AFRICA PREBRIEF

Why Kenya Is Poised To Win LTE War

We're witnessing a new chapter in a debate – taking place simultaneously in 'developed' and 'developing' economies – that will join agribusiness and land development as the most controversial and pivotal of subjects: the role of **Long-Term Evolution (LTE)** and mobile broadband spectrum in economic development and growth. From **House Energy and Commerce Communications and Technology Subcommittee Chairman Greg Walden, R-Ore**. And his sponsoring of long-awaited legislation - **Jumpstarting Opportunity with Broadband Spectrum (JOBS) Act of 2011** - in the **U.S. Congress** (http://thehill.com/blogs/congress-blog/technology/195891-jumpstarting-opportunity-with-broadband-spectrum) - to the advocacy of the **GSMA (the Groupe Speciale Mobile Association** represents nearly 800 mobile operators in 220 countries and 200 companies including handset makers, software companies, equipment providers, Internet companies, and media and entertainment organizations) and their headline-making report "Increased Mobile Broadband Spectrum Vital for Africa's Socio-Economic Development," (http://www.gsmworld.com/documents/sub-saharanafricareport.pdf) a critical mass is forming around politically, culturally and economically palatable arguments capable of positioning the telecommunications sector in the minds of the world as *the* agent of change best capable of balancing the worldviews and objectives of charity, profit maximization, and national development. Because our analysis tells us it will require an assemblage of actors from these interests (the same is true of broader infrastructure finance) to continue Africa's decade-old leap frog from having *no* phones to becoming a world leader in commercial broadband (http://www.reuters.com/article/2011/11/09/us-ericsson-africa-idUSTRE7A83JC20111109) picking the nation most likely to 'win' is not that difficult. **South Africa** and **Nigeria** notwithstanding, **Kenya** is home to the environment most conducive to the necessary hybrid of international donor appeal, indigenous entrepreneurial energy, foreign capital investment and domestic macro-policy. The only risk is the increased militarization of the United States in the region, which has the full cooperation of the Kenyan government.

The economic growth arguments in favor of the expansion of mobile broadband access are identical whether made by Rep. Greg Walden in America ("*The amount of data delivered over wireless networks alone last year was three times higher than the traffic on the entire Internet in 2000. And as American consumers' demand for wireless Internet grows with the expansion of smartphones and tablets, so does the need for more broadband…. The JOBS Act will advance wireless broadband service, spur billions of dollars in private investment, create thousands of jobs, help bring interoperable broadband communications to public safety officials, and reduce the deficit by approximately $15 billion*") or the GSMA in Africa *("…the release of Mobile Broadband spectrum in the Digital Dividend and the 2.6GHz bands by 2015 in sub-Saharan Africa could: Create up to 27 million new jobs, increase GDP per capita by 5.2 per cent1, which will directly lift 40 million people out of poverty2 by 2025; and Increase GDP and government tax revenues by US$82 billion and US$18 billion per year respectively by 2025.")*

Providing the international firepower and justification is the **UN Broadband Commission for Digital Development** (http://www.broadbandcommission.org/) whose goal of 40 % of households in developing countries using broadband internet by 2015 has emerged as a rallying cry. The UN also has been foremost in marrying the linguistics of charity, commerce and policy, making a dramatic case – The Broadband Challenge - (http://www.itu.int/net/pressoffice/press_releases/2011/42.aspx) - that there is a role and seat at the table for everybody, regardless to motivation:

"The Broadband Challenge endorsed by the Commission recognizes communication as 'a human need and a right', and calls on governments and private industry to work together to develop the innovative policy frameworks, business models and financing arrangements needed to facilitate growth in access to broadband worldwide. It urges governments to avoid limiting market entry and taxing ICT services unnecessarily to enable broadband markets to realize their full growth potential, and encourages governments to promote coordinated international standards for interoperability and to address the availability of adequate radio frequency spectrum. 'We note the importance of the guiding principles of fair competition for promoting broadband access to all,' it reads. 'It is essential to review legislative and regulatory frameworks, many of which are inherited from the last century, to ensure the free and unhindered flow of information in the new virtual, hyper-connected world.' "

The foreign commercial actors all understand Africa to be the next prize in telecommunications http://www.reuters.com/article/2011/12/05/africa-telecoms-idUSL5E7ML08920111205) as it is "now the world's second largest mobile market by connections after Asia, and the fastest growing mobile market in the world." (http://www.cellular-news.com/story/51715.php) with the most intriguing industry-wide battle shaping up to be who will be the first in Africa with a 4G network (http://www.reuters.com/article/2011/11/09/us-ericsson-africa-idUSTRE7A83JC20111109) with **MTN** and **Vodacom** building in **South Africa** and **Safaricom** in Kenya.

So, what can slow this train down? *Reuters* offered the following objections from an industry consultant named **Simon Lee** (http://www.reuters.com/article/2011/12/05/africa-telecoms-idUSL5E7ML08920111205):

But some industry players think it will take several more years before Africa sees widespread 4G, saying there is not yet a pressing reason for operators to make the huge investment, and as some governments have yet to allocate spectrum for LTE. A migration to 4G from existing 2G and 3G means a complete network overhaul, a huge expense before the cost of spectrum is factored in, said Simon Lee, managing director at telecoms industry consultancy firm Farwell."Convincing shareholders to make the plunge, upgrade the network to be LTE compliant when the 3G network still has not reached its potential will be a difficult task. There is no real compelling reason to move to LTE, as there is no killer application that can only work on 4G networks alone," he said.

These counter-arguments are sound but the implication is that the policy-environment is static.

However, pressure from the GSMA and UN in policy advocacy is strong, with the former pushing (gsmworld.com/newsroom/press-releases/2011/6590.htm) :

“African governments must act now to release much-needed spectrum for Mobile Broadband services if they are to meet the UN’s 40 per cent broadband target,” said Peter Lyons, Director of Spectrum Policy, Africa and Middle East, GSMA. “Increased spectrum will lower the cost of mobile devices, improve speed of data communication, and ultimately help nearly 40 million Africans escape poverty.” By licensing spectrum in the Digital Dividend and the 2.5GHz bands for Mobile Broadband, governments in the region have the opportunity to increase total spectrum available by approximately 70 per cent. In particular, the Digital Dividend band, which is currently used for analogue television broadcasting, offers widespread mobile broadband coverage in rural areas and improved indoor penetration in urban areas. In rural areas alone, the Digital Dividend band could deliver Mobile Broadband service to between 40 to 80 per cent of the population. Lyons continued: “If governments in sub-Saharan Africa allocate more spectrum for Mobile Broadband over a 10-year period from 2015, this would result in US$235 billion of additional GDP and US$50 billion in additional tax revenues5. However, if the release of spectrum is delayed by five years, then these benefits would fall to US$50 billion in additional GDP, and US$10 billion in additional tax revenue. Action is required now to secure the future connectivity and economic empowerment of Africa’s citizens.”

This, while the UN Broadband Commission “…urges governments to avoid limiting market entry and taxing ICT services unnecessarily to enable broadband markets to realize their full growth potential, and encourages governments to promote coordinated international standards for interoperability and to address the availability of adequate radio frequency spectrum…. “It is essential to review legislative and regulatory frameworks, many of which are inherited from the last century, to ensure the free and unhindered flow of information in the new virtual, hyper-connected world.”

Everyone is clearly on message.

It doesn’t take much to see that for different reasons South Africa (best developed infrastructure, wealthiest SME market for services and largest broadband penetration in Africa), Nigeria (with nearly 100 million mobile subscriptions in Africa, the most on the continent) and Kenya (the leader in mobile banking) are well positioned to thrive in a 4G world. But not all advantages are created equally.

South Africa’s markets are the most saturated and arguably home to the most explosive cultural-political environment (see ***APB* May 24, 2011, “South Africa, Still A Powder Keg"**) and Nigeria is *just now* putting in place an economic team capable of soothing decades-old concerns and committing to infrastructure development and regulatory reform (see ***APB* August 15, 2011, "Nigeria: A Top-Down Dream Team?").**

Kenya’s advantages are significant in two areas – not only is its government’s commitment to ICT seen as head and shoulders above other nations on the continent (it is no accident that the GSMA conference was hosted in **Nairobi**) but its companies have some of the more dynamic business models in the power and infrastructure sectors necessary to support it (see ***APB* August 30, 2011, “TransCentury: On The Cusp Of A Leapfrog”**) with growing government budgetary and policy support toward infrastructure finance (see *Business Daily* December 2, 2011, "Kenya plans to spur infrastructure growth with new legislation" http://www.businessdailyafrica.com/Corporate+News/Kenya+plans+to+spur+infrastructure+growth+with+new+legislation/-/539550/1282694/-/view/printVersion/-/f7pkf1/-/index.html).

But perhaps more importantly, the country has the most *compelling story* for international, charitable and commercial consumption – a dynamic young entrepreneurial class who have emerged from an impoverished environment to innovate in ways that can be standardized, financed and monetized to the satisfaction of a variety of stakeholders (and shareholders) in the cultural, political and business arenas (see ***APB*** **July 1, 2011, "The Rise Of Kenya's Techpreneurs"**). That, combined with the fact that Kenya is the most important economy in the region wracked by famine, drought, refugee crises, and is supposedly the most vulnerable to the threat of 'terrorism' makes for a storyline with broad appeal that anyone would be hard to resist, from the perspective of individual and corporate charity or international 'aid.' On the latter point 'donors' are increasingly adroit at mission creep – eagerly taking on an 'investor' profile (**Sir Bob Geldoff** is a classic example. After being defeated by anti-aid economist/activist **Dambisa Moyo** in public debate he could be heard saying, *"Poverty can be alleviated through aid, but will only be eliminated through trade, investment and growth."* In 2010, along with former **Doughty Hanson** senior principal **Mark Florman** the former donor *par excellence* launched an Africa-focused fund, investing in infrastructure http://www.infrastructureinvestor.com/Article.aspx?article=55754&hashID=ABB40ED7CA5CD2EEC35150298598744AE00144E0).

A bet on Kenya or a leading company like Safaricom or even UK-based **Vodafone,** which owns 40% of Safaricom, is not without risks of other kinds (i.e. power outages http://www.kachwanya.com/2011/12/02/your-money-is-safe-despite-the-m-pesa-outage-says-safaricom-ceo/ ; tariff price wars http://www.nation.co.ke/business/news/Price+wars+cut+Safaricom+profit/-/1006/1165056/-/lh77pf/-/index.html or Safaricom's difficulties in finding a Kenyan CTO http://allafrica.com/stories/201112050485.html) but we still think they are best positioned in *that* country to ride and navigate the path to success on the 4G and mobile broadband spectrum front.

Of course those looking to diversify will find **Indian** mobile **Bharti Airtel** attractive (second only to Safaricom in Kenya and with 50 million subscribers in all of Africa http://www.businessdailyafrica.com/Corporate+News/Airtel+crosses+50+million+customers+mark+in+Africa/-/539550/1282182/-/38xdisz/-/index.html) and one must keep an eye on the **Telkom Kenya-France Telecom Group** partnership, **Orange**(http://www.telkom.co.ke/) and **Essar Telecom Kenya Limited** (http://www.yu.co.ke/) – a unit of India based **Essar Group**.

We would be remiss if we did not mention the elephant in the room: whether the U.S.-Kenya military alliance in the region can achieve its objectives without disrupting the business environment. We have our doubts (see ***APB*** **October 18, 2011, "U.S. Foreign Policy: The Greatest Threat To East African Economic Growth")**.

Save that disaster, we think Safaricom should consider now licensing **Jerry Butler**'s classic, **"Hey, Western Union Man"** (http://www.youtube.com/watch?v=B9ArEv8ZOoI&feature=related) for an eventual 4G advertising campaign – with an updated version in Swahili.

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