

## Pro-poor Information and Communication Technology starts with improved networks

How will ICT move forward in Africa? This summary paper provides a response based on the experiences of the CATIA (Catalysing Access to ICT in Africa) programme. It shows that the challenge is not primarily technological but one of networking people across the socio-political infrastructure.

### Introduction to CATIA

The CATIA programme aimed to bring the maximum benefit of Information Communication Technologies (ICTs) to poor people in Africa and to act as a strong catalyst for reform. It supported a package of strategic activities to improve affordable access to a wide range of ICTs, from Internet to community radio.

### How has networking been a key activity?

There are a number of interesting characteristics of the context of ICTs in Africa, including:

- changes in regulatory regimes
- issues associated with international connectivity
- investment in infrastructure
- internet services in remote communities
- privatisation processes in ICT infrastructure

The CATIA programme focussed on ways to maximise opportunities arising within this context and its main response has been to strengthen the networks of African stakeholders involved in these issues, by making new connections and by building capacity.



## Examples: How CATIA responded to key ICT issues

African ICT Characteristic	Example of CATIA approach
<p>Changes in regulatory regimes have resulted in significant impacts on telecoms industries. These include deregulation and the growth of networks (and expansion of fibre optic networks in several countries), and legalisation of calls using the internet (VoIP). Liberalisation processes in many countries were set in motion in the last decade and recent changes are, to a certain extent, part of the unfolding of those processes e.g. end of monopoly / duopoly protection periods.</p>	<p>In a rapidly changing context, the capacity of key stakeholders is crucial to ensuring a policy environment that enables pro-poor use of ICTs. NetTel@Africa is a network comprising universities, regulators and policy makers across the continent and is focused on strengthening expertise on ICT policy and regulation in Africa. It is supporting the provision of African focused courses and an effective peer-to-peer sharing of expertise and experience among African policy makers and regulators.</p>
<p>As national infrastructure has improved, issues associated with <b>international connectivity</b> have assumed increasing importance. This is evident in regional agreements (e.g. WATRA ICT framework) and debate on continental connectivity (e.g. East African submarine cable, EASSY). Incoming traffic exceeds outgoing traffic and termination rates provide a valuable source of income. International connectivity, therefore, has complex implications for developing economies.</p>	<p>Among other networking activities, CATIA has been working with CRASA (Communications Regulators Association of Southern Africa), ARICEA (Association of Regulators of Information and Communication for Eastern and Southern Africa) and WATRA (West African Telecommunications Regulators Association) to increase awareness and build capacity on wireless technology and regulation. These regional organisations have been creating a platform for regional cooperation and exchange of ideas on this issue.</p>
<p>As the quality of <b>internet infrastructure</b> has improved, the use of the internet for voice calls (VoIP) has become a viable service, and is now permitted in many African countries. There is growing demand for low cost international calling, as migrant labour becomes an increasing part of developing country economies, and VoIP is likely to have a major impact on international call tariffs (as has been the case in Europe).</p>	<p>CATIA brought together ‘communities of change’ to influence policy making in Kenya. A number of civil society, private enterprise and political organisations formed a multi-stakeholder network called Kenya ICT Action Network (KICTANet) to support Kenya’s ICT sector. Their advocacy contributed to the process of liberalising VoIP by the Communications Commission of Kenya (CCK).</p>

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<p>Telecommunication companies have continued to invest in infrastructure, which has resulted not only in increased coverage (encouraged by universal access strategies in some countries), but also in a number of improvements to services e.g. broadband internet over fixed line, internet service over mobile networks, ‘e-top up’, and credit swapping. Quality of service has improved to the point where e-commerce applications such as internet banking and e-trading are emerging.</p>	<p>Improvements rely on a degree of cooperation within the industry. “Most ISPs in Africa are bootstrap operations. They’re small and it’s difficult to grow. So when you begin a programme that looks to bring them together under a common front, it’s very difficult for them. Most see themselves as competitors. To build the trust is very challenging” (Eric Osiakwan, Secretary AfrISPA). CATIA supported AfrISPA with a series of workshops and position papers to overcome these barriers and bring ISPs together.</p>
<p>Many countries have supported projects aimed at providing internet services in vulnerable communities (e.g. schools, rural cyber cafés). Internet use remains low, in contrast to the rapid adoption of mobile telephony. Debate continues over the value of internet in rural areas. However, this is likely to change dramatically in the coming years with new wireless options.</p>	<p>The Open Knowledge Network (OKN) has established a network of partners who are using OKN to assist them in creating and exchanging local content in six countries in Africa. Wider national networks are being built beyond initial partners in three countries (Kenya, Senegal and Zimbabwe). Local and national content is being created and exchanged locally (5000 pieces over 3 years).</p>
<p>Privatisation processes continue to be hampered by political influence, notably the selling off of state ownership in incumbents, and procedural difficulties with selecting competitive operators.</p>	<p>An independent media can be effective in encouraging open debate and exposing malpractice. Through the Association of Progressive Communications (APC), CATIA supported networking of the media and civil society. For example in Senegal the focus has been on building the capacity of the media to cover ICT policy issues (by providing specific training and resources).</p>
<p>Among development practitioners there is growing recognition of the value of ICTs, including not only traditional media (e.g. radio), but also innovative use of new technologies (e.g. GIS, PDAs, internet). The challenge remains how to maximise the effectiveness of these ICTs and exploit opportunities presented by new technologies e.g. integrating internet with radio.</p>	<p>AMARC Africa, Panos and Oneworld are CATIA partners working towards a stronger network of Community Radio, FM and Public Service Radio Stations across Africa. This component has established hubs in Kampala and Dakar with access points that local broadcasters can use for producing, downloading and sharing pro-poor programming and training. 80 radio stations have been equipped with appropriate connectivity and approximately 350 broadcasters have received training.</p>

## Conclusions

CATIA has been able to undertake a programme of work that has influenced the African ICT sector by engaging with the key stakeholders. It has worked with Governments and Regulators, assisting international alliances. It has strengthened the private sector links to government, strengthening partnerships that lobby for changes in regulation. These changes take advantage of technological advances to lower prices and create affordable access. CATIA has strengthened civil society and the media, giving the public a voice to influence policies and practice. The common thread through all these activities is the idea of networking people – bringing stakeholders and players from different interest groups together to share information and exchange knowledge.

In the end, the influence of CATIA on the African ICT sector has not been in the details of technology, models of implementation, or the use of cutting edge technology. It lies with the strategic view on ICT policy, development of the capacity of decision makers, participation of the various stakeholder groups, and networks of influence.

### Case Study – The liberalisation of an international gateway in Zambia

Initially CATIA engaged with decision makers who were likely to influence the liberalisation of international gateway services. Most of these were in the regulator’s office. Through NetTel activities it brought together the regulator’s staff and academics to discuss the strengths and weaknesses of various approaches thus building the capacity of the regulator to make informed decisions. As part of the discussions regarding wireless connectivity, CATIA brought together individuals from the Ministry, the regulator, and private sector. The AfrISPA team was linked with the Deputy Chief Executive Officer from the regulator. It is interesting to note that the CEO of the regulator’s office attended an OKN workshop, which brought him into contact with a number of NGOs.

The NetTel input has addressed a range of ICT policy issues, while the other engagements have a clear focus on international connectivity. This has resulted in capacity building and networking. It has also created opportunities for the private sector and civil society to have a voice and support at all levels for the liberalisation that has now taken place.



CATIA was a programme of the Department for International Development (DFID) in close collaboration with other donors and role players (e.g. Sida, IDRC, CIDA and USAID). It was implemented in close coordination with the Canadian government’s Connectivity Africa initiative.

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