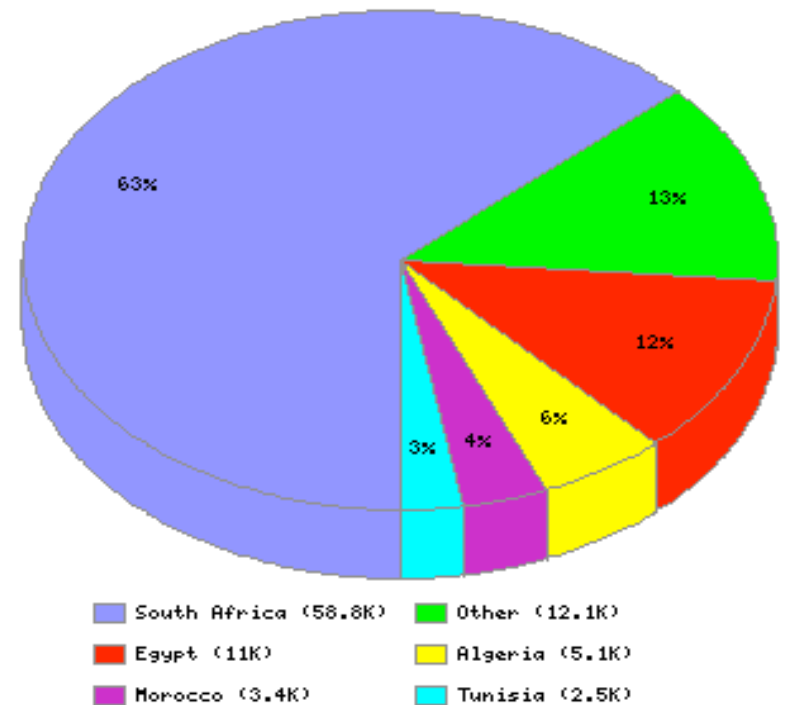
Some Numbers allocations Statistics

IPv4 ADDRESS SPACE

IPv4 Addresses By Type

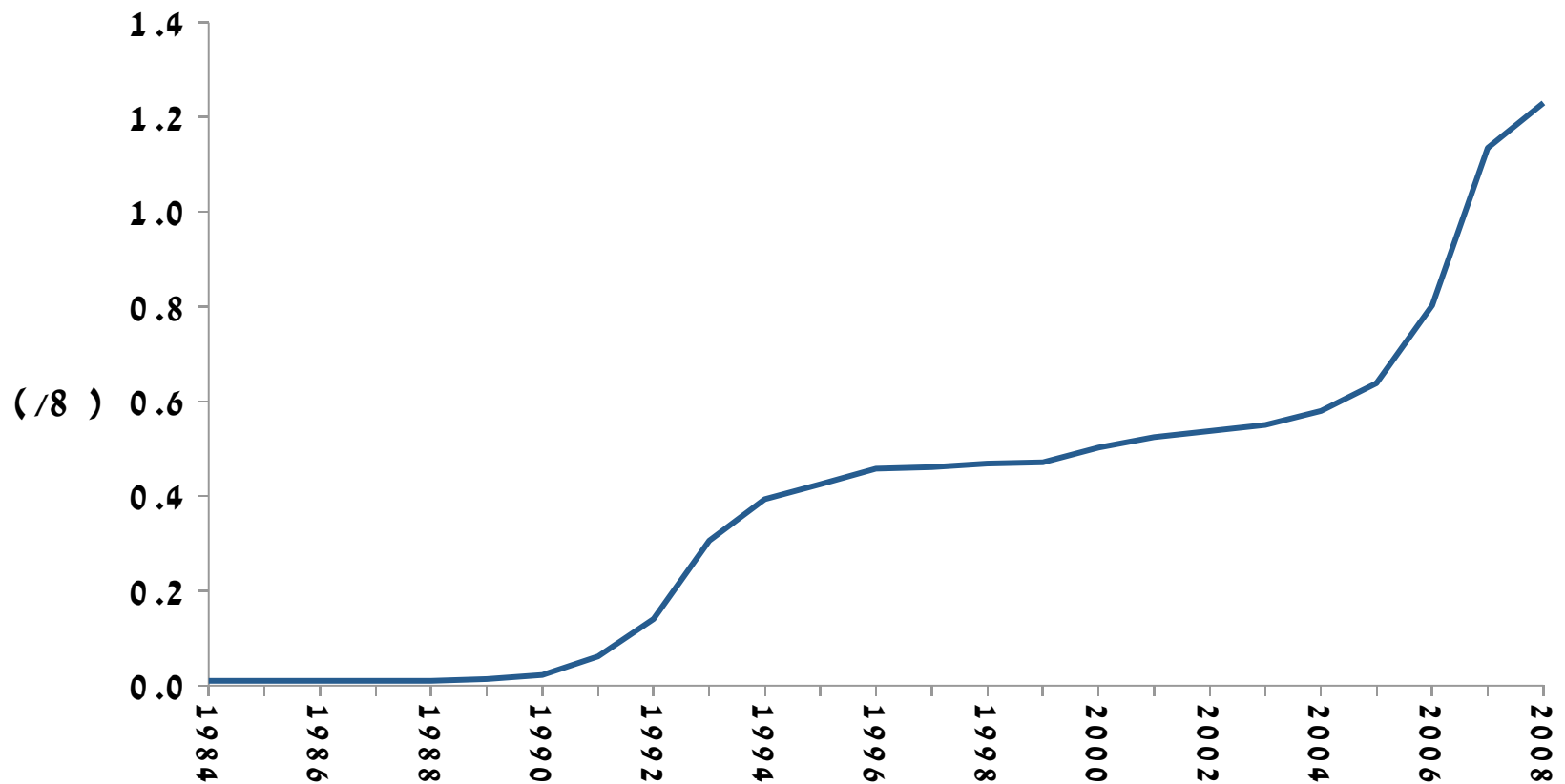


IPv4 Addresses By Country

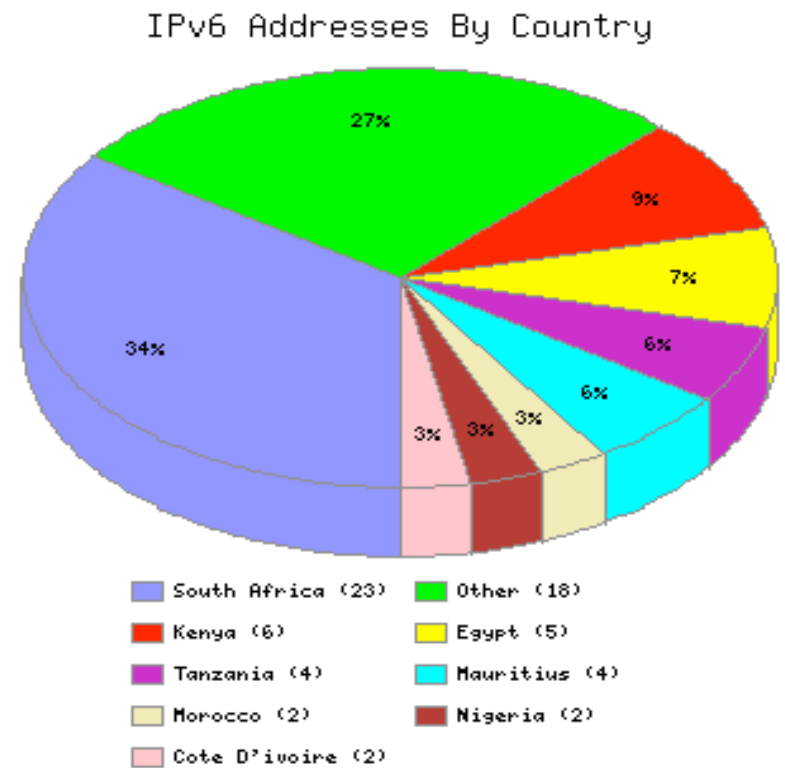
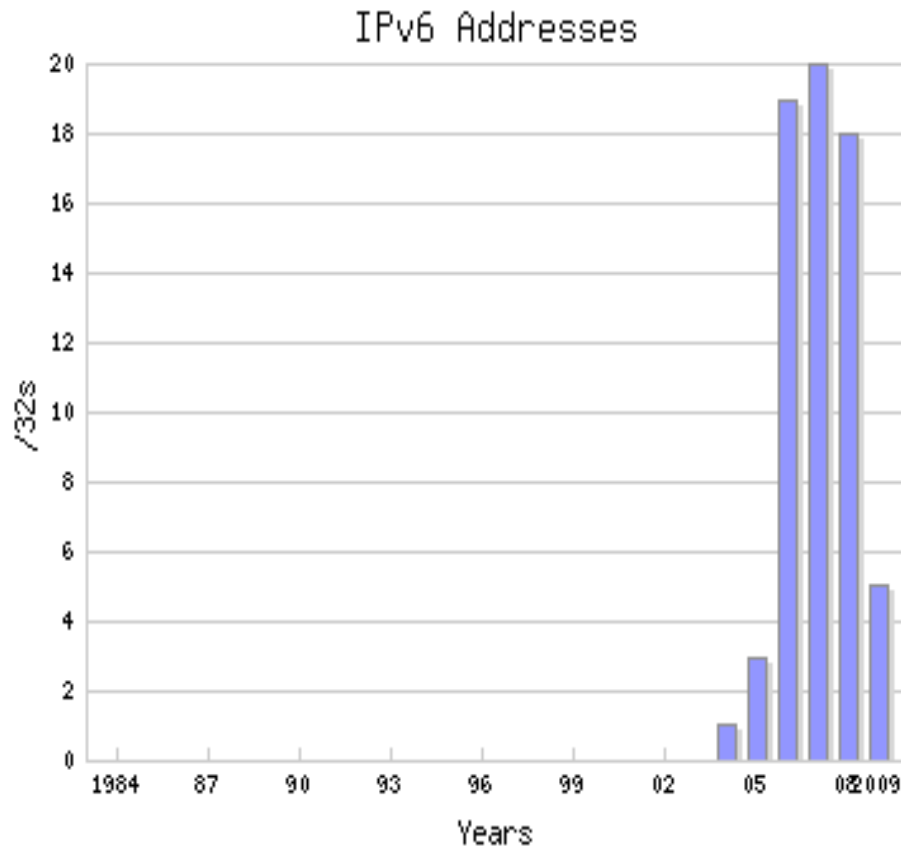


IPv4 ADDRESS SPACE(cont.d)

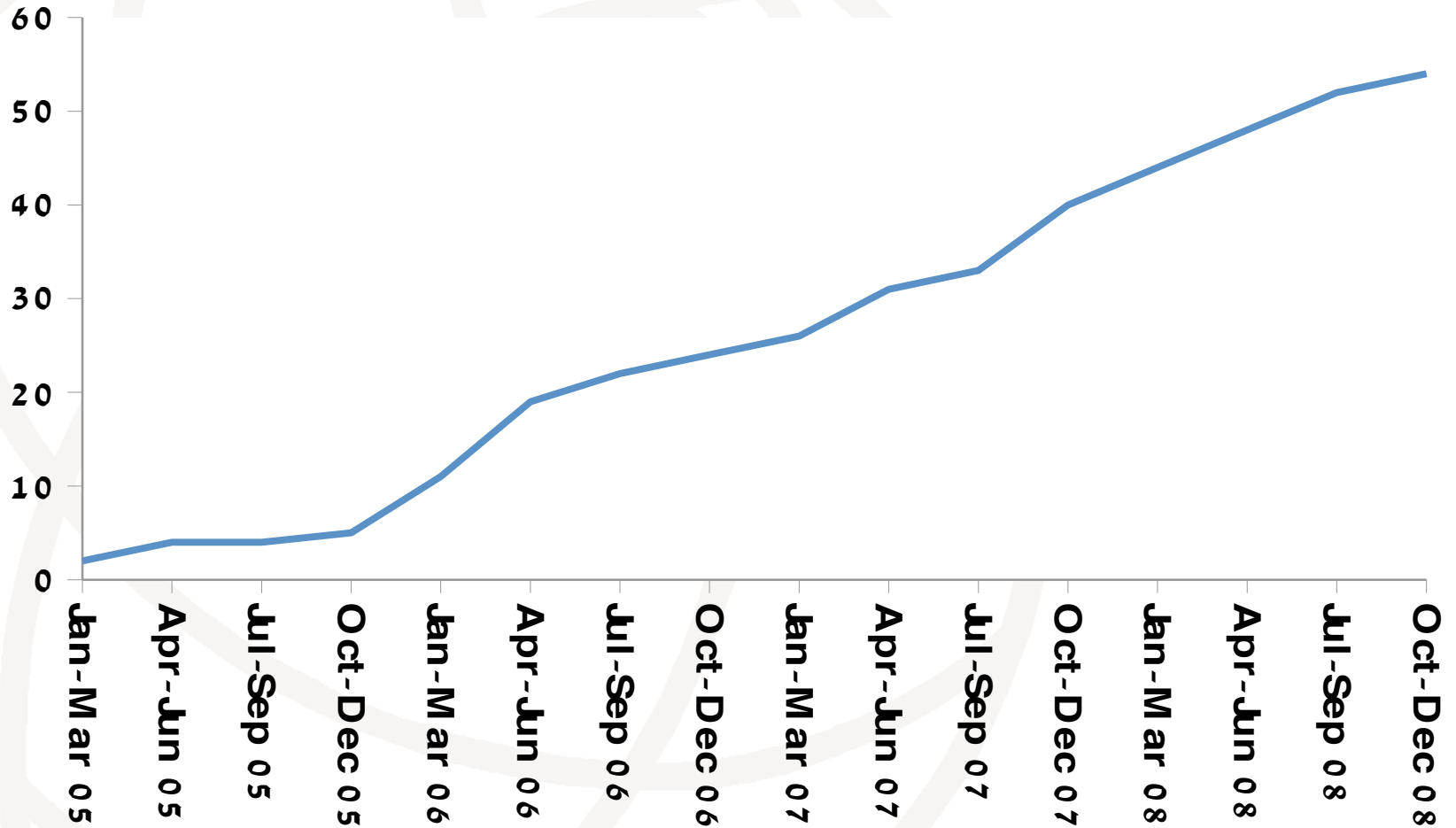
Total IPv4 Allocation & Assignment Growth



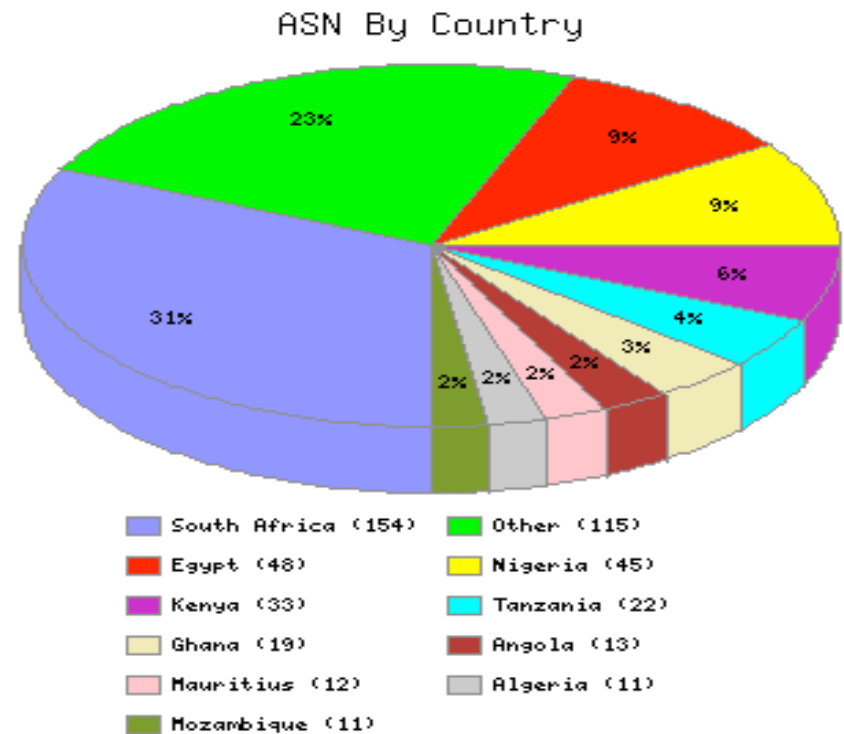
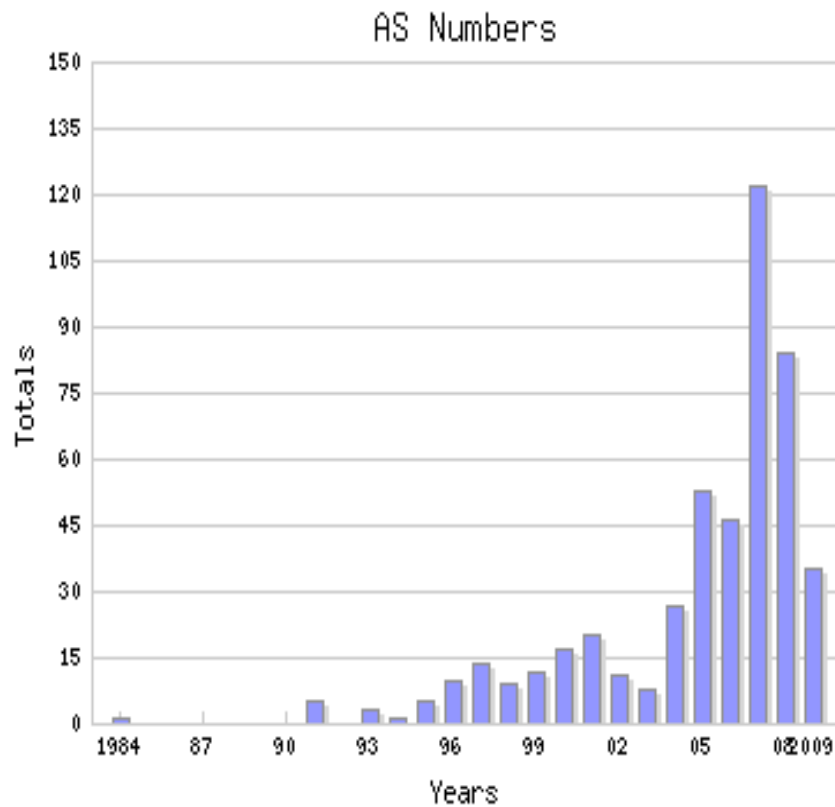
IPv6 ADDRESS SPACE



IPv6 ADDRESS SPACE(cont.d)



ASN ASSIGNMENTS



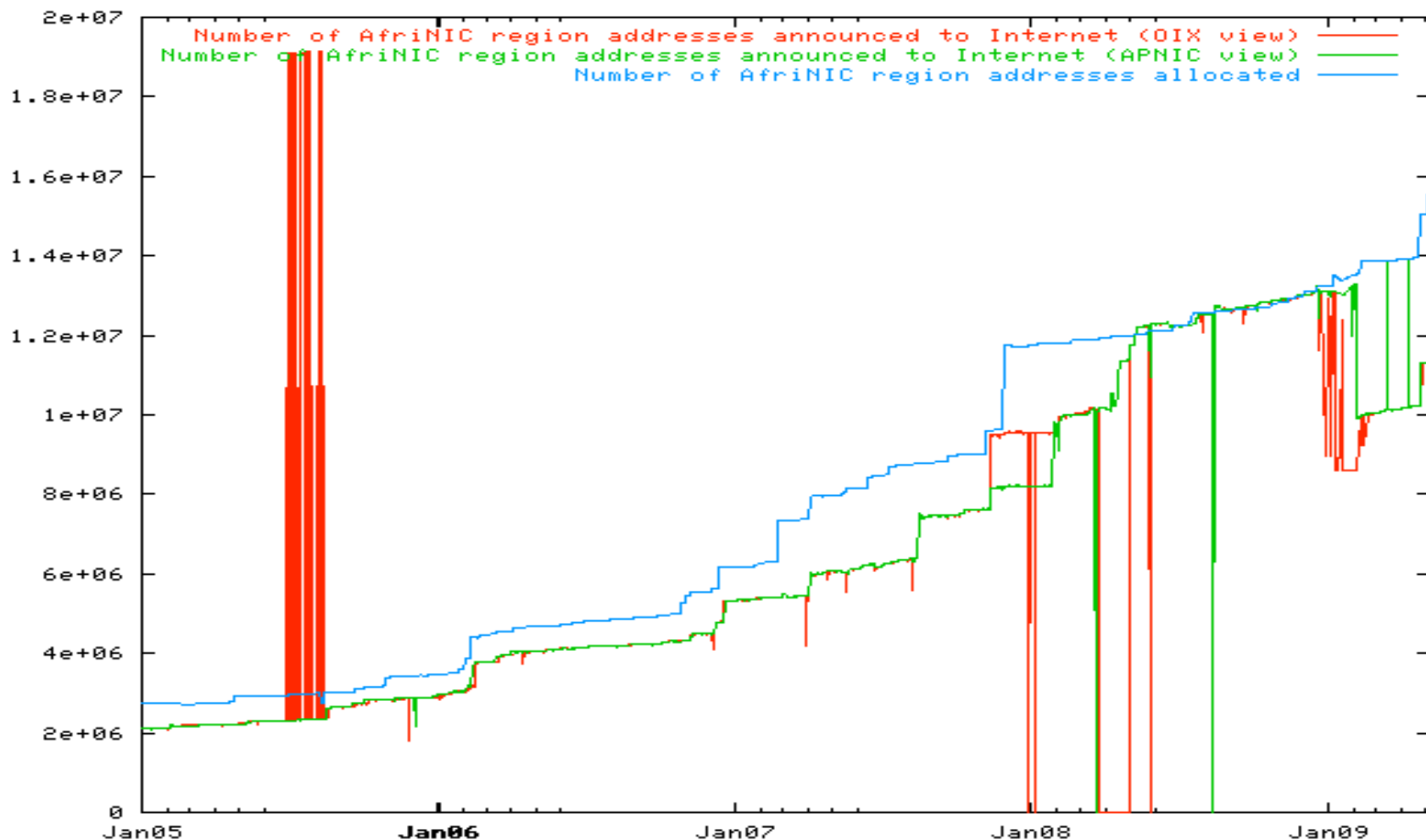


AfrINIC ALLOCATIONS

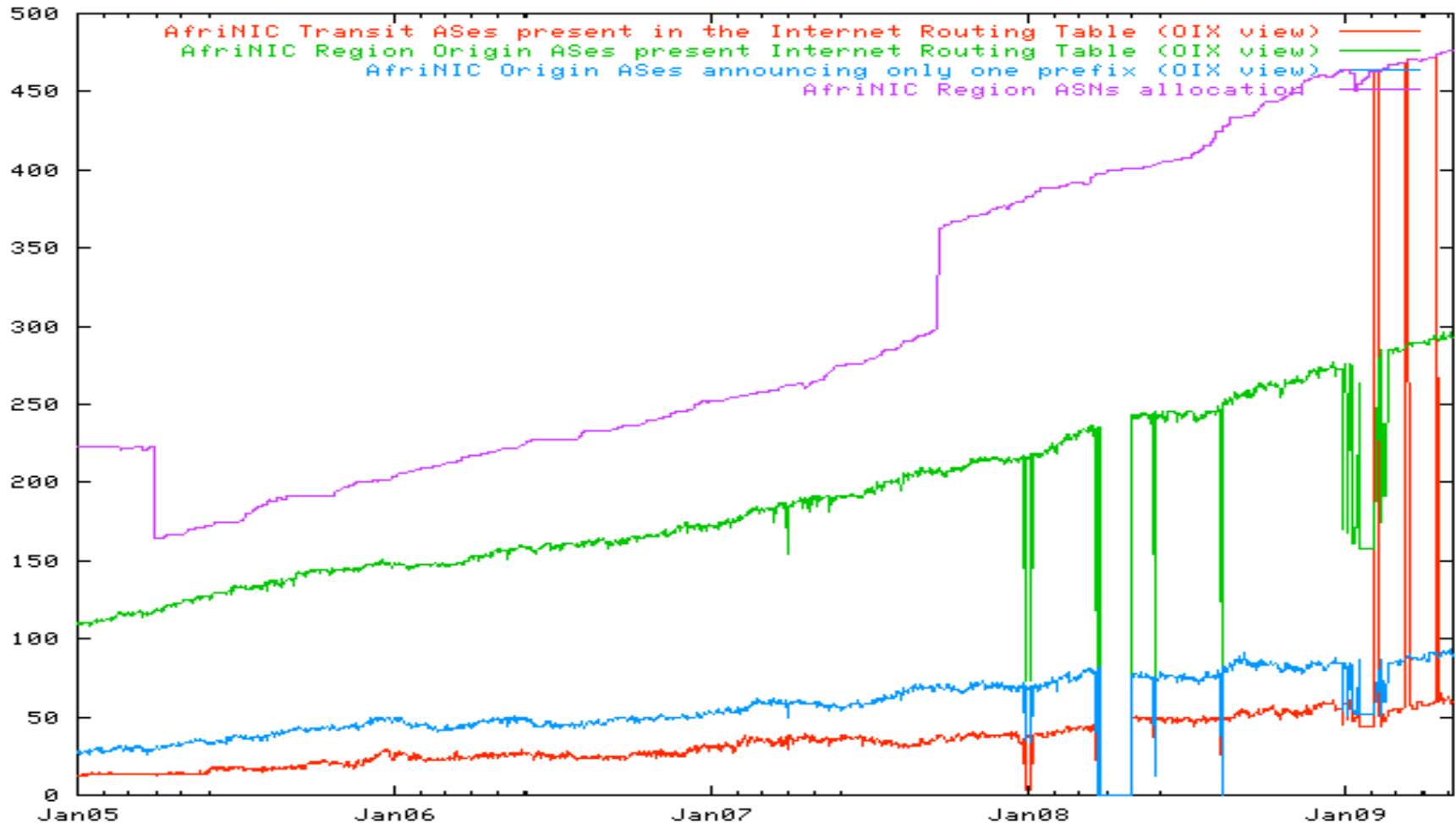
VS.

ROUTING

Amount of AfriNIC address space being announced to the Internet vs. AfriNIC address space allocated



Number of AfrinIC Service Region ASNs allocation vs. AfrinIC Service ASNs in the Internet Routing Table (OIX VIEW)





IPv4 exhaustion

The Situation in Africa

IPv4 lifetime Projections

- “Using the current allocation statistics, the Internet would exhaust the IPv4 address space between 2005 and 2011”.
 - ALE projections (RFC 1752 - 01/1995)
- Projected IANA Unallocated Address Pool Exhaustion: 20 jun 2011
 - <http://www.potaroo.net/tools/ipv4>

(16 jun 2009 07:59 UTC+1)

Projections on AfriNIC pool

- We used one year (02/01/01/06 to 02/01/07) allocation statistics for the 41/8
- Apply an exponential model with instantaneous growth rate of 0.29% based on the current consumption rate
- We projected the date for AfriNIC pool exhaustion according to IANA's pool
- <http://www.afrinic.net/news/ipv4/exhaustion.htm>

**AfriNIC pool to be exhausted by April 2014
following the depletion of IANA's pool**

