IPv6 deployment worldwide: Is Africa lagging behind?

Hisham A. Ibrahim
IPv6PM, AfriNIC
Johannesburg, November 2010

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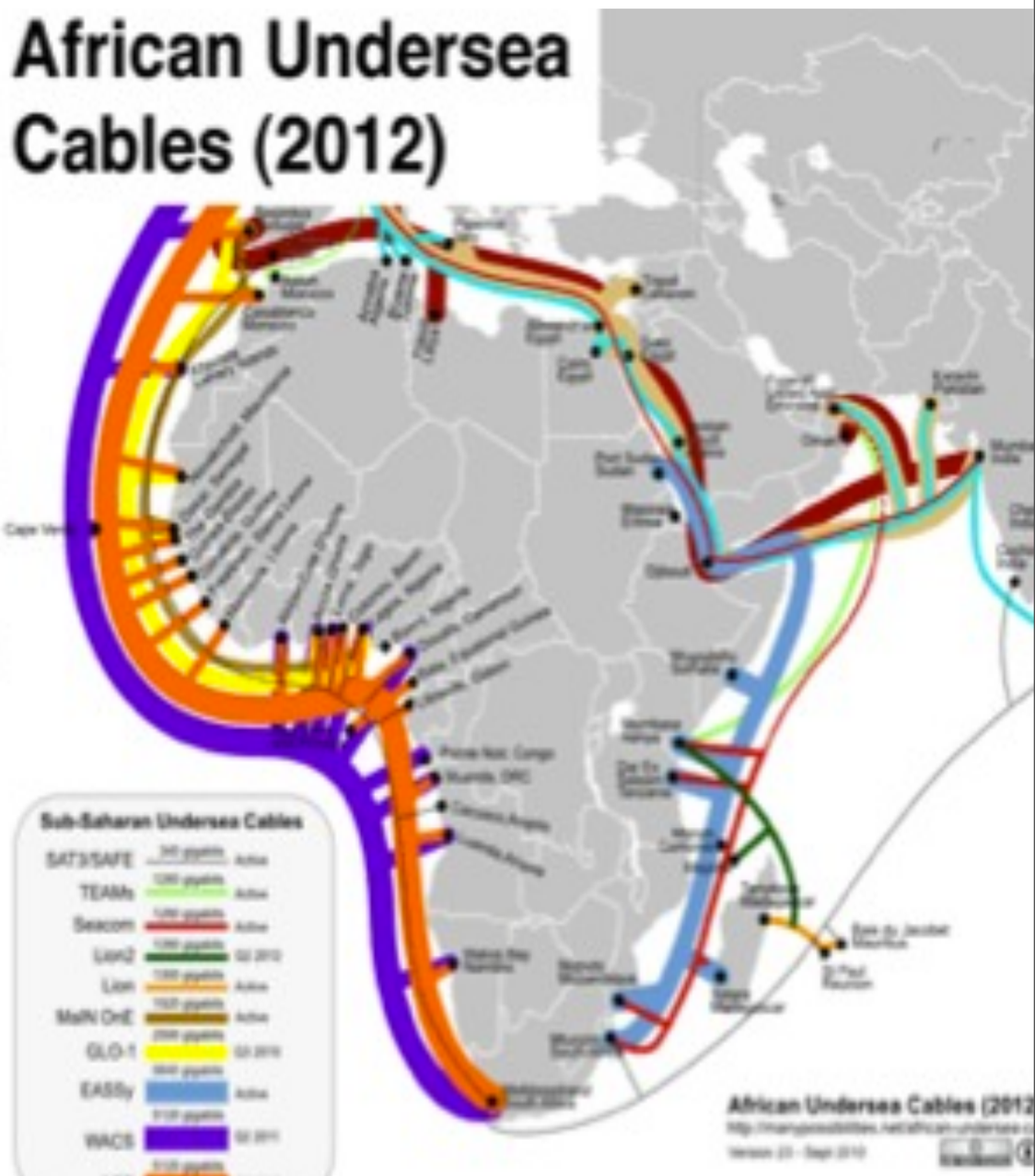
THE FACT IS...

THEY ARE RUNNING OUT!!!

African submarine cables



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APNIC Region

Australia (Three stage plan)

Stage 1 (Jan 2008 - Dec 2009)
- Review Procurement Policy.
- Stocktake of Equipment / Applications.

Stage 2 (*Jan 2010 - Dec 2011)*
- Upgrade of ICT Hardware to be IPv6 ready.
- Applying For and Reserving IPv6 Address Space.
- Upgrade of Operating Systems / Applications to be IPv6 ready.
- Upgrade of Gateways to be IPv6 ready.

Stage 3 (Jan 2012 - Dec 2012)
- Agencies IPv6 ready & enabled.

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China

Showcased their progress at the summer Olympic Games in Beijing in 2008.

The security system alone supported over 100,000 control and sensor units controlling temperature, lighting, etc. to all the Olympic venues.

These IPv6 sensors deployed throughout Beijing, were even used for taxi services and traffic congestions that were monitored and eliminated quickly to enhance the Olympic experience, as well as demonstrate China's dedication to technology advancement.

APNIC Region

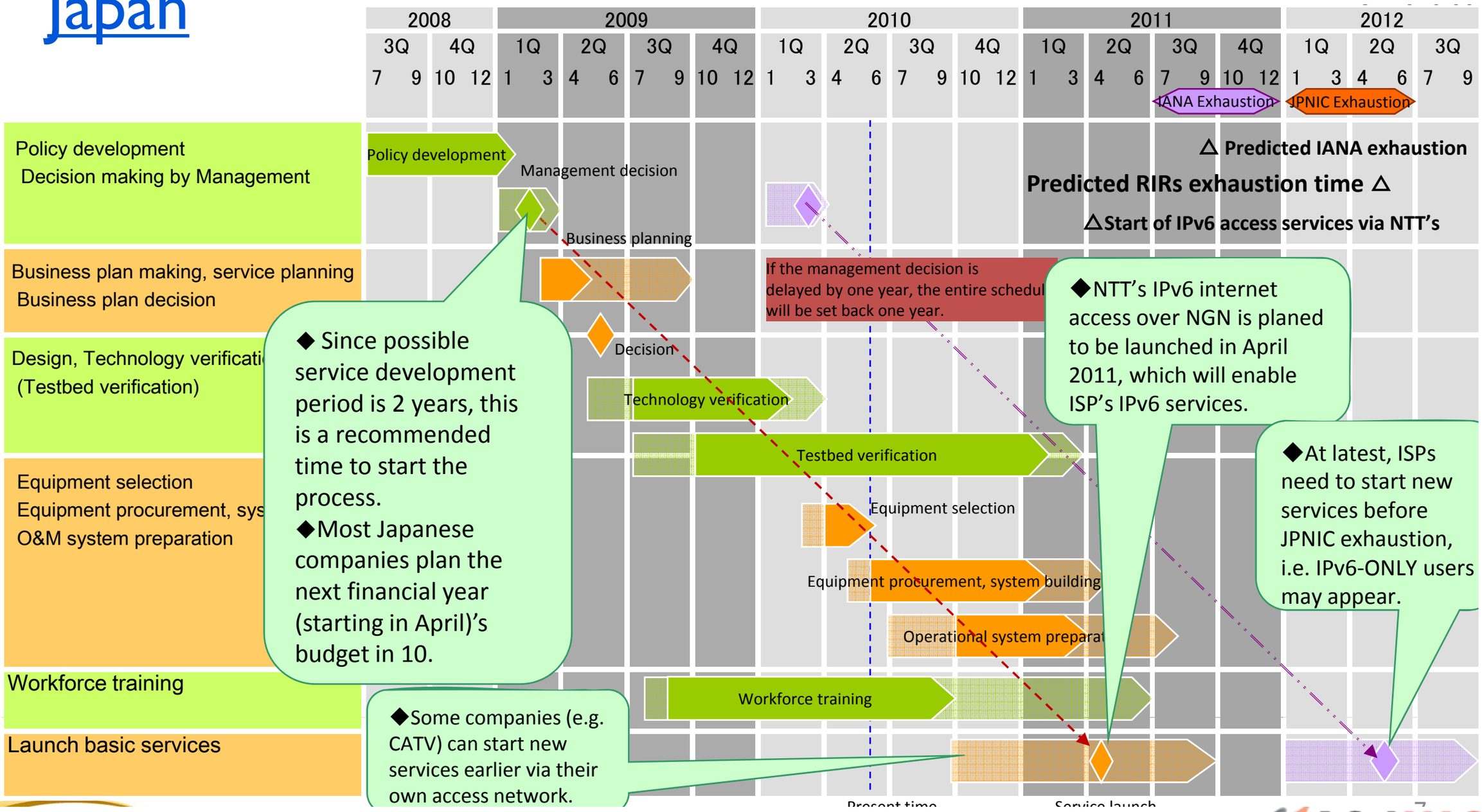
India

The department of telecommunications (DoT) declared that it shall enable citizens to start using IPv6 services by March 2012.

For this all telecom and internet service providers are required to become IPv6 compliant by December 2011.

APNIC Region

Japan



ARIN

American Registry for Internet Numbers

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ARIN Region

United States of America

• Upgrade public/external facing servers and services (e.g. web, email, DNS, ISP services, etc) to operationally use native IPv6 by the end of FY 2012.

• Upgrade internal client applications that communicate with public Internet servers and supporting enterprise networks to operationally use native IPv6 by the end of FY 2014.

•Designate an IPv6 Transition Manager to serve as the person responsible for leading the agency's IPv6 transition activities by October 30, 2010 to liaison with the wider Federal IPv6 effort.

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ARIN Region

United States of America

•The National Institute of Standards and Technology (NIST) developed a technical standards profile for US Government acquisition of IPv6 Hosts and Routers, and a specification for Network Protection Devices.

•Ensure agency procurements of networked IT comply with FAR requirements for use of the USGv6 Profile and Test Program for the completeness and quality of their IPv6 capabilities.


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LACNIC Region

Mexico

The most significant IPv6 achievements in Mexico are the support of native IPv6 traffic in all the Backbone routers of the Mexican Internet2 Network (since December 2001), and the first native IPv6 connection to USA by Internet2 (June 2002) through large scale IPv6 networks.

Mexico is now collaborating on a number of projects that include working together with other research groups to support and use IPv6 in areas such as: GRID Computing; Remote Control of telescopes, microscopes, Volcanic Monitoring and Parallel Processing.

RIPE NCC

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RIPE Region

European Union:

The European Commission released its Action Plan for the deployment of IPv6 in Europe in 2008, and followed this in 2009 with surveys of attitudes to IPv6 and measurement of IPv6 in use on the Internet.

Germany:

The German Government's plans for a federal IPv6 network connecting all German municipalities are already serving as a model for other government network strategies.

AfriNIC

The Internet Numbers Registry for Africa

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AFRINIC Region

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[Online National IPv6 roadmaps]

AFRINIC Region

Online National IPv6 roadmaps

I personally could not find them!!

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National IPv6 TF (with web site)

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Egypt, Ghana, Sudan, Senegal and Tunisia

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African Country Code TLDs (ccTLDs)

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Kenya (.ke), Tanzania (.tz) and Tunisia (.tn)

AFRINIC Region

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IPv6 Allocations by country

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IPv6 Allocations by country (ex. South Africa)

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- http://www.ipv6actnow.org/info/statistics/

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Is Africa lagging behind?

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And if so, what do *WE* intend to do about it???

Thank you

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IPv6PM, AfriNIC
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Sources

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- MEMORANDUM FOR CHIEF INFORMATION OFFICERS OF EXECUTIVE DEPARTMENTS AND AGENCIES
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