



SOMALILAND TELECOMMUNICATION

UNDERSTANDING THE REGIONAL UNDERSEA CABLE SYSTEMS

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Executive Summary

Somaliland is leading the way in the Telecommunication sector in the region but the lack of reliable and affordable connectivity with the rest of the world is impeding its potential growth. This is also denying fast Internet connections for the thriving businesses, government departments and academic institutions which are at the heart of future developments of this country and its people.

This brief report has been developed to demystify the undersea cable systems in operation in the region and how Somaliland can benefit by establishing affordable and long term connectivity with the international networks. It also highlights the challenges ahead that the new Somaliland government will need to tackle head on and the opportunities that will need to be capitalised for the benefit of the country as a whole.

Why Undersea Cables?

Like most developing countries Somaliland is becoming increasingly dependent on its thriving telecommunication services, mainly provisioned by local private companies. The growing demand for access to cheaper and competitive international connectivity requires a reliable provision of submarine cables. This is achieved through fibre optics laid down under the seabed with offshore landing stations at the host countries. The aim is to achieve high bandwidth and efficiencies that are not possible in any other technology method today.



Figure 1 – Somaliland Map with Undersea Cable Landing Station

Moreover the competition between the local Private Network Operators (PNOs) could drive down the prices for the benefit of the consumers. However unless there is an affordable connectivity with the international networks via undersea cables which are independent from

3rd party management the prospects of consumer choices will be shorted lived. The basic principles of economics in supply and demand apply here; if the demand of network usage is ramping up in the absence of scalable connectivity, this will ultimately push the prices up.

Demystifying Regional Undersea Cables in Operation

For a long time the Eastern and Horn of African region has been lagging behind in establishing undersea connectivity with the rest of the world. The region was referred as the 'missing link' due to the absence of submarine systems. This issue has now been addressed in two primary projects namely SEACOM and EASSy which are commercial and developmental respectively¹.

SEACOM Project

The SEACOM (South and East Africa Company) is a privately funded venture which built, owns and operates an undersea cable connecting communication carriers in Africa. The project's business model is commercial and it was developed to provide larger bandwidth than that of satellite. It was the first to provide broadband to countries in east Africa, which previously relied entirely on expensive, slower, satellite connections.



Figure 2 – The SEACOM cable and the landing stations in Africa (Source: SEACOM)

The cable was commissioned for operation on 23 July 2009 and Somaliland Telecom Operators have built microwave network transporting their traffic onto the SEACOM cable via Djibouti. Apparently this created new business opportunities for Djibouti Telecom to generate extra revenues from Somaliland because of the absence of a direct link en route to Berbera.

¹ Obviously there are other commercial cables (e.g. TEAM, SAFE etc) but these two are major cables in operation today

EASSy Project

The East African Submarine Systems (EASSy) project is a developmental programme backed up by the World Bank to fill up the gap in the Eastern and Southern African countries. It operates different business model than that commercial cables with the idea to provide open access to all targeted countries. The idea was first conceived in 2003 and despite delays in securing adequate funding for the project the construction work has now been completed. The early trials are currently underway and it is expected to be launched in August 2010.



Figure 3 – The EASSy Cable and its original plan for landing stations (Source: EASSy project)

New African Partnership for Development (NEPAD) has identified EASSy as a priority project for the enhancement of the ICT infrastructure in the region. Among the 13 different countries² from the Eastern African block whose are expected to benefit from this momentous project are Somaliland and Somalia. Due to the political mantra that Somaliland is part of Greater Somalia the original plan did not include Berbera. However, since 2006 Small Globe has been working hard with both the funders of the project (World Bank's IFC) and the Somaliland government in order to secure a separate landing for Somaliland. As a result this has created awareness among many decision makers including the IFC and its partners in the region to increase the potential of Somaliland becoming an important hub.

The Need for Open Access Market

The historical approach to the creation of an undersea cable was to form a closed club of operators and these members would then have the exclusive rights to use that capacity in their respective countries. This monopolistic approach failed in many ways, not least it did not address the strategy to stimulate competition, growth and the adoption of a fair telecommunication regulatory system.

Today, opening up access to undersea cables is seen as means to increase economic growth and to reduce the digital divide. It promotes the key strategy to support growth and competition in the local market, directly contributing to the New Partnership for Africa's

² The countries include (South Africa, Mozambique, Tanzania, Kenya, Somalia/Somaliland and others)

Development (NEPAD) goals on broadband access and to the action plan adopted by the World Summit on the Information Society (WSIS)³.

Challenges & Opportunities

Clearly a solid regulatory framework is necessary to ensure certainty of success. There is no doubt that this will be the biggest challenge facing the new government to create the ideal national setting in which Information Communication Technology (ICT) can thrive and prosper.

However it is worth noting that Somaliland is blessed with its geographical position with numerous international cables going past its doorstep in the Red Sea and the Gulf of Aden. Coupled with its close proximity with landlocked Ethiopia this places the country in a key strategic position to seek its own landing stations at the port of Berbera. Having sufficient cable landings at Somaliland's coastal towns will enable the local economy to increase network coverage and lease out any surplus cable facilities to neighbouring countries.

The Risks Associated with Using 3rd Party Junctions

Somaliland private Mobile Network Operators (MNOs) and ISPs are currently having to rely on the provisions of 3rd party junctions via neighbouring countries of Djibouti and Ethiopia. This is further complicated by the unreliable, bandwidth-limited of microwave systems employed. Whilst this is a tactical solution addressing the short term needs of the country it does not address the long term, strategic position in obtaining reliable and cost-effective access to international transmission capacity.

Aside from the lack of competitiveness in utilising a 3rd party country in establishing connectivity, there are other inherent risks that the country could ill-afford:

1. The limitations on capacity growth imposed by the 3rd party agreement
2. No to mention inherent national security issues around the information flow between Somaliland and the host country in which the 3rd party junction is positioned
 - a. This could risk the confidentiality and the sensitive information flowing between government departments, particularly during bilateral/multilateral agreements by the Somaliland government and other countries
 - b. It could also affect the local businesses when their intellectual property is compromised in the mere fact that a sensitive data could be flowing through a junction owned and managed by a neighbouring country
3. The lack of competitiveness in the local telecommunication market because of the involvement of a 3rd party country and that the relevant whole capacity pricing (Indefeasible Right of Use) is determined by a foreign Network Operator.
4. Critically, the reliance on a 3rd party for all telecommunication services makes the country at the mercy of a neighbouring country which could have devastating ramifications both to the political and economical independence of the country

³ <http://www.itu.int/wsis/index.html>

Conclusions

Thanks to the openness of the private telecom market Somaliland is already leading the advanced telecommunication services in the region. Because of its geographical position it can seek to become an economic tiger where business entrepreneurs thrive and foreign investors are attracted. However there are enormous challenges ahead for the new government and telecommunication will inevitably take the priority as it is deemed to be the only sector that can create huge opportunities for the whole country.

The objectives of regulating open market for undersea cables are to reduce the cost of international voice and data communications. In turn, this can be shown to benefit national competitiveness, to boost economic growth and to create jobs. It also helps to reduce the digital divide, making services more affordable and thus improve the social cohesion.

Many Mobile Network Operators (MNOs) are being frustrated in offering more affordable international services because they cannot obtain cost-effective access to international transmission capacity (IRU agreements etc). If undersea cables could be opened to them, it would contribute to the achievement of widening service provision and deepening competition. Ultimately this will benefit the local economy.

That said, conditions in one country are never identical to those in another. However, the first priority has to be retaining the openness of the market instead of imposing monopolies. The second important task is to initiate the work to lay down the foundations of a solid regulatory framework. This is something senior professionals from Small Globe will be able to advise the government as and when it is needed.

Together, we believe we can make this country the success story that it rightly deserves.

Appendix - A

Who's Who

This section will provide a brief overview of the organisation involved in the undersea cable systems.

Small Globe Solutions

Small Globe Solutions (along with its UK-based Small Globe Ltd) was established by a group of business entrepreneurs and senior professionals who leverage over 15 years of expertise in the field of telecommunication and ICT. They have been following all regional and international developments in the region, including the EASSy project since 2006. With their distinguished experience and knowledge in the field, they have come together to make an enormous contribution to the development of Somaliland and the region beyond.

SomCable

Somaliland Cable Company is business venture established by a business entrepreneur from Djibouti. The company has already invested in the SEACOM project, with plans to establish a link from Djibouti to Somaliland. This will provide the 3rd party junction that this report has discussed.

Dalkom Somalia⁴

Dalkom was first established for securing a landing station for Somalia. It is owned and operated by a single person, with backup investments from business entrepreneurs from Somalia. The founder has also the support of the support of the Somali Transitional Federal Government. But due to the instability in Somalia, a landing station has not been possible in Mogadishu so instead the owner has been forced to seek alternative options in Somaliland but faced with stiff resistance from the Somaliland public. As things stand at the moment, the company's main interest is to use this regional development funding to promote the interests of the TFG government.

⁴ There is no such thing as Dalkom Somaliland as the company takes parts in EASSy consortium as Dalkom Somalia