Event Report

COMMONWEALTH TELECOMMUNICATIONS ORGANISATION

2nd Annual

Investing in ICTs in Emerging Markets 2009

Inmarsat Conference Centre, London, UK
9 – 10 December 2009

It is patent that lack of coordination and linkages between the various stakeholders are impeding the advancement of ICTs in the developing world. The CTO's collaborative forum on ICT investments in emerging markets addresses (i) the challenges and issues facing fund owners, technology providers and investment advisors, and (ii) appropriate steps that need to be taken by policy makers and regulators of countries that require investments.

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Executive Summary

The CTO launched the series of Investing in ICTs in Emerging Markets conferences in 2008 as its contribution to help developing countries realise the full potentials of ICTs in their efforts to bring about socio-economic development. It is patent that lack of coordination and linkages between the various stakeholders are impeding the advancement of ICTs in the developing world. A robust forum is needed for the fund owners, technology providers and investment advisors to voice their challenges so that policy makers and regulators of countries that require investments could take appropriate action; for the multilateral and bilateral donors to identify potential investment opportunities which could bring about disproportionately higher benefits; and for the private sector innovators to build bridges with countries that could become test beds for their innovations. The success of the first conference in 2008, the level of interest it generated and the enthusiasm created amongst the stakeholders has encouraged the CTO to continue with the series on an annual basis.

Drawing delegates from the public sector engaged in ICTs and investment promotions on one hand and the Private sector engaged in ICTs and investing, the conference seek to make stakeholders aware of the challenges faced by each other, facilitate discussions with a view to minimise those challenges and importantly, to help build bridges between the various partners. Unlike other CTO events, this conference is held in London in recognition of its position as the financial capital of Europe. Moreover it is a central location for CTO member countries spread across Africa, Asia, the Caribbean and the Pacific.

Investing in ICTs in Emerging Markets is a part of the portfolio of events and conferences the CTO conducts aimed at promoting the effective use of ICTs for development. The CTO seeks to carry out its mandate of helping member countries bridge the digital divide by knowledge generation through its research and consultancy services; by knowledge sharing through its training & capacity building services and conferences; and fostering networks among stakeholders through its membership services.

More information about the CTO and its various activities are available on the website at www.cto.int.

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Agenda

DAY 1	
09.00	**CTO Opening Remarks:**
09.10	**Welcome Address: Dr Ekwow Spio-Garbrah,** CEO, CTO
09.30	**Keynote Address: H.E. Dr Mohamed Ibn Chambas, President, ECOWAS**
	POLICY PANEL
10.35	**Policy Discussion** • What are the effects of the recession on emerging markets? • The impact of cable and network sharing • The role of regional development banks – Are they filling National Equity Funding Gap?
	REGULATORY PANEL
11.35	**Regulatory Discussion** • Privatisation of incumbent, Mobile sector consolidation, SMP will this be an issue? • Policy and regulatory capacity --- Unified licensing? • The impact of tax breaks on emerging markets
12.30	Q & A
13.00	**Lunch and Networking Opportunity**
14.15	**Chairperson's Opening Remarks**
	BROADBAND INVESTMENT
14.25	**Policies to encourage broadband investment in emerging markets**
14.55	**Success stories of ICTs in India** **Challenges and opportunities in financing ICTs in one of world's leading market**
15.25	**Afternoon Coffee and Networking Opportunity**
	FINANCING FOR ICT DEVELOPMENT
16.00	**Practical case studies, financing telecommunication projects**
16.30	**Mobile Money transfer**
17.00	**Q&A**
17.30	**Chairman's Closing Remarks End of Day 1**
18.00	**Cocktail reception sponsored by INMARSAT**
Day 2	
08.30	**Re-registration and Coffee**
09.30	**Chairperson's Opening Remarks: Martin Jarrold, Chief International Programme Development, GVF**
	OPERATOR'S PERSPECTIVE
09.40	**Operator's Perspective - investment for the future, Infrastructure development**
10.25	**Case Study: Sharing Infrastructure successfully , Best practice**

	methods
10.50	**Q & A**
11.00	**Morning Coffee**
	RISK MANAGEMENT
11.25	**Investment opportunities in Kenya**
11.50	**Risk Management - Human Capital - Current gap & Capacity Vs Capability**
12.20	**Risk Management - Project Procurement - major s/w & h/w ICT projects**
12.40	**The Lean operator model – benefits of infrastructure sharing & managed services**
13.00	**Q & A**
13.15	**Lunch and Networking**
	INVESTING IN INFRASTRUCTURE AND TECHNOLOGY
14.15	**Panel Discussions on Investing in Infrastructure & Technology** • Vision & challenges • Domestic vs International • Stable financing methods
15.15	**New Technology in Emerging Markets**
15.40	**Value Added Services in Emerging Mobile markets – The Next frontier**
16.00	**Innovative Partnership Models to support sustainable development**
16.20	**Creation of Commonwealth Telecom Development Fund for Emerging Markets**
16.50	**Q & A**
17.00	**Chairman's Closing Remarks**

List of Speakers/Panellists

Dr Ekwow Spio-Garbrah
Chief Executive Officer
Commonwealth Telecommunications Organisation

Mr Abhi Naha
Vice President and Board Member,
Communication Manufacturing Association of India (CMAI)

Dr Amanat Hussein
President
E Net World

Dr Mohamed Ibn Chambas
President
ECOWAS

Mr Adrian Baschnonga
Senior Analyst
Global Telecommunications Ernst & Young LLP

Mr Andrew Gill
Director of Business Development
EMEA, Networks & Enterprise
Motorola

Brooke Partridge
CEO
Vital Wave Consulting

Mr Bashir Patel
Director - Programme & Business Development
Commonwealth Telecommunications
Organisation

Dr Dominic Scicluna
Head, Government Solutions EMEA
Exigy

Mr Christie Christelis
President
Technology Strategies International

Mr Getjan Van Stam
Co-Chair
IEEE
Zambia

Ms Freda Ruth Murray-Bruce
Special Assistant (Strategy and Development) to
the Executive Vice Chairman
Nigerian Communications Commission

Ms Jules Bretland
Chief Communications Officer
Tribalnets

Mr Geoff Molobela
Chairman
Telkom South Africa

Mr Kofi Attor
Administrator
Ghana Investment Fund for Electronic
Communications (GIFEC)

Mr Geoff Wooding
Future Realities

Mr Martin Jarrold
Chief, International Programme Development
Global VSAT Forum

Ms Ladé A. Dada
Senior Investment Officer
Private Sector Department, African Development
Bank

Ms Nonkqubela Jordan
Chief Director - Africa,
Department of Communications, South Africa

Dr Michael Frendo
Consultant
Exigy Limited and
Former Minister of Foreign Affairs, Malta

Mr Patrick Masambu
Executive Director
Uganda Communications Commission

Mr Roland Janssens
Senior Investment Adviser
Frontier Markets Fund Managers

Mr Saidu Turay
Commissioner
National Telecommunications Commission
Sierra Leone

Mr Rory Macmillan
Partner
Macmillan Keck
Attorneys & Solicitors

Dr Salma Abbasi
Chairperson and CEO
E Worldwide Group

Dr Stephen Castel
Chairman
Castel Consulting

DAY 1 : 9 December 2009

CTO Welcome Address

Dr Ekwow Spio-Garbrah

In delivering the welcome address Dr Ekwow Spio-Garbrah referred to the prevailing challenging economic climate, resulting in ICT companies focusing more on consolidation rather than expansion. Nevertheless ITU estimates that in the coming five years US$ 50 billion will be invested mostly by GSM operators.

Africa draws only a limited (4%) portion of global investments in ICTs according to 2005 data despite numerous investment opportunities. The continent lags behind the rest of the world with a telephony penetration rate of 35% to 40% and broadband penetration of less than 5%. Effective regulatory intervention is necessary to ensure the growth of the sector in a manner that benefits all. Universal Service and Access Fund agencies could play a significant role in promoting access for all, provided the funds are used innovatively.

The Commonwealth African Rural Connectivity Initiative (COMARCI) of the CTO plans to hold a series of in-country capacity building workshops aimed at facilitating the building of Public Private ***Peoples*** Partnerships to create rural connectivity that will help alleviate access gaps in rural Africa.

Key Note Address

H. E. Dr Mohamed Ibn Chambas

Dr Chambas, the President of ECOWAS, who is due to take over as the Secretary General of African Caribbean Pacific Secretariat of the European Union on 1 March 2010, delivered the keynote address.

The Telecom and the ICT sector are vital to the economic growth of the African continent as the emerging Global Knowledge age depends on access to ICTs. Interestingly ICTs are not simply an end by itself but a means to achieving a number of ends. E-health has already delivered numerous benefits across the continent while the potential benefits are even larger. Though Africa is well aware of the strengths of ICTs, it is reduced to playing catch up with the rest of the world. The effectiveness of using ICTs for development depends on the extent of the telecommunications infrastructure and the policy and regulatory frameworks. Most ECOWAS countries do not possess an appropriate ICT infrastructure as the investment needed is beyond these countries. Hence a regional approach is needed to pool resources and create economies of scale. ECOWAS Secretariat has started the process by creating a platform to attract investments on a regional basis. In terms of connectivity, INTERCOM 1 has linked the capitals of the members while INTERCOM 2 aims to create a broadband network for West Africa.

Investment opportunities for the private sector has grown in the last two decades with the help of privatisation of operators and regulatory adjustments designed to attract new investments. One such opportunity is the proposed ECOWAS Fibre Network extending for 9000 KM connecting over 280 million ECOWAS citizens. Moreover, ECOWAS has taken the lead to create model laws and regulations to assist regional harmonisation of laws and regulation. Already the ECOWAS heads of states have adopted model ICT policies and legal regimes which five countries have already adopted as national laws with further ten on its way to so adopting.

Dr Chambas expressed his appreciation of the role played by CTO and other regional organisations and appealed for support to connect the unconnected of Africa. ECOWAS aims for a borderless collective of nations, which could jointly harness the resources to create wealth and prosperity for the peoples

Policy Panel

Chair - Dr Ekwow Spio-Garbrah
Members

- Dr Michael Frendo,
- Mr Patrick Masambu
- Mr Geoff Wooding
- Ms Ladé A. Dada

The session started with the Chairman inviting each member of the panel to state what in their view are the main policy challenges facing emerging ICT markets.

Mr Masambu was of the view that the key challenge is linking ICT policy to the development process and assuring that the ICT policies are synchronised with the national development plans. Another challenge is the apparent mismatch of the planning horizons between the factors influencing the sector; while a 10-year time horizon seems reasonable in terms of ICT functionality, for financing that may be too long.

Dr Frendo stated that in ICTs popular strategies such as privatisation or liberalisation are policies to be adopted according to the priorities of each country and the times in which they are considered. Though EU recommends soft-touch regulation, Malta's regulation, despite being a member of EU, has a more interventionist outlook as the market is not yet open. Though the conventional wisdom is that regulatory intervention lessens when markets mature, experience indicates otherwise. Having a clear vision on which decisions could be based, consensus could be built and stakeholders could exercise ownership, is a primary need.

Mr Wooding referred to the importance of sharing networks and infrastructure. USAFs seem to have missed the opportunity to leverage the funds by mobilising other commercial investments. USAFs could publicly make available information about pending projects so that potential investors will be able to evaluate and, if found appropriate, engage with these projects.

Ms Dada explained that the role of the Private Sector Department of AfDB is to promote Public Private partnerships to attract investments into Africa. In ICTs the AfDB has developed a strategy on investing in infrastructure, developed model policies and regulatory frameworks to attract investments and encouraged regional cooperation so that ICTs could be integrated into overall development. AfDB strives to ensure that ICT projects are created to gain synergies with other sectors so that it drives down the investment cost per sector. AfDB operates a dedicated capacity building programme for Government agencies as a part of which ICT centres of excellence have been created throughout Africa including in Mali and Tunisia. It also encourages establishing dedicated ICT focal points for every country that would identify investment opportunities in ICTs. Regional integration is another key theme for AfDB and in 2008 the Bank funded a study on how to improve regional integration of West Africa. Ms Dada was of the view that information is lacking of projects that need support. Had there being a database of information it could have helped match-making between donors, investors and project proponents.

During the discussion that followed the panel identified the investment gap as projects that are good investment opportunities which do not receive investments due to paucity of risk capital. CTDF, proposed by the CTO, is a mechanism to bring in additional investments not available through current funding mechanisms. Encouraging USAFs to partner with private equity is critical to further leverage limited funds available.

It has been a challenge to convert programmes of regional organisations such as the Commonwealth and ECOWAS and even telecom operators operating on a regional basis, into national policy frameworks. In 2005 the Commonwealth Connects programme of the Commonwealth received more than 200 project proposals in response to a request. Such projects could benefit from a mechanism of match making with the donors and private sector investors, provided the project proponents are also prepared to make an initial investment.

It is also important not to lose sight of Small and Medium Enterprises (SMEs), both as investors and potential investment targets. SMEs play a large role in the European Economy. However costs of investing and the complicated investment procedures in developing countries may hamper them playing a worthwhile role.

A mechanism to match local investors with foreign investors together with assistance to develop business plans that resonate with investors, will greatly enhance the investment climate.

Dr Stephen Castell spoke about a project he is working on to set up an internet based platform to bring together small scale investors with small and medium scale projects, where the relationship will be simple and straight forward devoid of the complications of traditional stock exchanges.

The panel suggested that the CTO work on creating a framework to draw in various sources of funding including USAFs, that will facilitate the forming of multi-stakeholder partnerships.

There was general consensus that, though subject to limitations, USAFs have generally been effective with some agencies such as RCDF being more successful than others. The key problem is the current mode of engagement which does not allow USAF to earn a return on investment which may not be the most appropriate mode for such a highly profitable sector as ICTs.

Regulatory Panel

Chair – Mr Patrick Masambu
Members:

- Mr Saidu Turay
- Mr Kofi Attor
- Mr Rory Macmillan
- Ms Nonkqubela Jordan
- Ms Freda Ruth Murray-Bruce

Mr Turay speaking about the situation in Sierra Leone explained the forming of National Telecommunications Commission (NATCOM) in 2006. Today there are four operators in the country with a few more who are licensed but yet to set up operations. The country is dependent on satellites for international bandwidth and is seeking international connectivity through a cable.

Mr Attor speaking on behalf of Ghana described the USAF of Ghana, recently renamed as Ghana Investment Fund for Electronic Communications (GIFEC), which aims to extend ICTs to underserved areas, especially rural areas. Key regulatory challenges remain licensing (further complicated by the fact that both the Ministry and the regulator play a role), frequency allocation and interconnection.

Mr Masambu explained the regulatory regime in Uganda where the regulator enjoys a great degree of independence. He identified the need for regulators to take a holistic view encompassing the socio-economic picture rather than a narrow focus based solely on telecommunications.

Mr Macmillan identified having a sufficiently long term planning horizon and encouraging sharing of infrastructure and other elements such as power, as critical challenges of the regulators. A novel proposal by the Mr Macmillan was for the Government to act as a demand aggregator whereby the Government commits to a combined demand for its various arms that would encourage operators to consider underserved areas on a commercial basis. A strong element of public consultations in the regulatory process may reassure investors.

Ms Jordan was of the view that a primary aim of regulation needs to be providing people with the socio-economic capacity to utilise ICTs. Licensing needs to take into consideration new technologies and investment promotion needs to be focused on critically required infrastructure.

Ms Murray-Bruce said that Nigeria practices clear demarcation between policy and regulatory spheres but with links between them. Regulatory consistency, transparency and openness are important elements of the regulatory process. NCC values and actively seeks public engagement through consultations. Though there may be overlaps between the mandates of the policy makers and the regulators, the positive is that it may lead to synergies being achieved.

Summarising the proceedings Mr Masambu said that in order to promote investments in ICTs, regulators need to consult with the stakeholders. Moreover the investment and regulatory frameworks need to be transparent. The policy makers' role is not as clearly definable as that of the regulator, which may lead to some confusion and conflict. But it is important to ensure sufficient linkages between the two to create enabling regulatory frameworks.

Infrastructure Financing Panel
Chairman – Geoff Molobela

Policies to encourage broadband investment in emerging markets
Daniel Jones, Partner, Onda Analytics

Mr Jones referred to the many factors impacting on investing in broadband including regulation on dominance, competition, demand, use of USAF and spectrum. Four elements of spectrum policy are crucial; the licence award mechanism, timing of the award, frequency band and the amount of the spectrum awarded. The presentation showed the co-relationship between the cost and the amount of spectrum and its frequency. South Korea's over 90% broadband penetration, which places it the highest in the world in terms of broadband penetration, is due to the government acting as a demand aggregator.

Telecom Opportunities in India
Mr Abhi Naha

The presentation showed how attractive India is as an investment destination for ICTs compared to other emerging markets such as China. On purchasing power parity basis India with US$ 1.15 Trillion is the third largest consumer and it is the second largest and fastest growing wireless market in the world. India's mobile gaming market is expected to reach US$250 million by 2010 at an annualized growth rate of 106%. The future of the Indian market is very attractive with 3G auctions due to come up shortly in 2.1/2.5 MHZ band and MVNO and Number portability to be permitted soon.

During the discussion that followed, the possibility of using advertising as a revenue stream for mobiles was discussed. This concept is currently being tested in India. Broadband is the next opportunity for both incumbents and mobile operators to expand the potential market and maximise revenue.

Serving Development through ICT Smart e-Government
Dr Michael Frendo and Dr Dominic Scicluna

The presentation was based on the model of service delivery by Exigy of Malta's e-governance programme. The model allows the delivery of numerous citizen services from Identity cards and passports to administration of income tax and social security through an integrated eGovernment portal. The model allows various arms of the Government to use the data, managed by a central agency of the Government, and the interrelationship will improve the efficiency and effectiveness of the individual Government agencies.

Considerations on Investing in and Financing ICT/Telecoms in Emerging Markets Selected Case Studies

Mr Nick Rouse and Mr Roland Janssens

Mr Janssens introduced Frontier Markets Fund Managers (FMFM) as a private sector management team for public sector infrastructure, leveraging public and private sector debt. Its two arms are the Emerging Africa Infrastructure Fund that provides hard currency funding for infrastructure in Sub Saharan Africa and GuarantCo that provides credit enhancement for local currency funding.

The presentation explained the implementation of Seacom undersea cable project that connects Southern Africa, East Africa, Europe, and South Asia, as an open access network. Landing points in Africa are South Africa, Tanzania, Kenya, Djibouti and Madagascar. The project is 76.56% owned by Africans who also bring in to the project local sales, government relations and expertise in the Southern and Eastern African markets.

Shareholders hold shares in Seacom Capital Ltd, which in turn controls Seacom Ltd, both of which are based in Mauritius. The need for a multiple layer structure is driven by cash flow, accounting revenue recognition and collateral considerations. The $300 million cost of the Seacom cable was funded by $75 senior debt by Nedbank and Investec bank and $225 million in cash equity contributions by financial investors to Seacom Capital Ltd.

Major Challenges of the project were in contracting (ex. contingency for force majure), handling owner risk (ex. obtaining permits), transit & landing rights and the management and governance structure.

The following discussion centred around the numerous cable projects that seek to serve the African market. Recent experiences have shown that projects run by private investors have a greater potentiality to be completed as shown by the successful completion of Seacom while EASSy cable project is yet to start.

Mobile Money Transfer

Mr Adrian Baschnonga

The presentation showed how emerging markets are leading the way in this sector. Smart Money launched in Philippines in 2002 is said to be the World's first electronic cash card linked to a phone. The presentation indicated the different types of mobile based financial services; moving from mobile payments to mobile banking. There are possibly four different operating models; Operator-centric model, Bank-centric model, 3rd-party based and Consortium-based. Regulation such as laws on what banks and nonbanks can and cannot do, will impact the business model. Estimates indicate that the global remittance market could triple over the next five years to US$1trillion with the help of mobile money transfer solutions. A key benefit that the mobile model adds to money transfer is that it can reach the unbanked in cash-based economies due to the proliferation of mobiles in developing countries. It is prudent for regulators to bear in mind that heavy regulation could hinder the growth of this service. Stakeholder and partnership management, balancing customer and technology needs and standardization and interoperability are factors that impact the success of mobile money transfer.

Building Your Community

Julie Bretland

There are an estimated One Billion people in Africa, South America and Asia with a mobile but without a bank account according to GSMA research. World Bank estimates that over 175 million migrants currently use remittance services, sending money to over 800 million recipients. GSMA estimates that a 10% increase in mobile phone penetration can boost GDP growth by 0.6%. Mobile financial services can provide a cost effective, efficient way of broadening economic inclusion to the poor whereby one infrastructure can provide the basis for many applications.

When discussing why mobile money transfer has not been successful in developed markets, the speakers felt that it may be due to lack of a clear market gap. Mobile money transfer is still considered more as a customer retention strategy. For example Safaricom has a large market share which it attempts to protect against competition by introducing services such as MPESA.

Another point discussed was the delay in introducing regulation in developing markets to facilitate MVNOs. It was felt that the rather limited network capacity generally available in developing countries may preclude the introduction of MVNOs in near term.

DAY 2: 10 December

Operator's Perspective

Chairman – Mr Martin Jarrold

Investment for the future, Infrastructure development

Ms Ladé Dada

Statistics show that Africa lags behind the rest of the world in internet and Broadband penetration. Moreover the Digital Divide within Africa is highly pronounced. For example Egypt's fixed line penetration is eleven times higher than Nigeria's.

The principal objective of the AfDB is to find "additionality", the extent to which a project in ICTs could help improve other sectors such as education or health. The total investments made by AfDB in the sector are over $ 41.3 billion. It finances infrastructure and also strives to add an ICT element to other projects. Further it supports capacity building and provides technical assistance. As a rule of thumb, AfDB will invest a maximum of 25% of the project cost.

During the discussion Ms Dada informed that the AfDB's Infrastructure Preparation Facility works with Governments helping implementation and monitoring. Generally AfDB could release funds within six months of the application, provided the requisite information is supplied. Approved projects are tracked by Portfolio Management Division which supervises compliances with covenants. 18 months after completion an assessment is carried out and the project completion report evaluates the achievement of objections.

Risk Management - Human Capital

Dr Amanat Hussein

Worryingly there is a High failure rate in public sector ICT projects. A recent UK survey of 120 government ICT programmes identified that 65% were unsatisfactory with only 15% achieving all their objectives. Reasons for failure include underestimating the power of vision, allowing too much complacency, failing to invest in the knowledge, skills and competences of the people, failure to communicate the relevance of the change and neglecting to anchor changes firmly in the national / corporate culture. These failures impact on the move towards knowledge economies.

ICT Contract Risk Avoidance, and Dispute Resolution: The Expert Way to Avoid Disasters and Deal with Disputes

Dr Stephen Castell

The presentation identified eight pre-requisites to make the contracts failure-proof are a clear and unambiguous statement of requirements, prioritisation of most important requirements, data transfer/migration specifications, capacity and performance requirements, system cycle with identified responsibility owners, user training plans with timetables, clear acceptance criteria and project management roles. It is useful to have an independent, experienced and authoritative 'monitor' as an integral part of the implementation of an IT contract. Secondly using a formal Dispute Board that could recommend, decide upon and adjudicate disputes as they occur could minimize the damage of disputes.

Innovative Partnership Models to Support Sustainable Development

Dr Salma Abbasi

The presentation referred to the importance of multi-sectoral, multistakeholder partnerships to assure sustainability of ICT for development initiatives, where Governments, donors, technology providers, private sector and academia occupy different strata of the equation. The success of community ICT centers depend to a large degree on being demand driven and leveraging the strengths of each partner. Lessons from the past indicate that the critical success factors of such ventures include having a clear shared vision and measurable objectives, good governance, true intentions and enabling policies focused on sustainability.

Panel Discussion on Investing in Infrastructure and Technology

Chairman – Mr Martin Jarrold

Members

- Mr Andrew Gill
- Mr Roland Janssens
- Julie Bretland
- Ms Ladé A Dada

Mr Gill was of the view that financing ICTs is hampered primarily by not having the right technology mix. There is significant financial support for two extremes, for mega projects and for small pilot projects such as Telecentres. But a lot of projects that fall in between these two extremes remain unsupported because they are too large for local investors and too small for foreign investors. Unfortunately these are projects that could have a disproportionately high impact, hence they need to be considered as a matter of priority. Another lacuna is that not enough pilot projects have been scaled up. It may be that the proponents are unable to visualise the degree to which a project could viably be scaled up.

Mr Janssens pointed out the importance of projects having a high enough return on investment. Project designing should be based on realistic assumptions. Raising finance is a difficult and long process while projects of half to one million dollars being the most difficult to generate funding for.

Ms Bretland was of the view that the principal needs are being able to relate to the particular environment, being less specific about technology and more about the end result, adding value by creating intellectual property rights and recognising convergence. There needs to be a broad framework of collaboration in place, that can be amended and customised from project to project.

Ms Dada informed that the Public Sector window is studying the requirements for infrastructure development in Africa up to 2030 following the World Bank's Africa Infrastructure Diagnostic study in November 2009. This will result in a basic action plan of projects and their sequencing for the next years encompassing several sectors including energy, ICT, transport, water & sanitation.

The panel agreed on the importance of open networks so that it will allow entrepreneurs to provide additional services. There are different technologies using different bands of the spectrum that can be used for connectivity. Some solutions use different technologies for different parts of the connectivity such as the unlicensed spectrum, then the licensed fixed wireless, finally ending with WiMax.

Developing countries need a strategy to invest in core skills and home grown technologies. Software industry has developed world over due to risk taking capital which is lacking in emerging markets. The panel also agreed on the importance of local content to populate the newly created connectivity.

A key challenge to promote the use of ICTs in Africa is to bring down the cost of broadband. While the fixed networks have limited reach, mobile broadband is at the moment too expensive though some technologies appear to be cost effective.

Mobile Services in Emerging Markets

Brooke Partridge

Shrinking pool of potential new subscribers and falling margins fuel the development of mServices. Technology that helps deliver social services and basic human needs such as access to credit or employment information, has the highest potentiality to succeed. The presentation identified several challenges faced by mService providers and strategies to meet them. For example legal issues could be addressed by robust government regulations, close value chain management will pinpoint priorities within the vale chain and a rigorous ROI analysis will help identify the primary ecosystem to operate in. Offering additional services, increasing value of services and adding a separate economic buyer (ex. Health) could increase revenue per subscriber. On the other hand cost reduction could be achieved through using minimum viable technology, minimizing customizations and using alternative business models. The development community and the private sector has to work hand in hand to develop mServices but the engagement of the development sector will fall off leaving private sector to play a larger role, as the market matures.

Innovative Partnership Models to support sustainable development

Mr Macha Van Gertjan

Focus on relationships, limitations of data, logistical constraints and the importance of traditional leaders characterise the African rural setting. The Foundation has built a local network through a mesh network and is about to start the first rural bank. The financing model of the project is that the profit generated from business activities are ploughed back in to the other ventures of the Foundation. The Foundation uses internet to source economic opportunities. For example the community found out the economic potentials of Sunflower and now it has become a prime cash crop of the community.

Value Added Services in Emerging Markets

Mr Christie Christelis

Domination by prepaid subscribers, reducing ARPU, falling profit margins, emergence of new technologies such as 3G and new business models, characterise emerging markets. Value added services are typically data driven and are often marketing related or based on value. Though the focus upto date has been on sophisticated 3G handsets, today services are being developed that can be delivered to less sophisticated handsets. A Toronto based company is developing an application that can take mobile video and stream it to a very basic handset. The first market the company is focusing on is India, a country that is adding 15 million mobile subscribers per month. Other important applications delivered through mobile channels include healthcare information, payments & banking, training, games and social networking. He identified mobile as possibly the 3rd Screen. It differs from TV or internet and opens up unique marketing opportunities.

During the **discussion** delegates explored the many facets of value added services. As the services being developed today are mostly operator independent, they may be perceived as a threat by the operators. On the other hand manufacturers have started placing applications in handsets (ex. iPhone). Development of value added services require the agreement of the operators for a standard framework of engagement that is fair to all parties including the developers.

Commonwealth Telecom Development Fund

Mr Bashir Patel and Mr Roland Janssens

The presentation informed delegates of the different levels of investment made and planed to be made by various stakeholders including the US$ 50 Billion by GSM Operators.
World Bank estimates that there will be further investments of US$ 100 Billion in emerging markets in the next five years. Yet there is a significant funding shortage in telecom projects which the CTDF seek to fill.

CTDF aims to provide a new source of equity funding to complement USFs and to establish a pool of capital with which to attract matching funds to invest in a portfolio of telecom projects across a number of countries to spread the country risk.

CTDF will seek approval of members to commit a minimum of US$ 1 million or more to a joint pool of capital with a view to attract matching funds from other financing mechanisms.
It will be operated as an independently managed investment fund that offers commercial investors an attractive return on capital with the target being 20% annual rate of return on investment over a period of five years. It is built on the premise of a combination of public and private sector sources of capital that share investment risks. Once the portfolio of assets matures the fund will realize the investment and the return through a sale of the assets. The primary investment strategies of the fund will be to invest in broadband access & ICT services, in unserved areas. The fund will invest in both infrastructure based projects as well as national ICT small business incubators.

CTDF will have its own board of directors and will be overseen by the Commonwealth Telecom Development Company with its own Governing Board consisting of founder members. CTDF will establish a series of sub funds to invest in and hold regional assets via local Special Purpose Vehicles and will appoint investment managers to administer individual asset portfolios.

Abbreviations

WSIS	World Summit on Information Society
AfDB	African Development Bank
MDG	Millennium Development Goals
USAF	Universal Access and Fund Agency
CTDF	Commonwealth Telecom Development Fund
SME	Small and Medium Enterprises
NCC	Nigerian Communications Commission
EASSy	Eastern and Southern Submarine System

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