KICTANet

Online Discussions on the East-African Submarine Optical Fiber Cable

eDiscussion Report

January 22nd – February 10th 2007

Acknowledgments

Much appreciation goes to KICTANet (Kenya ICT Action Network) for giving me the opportunity to moderate this important eDiscussion on ways of provisioning Submarine Optical Fiber Cables. More appreciation goes to the KICTANet list members for their effort and time taken to make their incisive contributions. And finally, most appreciation goes to the Kenyan Ministry of Information and Communication for endorsing and supporting the eDiscussion. Most likely, it was the first Online Discussion forum with Government participation in these parts of the world. May God bless us all and continue to provide for many more similar opportunities for consultations.

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Executive Summary

The East African Coast remains the only seabed that is yet to be covered by International Submarine Optical Fiber Cable (OFC) Connectivity. With over three prospective Submarine Optical Cables in the offing, East Africans are standing at the threshold of new opportunities and are expecting better and more affordable communication services that OFCs have provided in other parts of the globe. But the question remains – which model of OFC provisioning, will bring about meaningful and sustainable Socio-economic gains for the majority of citizens in East Africa and its environs?

The Online Discussion explored this question by investigating the existing models for providing OFC and evaluating how each model would impact on the Key Stakeholders. The Key Stakeholders identified included the Regulator, the Consumers, the Government, the Development Financial Institutions (DFIs), the Private Operators and Investors. Efforts were made to understand each Stakeholder's objectives with a view to ensuring that a model that can closely balanced out most of the conflicting interests could be arrived at.

The generic models of Consortium, Open-Access and Privately provisioned OFC were discussed and their requirements and the impacts they (would) have on the various stakeholders were elicited. The role of the Regulator with regard to protecting Consumer interests in whichever of the above models were particularly emphasised and considered fundamental. The Open-Access principles were preferred irrespective of the OFC provisioning methods adopted– especially with respect to allowing market-rate access both to existing and future Data Operators.

With regard to ownership and financing of the OFC, it was felt that a mixture of Public, Private and DFI's sources of capital maybe the most efficient. In such a case, the owners would then constitute a body (Special Purpose Vehicle, SPV) to operate and maintain the OFC in the interest of the stakeholders. On the other hand, there was also the other alternative that placed less or no emphasis on the construction and ownership of the International OFC. Instead, it suggested that more emphasis should be placed towards developing a comprehensive and national (domestic) OFC.

A comprehensive and active domestic infrastructure, coupled with local content would be expected attract Internet Backbone Providers (IBPs) wishing to tap into this new source of domestic traffic. Such Operators would therefore construct and extend their own OFC into the region at their own cost - as long as the local (domestic) Operators can guarantee to purchase an economic capacity of International bandwidth from the IBPs at market rates.

Both the Online discussions as well as the Face-to-Face workshop provided a rich source of information that is hoped will provide valuable input in shaping the Policy and Regulatory direction regarding the provisioning of this critical submarine cable that would finally conquer the last frontier – the East African Coast.

Introduction

Background

Provisioning of OFC in Africa has not had a significant impact on the socio-economic development of the hosting nations. The SAT3 Cable that runs along the West-African Coast down to South Africa has had little or inadequate contributions towards the countries socio-economic development. This is largely because the provisioning of the OFC was based on a business model that aimed at making returns by expensively selling minimal bandwidth to a selected group of premium Consumers. East Africans have an opportunity to learn from the experiences of SAT3 and push for the adoption of a better model that would serve the interest of all Stakeholders.

Program Setting & Description:

What is the best model for Provisioning OFC along the East African Coast? In investigating the above question, three generic models Private, Consortium and Open Access models were discussed. In addition, the impact of the Models on the various Key stakeholders was investigated. A model that would consider balancing out each others Stakeholders expectation was sought as being the most appropriate method for provisioning OFC for East Africa.

Program Design (Data Collection, Data Processing)

Data Collection:

The Online Discussion was structured along six themes that were discussed electronically over a period of 2 weeks according to the following schedule:

1. Why do we need Optical Fiber Connectivity – 1 day
2. What are the Existing/Proposed Business Models for Provisioning submarine cables – 2 days.
3. What is the best Business/Regulatory Model for provisioning submarine cables – 2 days
4. What is the impact of the proposed model on the stakeholders – 2 days
5. What is the way forward/conclusions – 1 day

The Online discussions were geared towards having a face to face workshop in order to consolidate and conclude on the electronic deliberations.

Data Processing:

The various contributions from the Participants was analysed and collated into a Final report. This report seeks to inform Stakeholders, and in particular Policy Makers in their decision making process with regard to OFC provisioning along the East African Coast.

Aim: To exploit Online tools as a means of investigating and discussing issues surrounding the provisioning OFC.

Objectives

1 Raise Awareness of the importance of the submarine Cable for East Africa
2 Establish appropriate Business models for submarine optical fiber provision
3 Establish appropriate Regulatory models for submarine optical fiber Regulation
4 Promote discussion and consensus regarding the contentious issues

Main Outcomes/Deliverables

1. Summarised eParticipants contributions
2. Summarised Workshop (Face-to-Face) Contributions
3. Final Report for subsequent submission to Ministry of Information & Communication and other Stakeholders

Tools

Online Tools (email, listserver, internet)
Brainstorming Techniques/Aids.

Resources.

Participants (Online & Face-to-Face)
Web Resources.
http://www.africafocus.org/docs06/apc0612.php
http://www.fibreforafrica.net/
http://www.infodev.org/files/2569_file_OPEN_ACCESS_REPORT.pdf
http://www.diplofoundation.org/poolbin.asp?IDPool=127
http://www.infodev.org/en/Publication.10.html
http://www.ralden.com/C1/EASSy/default.aspx
www.wto.org/english/tratop_e/serv_e/telecom_e/tel23_e.htm

eDiscussion Proceedings (2 weeks Discussions)

Theme 1 – The need for Optical Fiber Connectivity

Planned Activities

- Why do we need Optical Fiber Connectivity – 1 day.

Contributions

The following were highlighted as possible reasons for provisioning OFC connectivity:

1. It is more reliable than satellite connectivity
2. It is much faster (i.e.) delay time from one continent to the other is less.
3. It has unlimited bandwidth capabilities and by extension
4. It tends (should) be cheaper to buy per Megabit.
5. It has a relatively long-lifespan as compared to Satellite connectivity
6. It is more secure
7. It easily support multimedia applications (voice, data and video)
8. It has little or no environmental repercussions
9. The East-African coast is the only seabed without OFC.
10. The OFC (should) enhance the global competitiveness of the region.

[Walu, Nduati, Munsaka, J. Kagwe, K. Waruru, L. Kimani, Brian L, Becky W]

Theme 2- Existing/Proposed Business Models for Provisioning OFC

Planned Activities

- What are the Existing/Proposed Business Models for Provisioning submarine cables – 2 days

Contributions

The three generic models for provisioning OFC were described by **Walu** as:

Option I: Commercially/Privately Provisioned Model
Basically, the Internet Backbone Providers (IBPs) use their own money to sink the cable and they independently decide who connects to the cables landing (exchange) points and at what rate per month. These private companies are run on a purely commercial basis with the aim of maximizing profit within the shortest times possible.

Option II: Partly Commercial (Consortium) Model.
This is what has occurred with the OFC running from Portugal, across the Western Coast of Africa through to S.Africa. The so called SAT3 Cable has been provisioned through a (currently) contentious model that has given the Consortium a suspicious connotation. At its simplest level, a group of mainly government owned (Public) Telco companies across the affected coast-line get together to form a consortium with a view to seek funds and build the OFC. Thereafter, they retain the privilege of independently deciding who connects to the cable and at what rate per month. From the SAT3 experience, the OFCs monthly rates charged are nowhere near the ones enjoyed currently being enjoyed in the developed economies for various reasons.

Option III: Open Access Model.
In the simplest terms, the Open Access Model is premised on the argument that Africa's socio-economic renaissance hangs on the availability of cheap bandwidth or communication costs. As such, the OFC presents a historic opportunity that should not be left to prevail under short-term, commercial arrangements either within the Private or Consortium models. Open Access Models proposes radical changes at all levels (Political, Legal, Regulatory, Economical, etc) in order to provision international OFC with an alleged bias towards socio-economic development.

In particular, its proponents suggest that the OFC should be co-owned by both Government and Private sector but should NOT be operated on Profit basis - that is, it should be run at Cost by a body (Special Purpose Vehicle) constituted to operate and maintain the cable. Further, access or connection to the cable should be Open to current and future stakeholders wishing to connect to it at a COST rather than a PROFIT basis. The fundamental point is that money should NOT be made out of the cable, money, should instead be made out of services (BPO, eCommerce, etc) that would arise from the presence of the cable. Open Access model, foresees a Low-Cost, High Volume Business Model for the Cable.

Several reactions arose under this topic that included:

Kai's who talked about the KDN, FLAG initiative, which will be Privately provisioned by an Investor from India. In addition, this particular OFC would not discriminate on Access and will be open to prospective (ISP) customers wishing to connect through it at competitive market rates.

Badru's contribution was that the EASSy Consortium model would have been best but was sabotaged by respective national politics and egos. He felt also that the Open-Access model was too academic with little chance of being successfully implemented. Governments should focus on providing an enabling environment and leave the deployment and running of the cable to Industry players. As for bringing down costs, the focus should be on production of local content, offering tax-waivers amongst other interventions.

Eric's contribution was that submarine OFC maybe too expensive to deliver purely by using Private sector financing. Cheaper sources of funding would most likely be sought to complement the Private sectors contribution. And in such a case, the Open Access model would be most ideal as it seeks to unify and cater for all stakeholders interests.

Brain concurred by saying that indeed the Open-Access model is the preferred model and gave the analogy of the Oil and Gas Pipelines across Europe. These pipelines are build by capital from a group of interested stakeholders who then constitute a body (SPV) to operate and manage the pipeline on their behalf. This SPV would operate the pipeline at cost for the benefits of the stakeholders who then make profits elsewhere i.e. from the products that have gone through the Pipeline.

Njorohio's contribution was that the regional bodies COMESA, EAC, SADC should get together and raise the capital to construct the cable. An independent body (SPV?) would then be constituted to run and maintain the cable.

Alex' contribution was that consumers should build and own the Cable and lease it out to selected ISPs/IBPs to manage it. He cited the case of Canadians and American's who started and implemented the ''fiber-for-the-people' campaign. He also preferred a government driven cable (using government funding) that would guarantee open-access at pre-defined rates.

Mucheru felt that government engagement should however be done with caution, given the experience Government involvement with parastatals such as the former Kenya Posts and Telecommunications Corporation. He then proposed the following model.

That ownership of the fiber is completely separated from its management. (for example the Government owns majority of Safaricom but does not have management control).

That a completely independent competent management team runs the fiber taking into account the various needs of the consumers, who in this case will be the Telecommunications companies and service providers, who eventually serve the mwananchi.

That the management must equitably and fairly provide access to all operators and service providers but must ensure no single operators consumes more than 40% of their services because this leads to control. (suggestions please on how they can do this and still be fair, equitable and profitable).

That the management must run the business for a PROFIT and further more must not get preferential treatment from CCK. Other private operators must continue to get the same rights and access to resources and government support.

In terms of investment/ownership there should be a fair structure that will allow for as wide ownership as will allow for the cheapest money but with a MAJOR bias to Kenyan ownership.

Michael Joseph felt that it was necessary to discuss how this will all be funded. Submarine cables systems are expensive to install and maintain, and he was yet to see or hear of any firm proposals of how this will all be funded. He had heard talk about SPV's with Government putting up the initial capital, IPO's etc. but nothing in writing. As one of the potential main users of an international submarine cable and probably one that might be asked to participate in the funding, it would be useful to start this dialog quite early.

Badru added that a commercially orientated platform is needed, probably with government soft loans which would then justify future regulatory control for the good of the mwananchi. However government should not be directly involved. Open Access has always been around some call it universal service access and is practiced under different flavors. He said that private entities should be encouraged to lay the fiber. All this will do is give more choice for access and the market will take over.

Ndemo then said that with regard to the TEAMs project the government was awaiting the Detailed Feasibility Study before engaging with the stakeholders. They now had the Report and were planning on getting the financial arranger in place in a week's time after which a series of stakeholder meetings would be initiated to decide on the best model that would be more applicable to our context and needs.

Alice preferred that the Private sector leads the ICT infrastructure development/ownership, where they would do most of the ‘heavy lifting’ in terms of investment required t. She said that this would lower access costs, etc but wondered whether this model would bring benefits to underserved/un-reached rural communities. She argued for a model that does not give undue favoritism to private sector or government but rather one that suits the people of Kenya and subscribes to the principles of Open Access while ensuring that ICT policy is linked to poverty reduction strategies and development goals.

Bill suggested that financing options for the cable should consider the NSE (Nairobi Stock Exchange) approach where capital could be sourced from the citizens by have IPOs geared towards provisioning of the OFC.

Theme 3 – Regulatory Models for Provisioning OFC

Planned Activities

- What is the best Business/Regulatory Model for provisioning submarine cables – 2 days

Contributions:

Walu's opening remarks were that it looked like on the Regulatory theme, there is very little option. The choice was simply between having and NOT having Regulatory environments for the Submarine cable. The current practice was simply NO Regulation by virtue of the fact that most OFC was laid out by Private sector with commercially agreed private contracts. These are kept confidential until or unless a dispute arises in which case it is resolved through existing Company Laws or Competition Laws. None-Regulation has therefore served well in managing Private sector investments.

However, in the Case of a Consortium model, where Public Funds have been committed to build the infrastructure, some argue that Regulation is required to ensure that the Public interest (social benefits) are balanced against the Private (profit) interests. The Consortium operators however find this recommendation not encouraging since they feel that Regulation would tend to frustrate an otherwise enterprising venture that would excel without Regulatory constraints. As for the proposed Open Access Model, the Regulatory frameworks suggested seem to range from None, Some, Delayed to Full Regulation. He said that he still didn't know how these different variants would apply but would be glad to hear more from the participants.

Harry said that he had just checked the dictionary definition of "Regulate" and got these synonyms - rule, govern, manage, order, adjust, arrange, dispose, conduct, systematize. All these sound and are good "English" words because they gave you the sense of stability, odder and continuity. However, these may not be so good "legal" words because law introduces the concept of constrain. Then these words become a burden that regulation is (especially to the private sector) and that regulatory frameworks prescribe.

On the same breath, Harry argued that it was not a simple lets have or no, let's not regulate the OFCs. I think we need to regulate in the sense of providing continuity by systematizing and managing for the benefit of all, so regulation should only be used to facilitate and not constrain. Non-regulation to me sounds chaotic and not sustainable in the long run!

He said that it is better to have a "facilitative regulatory framework" so that the private sector can do what they do best...invest and get a return on their investment; and the government collects its taxes while we enjoy efficient and affordable the services!

Lucy Kimani said that Regulation is definitely required as even the big players of the west are regulated, in a capitalistic environment (read cut-throat) self-regulation has not worked, and is sure a recipe for disaster.

Eric wrote that the Open Access Model makes two important distinctions which the regulatory policy environment must capture and enforce:

1. The distinction between infrastructure and services so that infrastructure providers are NOT allowed to also provide SERVICES and vice versa.
2. Ownership of the infrastructure (in layer 1) should not guarantee any form of fair or unfair access to capacity for the provision of service (in layer 2).
3. That there should be no discrimination within and between both camps so that infrastructure providers are able to establish clear and transparent trading relationships with all service providers and vice versa. Within the infrastructure or service layer there should be no restriction on COMPETITION and SERVICE DELIVERY.

This he said would create an ecosystem of various operators interconnecting seamlessly and ensuring there is interoperability.

Walu felt that unfortunately, this model was not quite easy to execute because it demands a total overhaul of the existing Telco market structures. The current regulatory and business structures in most of the regional countries allow and probably encourage Operators to own the backbone (essential) infrastructure and still operate across all the service layers.

Kai said that Open Access should not mean regulated. A system like Flag will have invested money to build a fiber around the globe and will make money with it. Pricing on the cable is determined by open market and not open access.
Open Access needs to be provided to the Landing Station and with this to any other system that might be available. He said that unless we build our own Internet or at least a cable that is jointly owned and peered at an international Internet Exchange (and even there are commercial charges) we will never escape the need for some commercial dealings.

Eric said that without a certain regulatory mechanism we would all not be going anywhere. The private sector leadership by KDN on this was commendable but should not be used to define what is and what is not. Open Access as we have known it to be has a layout and it is clear @ http://www.infodev.org/en/Publication.10.html. If we all stuck to the larger principles, all these other elements would fall in place whether it is private and or public sector leadership in the build out.

Alex felt that Regulatory bodies had let the consumers down and the cost of internet would drop down immediately if CCK wanted that to happen. He had very serious problem with licensing layers upon layers of local bandwidth resellers and wondered what "processing" they actually do.

He gave a case study where he hoped that readers would understand why there a very big need to ensure the OFC benefits stakeholders in the following order1. Consumer 2. Entrepreneurs (especially local after the Institute of Economic Affairs study that sought to find out if liberalizing Kenya's telecoms benefited locals).

In addition, he noted that the number of Internet Users in Kenya kept dropping over time and felt that it could be as a result of CCK inaction towards Consumer related matters. He proposed a structure where the Regulator and Consumers can engage effectively to control the excesses of Private Operators. This structure would provide for a Consumer Complaints portal where users can file their complaints and mechanism for their resolution executed.

He suggested that the Regulator should begin by establishing a relationship framework with consumers and multi-located businesses and facilitate them with their own fibre rollouts. In addition, Operators should assist in the operations/management of consumer-customer owned last mile fibre and/or mash (2.4 and 5.8 GHz) networks. Finally, the Government - Ministry of Information should ensure that the wonderful consumer protection clauses in the ICT policy (and upcoming Information laws) do not end up as just relics.

Lucy K said the currently the regulator seemed to be more concerned with keeping the operators happy rather than looking out for the tax payer paying their salaries. In addition, the notion of an "independent" regulator was just but a theory, and government interferes heavily in the Regulators operations.

She added that operators are eager to keep the status quo, but in the meantime try to out do each other to steal, and or maintain the customer base. Meanwhile the government focuses on growing their tax base and hopefully looking to lower the bandwidth price in the process, but they end up being pulled in different directions by the various forces with the consumer being least in their priority.

Alice said that there is normally quite a lot of tension between commitment and flexibility that all governments face when creating and implementing communications polices and rules. Primarily government were responsible for developing policy, which by extension establishes regulatory authorities which works to a mandate set by the legislation. The role of regulatory authorities was primarily facilitative rather than providing detailed management of the sector. She added that major policy issues should still be decided by government (in the interest of the public- read consumers) with operators themselves taking care of commercial and operational matters. Therefore the independence of a regulator cannot be absolute but it can and should operate with the sustained support of the government with which rests the ultimate responsibility for the health of the sector by the policies governments adopt and implement.

She added that from a consumer perspective what would be ideal would be to get involved in development of consumer protection policies and regulations which would provide users with all the information required to make informed choices thus deriving benefits from competitive service provisioning.

The regulators should also aim at maintaining public confidence through

1. Implementation of suitable consultation mechanisms
2. encouraging good practice by providers as well as provision of universal high quality service,
3. Ensure all providers are treated fairly while assuring consumers of fairness in tariffs, transparency in billing as well as opportunity to redress poor performance and/or misconduct

All the above and more should ideally be developed into a set of consumer affairs guidelines applying to all service providers in all categories, be it infrastructure etc and end users.

Marcel said that from a KIF perspective, the ICT draft Bill (2006) had ignored mentioning the competitive framework. In their Position Paper (June 2006) they had proposed the following Competition Framework:

(a) Restrictions will not be placed on competition.
(b) All scarce resources including but not limited to radio frequencies, rights of way for telecommunications infrastructure, and the top level domain name registry will be allocated in the public interest and utilized to the fullest.
(c) Kenya will implement the decisions of bilateral and multilateral agreements to which Kenya ascribes to such as ITU and WTO.
(d) The industry regulator shall implement 3 a, b, and c, (above) with regard to the following themes;
i) On rates, terms and conditions that are not discriminatory and that are reasonable and justify Interconnection of all service providers
ii. Access to rights of way to existing physical infrastructure and new physical infrastructure.
iii. Use of radio frequencies.
iv. The provision of nondiscriminatory access to network elements on an unbundled basis
(e) The ICT Sector shall not be subject to higher taxation than other sectors, mechanisms to fund universal access notwithstanding.
(f) License fees shall be used strictly for expansion of the ICT sector

Becky felt that the question of regulation was tricky and was going to take a lot of consultations and concessions between government and other stakeholders if the OFC is to work and serve the intended purposes,

She said that indeed other countries may have deregulated but what do you do in a country like say, Kenya where the anti monopolies commissioner is not in the fore front of addressing issues, am sure many people in the streets may not even know the existence of that office.

She added that in article by R. Alden (2006), Roland argues that many African Governments have been resistant to change and adds that what is needed is regulation liberalization. But how do we start talking of deregulation when we can't agree about the Act that will govern some of these issues. Roland further contends that in some cases, regulators may have ordered one party to fulfill its part of the bargain, but when it failed, the judicial system "rarely provided any meaningful" compensation to the aggrieved party. Regulation, deregulation, appropriate law, and am sure all these issues must be discussed at one point.

Kihanya by virtue of his professional background had a lengthy contribution that we have retained in here in verbatim:

'The regulatory framework I am afraid has to have its background against what is and has become current over the last 15 years or so globally. It can be viewed both at the national level and at the international arena. It is important to note that regulation in telecommunications is a public policy matter for any country. Governments must design and implement regulation based on the needs of a particular country and its peculiar historical or other circumstances, of course tending towards best practices.

Telecommunications regulation in the transition from a monopolistic and largely anti-market based approaches to supply of services, to a market based approach in a liberalized era, mandated most governments and hence societies to seek regulatory oversight. This was against an anticipated reduction of oversight given that market forces/ competition was to guide, in the long term, the development of this industry as in others. Consensus appears to be that in the short term-as a guide/ facilitator to liberalization, regulatory bodies were and are required.

It is indeed even anticipated that it is in this transitional stage that the regulators will (should) be so busy for the obvious reasons that the new players may gain dominance very quickly and attain the monopolistic tendencies of the historical operators.

Why is regulation in telecommunications important?
1. It authorizes new operators.
2. It removes barriers to entry.
3. It mandates interconnection between players.
4. It oversees the penetration of services in areas that commercial imperatives would not allow or pursue.

The objectives of transparent telecommunications regulation are mainly the following;
Oversee competitive markets by;

1 Promoting efficient supply of services.
2 Ensuring good QOS
3 Promote advances services
4 Enable the maintenance of efficient pricing.
5 Prevent abuse of significant market powers.
6 Protect consumer rights/privacy rights.

7 Facilitate interconnection thereby efficient use of telecommunication services.
8 Oversee the optimal use of the finite radio frequency spectrum.

From the foregoing, it is clear that, in the short term at least, most countries, Kenya included have an interest to regulate telecommunications services provision. The question therefore only remains as to whether the OFC is within the ambit of what may be regulated in the industry.

Deregulation is a theme that is in play in most jurisdictions that have achieved above optimal competitive markets. The case of the UK under the Communications Act 2003 and the role of OFCOM are in point.

Given that there is no direct call for deregulation even under the National ICT policy 2006, it would appear that the strategies suggested at (3.3.1) in relation to information technology infrastructure would entail a fair amount of regulation. This is especially given the fact that despite encouragement of the laying of the infrastructure, only so few options will be available, Indeed, in the OFC case, perhaps 2 will be a lucky option for many for the next 5-10 years or more.

Do we then need a regulatory framework?

My answer is yes and perhaps for tempering, a hesitant qualifier.

Competition laws are likely to be the most fundamental ?regulatory framework? for the OFC as indeed for any other services. It is particular to note that even in the UK the Office of Fair Trading and OFCOM share equivalent powers in relation to fostering competition. The CCK will have to; in the very short to medium term translate from primarily the 'Licenser- Facilitator' of entry to a serious competition oversight body with sound, quick and efficient determinations. If I am not wrong the only recorded competition determination relates to the cyber-cafe association case of their common pricing, cartel attempt. Interconnection determinations have been only one- Kencell vs TKL [but also recently Safaricom vs Celtel)]

The Regulator should be countered and perhaps also enhanced by an independent competition body- given that the workings of the anti-monopolies commissioner under the Restrictive Trade Practices Act (Chapter 504 Laws of Kenya) are highly opaque.

Other countries, such as Australia have also undergone a transformation from maintaining industry specific competition principles and statutes for the telecommunication sector to an all inclusive co- competition oversight regime in the interim and a sustainable sole competition / regulatory framework for all industries.
As such therefore, regulation for the OFC may be through the competition framework under the Competition Act (1998) or the draft ICT BILL (2006).

Complete lack of regulation may therefore not be an option at all. Whatever business model is adopted, the Key question is whether as a country in acute need of the OFC, we would facilitate its provisioning of services within the country without any regard to any oversight of any sort for whatever purpose.

At the international level, the WTO and the ITU also anticipate regulatory oversight in telecommunications too and Kenya, being party to these organizations would be hard pressed to provision services without oversight (if that were possible), especially since the OFC will be extra-territorial. I would suggest that a reading of this Reference paper at the WTO would elaborate on this aspect. See www.wto.org/english/tratop_e/serv_e/telecom_e/tel23_e.htm

The best regulatory models would for me therefore be within the competition framework. It would be difficult to try and regulate any/the OFC, singularly, as it would also perhaps border on the unconstitutional, there being a bar against discrimination under our Constitution.

Sector specific competition regulation under the CA1998 may work in the meantime but in the long run a clear policy that has a generic definition of what significant market power is, would serve the industry best.

Theme 4 – Impact of OFC Models on Stakeholders

Planned Activities

- What is the impact of the proposed model on the Stakeholders – 2 days

Contributions:

Kihanya felt that Operators should be expected to reciprocate on Price and QOS issues. He expected that there would be publicly accessible Interconnection Agreements under the non-discriminatory technology-neutral Open Access principles. He also expected that there would have to be business re-alignment to conform with new entrants at the local level who the operators would indeed agree not to want to "take over" as soon as a ROI looks good.

On the regulator, Kihanya felt that the paradigm shift in allowing competition and enforcing it would be key.. He argued that competition alone despite all that is said about it was **not** known to benefit consumers. Particularly where duopolies or oligopolies exits because Product and Price shadowing often takes centre stage and one is not sure that the alternatives are not exorbitant. The regulator must also enforce QOS.

He added that the consumer must also be ready for a vibrant market and take up alternatives that make the best "cents". He /She must be able to walk out and perhaps to an ombudsman (regulator) where QOS is not as per SLA or other

Theme 5- Way Forward and Face-to-Face Workshop

Planned Activities

- What is the way forward/conclusions – 1 day

Actual Activities:

A face to face meeting was scheduled to continue and conclude this important discussion

Contributions:

Walu welcomed the participants to the face-to-face workshop and gave an overview on what had transpired during the Online discussions. He took the participants through the themes and highlighted the key models, stakeholders and their objectives with regard to OFC provisioning.

Dr. Ndemo gave an update on the TEAMs project, saying that it would be owned by all Stakeholders. He said that the project would be a Public-Private-Partnership with investors invited across the board and will include individuals, corporates, financing institutions and other organizations. He added that the feasibility mapping of the route was ongoing and thereafter, stakeholders would be invited to participate in discussing and taking up ownership of the cable. Thereafter, the construction would begin, latest around July 2007.

He emphasized that access to the cable would be along the Open-Access model, noting that the national operator, Telkom Kenya was only acting as the interim, government representative within the Project but would likely give way to a more representative body, that will eventually own and operate the Cable in the interest of the Stakeholders.

Brain Longwe, gave a detailed view of the possible SPV (Special Purpose Vehicles) models for financing and operating the OFC. He said that the financing SPV would be the legal entity seeking and consolidating the funds needed to construct and eventually own the OFC. He added that the social and public good of the cable would always exceed the initial, and subsequent monetary value of the cable and therefore no price should be too high to pay for its construction. Furthermore, he said that in the unlikely event that the financing SPV is unable to repay back the initial capital funding to its creditors, it will only be forced to sell-out to new owners under receivership modalities - without affecting the Operation of the cable. This of course, assumes that there is a clear separation between the Owning SPV and the Operating SPV.

Kai gave a detailed presentation, explaining how the FLAG initiative was modeled. He emphasized that ownership of the cable was immaterial, given that creating sufficient local demand (traffic) was a better method of attracting Internet Backbone Providers (IBP) who would then extend their own cable to the East African Coast – at THEIR cost. The local Operator(s) only needed to pre-purchase a guaranteed amount of International bandwidth from the IBP for this model to happen. He however welcomed all initiatives for provisioning the OFC saying that two or more cables would be needed to create the redundancy requirements demanded by prospective Business Process Outsourcing (BPO) Operators.

Evaluation & Feedback

Technical

The technical environment was fairly reliable except for one instance when the list server failed to function resulting in participant's posts not being delivered over a period of four hours. This interrupted the smooth the flow of ideas but was quickly resolved and the exercise continued without further technical hitches.

eParticipants

During the eDiscussions, the KICTANet listserver had around 150 (one hundred and fifty) subscribers and around 15 (fifteen) of whom contributed actively to the discussions. It is assumed, however, that most participants must have participated by way of observation and learning judging from off-line feedback collected after the event.

Moderation

A listserver is considered an entry-level tool for managing electronic discussions or collaborations. A web portal with complete functionality that includes Online Chats, eForums, Blogs amongst others would have been preferred. However, by putting special attention to 'Subject-Lines', 'Theme Reminders' and Constant lobbying for comments, it was still possible to extract a significant amount of contributions from members.

Conclusion

The eDiscussion deliberation on such an important topic was a ground breaking opportunity in many ways. Firstly, it enabled different Stakeholders to engage and deliberate on a crucial topic from the convenience of their various domestic localities and timeframes. Secondly, it provided a platform where individuals, organisations and the government had an equal opportunity to exchange views in a semi-formal environment. Finally, it demonstrated how rudimentary and inexpensive electronic tools of communication could be used to raise awareness and gain deep understanding of topical issues affecting the livelihoods of citizens.

It is believed that more similar exercises will follow this initial one in our continuous endeavor to understand and deal with the various challenges affecting the ICT industry in particular, and our general national development agenda.

Appendices:

Appendix I – Glossary of Terms

Blog – an electronic notice board for posting public messages
BPO – Business Process Outsourcing
DFI- Development Financial Institutions e.g. World Bank, Donor Agencies, etc
EASSy – East African Submarine System
eParticipant – a participant engaged electronically on a collaborative task
FLAG- The Initiative by KDN for provisioning the Optical Fiber Cable
IBP – Internet Backbone Providers
IPO- Initial Public Offering
KDN – Kenya Data Networks
KICTANet- Kenya ICT Action Network
KIF- Kenya ICT Federation
OFC – Optical Fiber Cable
Portal – an Online environment that integrates a variety of electronic collaboration tools
SPV- Special Purpose Vehicle
TEAMS –The East African Marine System
SAT3- South Atlantic 3/West African Cable