A STAKEHOLDER ANALYSIS OF THE EAST AFRICAN SUBMARINE CABLE SYSTEM [EASSy]

Introduction

For those that have been following telecommunications infrastructure development on the African continent, events surrounding the establishment of the East African Submarine Cable System, popularly known as EASSy, have (to say the least) made for engaging reading. EASSy is the proposed US$300 million[1], 9,900km fibre optic submarine cable that will connect the east coast of Africa to the world's network of international high capacity submarine cables. Mtunzini (located just north of Durban) in South Africa will host one end of EASSy, and Port Sudan in Sudan the other end. In between, EASSy will have landing points in seven other countries[2].

It is anticipated that EASSy will connect the East African coast to the network of global infrastructure at the following points:

- In the South of Africa, EASSy will connect to two international cables: the first is the South Africa, Far East (SAFE) cable which links (Melkbosstrand) South Africa to (Penang) Malaysia; and second is the South Atlantic 3/West Africa Submarine Cable (SAT-3/WASC) which links Portugal and Spain to South Africa and connects to several West African countries along the way.
- In the North East of Africa, EASSy will connect to the South East Asia, Middle East and Western Europe submarine cable system (SEA-ME-WE4), preferably from the landing point at Djibouti[3]. SEA-ME-WE4 links South East Asia to Europe via the Indian sub-Continent and the Middle East and has 16 landing points between (Marseille) France to Singapore. Djibouti is also a landing station for another (older) submarine cable system also linking South East Asia, Middle East and Western Europe – SEA-ME-WE3. SEA-ME-WE3 has 39 landing stations in 32 countries.

In addition to the submarine cable system, members that have subscribed to building the cable will also be investing in the construction of backhaul (terrestrial) transmission networks. These (backhaul) networks will then link to the EASSy submarine cable and have the potential to connect (at least) ten[4] landlocked African countries.

The Benefits of EASSy

In all the EASSy project has noble objectives. Firstly, it will fill an important gap in Africa's international communications infrastructure and (as illustrated above) connect several countries to the global network of submarine cables. This would greatly increase the accessibility of such countries to high speed, high bandwidth connectivity, as well as enable the development of new products and services that would otherwise have not been possible due to bandwidth restrictions. In this sense, EASSy could potentially contribute to the socio-economic development of the region. Secondly, and in collaboration with the development of backhaul transmission networks, EASSy will improve the connectivity between African countries and reduce the cost of communication within and between them. A 2005 UN ICT Task Force document notes that:

1 Revised from an initial budget of US$200million

2 Proposed EASSy landing stations are: Mtunzini (South Africa), Maputo (Mozambique), Toliary (Madagascar), Dar-Es-Salaam (Tanzania), Zanzibar (Tanzania), Mombasa (Kenya), Mogadishu (Somalia), Djibouti (Djibouti), Massawa (Eritrea), and Port Sudan (Sudan).

3 See http://www.eassy.org/project.htm for further details.

4 These countries include: Botswana, Burundi, Ethiopia, Lesotho, Malawi, Rwanda, Swaziland, Uganda, Zambia, and Zimbabwe. For example, in Uganda, Uganda Telecom (UTL) and Mobile Telephone Network (MTN) have laid a cable extending to Mbarara in the West and Jinja in the East; this will also extend to Malaba, a border post between Uganda and Kenya, from where it will link into Kenya's terrestrial network and onward to the EASSy submarine cable.

> "90% of calls from African countries to other African countries are routed through Europe (or North America) at a cost of $400 million a year." (Dhliwayo 2005:122)[5]

EASSy can significantly contribute to reducing such payments to foreign communications operators, and reductions in such connectivity costs can potentially lead to increases in profits of African operators and to lowering tariffs and charges to their customers/end-consumers. Lastly, whilst reference has already been made to the ability of the cable to facilitate socio-economic development via its contribution to the development of new products and services; EASSy can also contribute to expanding intra-Africa trade by providing better communication in the region.

So What Could Possibly Go 'Wrong'?

The idea for EASSy came about approximately four years ago. The East African Business Summit held in November 2002 has been highlighted as the start of the chain of events that put EASSy in place. At this Summit, participants (composed predominantly of business leaders from Kenya, Tanzania and Uganda), adopted a *Business Manifesto* to build a submarine fibre optic cable along the eastern seaboard of Africa. Responsibility for initiating the fibre optic project was assigned to a selection of private telecom operators including: Telkom Kenya, Tanzania Telecommunications Company (TTCL), Uganda Telecom (UTL), Mobile Telephone Network (MTN Uganda), and Zanzibar Telecom. These operators were also to form the lead consortium for the project.

Two months after the Business Summit (in January 2003), Telkom Kenya hosted the first EASSy project meeting. However, progress on the project since this first meeting has been slow in coming; for example, although the first Memorandum of Understanding (MoU) meeting was held in Bostwana in January 2004[6], as at October 2006 only 15 MoU signatories had indicated their intention to signed off on the shareholding plan/agreement[7]. The implication of this is that there has been a delay in the signing of a construction agreement with the selected contractor[8], and therefore a delay in the commencement of the building of the cable. This is because it is as yet unclear exactly how much money is actually available to the project. This situation can be rephrased in terms of 'progress' as follows - when it was first conceived, EASSy was to have been completed by June 2005; this was later revised to the 4th quarter of 2007, and now the latest advertised commissioning date for the cable is October 2008.

Issues on Ownership and Access

Key to the delays that have been experienced on EASSy is the uncertainty around the ownership and management of the cable, which in turn influence the terms and conditions that will govern access to its capacity by *non-members* (i.e. entities that do not hold shares in the cable).

With respect to ownership, EASSy was initially conceived under a "closed consortium structure"; this is a model of ownership that sustains monopolistic behaviour in that each member of the consortium contributes towards the upfront capital cost of building the cable and commits to paying for its operational and maintenance costs over its life-span. These consortium members therefore pay (or commit to pay) for the entire cable system and its maintenance at the start of the project and therefore formulate their business plans and calculate their returns based on their market share in their respective countries. Together, the consortium members develop the configuration of the cable, agree the funding

5 Dhliwayo, Jabulani (2005) "Developing a Fibre Optic Backbone for Africa" in Danofsky, S. (Ed) (2005) *Open Access for Africa: Challenges, Recommendations and Examples.* New York: United Nations ICT Task Force Working Group on the Enabling Environment. Available online at http://www.unicttaskforce.org/perl/documents.pl?id=1563

6 The MoU was signed in December 2003. Initial (11) signatories included Telkom Kenya, Zanzibar Telecom, Uganda Telecom, MTN Uganda, TDM Mozambique, Telkom South Africa, Djibouti Telecom, Sentech, Telecom Malagasy, Rwanda Telecom, and Botswana Telecom. By 2004 these signatories had been joined by telecommunications entities from Sudan, Malawi, Ethiopia, and Somalia bringing the total to 15. By March 2006, some sources claim that there were 33 MoU signatories.

7 According to the EASSy Project Secretariat, the remaining (13) companies were given a 60-day window in which to sign the shareholding plan (commencing October 12 and expiring at around December 12). The EASSy Project Secretariat has stated that it will know by 12 December 2006 exactly how much money it has. However, it is likely that a funding gap will still exist and which needs to be filled to ensure that the project can be completed.

8 Alcatel was awarded the tender to build EASSy in July 2006.

rules that will cover capital and maintenance costs, and also agree on how capacity of the cable will be allocated (Axiom, 2005:37)[9]. Members of a closed consortium also determine the cost at which capacity on the system will be sold or leased to entities that are non-members. However, as the cable system being built by such a consortium is already (in principle) fully paid for, cash from additional sales or lease to non-members is of relative low incentive to the consortium members, especially when there is potential conflict with a desire to protect their business plans and returns. The results of such a monopolistic situation exits on the SAT-3/WASC submarine fibre optic cable, whose performance (in terms of its contribution towards making international connectivity more affordable) has not matched the expectations of its member countries.

There has therefore been significant pressure for EASSy to be built using an 'Open Access', non-discriminatory model. Although the exact model that will be adopted for the project is not yet known, it may take the form of two Special Purpose Vehicles (SPVs) as proposed by the New Economic Partnership for Africa Development (NEPAD): one for the constructing of the submarine cable and another for the terrestrial (backhaul) network; or (as proposed by the EASSy Project Secretariat) a hybrid consortium model incorporating private operators and government entities. According to the EASSy Secretariat, any telecom operator can participate in the EASSy project as an MoU signatory. Participation is only limited by the need to comply with the national laws, licenses and regulatory rules of the country in which the operator is situated. This means that the invitation to participate is only open to operators in possession of international gateway licenses, which national laws require for operating at this level. This is disappointing for the associations of Internet Service Providers (ISPs), academic and other non-governmental/civil society consortia interested in investing in the cable (as a way of guaranteeing access to affordable bandwidth in the future).

In addition to participation of organisations in the ownership of the cable system, the mechanism for managing the backhaul transmission network, and in particular the flow of traffic across national boundaries has also been subject to discussion, and have contributed to delays in the project. EASSy will be of more significant socio-economic benefit to sub-Sahara Africa if landlocked countries are able to gain access to it. However, a viable policy and regulatory environment is required for such a regional network (spanning various countries) to succeed. In response a Backhaul Coordination Working Group, headed by NEPAD, was set up by the EASSy MoU signatories to develop the necessary links for access to EASSy. The proposal put forward by NEPAD in the form of the Protocol on High Level Policy and Regulatory Framework for the NEPAD Broadband ICT Infrastructure – in particular the provision for an Inter-Governmental Assembly (IGA) – has however been met with resistance by the MoU signatories.

According to the Protocol, the IGA will form part of the governance structure of the SPVs and will have the overall aim of ensuring that the developmental objectives of the governments of the region are achieved by the project. The IGA would also be able to approve non-ICT entities nominated to be shareholders of the SPVs, as well as determine and enforce regulated return on investment for each of the SPVs. Not only do the EASSy signatories oppose the setting up of an IGA, they also emphasize that the role of NEPAD in the EASSy project has been as an 'important stakeholder' and not as an MoU signatory – and as such object to NEPAD considering itself as an *owner* of the cable[10]. NEPAD's Protocol on the other hand views the EASSy cable as being a part of a wider Broadband ICT Infrastructure Network, and the SPVs as the mechanisms through which NEPAD would "...own, develop, operate, and maintain..." the Network, including EASSy.

The impasse that has developed – succinctly described as a *disconnect between the political and commercial ends of the cable*[11] – and the impact this is having on the EASSy project is the subject to this paper. The paper uses a stakeholder analysis to represent and assess the dynamics between the differing positions held by relevant groups involved in the project. This graphical representation provides a useful

9 Axiom (2005) *EASSy Detailed Feasibility Study: Final Report May 2005*. Available online at http://www.eafricacommission.org/docs/EASSy_DFS_Report.pdf

10 See presentation, "EASSy Project Overview". Available online at http://www.eafricacommission.org/docs/EASSy_Project_Overview-6_Apr_2006.pdf

11 "Kenya Begins the Countdown to Cheap International Fibre." *Balancing Act's News Update 332*. 19th November 2006.

tool for understanding and navigating the current state of play and developing scenarios of the future of the project.

What is Stakeholder Analysis?

A stakeholder is "anyone significantly affecting or affected by someone else's decision-making activity" (Chevalier, 2001:1). Stakeholders may be people or organisations that are included or excluded from the decision-making process. They may be producers of a particular initiative or end-users of the results. For the purpose of this paper and in relation to the EASSy cable, stakeholders are considered to be entities that (i) will be affected by the project or (ii) determine the level of success or failure of the project.

Stakeholder analysis involves identifying the stakeholders of a project, policy, initiative etc.; making an assessment of the interests each stakeholder has, and analysing the ways in which these interests may affect the project, policy, initiative etc. Furthermore, stakeholder analyses can also be used to measure the dynamics between different stakeholders – their similar and/or divergent viewpoints towards the project, policy, initiative etc., the groups/coalitions they are likely to form in advancing their interests, and the potential power struggles that exist within and between groups and individuals. Lastly, stakeholder analyses can help in the formulation of strategies for negotiating with groups and individuals that are opposed to the position being presented.

The Power-Interest Matrix

The Power-Interest matrix is just one way of (graphically) presenting the findings of a stakeholder analysis. The matrix (see Table 1 below) positions stakeholders according to two key attributes: the level of power (influence) they hold, and the level of interest they have in the project, policy, initiative etc.

1. The level of power depends on the quantity and type of resources a stakeholder can mobilise to promote its position regarding the project, policy, initiative etc.
2. The level of interest refers to the priority and importance the stakeholder attaches to the project, policy, initiative etc. It is a measurement of how interested (or motivated) the stakeholder is in impressing its expectations on the decision-making process. It is assumed that the more stakeholders are aware of what they stand to gain from a project, policy, initiative etc.; the higher their level of interest will be.

The combination of these two attributes helps in assessing the capability a stakeholder has to (i) block or promote their position regarding the project, policy, initiative etc., (ii) join with others to form a coalition of support or opposition, and (iii) influence the decision-making process.

High Power, Low Interest Stakeholders whose actions can affect the project's ability to meet its objectives BUT who do not stand to lose or gain much from the project	**High Power, High Interest** Stakeholders whose actions can affect the project's ability to meet its objectives AND who stand to lose or gain significantly from the project.
Low Power, Low Interest Stakeholders whose actions cannot affect the project's ability to meet its objectives AND who do not stand to lose or gain much from the project	**Low Power, High Interest** Stakeholders whose actions cannot affect the project's ability to meet its objectives BUT who stand to lose or gain significantly from the project

Table 1: Quadrants in the Power – Interest Matrix

The application of the Power-Interest matrix adopted in this paper requires that identified stakeholders be placed on a continuum of increasing/decreasing levels of Power and Interest rather than merely placing them in a specific quadrant. Such an approach results in a graphical illustration of the hierarchy of authority and power among different groups. The approach also facilitates discussion of which relationships should be built and nurtured; which coalitions should be formed or disbanded, and the different roles coalition members should play.

List of Stakeholders

The following are the key EASSy stakeholders that have been identified for this paper. This list is by no means definitive and identified categories of stakeholders are subject to change[12].

1. Public – refers to the general populace of the term of reference (country, region, continent etc.)
2. Consumer Groups – refers to organisations that represent the interest of the public in specified areas. In this area we are concerned with consumer groups active in telecommunications services and broadcasting.
3. Internet Service Providers – refers to organisations that are licensed to provide Internet services in the countries in which they operate.
4. Regional Regulatory Organisations – refers to bodies that represent national regulators of countries in the same regional (economic) groups. With respect to EASSy this includes the Communication Regulators Association of Southern Africa (CRASA), and the Association of Regulators of Information and Communications for Central and Eastern Africa (ARICEA).
5. National Regulators – refers to the (tele)communications regulatory authority of each EASSy member country.
6. National Governmental Institutions – refers to the policy-making and implementation organisations of each country and includes Government ministries.
7. Regional Governmental Institutions – refers to the policy-making and implementation organisations operating at regional (economic) grouping levels. This category also includes organisations operating at the continent level such as the African Union and its vehicle for achieving integrated socio-economic development in Africa - NEPAD (New Partnership for Africa's Development).
8. Multilateral Institutions – refers to international institutions with governmental membership that conduct all, or a significant part of their activities in favour of development and aid recipient countries. They include multilateral development banks (e.g. World Bank, regional development banks), United Nations agencies, and regional groupings (e.g. certain European Union and Arab agencies)[13]
9. Donor Organisations – refers to non-governmental and/or non-profit organisations which fund projects that are limited by time and objectives
10. Financial Institutions – refers to private financial services organisations including banks, venture capitalist firms, insurance companies, and national (governmental) credit agencies.
11. Civil Society Organisations – including academic and research institutions and non-governmental organisations
12. Media – refers to both broadcasting and print media organisations
13. Telecommunication Companies – Mobile Operators
14. Telecommunication Companies – Fixed Operators
15. Submarine Fibre Consortia – this refers to the MoU signatories/group of operators that will own the submarine cable

Stakeholders Analysed on 'Open Access'

The power-interest matrices presented in Figures 1 and 2 were constructed in March 2006. They represent two views of how identified stakeholders could (at the time) be represented in terms of the level of power (or influence) they had and their interest in ensuring that the EASSy consortium adopted an Open Access approach. The adoption of an Open Access methodology was at the time a critical issue impacting on the success of the EASSy project. The two matrices differ in that Figure 2 illustrates the ways in which some stakeholder groups collaborated to increase their sphere of influence and/or power.

Each iteration of the analysis of stakeholders will be different; it is therefore important to capture and understand the reasoning or logic behind placing a particular stakeholder in a particular grid. Each analysis is therefore accompanied by detailed narration/explanation of why stakeholders/stakeholder group has been represented in a particular way.

12 The author welcomes feedback on this analysis; in particular comments, suggestions and/or criticism on the list of stakeholders presented in this paper. Please forward suggestions on groups that should be included or excluded from the list and include your reasons for making proposed changes so as to facilitate documentation of the analysis. The author's contact details are stated at the end of this paper.

13 Definition is from OECD website: http://www.oecd.org/glossary/

~ Misunderstanding the Meaning of 'Open Access'

The analysis presented in **Figure 1** takes a predominantly economic perspective in analysing stakeholders; the EASSy cable project is perceived as being only about business and not 'charity'; as 'open access' was misunderstood to be. At this point in time, the general impression was that 'opening' up the EASSy cable meant that access was to granted to people for next to nothing. Financial institutions and business entities are therefore interpreted as being both powerful and highly interested in determining the extent of "openness" of the submarine cable. The most powerful entity, and the one with the highest level of interest was the EASSy consortium (represented as *Submarine Fibre Consortium* in the diagram). Furthermore, the consortium as an entity is deemed more powerful and influential than each of its individual members (*Telcos Fixed Operators*). Also influential were the *Financial Institutions* supporting the project. The analysis identified that such institutions would be more focused on obtaining a timely return on their investment and would therefore be in support of strategies that best facilitate this objective.

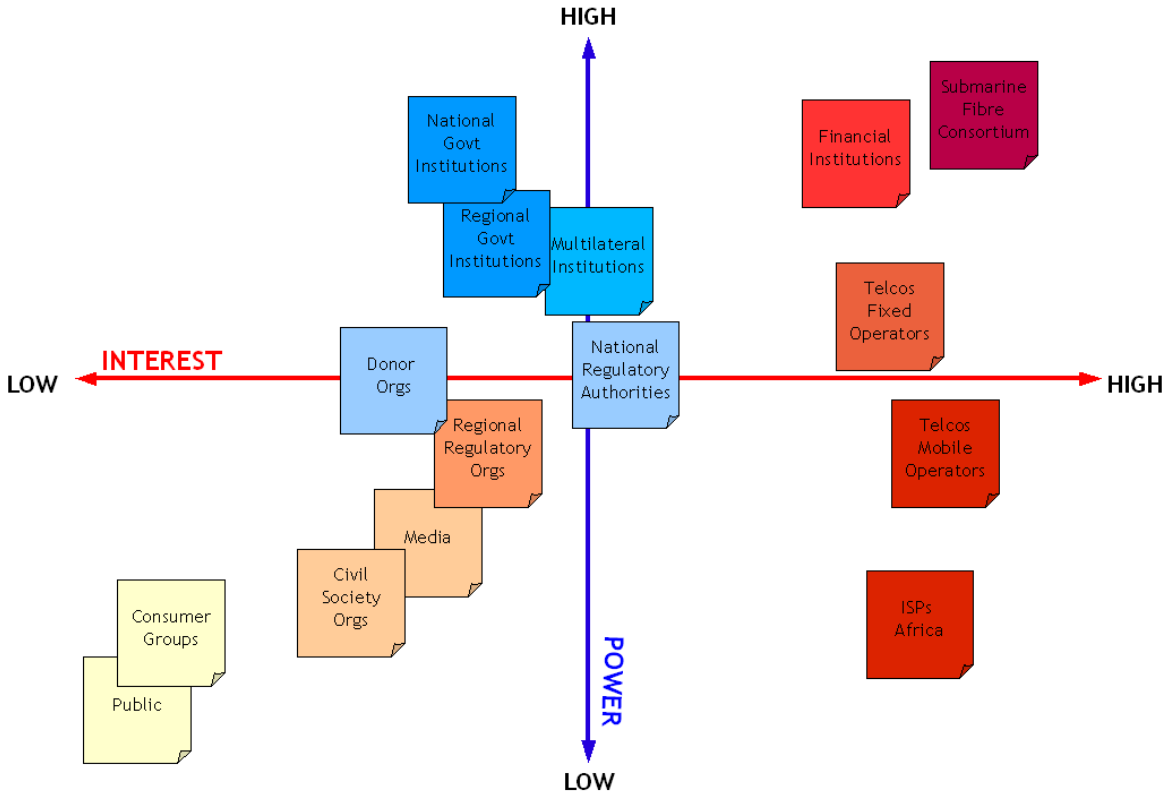

Figure 1: This Project is About Business, Not 'Charity'

National Governmental Institutions, *Multilateral Institutions* and *Regional Governmental Institutions* were identified as exerting high levels of power (or influence) on the EASSy consortium. Institutions like the World Bank (multilateral) and NEPAD (continental/regional governmental) during this period, expressly issued statements proposing that an "open structure" be adopted for the cable. However, their level of influence depended (to an extent) on the financial health of the EASSy consortium[14]. For as long as the consortium felt it could raise the funding required for the project from its members and their partners/backers, institutions like the World Bank and NEPAD had to use other non-financial means to influence the decision-making process of the consortium. It is for this reason that national governmental institutions are represented as having more power/influence than both continental/regional governmental institutions and multilateral Institutions[15]. The interest of national governmental institutions in the level of "openness" (from a business perspective) was however perceived as being comparatively lower than that

14 In March 2006, the EASSy consortium rejected a World Bank offer of 50% of the funding required to complete the project. Members of the consortium were uncomfortable with the condition the Bank attached to the funding – which was that the consortium adopted Open Access guidelines.

15 However, some national governments are clearly more powerful than others. For example see article "World Bank Offers East African Fibre Consortium EASSy Funding" in Balancing Act http://www.balancingact-africa.com/news/back/balancing-act_282.html

of multilateral and regional governmental institutions. This is because it is felt that national governments would be preoccupied by more macro-economic developmental objectives (such as international connectivity) than the micro/detail initiatives of how projects are implemented.

Arguments made by proponents of Open Access suggest that adopting an open structure for the EASSy cable would lead to increased competition in the provision of (tele)communication services which would (according to market principles) lead to more affordable access to ICTs. Affordable ICTs could in turn facilitate their application in achieving development goals. By adopting a closed structure – for example a "closed club consortium structure"[16] - members of the EASSy consortium would have exclusive right to the cable with non-members likely to pay above the odds to obtain access to its capacity. Furthermore, at present, only operators with international gateway licences can become members of the consortium. In most African countries this currently translates to the incumbent operator and although the regulatory environment in each country is changing to allow more operators to hold such licences, there is the possibility that, were a "closed structure" adopted by the consortium, by the time the EASSy cable is operational, an environment of non-competitive access to the cable would exist in most member countries.

Open Access is therefore not just about financial considerations that impact on the ownership of infrastructure; it also impacts on the regulation of (tele)communication markets (particularly in terms of interconnection). As such, *National Regulatory Authorities* and *Regional Regulatory Organisations* are also represented in Figure 1. Due to the different stages of liberalisation exhibited by each country's telecommunications sector/industry; national regulators are perceived to be both more influential and interested in the level of openness of the EASSy cable than regional regulatory organisations.

Other operators in national and increasingly regional telecommunication markets (as in the case of mobile)are also represented as stakeholders in this analysis (*Telcos Mobile Operators*). Mobile subscription has overtaken fixed lines in most African telecom markets and it is anticipated that both mobile operators and Internet service providers (ISPs) will eventually generate more international traffic than fixed line operators. Both mobile operators and ISPs are therefore shown to have high levels of interest in the structure adopted by the EASSy consortium. Mobile operators are however represented as being able to exert more influence on the consortium than individual ISPs. This is due to a number of factors including their ability to operate international gateways (where applicable), their large subscriber base, and their financial strength/viability. These factors contribute to increasing the bargaining power of mobile operators; an advantage individual ISPs do not have.

Other stakeholders with lower levels of interest and power are the *Media* and *Civil Society Organisations* (CSOs). Whilst the media does have tremendous latent power (by being able to influence the interests and views of the public), issues relating to access to communications infrastructure and pricing of bandwidth are usually difficult to present in a simple format for a mass audience. This is perhaps more true for the mass media than for specialised communications and/or business orientated media. Likewise, for the majority of CSOs, telecom infrastructure is not an immediate priority when it comes to allocating limited resources. This is a perspective that is to an extent also shared by *Donor Organisations* that would prefer to deal with ICT infrastructure issues via a "mainstreaming" approach. Mainstreaming relates ICT infrastructure to wider development goals/objectives rather than addressing it as an objective in itself. The final two stakeholders represented in Figure 1 are the general public (*Public*) and the consumer (rights) groups (*Consumer Groups*) that represent their interests. Both stakeholders are perceived to have very low interest in the specific structure adopted by the EASSy consortium and have very little influence over the decision.

~ The Value of Coalitions

The analysis presented in **Figure 2** illustrates the advantages that were created when coalitions were formed. Coalitions can be represented as being guided by the following general principles:

1. The sum of the individual parts CAN be greater than the whole – this applies when there are players within the list of stakeholders. In such circumstances, there is the possibility that these players will "go it alone" and thereby compromise the stability of any coalition they may enter into.

16 Descriptions of various ownership structures are presented in Hamilton, Paul and TeleGeography (2004) *Identifying key regulatory and policy issues to ensure open access to regional backbone infrastructure initiatives in Africa.* Washington D.C.: The Global ICT Policy Division (CITPO), World Bank (see page 16).

2. The sum of the individual parts CANNOT be greater than the whole – this applies when individual entities become stronger (in terms of either influence and/or power) when they band together. An example of this is provided by Internet Service Providers (ISPs) and might explain the tendency for these organisations to form associations/consortia. From an economic perspective, an ISP consortium would require more bandwidth than an individual ISP and can therefore negotiate pricing more efficiently (there is therefore opportunity for economies of scale).
3. Stakeholders collaborate to attain a common objective; HOWEVER, the gains of collaboration are not always evenly distributed between members. In Figure 2 Civil Society Organisations and the Media are represented as a coalition. When compared to the analysis represented in Figure 1, the CSOs appear to gain the most from this partnership in terms of influence. However both parties gain with respect to influence/power[17].

Coalitions are represented in the power-interest matrix by a dotted rectangle around groups of stakeholders. In this specific analysis two collaborations have been identified: (i) between the media and CSOs, and (ii) between multilateral institutions and regional government institutions. In the first case, the collaboration results in both an increase in power/influence and interest. In the second case, the (temporary/quasi) collaboration between multilateral institutions, and regional government institutions results in a more formidable entity in terms of ability to influence decision-making. However, it was also perceived that this new entity exhibited a reduced interest in the EASSy infrastructure itself.

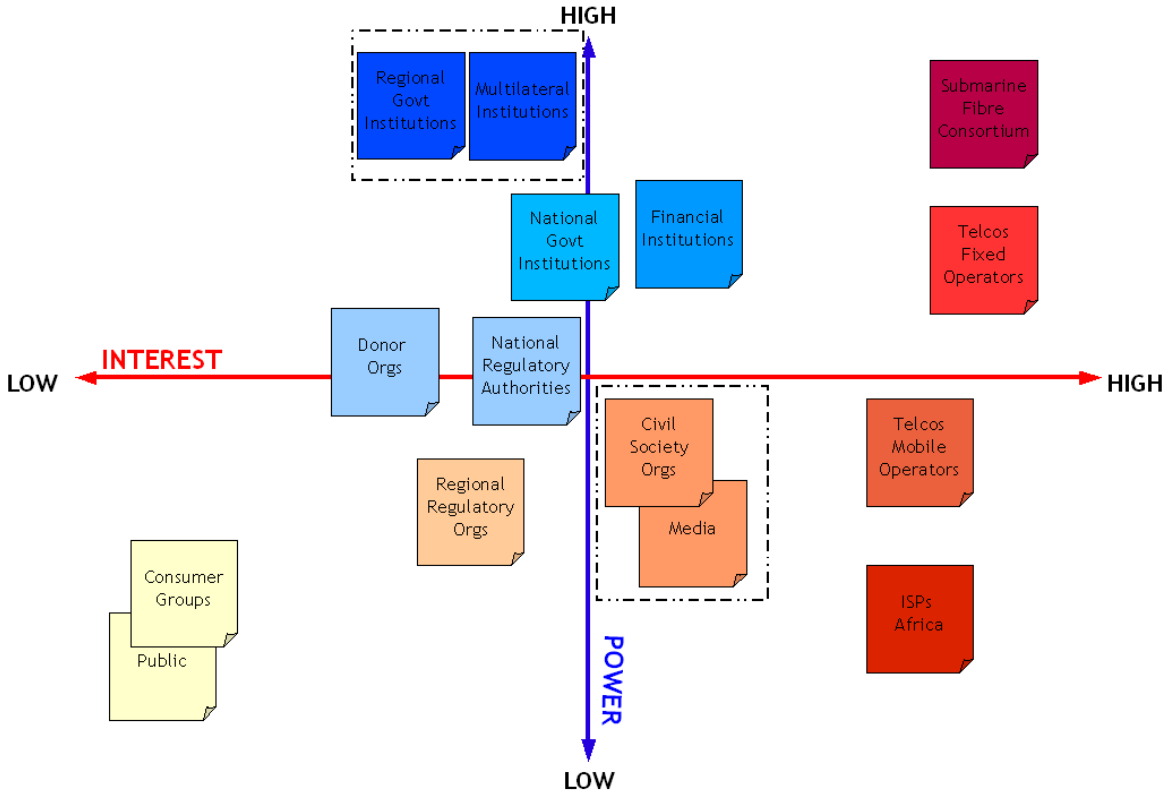

Figure 2: The Value of Coalitions

With respect to the adoption of an open access model, the coalitions appear to have worked. Whilst it is as yet impossible to describe definitively what model will be adopted for EASSy, what is certain is that it is unlikely to be a closed consortium model (in the form in which SAT-3/WASC currently operates). The sustained campaigns of some donor and civil society organisations, initiatives by multilateral institutions and NEPAD, and the publicity generated by these campaigns in the media and amongst potential bandwidth customers can be said to have paid dividends.

~ The Role of NEPAD in EASSy

Regional government institutions primarily in the form of NEPAD, have (within the context of the

17 This partnership does not however refer to the media in general but to strategic partnering with communications experts in the area – this is a partnership that is more on the analytic level than merely a reporting level.

stakeholder analysis) made significant gains in power and influence. According to the EASSy Secretariat NEPAD is an important stakeholder of EASSy and participates in the project as an 'observer'. For example, in January 2004, NEPAD was invited to chair EASSy's Backhaul Coordination Working Group (BCWG)[18]; also NEPAD is credited with securing funding for a detailed feasibility study (DFS) from Development Finance Institutions (DFIs) that are interested in EASSy[19].

However, NEPAD's view of its role in EASSy is different from that of the the EASSy Secretariat. Within NEPAD, the "...development of a broadband ICT network linking all countries in Africa to one another and in turn to the rest of the world..."[20] has been adopted as a top priority project[21]. NEPAD's reading of the Detailed Feasibility Study is that the EASSy cable is commercially viable provided landlocked countries in the region are able to connect to it. The backhaul terrestrial network is therefore considered key to the success of the EASSy project and in July 2004 (approximately six months after taking up the chair of the EASSy BCWG) NEPAD convened a workshop on "The Integration and Rationalisation of ICT Broadband Infrastructure for Eastern and Southern Africa". According to NEPAD, the stakeholders that were present at this meting[22] agreed on a rationalised broadband ICT network, which incorporated a number of network development initiatives in the region, including EASSy.

The July 2004 workshop also called for the development of a cohesive plan to facilitate the development of the 'rationalised network'. The NEPAD eAfrica Commission was tasked with monitoring the progress of the various initiatives making up the agreed network and is also to assist such initiatives in (what the brief described as) "practical ways". In response, the Commission initiated dialogue with ICT Policy Makers in the region with the aim of

- "...resolving such policy and regulatory issues as may impede or prevent the realisation of the rationalised regional network" and
- "Increasing private sector investment in the network, by ensuring that policy and regulatory environments are transparent, and that regulatory barriers are removed".

The result has been an effort (spearheaded by the Commission) to harmonise policy and regulatory frameworks in the region. Following the recommendations of a group of experts brought together by the Commission[23], "five policy principles" that would guide the development of a framework for the rationalised network, and facilitate its rapid implementation were adopted by governments in the region. In addition, and with assistance from the Commonwealth Telecommunications Organisation, the Commission drafted a Protocol, which is to be endorsed by all the twenty three countries involved in the rationalised network[24]. Furthermore, the Commission contracted the Industrial Development Corporation (IDC) to help it structure Special Purpose Vehicles which would:

> "... own, develop, operate, and maintain the NEPAD Broadband ICT Infrastructure Network, including the EASSy cable." (NEPAD eAfrica Commission 2006:17)

The statement above clearly illustrates that the ambitions of NEPAD go beyond the EASSy project and that NEPAD considers its role in EASSy to be more than the "important stakeholder" ascribed to it by the EASSy Secretariat.

18 The Group is charged with developing and promoting regulatory and policy frameworks that are conducive to the development and operation of a multi-country, cross-boundary terrestrial network

19 A study on behalf of the Eastern African Backhaul System is also being funded by DevCo. DevCo is a multi-donor facility established by IFC and the United Kingdom's Department for International Development (DFID) to support IFC's privatization advisory work in infrastructure.

20 NEPAD eAfrica Commission (2006) *NEPAD ICT Broadband Infrastructure Program* Presentation to the High Level Commission Meeting on Policies and Regulatory Practices Favourable to the Development of Telecoms and ICT Networks and Services in Africa. Addis Ababa, Ethiopia, 18 – 21 July 2006:slide 3.

21 At the twelfth summit of the Heads of State and Government Implementation Committee (HSGIC) of NEPAD, in Algiers, Algeria, 23 November 2004

22 The stakeholders included ICT Policy Makers, Regulators, Telecommunications Operators, and other utility infrastructure operators in the region.

23 Known as the Group of Experts for the development of the broadband ICT network in Eastern and Southern Africa - GExp(ESA). These experts were drawn from Botswana, Kenya, Madagascar, Mozambique, Rwanda, South Africa, Uganda and Tanzania.

24 The 23 countries involved in the network are Angola, Botswana, Burundi, Djibouti, DRC, Eritrea, Ethiopia, Kenya, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Rwanda, Somalia, South Africa, Sudan, Swaziland, Tanzania, Uganda, Zambia, and Zimbabwe.

Current Scenario: The Commercial versus The Political Ends of EASSy

As outlined in the prior sections, campaigns and collaborations between stakeholders to pry 'open' ownership and participation in the EASSy cable have been to a large extent successful. It is currently unlikely that the EASSy project will be completed under a closed consortium arrangement as currently pertains on SAT-3/WASC. However, this is about all that can be presently said about EASSy.

Two key deadlines quantify the uncertainty surrounding EASSy: first is November 30, 2006. This refers to the deadline by which all 23 member countries were to have signed the NEPAD Protocol. Only eligible entities from all countries of the region that are signatories to the Protocol will be able to become shareholders in the SPVs for the rationalised broadband ICT network (which includes EASSy). At the time of the deadline however, only 12 countries had signed the Protocol[25]. Commentators and analysts[26] have pointed to two possible points of contention preventing some countries from signing the Protocol. These include the Protocol's provision for an Inter-Governmental Assembly (IGA), and the assertion that the rationalised network (and more specifically EASSy) will be 'owned' by NEPAD.[27]

The second deadline is December 12, 2006. This refers to the time by which all signatories of the EASSy MoU were to have signed the shareholding plan/agreement – i.e. the Construction and Maintenance Agreement (C&MA). The C&MA is a shareholder's agreement that defines the rights and obligations of each investor. This paper is unable to confirm the number of signatories that had signed by the deadline or whether the total amount required for the construction of the cable had been raised. A loan amount of US$170million has been made available by a group of development banks[28] to Eastern and Southern African countries that are unable to generate their contribution to EASSy internally. However it is as yet unclear who this money will be available to; will telecom operators (whether privately or publicly owned) be able to access the funds; will it available to governments, and if so is access conditional on signing the NEPAD Protocol; or is the funding only available to the SPVs being proposed by NEPAD?

As illustrated in Figure 1, financial clout accounts for a lot in the analysis of stakeholders in the EASSy project, and now the introduction of a political dimension in the form of the NEPAD Protocol has further fragmented and diluted power of the erstwhile dominant stakeholder – the *Submarine Fibre Consortium*. Dilution comes principally from telecom operators that are MoU signatories, and who also operate in a country that is a signatory to the NEPAD Protocol. It is hard to imagine that they are no conflicts of interest at play, and that such operators are not in collaboration with their host government in other to be successful in the venture. **Figure 3** provides an illustration of the revised power-interest matrix.

The 'Submarine Fibre Consortium' stakeholder group is also weakened by a manifestation of the first general principle guiding coalitions (described earlier in this paper), i.e. *the sum of the individual parts CAN be greater than the whole*. Apparently frustrated by the slow progress of the EASSy project, the Kenyan government (through Telkom Kenya) in November 2006 signed a memorandum of understanding to build a submarine fibre link from Mombasa to Fujairah (United Arab Emirates). The project is called The East African Marine System (Teams) and is expected to cost approximately US$110million. Financing for Teams will come in the following form: 40% will be raised by the government of Kenya, 20% by the UAE operator Etisalat, and the remaining 40% from investors in the East African region. The form by which interested investors will participate in the project is as yet unknown, although it has been suggested that investment will be sourced from the Kenyan and regional (East African) stock markets.

At the same time, the Kenyan private sector operator, Kenya Data Network (KDN) is also building (in collaboration with Flag Telecom) a submarine fibre link. This link will start from Mombasa and terminate just off the coast of Yemen. KDN has stated that its cable will be operational by the end of the first quarter of 2008. Kenya's other cable, Teams, is planned to be operational by November 2007. It therefore comes as no surprise that Kenya is one of the 11 countries that are yet to sign the NEPAD Protocol. Also, both Telkom Kenya and KDN are signatories of the EASSy MoU; it would therefore be

25 Countries that have signed the protocol are Botswana, Democratic Republic of Congo (DRC), Lesotho, Madagascar, Malawi, Mauritius, Rwanda, South Africa, Tanzania, Uganda, Zambia, and Zimbabwe.

26 See for example "Kenya wins fight to delay regional telecoms project" Available online at http://www.mybroadband.co.za/nephp/?m=show&id=4258 and "EASSy Parties In Disconnect Over End Of The Beginning" Available online at http://www.mybroadband.co.za/nephp/?m=show&id=4258

27 See presentation "EASSy Project Brief" In particular slides 13 to 15. Available online at http://www.eafricacommission.org/docs/EASSy_Project_Overview-6_Apr_2006.pdf

28 These banks are: Africa Development Bank, World Bank, Southern Africa Development Bank, European Development Bank, and Kreditanstalt Für Wiederaufbau of Germany.

interesting to verify if they have also signed the EASSy C&MA agreement.

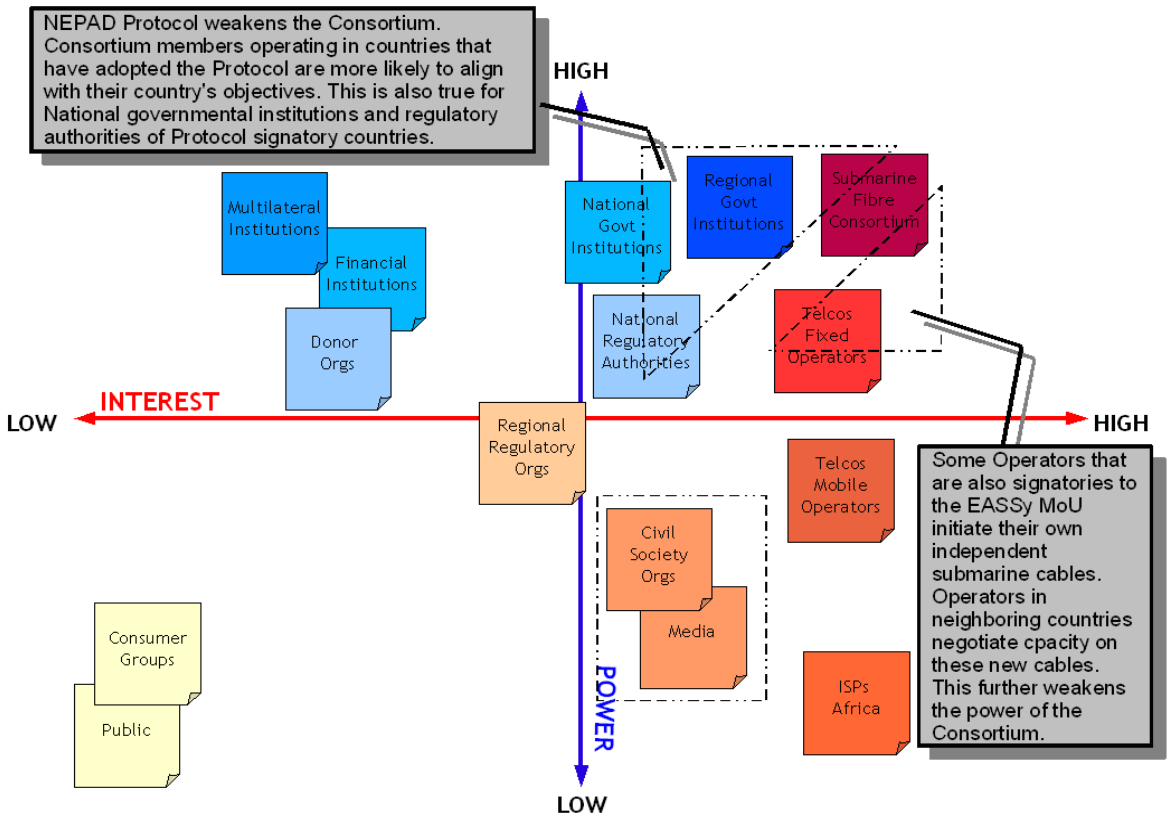

Figure 3: The Commercial versus The Political Ends of EASSy

Events in Kenya have a significant impact on reducing the power of the EASSy consortium (within the power-interest matrix) in that they question the efficacy of building the cable beyond Mombasa, and therefore question the need/relevance of participation of certain countries and/or operators in the project. For example Ethiopia, which is a landlocked country, has commissioned an optical fibre link to the Djibouti border, which links the country to the SEA ME WE2 and SEA ME WE3 cables at Djibouti. The country has reported contentions in negotiating connection through Djibouti. Such experiences illustrate the need for a framework to guide cross-boundary connectivity. However, Ethiopia is also reported to be currently in talks with both operators in Kenya to provide connectivity; an agreement with either operator would provide an alternative route to that provided by Djibouti and furthermore, the Kenyan landing points are said to offer better international connections[29].

Conclusion

This paper adopted a stakeholder approach to analysing the East African Submarine Cable System (EASSy). It provides a graphical illustration of the hierarchy of power and interest among the different stakeholder groups engaged in the EASSy process. The paper highlighted and discussed how different stakeholder groups were able to (through forming coalitions) influence the proposed ownership structure of EASSy. whilst the actual model that will be adopted for EASSy is still uncertain, what is clear is that it is unlikely to be a closed consortium model (in the form in which SAT-3/WASC currently operates). The paper also provided a graphical illustration of the current impasse within the EASSy project, which has been

29 Dr Bitange Ndemo (Permanent Secretary, Ministry of Information & Communications, Kenya), whilst responding to questions on Mashada (an online forum) on the choice of landing locations for the Teams cable stated that three locations around the Gulf that were considered as candidate locations. These were "...Djibouti, Oman and UAE. Djibouti is linked to SEA-ME-WE 2 and 3 that are soon coming to the end of their lives (these cables have a life span of between 20 and 25 years). Oman is linked to one cable, Flag (10 years). Fujaira UAE has four cables including SEA-ME-WE 4 (just two years old) and is negotiating to be a party in SEA-ME-WE 5 (Terrabyte system that will drastically lower cost of bandwidth)." The choice of Fujaira therefore gives the Kenyan cable the prospect of better international connectivity than Djibouti. See message number 119603 at http://www.mashada.com/forums/index/show_topic/22/119573/index.php

described as a disconnect between the commercial and political ends of the cable. The analysis of this impasse shows two competing groups; one the NEPAD Protocol coalition, and the other the Submarine Fibre Consortium. The analysis identified that the powerful position initially held by the Consortium has been diluted, and that the impasse has created high levels of uncertainty about the viability of the EASSy project.

A possible scenario to resolve this could be that the terrestrial backhaul network portion of the EASSy project be 'owned' by NEPAD Protocol signatories and the submarine cable portion by the private-public partnership initiative that constitutes the Submarine Fibre Consortium (EASSy MoU signatories). However, for this to occur, the Protocol would need to be ratified, and in particular the creation and role of a Inter-Governmental Assembly (IGA) in the process. For example, according to the Protocol, the IGA would be able to appoint a director to the Board of the submarine cable portion of the project. It is unlikely that the MoU Signatories would allow for this to occur. More contentious is that the IGA would determine and enforce regulated return on investment for each SPV/portion of the project. It is also unlikely that ownership of the terrestrial network by a non-operator entity would be accepted by operators that have already invested considerably in their countries of operation. Frictions over ownership of backhaul network currently exist at national levels. In Uganda, both MTN and UTL have protested against plans by the country's ICT Ministry and the regulator Uganda Communications Commission (UCC), to take over the development of the national communications backbone[30].

Progress on the EASSy project as it was initially visualised, i.e. backhaul terrestrial networks connecting landlocked countries to a submarine cable portion, requires that a agreement be reached between the EASSy Consortium and NEPAD Protocol stakeholder groups. It is anticipated that absence of such an agreement would visibly change the form in which the project will be completed. Further stakeholder analysis, as future events unfold, would aid in understanding this new form.

About the Author: ABIODUN JAGUN works for the Association for Progressive Communications (APC) as an ICT Policy Researcher for the African region. Her research focuses on the policy implications and application of ICTs in developing nations. She is also a part-time Lecturer in Information Systems and Development at the Institute for Development Policy and Management, University of Manchester, UK. She can be contacted by email via abi@apc.org

30 See *I-Network* article "MTN, UTL protest take over of fibre optic cable project". Available online at http://www.i-network.or.ug/news/i-n-news/mtn-utl-protest-take-over-of-firbre-optic-cable-project.html