Centre on Regulation and Competition

WORKING PAPER SERIES

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Collaboration in ICT Regulation in the Southern Africa Development Community: A Regional Approach to Capacity Building

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Abstract

Capacity building is a key activity in ensuring regulatory agencies can fulfil their mandate effectively. Without adequate institutional structures, processes and professional human resources, regulatory agencies are unlikely to be able to act in a credible manner. Lack of credibility impacts adversely on overall effectiveness by diminishing the relationships between the regulator and stakeholders in the regulated sector. This paper provides an overview of the collaboration that has taken place between ICT regulators in the 14 Member States of the Southern Africa Development Community. It indicates the initial approach used and the results that have been achieved through collaboration.

INTRODUCTION

Academic literature has dealt with the debate around the need for and extent of regulatory competition versus regulatory harmonisation among both horizontally and vertically arrayed agencies for decades (Esty and Geradin, 2001; Baldwin and Cave, 1999; Bratton, McCahery, Picciotto and Scott, 1996). With the recent establishment of regulatory agencies in SADC, the associated development of the Telecommunications Regulators' Association of Southern Africa (TRASA) in 1997, and the prior establishment of bodies such as the Southern African Telecommunications Administrations Conference (SATA), the debate although nascent, is gaining momentum in this region of the world.

The existence of regulatory competition requires regulators to develop an approach to deal with the 'problem' of competition among regulatory regimes (Woolcock, 1996, p.298). This must be taken into account in addressing one of the most dire concerns facing global and in particular

SADC regulators, that of capacity building and human resource development. Given that the complex and ever-evolving nature of the telecommunications technologies, the restructuring and convergence taking place in the sector, and the recent steps taken vis a vis liberalisation and globalisation are being faced against the backdrop of a dearth of expertise present in many of the SADC Member States (MS), how does one harness the potential presented by regulatory competition and regulatory cooperation to improve capacity building in regulatory institutions? That is the concern of this paper.

This paper is concerned with the issue of the use of regional cooperation as a tool to build capacity in the SADC region. It therefore outlines the use of collaboration which has been the basis for the development of much telecommunications legislation, regulation and policy in the fourteen SADC MS during the period 1995 until early 2003. We will first describe the 'capacity problem' faced by SADC MS. We will thereafter look at the development of SADC, in particular its institutions and instruments and so doing provide insight on the regional approach. Next we will consider how, using these institutions and instruments, SADC, and in particular SADC regulators, have used regional collaboration to build capacity. Using TRASA as a case study, we will therefore consider its role as well as the significant roles of SATA, AFRALTI and the ITU's Centre of Excellence and their impact on regulatory capacity building. In so doing, we hope to demonstrate that the collaborative model espoused by TRASA allows countries to capture the potential of regulatory competition to produce a movement towards more acceptable legislation, policy and regulation.

THE 'CAPACITY PROBLEM'

Capacity building and human resource development are key to the implementation of liberalisation policies and programmes, and to the development of regulatory agencies, Where governments have delegated powers to such regulatory agencies in order for the very problems of lack of expertise and efficiency that have confronted government and led many away from public provision of services, and in many ways to delegation; it is necessary to ensure that the problems of lack of capacity are not perpetuated in regulatory agencies thus making the transfer of powers in many ways a futile exercise.

Problems with capacity in SADC arise for several reasons, two of which will be considered in this paper. A first reason is that like many less developed countries, SADC MS find difficulty in attracting and maintaining capable staff for the regulator and government departments. They cannot compete with higher remuneration packages offered in the private sector. The result is high staff turnover which leads not only to a reduction in staff, but to an inability of regulatory agencies to maintain the 'institutional memory' necessary to lead successful reforms to fruition. As a result, over time, it becomes more and more difficult, due to insufficient human resource capacity, to develop and implement effective reform policies (Stirton and Lodge).

Secondly, organisational or institutional capability affects MS capacity. Poor legislation and weak institutions make effective reform a challenge. Legislation and institutions thus impact on delivery and successful reform depends to some extent on MS' ability to match the appropriate instruments to their national 'institutional endowment' (Levy and Spiller, 1995). In SADC, the 'capacity problem' has been recognised as not just a national, but a regional issue. As a result, it has in many instances been considered in a regional context and regional solutions to capacity building have been sought through SADC.

SADC AND ITS TELECOMMUNICATIONS ENVIRONMENT

SADC was initially established on 1 April 1980, as the Southern Africa Development Co-ordination Conference (SADCC) – a grouping of a number of the then "Frontline States" during the period of apartheid rule in South Africa. The change of government in South Africa, in 1994, heralded new opportunities for co-operation and SADCC became SADC in August that year. South Africa was admitted as a MS in 1994 bringing the membership of SADC to 11 countries. With subsequent admissions of new MS, it is now a grouping of 14 sovereign countries – comprising 12 countries on the mainland of Southern Africa and two Indian Ocean islands (Mauritius and Seychelles). These countries are[1]: Angola, Botswana, Democratic Republic of Congo, Lesotho, Malawi, Mauritius, Mozambique, Namibia, South Africa, Swaziland, Seychelles[2], Tanzania, Zambia, and Zimbabwe.

With a population of approximately 206 million and, at the end of 2001 6.3 million fixed telephone lines and 13.2 million mobile cellular connections (ITU 2002), it is clear that the issue of access to communications services is a critical one in the region. Overall national telephone penetration (fixed) varies within the region from between 0.5 lines to 55 lines per hundred population. A further investigation of these broad figures, demonstrates that the reality of access to telecommunications is that throughout the region there are significant disparities between the levels of access attained in urban, peri-urban and rural areas. There are further differential levels of access between various MS. Combined with low levels of personal computer ownership (approximately 3.4 million computers within SADC MS), this lack of access to telecommunications services, means that at around only 900,000 users, there is a considerably low level of internet penetration and access to information and communications technologies (ICT) in general remains low. The lack of access to telecommunications services, and ICTs in general, seriously impedes socio-economic development. In turn, this reduces the attractiveness of individual countries and the region as destinations for significant foreign and domestic direct investment. Needless to say, poor access to telecommunications services plays a role in reducing employment opportunities; encourages population drift to already over-crowded urban areas; and has a significant and adverse impact in areas such as health extension services, education and general civil society development.

Country	Fixed Network Connections (000s)	Mobile Connections (000s)
Angola	90	250
Botswana	160	493
DRC	10	1,000
Lesotho	30	165
Malawi	85	135
Mauritius	348	463
Mozambique	80	429
Namibia	127	190
Seychelles	23	55

South Africa	4,800	16,860
Swaziland	35	88
Tanzania	149	891
Zambia	90	150
Zimbabwe	300	363

Source: www.itu.int/ITU-D/ict/statistics Fig 1: Fixed and Mobile network size in SADC (December 2003)

Notwithstanding the relatively bleak picture painted by teledensity statistics, gains have been made over the past decade with the liberalisation of telecommunications markets in SADC MS. The liberalisation and associated regulatory reform has resulted in significant growth in private sector participation in the telecommunications sector in the past few years. Since 1999, the number of national fixed network telecommunications operators with private investor equity stakes has risen from one (South Africa) to four (South Africa, Tanzania, Lesotho, and Mauritius). In addition, the substantial growth in mobile cellular, from 2.9 millions connections in 1998 to 21.5 millions connections at the end of 2003 (ITU 2004), which in 12 of the 14 SADC MS has outstripped the number of connections made to the fixed network (see Fig 1), and has been almost wholly financed by private funding from consortia of domestic and foreign investors. Growth in other communications services – including internet, data communications, and provision of customer premises equipment – has largely been the result of private financing.

Country	Fixed Network (government owned)	Fixed network (full or partial private ownership)	Number of Mobile Operators	Regulatory Agency
Angola	1		3	Y
Botswana	1		2	Y
DRC		1	8	Y
Lesotho		1	2	Y

Malawi	1		3	Y
Mauritius		1	2	Y
Mozambique	1		2	Y
Namibia	1		1	Y
Seychelles		2 combined fixed & mobile		N
South Africa		2	3	Y
Swaziland	1		1	N
Tanzania		1	4	Y
Zambia	1		3	Y
Zimbabwe	1		4	Y

Source: ITU and personal research Fig 2: Numbers of Fixed and Mobile network Operators

The privatisation of previously state-owned operators and the introduction of competition have resulted in an increased importance in the role of regulatory agencies which were in many instances developed specifically to address these changes. The ability of regulatory agencies to effectively regulate newly liberalised telecommunications markets is however dependant to a large extent on the capacity that they have. Given the complex nature of the telecommunications sector and issues involved therein, further given the newness of regulation as a field in many SADC countries, the challenge of developing the human resource capacity to effectively and efficiently regulate the telecommunications sector is acute; hence the adoption of a regional approach to tackle this problem.

THE REGIONAL APPROACH

Protocolon Transport, Communications and Meteorology
The considerable strides in the provision of telecommunications services in Southern Africa have taken place in an environment in which the fourteen SADC MS agreed to work together to encourage wide-scale market integration within the Community. Thus, they decided to harness the potential of regulatory competition. Recognising the importance of enhanced regional co-operation, in 1994, SATCC-TU[3] began an initiative to encourage greater harmonisation amongst the member countries, with a view to developing common standards, developing and

maintaining common facilities, sharing expertise and generally moving towards an environment that would enable regional integration of markets to progress.

It was recognised by the mid-1990s that telecommunications and transport were key drivers of economic development and, as a result a SADC Protocol on Transport, Communications and Meteorology ('Protocol') was drafted and signed by the Heads of State in August 1996.Through consultation, the 'best' national and international policies and practices that could be adopted for regional use were identified and after being put into the Southern African context carried into the Protocol.

Consultation on the Protocol was extensive at all levels of society – both in government and the private sector. It also covered all the sectors included in SATCC-TU's mandate – surface, air and marine transport, meteorology, and all aspects of communications – including telecommunications.

The development of the Protocol was supervised at the highest level by the SADC Committee of Ministers (those with portfolio responsibility for the specific sectors to be included in the final document). Drafting was highly participative at all levels and supported by a team of legal and technical consultants – funded by the United States Agency for International Development (USAID). An important aspect of the consulting team is that it represented both regional and international expertise; the inclusion of a strong regional element undoubtedly had a positive impact on the speed and success of the implementation of the activities.

Amongst the many provisions of the Protocol designed to improve regional integration and economic development, was a mandate to develop sector-specific policies for the SADC region and provide appropriate draft legislation for adoption by Member States. The Protocol further sets out the region's objectives with regard to transport, communications and meteorology, and the policies which are essential for attaining those objectives. It explicitly recognises the need for private sector involvement, for restructuring state enterprises and for co-operation between state and private sectors. Implementation of the Protocol therefore, is essentially a process of policy, legislative and institutional reform. Hence, it seeks to promote regional integration through developing compatible and harmonised national policy and legislation (SADC website).

Regional Model Telecommunications Policy

Following the finalisation of the Protocol, early in 1997, work began on the development of a regional model telecommunications policy and complementary model legislation. Initial work was carried out in parallel on both documents by an SATCC-TU team, comprising the Telecommunications Expert and an ITU Senior Expert on Policy, and a legal and technical team provided by the Regional Telecommunications Restructuring Program (RTRP)[4].

With a clear commitment to developing practical models, there was a high level of consultation with governments, the private-sector, and consumer representatives and with a new emerging group of telecommunications sector stakeholders – the independent regulatory agencies. The initial team working on the models was expanded to include representatives from individual MS. The broad objectives that were adopted for the final Model Telecommunications Policy focused on the importance of separating policy-making, regulation, and operation/service-delivery. There was considerable emphasis on movement away from state-control of dominant telecommunications operators, and towards the liberalisation of many areas within the sector. The model policy also called for collaboration between MS on matters such as standard-setting and human resource development.

The model policy has gained overall acceptance from all MS and a number have used it has the basis for their own national sector policy statements. These include Lesotho, Mauritius, Malawi, Mozambique, Namibia, Swaziland, and Zimbabwe. In those countries where policy statements had already been made, active consideration is being given to the steps necessary to harmonise these with the regional model.

Model Telecommunications Law

Whilst it was possible to take into account almost all likely national variations in the development of the regional model policy, because of differences in legal systems and institutional endowment (Levy and Spiller, 1995) in some MS, the position was more complex in the case of the model legislation. Thus it was decided to develop individual draft laws for three countries in order to assess the likely difficulties that might prevail and the range of variations that might be necessary. Lesotho and Swaziland developed new legislation. In Mauritius, an in-

depth review was undertaken of their proposed new Telecommunications Act, and support was provided to the government during the stakeholder consultative process.

As with the policy document, wide consultation was undertaken within national governments and the private sector – both regionally and amongst existing and potential foreign investors. The main provisions of the law included:

- Separation of policy-making, regulation and operation/service-provision;
- Definition of the roles of the policy-makers, regulators, and operators /service-providers;
- Creation of independent regulatory bodies and broad definition of their powers;
- Consumer rights;
- Licensing of operators / service-providers;
- Encouragement of an investor-friendly environment; and,
- Provision for appropriate monopoly arrangements

The model legislation was approved by the Committee of Ministers, in June 1998, with a requirement that each MS prepare a timetable for its adoption as national legislation.

New telecommunications laws, based on the regional model, were passed by the parliaments of Malawi and Mauritius in December 1998. Lesotho enacted similar legislation in 2000 and new telecommunications laws are due for consideration shortly by parliaments in Mozambique and Swaziland. In each case, prior to finalisation of the draft legislation, stakeholder workshops were conducted. In addition, the Government of Namibia is currently re-drafting its telecommunications legislation.[5]

USING REGIONAL COLLABORATION TO BUILD CAPACITY

Institutional Cooperation

As discussed earlier, in order to give practical meaning to the model policy and legislation whose creation has been discussed extensively above, and to implement them effectively, there is a need for appropriate human resources at both organisational and sectoral levels. For regulatory reform to occur, it is necessary to look seriously at whether the capacity exists within the sector to meet existing needs. In addition to "hard" components, such as funding, technology, and human resources, capacity entails knowledge and understanding. There is no

doubt that the SADC region recognises this challenge, and has been moving to meet it in its use of the institutional structures described above to assist with skills and resources, and other strategies to help regulatory agencies and governments to help themselves.

The collaborative work carried out on the Model Policy and Law, created an institutional and legal framework which facilitated the ongoing co-operation on detailed policy and procedural issues and on human resource development that has led to TRASA being used as a model for using regional cooperation as a means of addressing capacity building concerns. In order to successfully implement the model law and legislation, once adopted by a nation, the necessary human resources and capacity are needed. Again, as in drafting the model law and policy, SADC MS have turned, in particular in the area of regulatory capacity building, to a cooperative model of addressing the problem.

TRASA's Role in Regional Capacity Building

With the increasing evolution of individual national telecommunications sectors, the role that the Southern African Telecommunications Administrations Conference (SATA), a long-standing forum of telecommunications operators, once played in considering regulatory issues was taken over by a regional regulators' organisation – the Telecommunications Regulators' Association of Southern Africa (TRASA).

Article 21 of the Declaration and Treaty of SADC, assented to by SADC governments, indicates that Member States,

> "(1) shall cooperate in all areas necessary to foster regional development and integration on the basis of balance, equity and mutual benefit; (2) ...shall, **through appropriate institutions of SADC,** coordinate, rationalise and harmonise their overall macro-economic policies and strategies, programmes and projects in the areas of co-operation," (SADC Treaty, Article 21).[6]

Given the permission granted in the SADC Treaty for cooperation, TRASA was inaugurated when SADC telecommunications regulators themselves identified the need for an association with objectives of:

"**Coordinating** regulatory matters…ideas, views and experiences on all aspects of regulation of the telecommunications sector throughout the Southern Africa region; **facilitating a** uniform level of understanding of regulatory matters; and **maximizing** the utilisation of scarce resources in specialist areas of telecommunications" (TRASA 1997).[7]

Although only formed in late 1997, TRASA has begun to make its presence felt as a body aimed at regional cooperation. At its Action Planning workshop, in April 1999, TRASA established a number of working groups tasked with developing regional perspectives on major regulatory issues such as human resource development and training, licensing, interconnection, and performance monitoring. All this is taking place with a view to enhancing the regional capacity to deal with the increasing globalisation of telecommunications.

TRASA meets its stated objectives of sharing expertise, experience and resources and does so in a manner that allows participants to either make the norms they discuss binding or not (Baldwin and Cave 1999). It has in the last seven years made model regulations on complex areas such as interconnection, numbering, and spectrum planning;[8] shared resources of consultants by focusing their energies on regional projects rather than individual country projects;[9] and secured training for the region,[10] thus fulfilling meeting its mandate and ensuring that the benefits that have been identified for regulatory competition are reaped. TRASA further addresses the concerns present in the SADC region which are in fact pre-requisites for coordination or collaboration, of cross-jurisdictional harms – lack of information about different regulators in the region, tendencies to delay regulation, and high costs for regulatees to comply with many differing regulations.

Although it may be criticised for having internal decision making which is not wholly transparent given the exclusion of operators and other interested third parties such as consumers from decision making of TRASA, on another level it provides increased transparency as a result of a

common standard of regulation being presented thus reducing the risk of regulatory capture at a national level since regulators are influenced additionally by their peers in decision making (Baldwin and Cave 1999). It has also therefore established itself with International Telecommunication Union (ITU) as a viable regional organisation representing regulators' views.

In addition to TRASA, both SATCC-TU and SATA have human resource development committees. That of SATCC-TU is comprised of both regulators and operators and meets regularly to plan collaborative training and development activities. With the differing development needs of the two main components, it is likely that the existing committee will evolve into separate fora. TRASA's HRD committee is actively pursuing the development of guidelines for regulators on people policies and practices; these guidelines will be debated at the upcoming TRASA annual general meeting, in Mauritius, in August 2004. If approved by the Annual General Meeting, the guidelines will be published for adoption by TRASA members. The guidelines are the result of two workshops designed to promote the role of human resource professionals in regulatory agencies, and were delivered with support from USAID and DFID.

Partnerships to Build Regulatory Capacity

There are two training institutions serving sections of the SADC telecommunications stakeholders. These are the Africa Region Advanced Level Telecommunications Institute (AFRALTI), and the ITU Centre of Excellence, both based in Nairobi, Kenya,. AFRALTI was originally founded with ITU support but is now self-supporting from country members' contributions. The Centre of Excellence was created specifically to support policy and regulatory capacity building. In addition to providing opportunities for individuals to satisfy their learning needs, the Centre of Excellence aims to bring together all stakeholders in the sector for regular exchanges of view, debate and discussion. They are able to play an instrumental role in complementing the work of TRASA in building capacity and developing its human resources.

CONCLUSION

The issue of capacity building in SADC has implications not just for the region, but more broadly for developing countries, hence the relevance of this study. In the regulatory area, the TRASA model has broadly been followed in creating the ICT regulators'

associations in West Africa (ECOWAS) and in the member states of COMESA – the Common market for eastern and Southern Africa. A Pan African ICT regulators' association, which encompasses the North African countries has been formed. This might usefully be extended to include collaboration with the countries of the Middle East. In the Middle East, the Arab ICT Regulators' Network recently held its first General assembly, in Jordan; this network has adopted some of the concepts promoted by TRASA. It is likely that opportunities for Africa-Middle East co-operation exist in the human resource development area – particularly in training and capacity-building – where many countries not normally considered to be Less Developed are, nevertheless, for the first time facing issues such as competition, regulation and fast-paced changes in technology-based services.

The only certainty about the future is that demand for telecommunications, and more broadly communications, services will continue to grow significantly. With the privatisation of a number of the operators in the region, changes in the ownership characteristics in the telecommunications sector have been and will continue to be evidenced – moving away from government "administration" to commercially-focused entrepreneurs. This may reflect the continuing commercial collaboration that is taking place in telecommunications globally; it may also affect the nature of co-operation between the telecommunications companies in the region.

As we have seen, the move towards privatization does not necessarily result in a 'shrinking of the state', but rather its reconfiguration with an increased role of regulation and thus independent regulatory agencies.   Thus there is no reason to assume that the capacity needs of the state will be reduced with regulatory reform and liberalisation. In order for regulation to be effective, a regulator has to demonstrate that it has the capacity to deal with often complex issues in the telecommunications sector. For regulators, the increasing convergence of telecommunications, Information Technology, and broadcasting media present a potential challenge. Convergence is likely to impact on the role and structure of existing regulators; this suggests rather than a diminishing challenge there will be an increasing capacity building challenge to be faced. If regulators are able to properly address their capacity building challenges, they will gain credibility since adequate capacity will be reflected in the regulatory

agency's decisions. Even in developed countries there exists a challenge of acquiring skill and expertise in regulatory agencies. SADC has chosen to use the above-mentioned institutional structures to address this challenge.

The changing environment presents a challenge for both operators and regulators. Hopefully, the most important outcome of all this cooperation will be significant increases in availability and quality of a wide range of telecommunications services at affordable prices, leading to economic growth and social cohesion. In order for such benefit to be accrued however, it is becoming increasingly clear that effective regulation and thus regulatory frameworks and institutions will have to be established. Through regional cooperation, in particular in the area of capacity building, this is possible.

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Notes

[1] Madagascar has indicated that it will join SADC in September 2004

[2] Seychelles has given notice of withdrawal from SADC during 2004

[3] The SADC organisation is supported by a number of specialist sector-specific units. The unit responsible, amongst other things, for telecommunications matters is the Southern Africa Transport & Communications Commission – Technical Unit (SATCC-TU), which is based in Gaborone, Botswana – having moved from Maputo, Mozambique, as part of SADC's rationalization for greater efficiency.

[4] From June 1995 to September 1999, SATCC-TU was supported by the Regional Telecommunications Restructuring Program (RTRP). RTRP was specifically focused on providing policy and regulatory assistance to the governments of SADC countries. It was managed by PricewaterhouseCoopers and funded by USAID. RTRP initially focused on supporting SATCCTU and Member States in the development of new sector policies. However, in recognition of the importance of effective telecommunications regulation in the growth in access, range and quality of services, the program's focus has shifted to much closer support of individual regulators through the TRASA organisation. The commitment to supporting TRASA has been delivered through the following:

- Executive Development Programs conducted for regulators in USA;

- Country-specific workshops for regulatory bodies – including Board Members and Commissioners;

- Provision of advisers for individual regulatory bodies – who can then share their expertise with other TRASA members;

- Provision of experienced industry experts to assist with development of specific regulatory guidelines; and,

- Assisting TRASA to develop a web-site.

[5] RTRP and successor programmes, including SIPRS, have supported the drafting of all these pieces of legislation.

[6] Our emphasis.

[7] Our emphasis.

[8] See www.trasa.org.bw for complete list of TRASA model regulations and guidelines which include those on interconnection, numbering, spectrum planning, fair-training and tariffs.

[9] Fair-trading guidelines, for example, were done by a single USAID consultant for TRASA, thus enabling all 11 active members to utilise them. Similarly, the South African Interconnection Guidelines were adopted as a 'model' by TRASA thus facilitating their adoption in other countries with reduced costs to regulators and investments in terms of time.

[10] See Annual Report, 2003 at www.trasa.org.bw . TRASA has received training from University of Witswatersrand's LINK Centre for example which facilitated regional tailored courses.