SATRN

WTO Negotiations in Telecommunications: How Should SADC Countries Respond?

James Hodge
University of Cape Town
November 2002

SATRN Working Paper No. 1

Economics Department
University of Cape Town
Private Bag Rondebosch 7700
Cape Town
South Africa

E-MAIL: jhodge@commerce.uct.ac.za

Table of Contents

LIST OF TABLES AND FIGURES

WTO NEGOTIATIONS IN TELECOMMUNICATIONS: HOW SHOULD SADC COUNTRIES RESPOND?[1]

JAMES HODGE

Telecommunications services are an important focus for most industrial countries in the current round of trade talks in services. Initial negotiating positions and country requests by these industrial countries all call for full liberalisation of the sector. SADC countries have already embarked on reform in telecommunications but few have made commitments in the WTO and almost none propose going as far as full liberalisation in the foreseeable future. Fortunately, merely by committing to the current and planned future liberalisation, SADC countries can improve their existing offers in this sector dramatically. However, in developing a negotiating position each country needs to consider whether they might have to or want to go further than merely committing to their autonomous liberalisation.

SADC countries might have to go further if their position is inadequate to satisfy demands placed on them in the negotiations or if they want other countries to open up beyond what they are currently doing. Telecommunications reform might also be used as an offering to compensate other countries for refusing to open up another sector adequately. SADC countries may also want to go further because it might be in their own economic interests to liberalise the sector faster but cannot do so because of internal opposition. Negotiations offer an opportunity to get compensatory market openings from other countries in this or other sectors - an opportunity that might not arise for another 10 years! These market openings can help compensate the losers of any additional reform and in so doing overcome political opposition.

Even if some SADC countries are unwilling to commit beyond their current reform programme in telecommunications, they will need to prepare an adequate defence of their policies in order to fend off demands. They may also want to make use of the special and differential treatment provisions for developing countries in order to either limit the extent of their commitments or use the negotiation process to assist in sector development.

This paper examines possible negotiating positions that SADC countries may want to take in telecommunications. It begins with an overview of how telecommunication services are covered in the GATS and how specific articles may influence telecoms policy. It then examines the current liberalisation path that is being followed in SADC countries, including the rationale for such a path. Understanding the rationale for the approach is crucial to looking at the potential offers for SADC countries because it articulates the development goals and special market considerations that

[1] Generous funding for this research was provided by SATRN

would form the basis for any articulation of special and differential treatment in the WTO. The current and planned future policy is also the basis for an immediate offer that would require no internal policy review. The paper then moves onto a brief assessment of the current policy regime in most SADC countries in telecommunications. This too is important for two reasons. First, if the policy is not effective then there is a basis for changing policy and therefore revising what one might commit to in the WTO. Second, if there is a decision to commit to more than the planned reform, then one needs to understand what might be the additional offers that are easiest to make and what the potential impact of such a move would be.

The paper then moves to specific WTO offers, requests and negotiating strategy. The current commitments by SADC countries are summarised and a maximum offer based on planned reform is converted into a GATS schedule. While most countries have very similar reform plans and hence a similar schedule, some countries do differ and so individual potential offers for each SADC country appear in the appendix. The paper then discusses various negotiating positions that countries might take.

1. AN OVERVIEW OF TELECOMMUNICATIONS IN THE GATS

Domestic policy development and regulation of the telecommunications sector by WTO member countries is now influenced by a number of components of the General Agreement of Trade in Services (GATS). These include the Framework Articles of the GATS, the Annex on Telecommunications and the Schedule of Specific Commitments (including the reference paper that constitutes an additional commitment). Some of these influence members regardless of whether they have made any specific commitments in the telecommunications sector, while others only become binding once specific commitments are made. In addition, the GATS has a built-in development agenda that can be invoked when making commitments to impose conditions on these commitments. This section outlines each of the various components of the GATS that are necessary to understand when deciding what commitments to make in the telecoms sector.

The framework articles of the GATS provide the general obligations and disciplines for signatories to the agreement. The GATS covers all service sectors and all four modes of supply through which those services may be

1.1 Framework Articles

traded. Most importantly, they provide a framework for the behaviour of regulators of the sector (whether a government department, a sector regulator or a competition agency).

1.1.1 General Obligations and Disciplines

1.1.1.1 Article II - Most-Favoured-Nation Treatment

This obligation applies to all services, whether scheduled as a specific commitment or not. The principle requires that a member may not discriminate amongst the services and service providers of all other member countries of the WTO. MFN obligations can be avoided if any favourable treatment is part of an existing economic integration agreement. The SADC FTA has recently decided to negotiate services and so it has adequate coverage to comply with the MFBN exemption. However, policy to date in all SADC countries has been to award licences to the best international and regional bidders rather than favouring firms from the region. Therefore, existing practice seems compliant with the MFN principle.

1.1.1.2 Article III - Transparency

The transparency obligation requires members to publish all relevant laws and regulations that impact on the services and modes of supply covered in the agreement. This obligation applies to all services, whether scheduled as a

specific commitment or not. Member states must also set up enquiry points for other members to request specific information on a law/regulation and must notify the Council for Trade in Services of new laws/regulation or changes to existing ones that impact substantially the sectors covered by commitments. The establishment of telecoms regulators in all SADC countries effectively ensures that contact points and information is available on telecoms regulation.

1.1.1.3 Article VI - Domestic Regulation

Article VI on domestic regulation only applies to sectors where specific commitments are made. The article requires that all regulations covering a committed sector should be applied in a reasonable, objective and impartial manner. There should also be scope for a review of administrative decisions affecting service trade in the sector that are also objective and impartial. If the procedures are found not to be objective and impartial, then appropriate remedies for administrative decisions need to be taken.

The article also requires that measures concerned with qualification requirements, technical standards and licensing requirements do not restrict the supply of services. To this end, the requirements should be based on objective and transparent criteria and be not more burdensome than necessary. The standards of relevant international organisations (in this case the International Telecommunications Union - ITU) will be taken into account when assessing the reasonableness of the licensing requirements. Further, licensing procedures should not be a restriction on the supply of services. Any applicant for a licence should be informed of the status of their application on request and be informed of the decision within a reasonable period of time.

This article is especially relevant to telecommunications where licensing of service providers is the norm and often done under the auspices of spectrum management. Member countries wishing to schedule telecommunications services should have in place administrative procedures that comply with this, but do not necessarily need an independent regulator to administer them. However, as it applies to committed sectors only, it does not act retrospectively and so licences already granted need not have complied with these requirements unless the sector was committed at the time. Where licences are limited by spectrum availability (e.g. mobile), then it could be the case that all licences are granted before this article is binding. In others where licences are essentially limitless (e.g. most value-added services like Internet service providers), then it is likely that at some point this article will be binding.

1.1.1.4 Article VIII - Monopolies and Exclusive Service Suppliers

This article applies to all services, regardless of specific commitments. It requires that the member country ensures that any monopoly service providers in their country do not violate the MFN principle or the scheduled commitments in their supply of a service. It goes further to require the member to ensure that the monopoly also does not abuse its monopoly position in

markets that it does not have a monopoly and which have scheduled commitments. The article also applies to suppliers where the member country limits suppliers and prevents competition amongst the limited suppliers. The Council for Trade in Services may require a member country to provide information on the operation of the monopoly if another member alleges that the monopoly is not complying with the article.

This article is particularly relevant to telecoms where monopolies are commonplace in developing countries. Compliance with the MFN principle is unlikely to be an issue because discrimination in supply, if it exists, is likely to be equal across all foreign companies. The other component of the article relates to anti-competitive behaviour in non-monopoly markets. It is often the case that value-added network services (VANS) are opened to competition while the monopoly in basic voice remains. The incumbent monopoly is in a powerful position to influence the competition in these VANS through ownership of the essential facility - the local loop (plus possibly the international gateway). This article then requires that a member country that schedules any VANS, has some form of check on potential abuses in place either through a competition agency, a regulator or the government ministry that oversees the sector (a competition agency is not required).

1.1.1.5 Article IX - Business Practices

This article applies to all service suppliers and merely requires that member countries are willing to engage in consultations with other member countries with a view to eliminating anti-competitive business practices that constrain trade in services. It does also require the member to provide information on the matter, subject to any domestic privacy considerations.

Again, this is especially relevant to the telecoms sector where oligopoly market structures are common once the monopoly has been removed, providing considerable scope for anti-competitive business practices given the influence of each player on the market. However, the article does not require resolution or a competition agency per se making it a relatively weak requirement.

1.1.1.6 Articles XIV & XIV bis - general exceptions and Security Exceptions

The general obligations ends with article XIV and XIV bis that handle general and security exceptions to fulfilling the agreement. A number of these exceptions are particularly relevant to telecommunications regulation.

- the prevention of deceptive and fraudulent practices - may include tapping of telephones
- the protection of the privacy of individuals - laws to protect the transfer of personal data
- those aimed at ensuring equitable taxes - the issue of taxing electronic commerce could fall within the scope of this clause

- supply of services for the military establishment - spectrum allocation and telecoms supply to the military.

1.1.1.7 Article XV - Subsidies

Members are required to enter negotiations to develop the necessary multilateral disciplines to ensure that subsidies are not trade-distorting. For telecommunications, subsidies tend to replace cross-subsidisation as a means of delivering on universal service. This article would not place any restrictions on this, but may require countries to engage with suppliers from other countries if the choice of how the subsidy was implemented tended to negatively affect the foreign suppliers.

1.1.2 Special Provisions for Developing Countries

Special provisions for developing countries have been integrated into a number of articles in the GATS agreement, but are also addressed specifically in Article IV - Increasing Participation of Developing Countries.

Article IV states that increasing participation of developing countries shall be facilitated through negotiated specific commitments. In particular, these commitments should allow for the strengthening of their domestic services capacity through technology access, improved access to distribution channels and information networks, and liberalisation of sectors of export interest to them. Developed economies must also assist facilitating the access to information about their markets by developing country service suppliers.

Other integrated provisions include:

- Article V - developing country economic integration agreements can have lower sectoral coverage and the extent to which they require the elimination of discrimination to qualify for MFN exemptions.
- Article XII - developing countries may invoke restrictions to safeguard balance of payments
- Article XV - negotiations on multilateral disciplines to avoid trade-distorting subsidies must recognise the role of subsidies in development programmes and their need for flexibility.
- Article XIX - progressive liberalisation must have flexibility for developing countries to open fewer sectors, liberalise fewer transactions, extending market access in line with their development situation and when making market access, be permitted to attach access conditions to foreign suppliers.

These special treatments for developing countries have not been effectively operationalised to date (UNCTAD 2000: 183) but offer many opportunities in the realm of telecoms. The exception is that developing countries have managed to keep the issue of reforming the settlement rate system off the GATS agenda that would impact negatively on their rollout of telecoms

infrastructure as well as their Balance of Payments (Cowhey and Klimenko 2001: 354)[2].

However, the provisions offer scope for much more. Members can make use of the provisions in article IV to demand the transfer of technology (through joint ventures), the training of local workforce, etc. The progressive liberalisation provision can be used to make reform contingent on achieving certain milestones relating to development goals or regulatory capacity. Of course the provisions allow for the flexibility in the agreement, but they may prove difficult to implement when dealing with the individual firms who have the option to invest or not. Further, most of the provisions only provide the opportunity for developing countries to negotiate for special treatment but do not grant any special treatment up-front. It is therefore up to the individual countries to articulate their development needs and negotiate effectively to get them recognised.

1.2 Annex on Telecommunications

The Annex on Telecommunications recognises that the telecoms sector is not only a source of negotiation itself, but also a vital vehicle for trading other services in the economy. As such, it was imperative to ensure that service providers that are users of the telecoms infrastructure are not denied access and use, and in so doing preventing them from providing services. So although it focuses on non-telecoms service suppliers, it does come into play in the telecoms sector itself if a scheduled commitment has already been made in the sector. This is a general principle and therefore applies to all signatories to the GATS and not just to those who have made specific commitments in the telecoms sector. The annex includes provisions for technical co-operation and the role of the ITU and ISO in determining international standards. However, the crucial aspect of the Annex is on transparency and access to the network:

1.2.1 Transparency

Information on conditions affecting access and use to the public telecoms networks is publicly available - including tariffs, conditions of service, specifications for technical interfaces, adoption of standards, attachment of terminal equipment, licensing requirements.

[2] The settlement rates issue essentially involves country's overcharging excessively foreign telecoms companies for the termination of incoming international calls. The revenues from settlement rates can comprise up to half the revenues of the telecoms provider in the developing countries and be a vital source of revenue to cross-subsidise local services. They also provide valuable foreign exchange for importing telecoms equipment. See Cowhey and Klimenko 2001 for a more complete discussion.

1.2.2 Access to and use of the Public network

Members must ensure that service suppliers (not just telecoms suppliers) must be given access and use on reasonable and non-discriminatory terms and conditions for supply of a scheduled service. These include:

- Suppliers must be permitted to attach terminal equipment to supply their service,
- interconnect their private circuits with the public
- use operating protocols of their choice
- use the network to move information within and across borders (especially intra-corporate information)

Conditions on use that are applied must fit the following test:

- to safeguard the public service responsibilities of the network providers
- to protect the technical integrity of the network
- to ensure service suppliers do not supply services that are not committed to by the member
- to ensure the security and confidentiality of messages.

Crucially, conditions that are permitted include restrictions on resale of the services, specified technical interfaces, and restrictions on interconnection of private leased circuits. Developing countries may also place reasonable conditions of access that they see as necessary to strengthen the domestic telecoms infrastructure and service capacity and to increase its participation in international service trade.

1.3 Schedule of Specific Commitments

Aside from the general principles that signatories to the GATS must all comply, each member state can list specific commitments in the telecoms sector. This is naturally influenced by the progressive liberalisation conditions, so commitments must expand with successive rounds of negotiations. By the end of the extended negotiations in February 1997, 69 countries had made some commitments in the telecommunications sector[3]. That figure now stands at 80.

1.3.1 Coverage of Negotiations

The coverage of the GATS includes all telecommunications services, with the exception of broadcasting services. In the negotiations, telecommunications

[3] Negotiations were extended beyond the Uruguay Round and were originally poised to end in April 1996. By April 1996, there were 53 countries participating in the Group on Basic Telecommunications of which 48 had made offers. A further one month period in February 1997 was open to governments to improve their offers before the protocol was accepted. More countries used this opportunity to improve their offers or include an offer.

were typically divided into basic telecommunications and value-added services. Countries must make commitments in all four modes of supply and on the basis of market access and national treatment considerations. The modes of supply are cross-border (mode 1), consumption abroad (mode 2), commercial presence (mode 3) and presence of natural persons (mode 4). Basic telecommunications are provided through modes 1 and 3, but mode 4 is a consideration for the intracorporate transfer of personnel.

Market access restrictions in the GATS (article XVI) includes limitations on the number of services suppliers, quotas on the value/number of service transactions, measures that restrict the specific types of legal entity or joint venture though which a supplier may operate, and limitations on the participation of foreign capital. Coming from a position of monopoly in most countries, clearly market access issues are central in telecommunications. On national treatment (article XVII), the GATS lists any measures that give foreign suppliers treatment less favourable than domestic suppliers. Apart from accounting rates, this is rarely an issue in telecommunications as country's invariably open up to all competitors once they open up the market. Members can also negotiate additional commitments (article XVIII) not covered under market access or national treatment concerns, including standards, qualifications and licensing. This has been done in telecommunications with the development of the reference paper (see below).

1.3.1.1 Accounting/Settlement Rates

Historically, the division of revenues for international traffic has been governed by accounting rates. The Accounting rate is a negotiated wholesale price for the cost of end-to-end facilities usage for an international call. This differs from the collection charge, which is the retail price per minute charged to the final consumer. The settlement rate is the amount paid by the originating carrier to the terminating carrier for terminating the call. The settlement rate has usually been set at 50% of the accounting rate. Payment between carriers is determined by the net flow of traffic times the settlement rate.

The accounting rate system worked well as long as traffic was balanced (which meant it did not impact on retail prices) and in a system of national monopolies. Developing countries deliberately inflated accounting rates in order to cross-subsidise local calls and network rollout. For instance, in 1995 net settlement payments accounted for 68.3% of telecom revenue for Nicaragua (ITU 1996). They also provide valuable foreign exchange for importing telecoms equipment (Cowhey and Klimenko 2001). The second problem with accounting rates is that they are often discriminatory amongst countries.

Pressure to reform the system has come from the US in particular, due to changes in their market structure and a growing imbalance in traffic. The latter meant that the US was paid $5.8b in settlement payments to other countries in 1996, since reducing to $4bn in 2000. Given that there are more winners than losers form the accounting rate problem, it has been very difficult to generate multilateral agreement to change the system. In fact, it was agreed

as part of the Group on Telecommunications in the WTO that the accounting rate system was not to form part of the negotiations and 'termination services' were excluded. Part of the rationale is that these rates were not regulated by governments but negotiated between carriers. This moratorium on accounting rates meant that members could not be taken to the dispute resolution mechanism over discriminatory accounting rates nor on the basis that these rates were not transparent. The 'Understanding on Accounting Rates' was up for review in 2000, when service negotiations were due to start. As this was not covered by negotiations, it was also deemed unnecessary for countries to list discriminatory accounting rates as a MFN exemption when making commitments. The alternative body for pushing multilateral reform is the ITU, but this is a consensus body and so the same problems are faced in trying to get agreements.

However, subsequent to the Group on Basic Telecommunications negotiations, the USA took unilateral action to try and force accounting rates down for connection to the US. The Notice of Proposed Rulemaking (NPRM) on settlements rate by the Federal Communications Council (FCC) in 1996, proposed putting a cap on accounting rates paid by US carriers in order to reduce these rates towards cost. This was to be phased in by 2002 with the price cap varying by income group status of the country[4]. This action was intended to force multilateral change and succeeded in getting the ITU to put forward a counter proposal whereby countries would get settlement rate targets according to their teledensity to be phased in by 2001 (2004 for LDCs)[5]. The target rates are revised annually to the level of the average of the lowest 20% of settlement rates for each teledensity group. Small island states and LDCs also get special treatment. Of course these are target rates and a wide variation still remains. The ITU as an institution has no means to offer dispute resolution and so compliance cannot be enforced. However, realising the accounting rate system needed to be overhauled in general, Study Group 3 in the ITU approved on three new procedures for remunerating carriers for terminating international traffic. (ITU-T Recommendation D-150). These include a termination charge (single charge that is applied in a non-discriminatory manner), a settlement procedure (one that is cost-orientated and permitted to be asymmetric), and a commercial agreement.

As a result of the initiative within the ITU, there has been no pressure within the WTO GBT to revisit the 'Understanding on Accounting Rates" and so the moratorium remains in place. Only Australia seems to be pushing for the settlement rates to be included in the negotiations in order to force transparency and non-discrimination[6]. The US perspective is that liberalisation

[4] Maximum settlement rates of $0.15 for high income countries by 1998, $0.19 for upper middle income and low-middle income countries by 1999 and 2000 respectively, and $0.23 for low income countries by 2001 (2002 for those with a teledensity of less than 1).

[5] This is contained within the ITU-T Recommendations D-140. The initial targets set were $0.45 for a teledensity less than 1, $0.35 for teledensity between 1 and 5, $0.29 for teledensity between 5 and 10, $0.23 for teledensity between 10 and 20, $0.16 for teledensity between 20 and 35, $0.12 for teledensity between 35 and 50, and $0.065 for teledensity above 50.

[6] See minutes of the Council for Trade in Services in WTO documents S/C/M/51 to 53.

will cause the collapse of the accounting rate system (WTO S/C/M /52 2001). Already a significant amount of international traffic is by-passing the accounting rate system through moving traffic over leased lines (where a fixed fee is charged) or data networks (where other settlement systems operate like sender-keeps-all) (ITU1996).

1.3.2 Telecoms Service Categories

1.3.2.1 Basic Telecommunications

GATS defined basic telecommunications as including all telecommunication services, both public and private, that involve end-to-end transmission of customer supplied information Examples of basic telecommunication services include:

(a) Voice telephone services
(b) Packet-switched data transmission services
(c) Circuit-switched data transmission services
(d) Telex services
(e) Telegraph services
(f) Facsimile services
(g) Private leased circuit services
(o) Other

- Analog/digital cellular/mobile telephone services
- Mobile data services
- Paging
- Personal communications services
- Satellite-based mobile services (incl. e.g. telephony, data, paging, and/or PCS)
- Fixed satellite services
- VSAT services
- Gateway earthstation services
- Teleconferencing
- Video transport
- Trunked radio system services

The categories covered by basic telecommunications commitments include (unless otherwise specified):

- Local, long distance and international
- wire-based (including, e.g. all types of cables and, usually, radio portions of fixed infrastructure) and radio-based (all forms of wireless, including satellite)
- on a resale basis (non-facilities based supply) and facilities-based supply

- for public use (i.e., services that must be made available to the public generally) or for non-public use (e.g. services provided for sale to closed user groups)

1.3.2.2 Value-added Services

The GATS defines value-added telecommunication services as "telecommunications for which suppliers “add value” to the customer's information by enhancing its form or content or by providing for its storage and retrieval" (WTO). Examples include:

(h)mail
(i) voice mail
(j) on-line data base storage and retrieval
(k) electronic data interchange
(l) enhanced/value-added facsimile services
(m) code and protocol conversion
(n) on-line information and/or data processing

1.3.2.3 A note on Scheduling the Telecoms sectors

Unless otherwise stated, any basic telecom service listed in a sector column encompasses local, long-distance and international for public and non-public use; may be provided on a facilities-basis or resale; and may be provided through any means of technology (e.g. any type of cable, wireless or satellites). As such it is not necessary to list mobile cellular as a separate sector but this is common practice to avoid confusion.

Spectrum/frequency management is not a measure that needs to be listed under market access restrictions[7]. Article VI also gives members rights to exercise spectrum management as long as it is done according to the principles of article VI. It is also covered in part 6 of the reference paper on telecoms (see below).

1.4 Telecoms Reference Paper

The Negotiating Group on Basic Telecommunications developed the reference paper as an additional commitment - i.e something that a country's could commit to in addition to the schedule of specific commitments and the general framework. There was a realisation that the promise of free trade in the scheduling of specific commitments can be easily undermined through anti-competitive practices by owners of essential facilities and dominant firms (which are common in telecoms), or the way the industry is regulated (licensing conditions & processes, price regulation of interconnection,

[7] Note from the Chair of the Group on Basic Telecommunication (WTO S/GBT/W/3 Feb 1997)

universal service obligations) (Clowhey and Klimenko 2001). Although these are tackled under the general obligations and disciplines in the GATS, these provisions are relatively weak and usually constrain countries to an engagement process and nothing more. This has value in itself as it establishes the political right to negotiate with the country and resolve disputes before they reach the WTO dispute resolution stage (Cowhey and Klimenko 2001). The reference paper puts down firmer rules and understanding about how competition should be fairly governed in the telecoms sector. It focuses on regulatory principles rather than specific regulations to allow differences in regulatory regimes (Tuthill 1997). It only applies to those member countries that commit to it, and countries are able to commit in part only. The reference paper has been adopted by 63 of the 69 governments submitting schedules in the telecoms sector. Of these 63, 57 subscribed to the complete document or with a few changes.

The reference paper covers key regulatory and competition principles governing 6 areas of concern in telecommunications[8]:

1.4.1 Competitive safeguards

It requires that appropriate measures are maintained to prevent major suppliers from engaging in anti-competitive practices, including cross-subsidisation, using information from competitors with anti-competitive results, not making technical information on essential facilities and other relevant information in a timely way that prevents them from providing a service.

This extends the general obligation by requiring countries to act against anti-competitive practices and having a suitable institution to monitor competition in the sector. It also extends the focus to dominant firms and not just monopolies.

1.4.2 Interconnection

Interconnection with a major supplier must be ensured at any technically feasible point in the network under non-discriminatory terms, rates, conditions and quality that are no less favourable than to itself. It must also be supplied in a timely fashion on conditions and cost-orientated rates that are transparent and are sufficiently unbundled. It must also permit additional interconnection at points in the network subject to reasonable cost charges. The procedures for interconnection to a major supplier and the agreements are made publicly available. Interconnection disputes will be resolved by an independent regulator within a reasonable period of time.

The reasonableness criteria (be it cost or waiting period) is likely to be constrained by international best practice and so substantial deviations from these are likely to be contested (Cowhey and Klimenko 2001). This is the most prescriptive component and the one that some signatories to the

[8] The full text of the reference paper appears in the appendices of this paper.

reference paper have excluded. It clearly builds on the weaker principles contained in the Annex on Telecommunications that interconnection can occur and not the reasonableness of that interconnection price and conditions.

1.4.3 Universal Service

Members can define whatever kind of universal service obligation as long as they are not anti-competitive. This requires that they are administered in a transparent, non-discriminatory and competitively neutral manner and are not too burdensome.

Given that 'not too burdensome' is left open to own interpretation, there is the possibility for a dispute to arise over this issue.

1.4.4 Public availability of licensing criteria

Where a licence is required, the licensing criteria and the time required to reach a decision must be made publicly available along with all terms and conditions of licenses. A reason for the denial of a licence must be made available on request.

This improves on the general principle through making the criteria for licences and the time publicly available, and not just impartial. However, it does not restrict the choice of criteria as long as they comply with the general obligations.

1.4.5 Independent regulators

The regulator is separate from and not accountable to any supplier of a basic telecoms services, and its decisions and procedures are impartial with respect to all market participants.

This provision strengthens the general obligation by stipulating the separation of regulatory from market participant. But it still does not require that the regulator be independent of government and leaves open the question of whether the regulator is independent of the operator if the government continues to hold a stake in the operator and has influence over the regulator. It also fails to prescribe the issues over which the independent regulator should preside.

1.4.6 Allocation and use of scarce resources

Procedures for allocation and use of scarce resources in telecoms (frequencies, numbers, rights of way) must be carried out in an objective, timely, transparent and non-discriminatory manner. Current state of allocated frequency bands must be made publicly available.

Still no requirement to change the current allocation of frequencies once the agreement is signed which may suggest that countries wanting to influence

this outcome should first allocate frequencies and then commit to the reference paper. However, countries who lag behind in the process of liberalisation and commit to the reference paper will be constrained in their procedures for allocating frequencies.

2. TELECOMMUNICATIONS POLICY AND REFORM IN SADC

In recent years most Southern African countries have embarked on a process of unilateral reform of their infrastructure service sectors. This represents a significant shift in economic policy by the governments of the region and one that has been difficult to sustain politically. While the pace of reform and selection of sectors has varied slightly between countries, there is a remarkable similarity in the way the reform has been approached by the region. All have adopted a cautious 'managed liberalisation' strategy that sees reform proceed slowly. This is partly a result of strong political opposition, but also because countries see this strategy as the best suited to serving their development needs and catering for their unique market characteristics.

The list of objectives that most countries in Southern Africa put forward for engaging in infrastructure reform include improving efficiency, reducing debt,

2.1 The Objectives and Constraints on Reform

financing investment, improving delivery to the poor and expanding domestic private sector participation. These objectives are not always consistent with one another and trade-offs sometimes need to be made. What concerns us is the relative weighting that each objective is given in developing a reform strategy. While SADC countries may have also prioritised different objectives, the gradual managed liberalisation approach seems consistent with a number of objectives and therefore is the dominant strategy in the region.

In wealthy countries, the absence of crippling debt levels and almost universal access to these infrastructure services means that there is a growing political consensus around the efficiency objective being the primary objective almost by default[9]. In contrast, it appears that in Southern Africa, like many developing regions, the efficiency goal is given less weight than the other objectives. Its importance is really determined by the extent to which it is consistent with the other objectives and the development agenda. The objectives, market characteristics and political pressures that are driving the strategy choice are debt reduction, improving the capacity of the PSTN, improving levels of investment, building regulatory capacity, building local expertise and entrepreneurs, coping with the uncertainty and control of development, and dealing with political and firm opposition.

2.1.1 Debt reduction

One of the more prominent goals in Southern Africa appears to have been that of reducing government debt. The reason is that much of the unilateral

[9] For instance, Norway decided to grant low licence fees for the 3G licences because it felt that it had sufficient government revenues.

reform of infrastructure service sectors in Southern Africa has its roots in IMF structural adjustment policies where the primary objective was to reduce the debt of the country. An obvious target for achieving this was to reduce the drain on the fiscus from loss-making public utilities and generate revenue form the sale of state assets. Clearly debt reduction is an important development objective for a highly indebted country and might be a more important short-term objective than efficiency[10]. This is because the state's ability to fulfil its social objectives is severely constrained if most of the budget goes into debt repayment. Also, as is the case with goods trade, the revenue implications of liberalisation take on greater significance when there are limited sources of government revenue because of small formal sectors and weak tax collection systems. Even those countries that did not reach crisis levels of indebtedness recognised the importance of using infrastructure reform to improve their fiscal position. The relative importance of debt reduction and efficiency in the balance of competing objectives is best illustrated by the South African government's vision statement on the restructuring of sate-owned enterprises (RSA 2000). While it concludes that "the promotion of competition and competitive markets should be an integral element of any restructuring strategy", it argues that "government should maximise the optimal return to the shareholder (fiscus), whether through the proceeds from equity sales, dividends and/or tax returns" (RSA 2000:46).

The general implication of trying to maximise state revenue for infrastructure reform has been to slow down the pace of such reform. These assets have more value to a buyer in a less competitive market and so the state has used its role as rule-maker to limit competition to boost state asset values. This has been particularly true of telecommunications where the Internet revolution in the early 1990s meant that the value of infrastructure assets were greatly increased due to the rapid growth in data traffic. Almost without exception, Southern African countries have granted exclusivity periods then sold a large equity stake. Even when introducing competition in the sector after the exclusivity period, the preference has been for limited entry. Wallsten (2000) is critical of the use of exclusivity periods but still finds that they double the price of the asset - a good result if that is the objective. The deliberate limitations placed on competition clearly may be seen in conflict with the goal of maximising the efficiency of the sector. However, it is consistent with some of the other objectives of infrastructure service reform and the perceived problems of liberalisation in countries with very small markets, strong distributional demands and high levels of poverty.

It is important to remember that the state may not see the immediate delivery of a particular service as an priority relative to other needs. Therefore using the sector to raise revenues for alternative uses in the short term before adopting efficiency-enhancing reforms later may be the best strategy. For instance, it is not necessarily apparent why telecoms delivery should be

[10] The recent ITU World Telecommunication Development Report also acknowledges that for many countries "the need to reduce government debt is equally compelling" (ITU 2002: 42)

prioritised against other valuable uses of public funds like education and healthcare.

2.1.2 Improving the capacity of the incumbent

There is a strong incentive for governments to ensure the survival and financial health of the incumbent PSTN because it is the provider of 'universal access'. The collapse of the incumbent would entail a collapse of services to the poor if new entrants focused on the long-distance and business markets. Of course, this role as the provider of universal service also gives the incumbent particular negotiating power with government over the reform programme - something they have been quick to use.

Because SADC incumbent operators have been so inefficient and lack technical capacity, they are particularly threatened by entry of a new efficient operator from abroad. The gradual liberalisation programme is designed to give them time to adjust to a potentially competitive environment and survive. Much of the design of reform is also geared to protecting their revenues from operators in other parts of the communications market - mobile operators and value-added services. Strategic equity partners are then introduced to accelerate the process and provide financial resources to engage in upgrading competitiveness. Clearly, in the case of mobile there was no existing operator and no universal access goal leaving the government with no clear incentive to protect on this reasoning. In value-added services there is a similar scenario to mobile but with the occasional exception that the incumbent was sometimes involved already.

2.1.3 Improving levels of investment

Another important objective is raising the level of investment in these sectors, in part to roll out services to the poor but also to improve service of business. Wallsten (2000) warns that exclusivity periods seem to result in lower levels of investment. This is rationalised on the basis that monopolies maximise profits from restricting output so have no incentive to invest to expand output. However, the study does not address the issue of how limiting entry to a few players rather than a single monopolist impacts on investment levels, nor whether restricted entry combined with investment targets overcomes this problem. Southern African countries fear that unless the market returns are sweetened for potential investors, that there will be little interest in what are incredibly small markets with high political risk. This very small market size in terms of population and purchasing power is what sets Southern Africa apart from all other developing regions. Governments use exclusivity periods and then the subsequent granting of a period of no new entry after the introduction of each new competitor as a way of improving the returns for potential investors. The potential disincentive for large investment is then dealt with through the imposition of investment and rollout targets that are then subject to penalties if they are not achieved. In markets such as mobile telephony where there are no existing state assets to sell, the rationale of limiting entry to maximise investment has been the most important driver of policy. This strategy is articulated by Telecommunications Regulators Association of

Southern Africa (TRASA) in their model telecommunications policy. They argue that an initial exclusivity period followed by the introduction of one more competitor is preferred because "the industry must be made more attractive to investors" (TRASA Model Policy On Telecommunications 1998).

2.1.4 Building regulatory capacity

It is apparent from theory and experience, than the weaker the regulation of these markets, the greater the gains to the firms at the expense of consumers. Given that investors are mostly foreign companies that are not an important political constituency, governments may wish to exercise more control over the process until they have established a regulator and built its capacity. This is an important rationale put forward by TRASA for exclusivity periods - "some time could be required by the existing institutions (e.g. newly established regulators) and operators to adjust to new market conditions" (TRASA Model Policy On Telecommunications 1998).

2.1.5 Building Domestic Expertise and Entrepreneurship

The selling off of state assets is an opportune time to build local entrepreneurs in the telecoms sector. However, given that local entrepreneurs will not have the capital and expertise to win licences on open tender, most SADC countries have imposed foreign ownership limitations and forced foreign investors to go into a joint venture with a domestic partner. Only South Africa specifies additional criteria - that the partner must also be a black economic empowerment partner. The rationale may be interpreted as using the state's regulatory powers to create money-making opportunities for political allies, or as a genuine attempt to build local capital and technical expertise. Either way, it is a foundation for much off the policy in the region. The exception is generally the poorer countries that do not have sufficient domestic capital to undertake such large investments. Even for the wealthier countries in the region these investments are large for domestic owners of capital. As such, there is a preference for gradual liberalisation because it does not place excessive demands on scarce local capital and entrepreneurs at one time and crowd out demands for local partnerships in other sectors of the economy.

2.1.6 Uncertainty and Control

A cautious managed liberalisation approach is also consistent with the uncertainty over the outcomes. The liberalisation of infrastructure markets that involve considerable sunk investments is an irreversible reform unless a country is willing to risk damaging its reputation with investors. As such, any uncertainty over the impact of that reform in terms of fulfilling development goals or the fortunes of key political groups is likely to be met by a degree of caution. This will result in countries pursuing a gradual liberalisation approach and sometimes adopting reversible reform strategies like using management contracts rather than equity stakes. It is evident that Southern African countries have also moved faster where the gains of liberalisation seem most apparent - in particular in telecommunications.

Finally, a concern around liberalisation amongst many Southern African countries is that it will lead to the loss of control over the development process. This is evident in much of the opposition to liberalisation in infrastructure services where it is usually argued that private firms have no incentive to fulfil development goals. If the state feels unable to pursue development goals through the regulation of that industry because of either the weakness of the regulator or the path of liberalisation it is forced to follow, then it is less likely to engage in the reform. Doing so while distribution and poverty alleviation remain top of the political agenda might be tantamount to political suicide.

2.1.7 Political Influences

The managed liberalisation approach is also consistent with the influence of strong interest groups. The key groups of incumbent firms and investors, trade unions and consumers may all have reason to delay reform, while private downstream businesses would be the key constituency pushing reform.

The small unattractive markets in Southern Africa give potential investors or incumbent firm's considerable bargaining power in negotiating reform with government. The incumbent fixed line operator has the additional political leverage of being the provider of universal access, making government weary of imposing a reform that may damage its commercial viability. Many of the finer details surrounding the shape of entry and subsequent reform are negotiated with investors and the incumbent. The result may run contrary to intended government direction. For instance, in South Africa a threat from the strategy equity partner to sell its shares at the time of the proposed initial public offering (IPO) managed to bring about a change in reform from introducing two to only introducing one new entrant.

Trade unions also oppose rapid liberalisation because of these are usually associated with job losses. It is often argued that the improvement in efficiency and drop in prices as a result of liberalisation might offset these losses through gains in downstream industries. However, these gains are not easily visible (like retrenchments at state-owned enterprises) and may also not go to those workers that do lose their jobs.

Finally, consumers are concerned about the rebalancing of tariffs that accompany liberalisation in telecommunications. In particular, this is a concern of the poor who may be hardest hit when access fees and local prices are increased to compensate for reductions in long-distance rates. Although many consumers may stand to gain from the liberalisation, uncertainty over whether they individually will gain may cause the consumer to oppose reform.

Although private businesses invariably support liberalisation of telecommunications because they stand to gain most, the formal private sector in many of the SADC countries is particularly small and so does not represent a strong force for change. In this instance, multinationals that are

2.2 The Managed Liberalisation Strategy

intense users of international telecommunications may take the lead in pressuring for reform directly or through their governments.

The 'managed liberalisation' approach has been articulated in the TRASA model telecommunications policy and is the core approach in the region (with some variation).The 'managed liberalisation' approach in the fixed line sector has generally involved the following reform path:

- *Corporatisation* - the incumbent monopoly is separated from the Ministry

- *Exclusivity Period* - Granting of an exclusivity period during which a foreign equity partner is found to inject capital and technical know-how while the incumbent prepares itself for competition. During this period rates are also rebalanced to reflect those that would emerge in a contestable market. During this period, revenues from voice traffic are protected by forcing mobile and VANS operators to lease all long-distance facilities from the incumbent and outlawing the use of Voice-Over-Internet-Protocol (VOIP). Resale is also generally prohibited to protect revenues. In most cases the incumbent is also given specific rollout targets to put in exchange infrastructure in poor areas. The understanding is that this would not occur in a competitive market and so should be rolled out first.

- *Second national operator* - introduction of a single new operator to compete on a facilities-basis only. The second national operator (SNO) would have a period within which no new competition and would have rollout targets around universal access imposed on it. In most cases, the SNO will have to have to comprise of a local partner too.

- *Resale competition* - resale competition is then allowed as it does not threaten the basic revenues of the operators but does impose some price restrictions.

- *Additional facilities-based competition* - the introduction of additional facilities-based licences is then considered based on whether the market is sufficiently large to take additional operators. As no country in SADC has reached this point yet, it is unclear how they might approach this phase of liberalisation.

In mobile, the standard approach has been to begin with one or two licences only because it was originally felt that this was a small luxury market in SADC and so economies of scale would suggest only a few players are viable. Some of the smaller countries (in GDP terms) therefore began with one operator and the larger countries with two. As the market has grown substantially, there has been an incentive to introduce new operators. However, given the strong position of the incumbents, many countries have chosen to adopt an approach that sees one operator introduced at a time that is then shielded from additional entry while it establishes itself. As with fixed line, a domestic partner is a common requirement for holding a licence.

In value-added services the approach has generally been to open up the sector to competition. Given that the service providers would be leasing network capacity from the incumbent, there are few economies of scale and loss of revenue to the incumbent to rationalise the limiting of competition. They are also a key focus for business needs and liberalisation is one means of appeasing the pro-competition lobby. Licensing has generally occurred to ensure contribution to any universal service fund. Domestic partner restrictions have generally not been applied in the case of VANS because of the scope for a proliferation of operators.

2.3 Where are the SADC Countries currently in the reform process?

2.3.1 Fixed line Basic Telecommunications

Table 1 examines the fixed line component of the market. All countries have corporatised their national operators but a number of countries have not managed to get much further down the reform path. All plan reforms in the next three years that will fall within the negotiating timetable of the Doha Round.

Half the countries under review have not partially privatised the national operator. Of these, Malawi and Zambia have immediate plans to do so, while Botswana and Namibia do not. Namibia has the most ambitious reform plans for the next few years with the planned introduction of full competition in 2004. Legislation is still to be finalised and so the extent of reform that emerges in the end may differ to initial plans. All other countries bar Zambia have began exclusivity periods that will see a second national operator being licenced at the end of the exclusivity period. The laggards in this group are Lesotho and Malawi, with four and five years left to go on this exclusivity period respectively. However, Malawi has permitted local operator licences that have a limited geographic coverage of one district. South Africa is at the most advanced stage in this process with an SNO likely to be in place by May 2003. Only Namibia plans full competition in the near future. Currently it is not clear what foreign ownership restrictions may be placed on the SNO, but if South Africa is an indication then local partnerships will be required.

In terms of voice resale competition, only Tanzania has opened up thus far with Botswana permitting domestic resale only. All countries expressly prohibit VOIP except for Zambia and South Africa that have opened the door for rural use only to enable growth in access in these areas. Mobile and VANS operators are also forced to lease network from the incumbent for international and domestic long-distance traffic routing. The only exceptions here are in the VANS sector in Tanzania and Zambia, while Botswana allows domestic networks only in the VANS sector.

Table 1: Current and Proposed Future Telecoms Policy in Fixed Line in SADC

	FACILITIES COMPETITION	PRIVATIS-ATION	VOICE RESALE COMPETITION	VOIP ALLOWED	REFORM YEAR	REFORM PLAN
Botswana	No	0%	Domestic only	No	2004	SNO, privatise partially
Lesotho	No	30%	No	No	2006	Not set
Malawi	Local only	0%	No	No	2002/3	privatise partially, SNO in 2008
Mauritius	No	40%	No	No	2004	SNO
Namibia	No	0%	No	No	2004	Full competition
South Africa	No	30%	No	Rural only	2002	SNO
Tanzania	No*	35%	Yes	No	2004	SNO
Zambia	No	0%	No	Rural only	2002	privatise partially, date not set for competition

*Facilities competition exists on Zanzibar
Source: SATRN Review of SADC Telecoms (2002)

2.3.2 Mobile telecommunications

Table 2 examines the mobile telephony sector. All SADC countries have licenced mobile operators and all except Namibia and Lesotho have some limited competition in the sector. Although spectrum limitations and market size offer a reason why number of competitors tend to be limited in this sub-sector, it is only Tanzania and Zambia that have no non-spectrum reasons for limiting competition and have probably reached the threshold for number of viable operators. Tanzania has a fully liberalised market and does not even place foreign ownership restrictions on operators. Lesotho and Malawi are the only other countries that have not placed ownership restrictions suggesting that the poorer countries in the region do not have the depth of local capital markets to impose such limitations. Zambia, the only other country in the review group with a GDP per capita less than $500, has imposed domestic partner requirements but set the bar at a high level - 60% - as opposed to the standard 49% for the other countries in the region. Reform plans in the next three years all focus on reviewing the introduction of a new operator and not a review of foreign ownership restrictions. The only exclusions are Tanzania and Zambia (which are already open to competition) and Lesotho and Malawi.

Table 2: Current and Proposed Future Telecoms Policy in Mobile in SADC

	NO. OF OPERATORS	LIMITATIONS ON THE NUMBER OF OPERATORS	FOREIGN OWNERSHIP RESTRICTIONS	REFORM PLANS	POSSIBLE REFORM DATES
Botswana	2	Yes	49%	new operator	review 2003
Lesotho	1	Yes	None	none	
Malawi	3	Yes	None	none	
Mauritius	2	Yes	Yes	new operator	review 2004
Namibia	1	Yes	49%	new operator	review 2002
South Africa	3	Yes	49%	new operator	review 2005

Tanzania	5	No	None	none	
Zambia	4	No	60%	none	

Source: SATRN Review of SADC Telecoms (2002)

2.3.3 Value-added services

Table 3 examines the state-of-play and proposed reform in Internet services - a key part of the value-added services sector and representative of general policy towards value-added services in these countries. The general picture is one of a relatively liberalised sector where the only restrictions in place are attempts to protect the fixed line monopoly of the national operator. Therefore, as noted above, VOIP is prohibited except for rural use in South Africa and Zambia and all but three countries prevent the ISPs from building their own networks. South Africa and Zambia have opened the door to restricted use of VOIP in rural areas to bring down the cost of communications in these low-teledensity areas. Tanzania and Zambia place no restrictions on ISPs building their own networks while Botswana permits this for domestic traffic only.

Table 3: Current and Proposed Future Telecoms Policy in Internet services in SADC

	NO. OF OPERATORS	RESTRICTIONS ON FOREIGN OWNERSHIP	LICENCE REQUIRED	BUILD OWN NETWORKS
Botswana	11	None	Yes	Domestic only
Lesotho	4	None	Yes	No
Malawi	7	None	Yes	No
Mauritius	2	None	Yes	No
Namibia	7	None	No	No
South Africa	>100	None	Yes	No
Tanzania	30	None	Yes	Yes
Zambia	5	None	Yes	Yes

Source: SATRN Review of SADC Telecoms (2002)

2.3.4 Regulatory Oversight

The establishment of an independent regulator is a core part of the Reference Paper on Telecommunications within the GATS and so it is important to determine whether the SADC countries comply or not.

All the SADC countries under review have a telecoms regulator in place already. All but Namibia claim that these are independent of political power, and all are independent of the operators. As independence from the operator is the only requirement of the Telecoms Reference Paper, all countries currently comply. Of course, independence is a term that is loosely used. All regulators are agents of government and so are strictly not independent. Also, one may argue that because the governments of the region continue to hold equity stakes in the national operators, the regulator is not independent of the dominant operator too. Government does make policy, and the regulators implement that policy. The real question is whether the regulators are autonomous in their decision-making and therefore free from political interference at that level. All countries claim their regulators are autonomous in their decision-making.

Analysts have examined ministerial control over appointment and the budget as an indicator of the degree to which the regulator is likely to be responsive to political pressure. The first opportunity for the Minister to influence proceedings is through the appointment of sympathetic councillors. However, given that the regulator is not an elected agency, it must be appointed by the President, Minister or parliament. Additional independence is gained if the executive fulfils one role and legislative branch another. For instance, if parliament nominate and the executive approves or vice-versa. In SADC, regulator members are all appointed by the Minister or President, for terms less than 5 years (the political cycle).

An additional avenue for Ministerial intervention is if the minister sets remuneration and if they can remove a member from office without an incompetence or misconduct reason. For those countries with information, only in Botswana and Zambia can the Minister remove regulators, but in Zambia it is limited to the executive officer only. In all countries except Malawi is the remuneration determined by the Minister. Finally, budgetary control is another means to take political control of the regulator. Only in South Africa and Namibia is parliamentary appropriation the only form of funding for the regulator, all other countries have independent sources of income.

Table 4: Institutional Features of the SADC Telecoms Regulators

	AUTONOMOUS IN DECISION-MAKING	APPOINT-MENT OF MEMBERS	CAN MINISTER REMOVE A MEMBER	DOES MINISTER DETERMINE REMUNERATION	MEMBER TERM	BUDGET APPROVAL	BUDGET FINANCING
Botswana	Yes	Minister	Yes	Yes	4	Board	Licence fees 78%, spectrum fees 22%
Lesotho	Yes	Minister				Minister	Licence and other fees 100%
Malawi	Yes	President	No	No	4	Board	Licence fees 64%, spectrum fees 36%
Mauritius	Yes	President/ minister	No	Yes	3	Board	Licence and other fees 100%
Namibia	Yes	Minister			5	Minister	Government appropriation 100%
South Africa	Yes	President	No	Yes	2-5	Minister	Parliamentary appropriation 100%
Tanzania	Yes	President			3	Minister	Licence fees 70%, spectrum fees 28%, numbering fees 2%
Zambia	Yes	Minister	Head only	Yes	3-4	Board	

Source: Legislative acts for each country, ITU, SATRN research

2.3.4.1 Interconnection

Table 5 examines the interconnection policy in SADC countries. Of importance for compliance with the Reference Paper is ensuring interconnection with a major supplier on non-discriminatory terms and at reasonable cost-orientated rates, that interconnection agreements are made public and the regulator will resolve any disputes.

In terms of general compliance with the Reference Paper, all countries ensure interconnection and all but Namibia demand that interconnection occur at cost-reflective rates and will make use of regulatory powers to resolve any disputes that may arise from failed private negotiations, including price issues. However, it is expected that Namibia's new policy will comply with these basic foundations of interconnection policy. However, where three other countries fail to comply with the reference paper is in the realm of making the interconnection agreements publicly available.

Table 5: Interconnection policy in SADC

	INTER-CONNECTION ASSURED	RATES REGULATED TO REFLECT COSTS	PUBLIC AVAILABILITY OF AGREEMENTS	REGULATOR TO RESOLVE ANY DISPUTES
Botswana	Yes	Yes	No	Yes
Lesotho	Yes		Yes	
Malawi	Yes		Yes	Yes
Mauritius	Yes	Yes	No	Yes
Namibia	Yes	No	No	No
South Africa	Yes	Yes	Yes	Yes
Tanzania	Yes	Yes	Yes	Yes
Zambia	Yes	Yes	No	Yes

*Beauty contest is the term used for a selection process using specified selection criteria rather than an auction where the highest bidder wins.
Source: SATRN Review of SADC Telecoms (2002)

2.3.4.2 Licensing

The Reference Paper requires that licensing criteria are made publicly available and a reason for refusal is given. For spectrum allocation, the allocation must be non-discriminatory as well. The SADC countries under review all satisfy this criteria and even go further by offering the right of appeal of any decision. The scope for review is part of Article VI (Domestic Regulation). All countries have adopted a beauty contest approach for limited licences (mobile and currently fixed line facilities providers). As the beauty contest process involves discretion on the part of the regulator in deciding the outcome, this is a potential source for a trade dispute if the criteria used are not clear. This was apparent from the South African dispute over the licensing of the third mobile licence.

Table 6: Licensing of Telecoms Operators

	LICENCING APPROACH FOR NETWORK OPERATORS	LICENCE CRITERIA NON-DISCRIMINATORY	LICENCING CRITERIA PUBLIC	REASON FOR REFUSAL GIVEN	RIGHT OF APPEAL EXISTS
Botswana	Beauty contest	Yes	Yes	Yes	Yes
Lesotho	Beauty contest				
Malawi	Beauty contest	Yes	Yes	Yes	Yes
Mauritius	Beauty contest	Yes	Yes	Yes	Yes
Namibia	Beauty contest				
South Africa	Beauty contest	Yes	Yes	Yes	Yes
Tanzania	Beauty contest	Yes	Yes	Yes	Yes
Zambia	Beauty contest	Yes	Yes	Yes	Yes

Source: SATRN telecoms research, national legislation

2.3.4.3 Competition enforcement

Prevention of anti-competitive by major suppliers is another important cornerstone of the Reference Paper (and articles XVIII and XIX). Only four SADC countries have competition agencies (South Africa, Zambia, Mauritius and Zimbabwe), but most countries deal with competition issues in utilities through the sector regulator. The SADC countries that comply with the Reference paper and have competition safeguards in the telecoms legislation include Botswana, Mauritius, South Africa (concurrent jurisdiction with competition agency) and Malawi.

2.3.4.4 Universal Service Policy

The Telecoms Reference Paper and Article XV of the GATS both permit a universal service policy that is non-discriminatory and 'not too burdensome as necessary'. All countries in the review have licence obligations that include a universal service fund contribution with the sole exception of Namibia, who will come in line with the new telecoms act. All but Tanzania also have rollout obligations on the licence holders that would include public payphones for fixed line (and in some cases residential lines) and geographic coverage for mobile. Rollout conditions are usually set for the first few years of operation and can differ for new entrants. This is a potential source of discrimination. Invariably, new entrants are given lighter rollout targets in order to overcome incumbent advantages.

3. ASSESSMENT OF THE CURRENT STRATEGY

3.1 Impact of Reform to date

It is difficult to contrast different reform strategies within the SADC region because the strategies are essentially the same but with countries at different stages of the same process. Aside from the stage of reform, the levels of access and efficiency will also be strongly influenced by the GDP per capita of the country. Within SADC there are large differences in GDP per capita and for this review there are essentially two groups (GDP per capita in brackets):

- Least developed group – Tanzania ($223), Malawi ($244), Zambia ($416) and Lesotho ($508)

- Middle income group - Namibia ($1,992), Botswana ($3,297), Mauritius ($3,554) and South Africa ($3,648)

However, some general lessons about the managed liberalisation strategy in general have emerged.

3.1.1 Affordability and Access

For a development state, one of the most important measures of the success of any policy is the improvement in access to telecommunication services. Table 7 details the changes in the number of lines/subscribers for fixed line and mobile in the past 5 years which covers much of the fixed line exclusivity period for many of the countries.

Probably the most striking feature of line growth in Southern Africa is the rapid rise of mobile. In a matter of five years, mobile subscribers have grown from almost nothing to the point where they outnumber fixed line subscribers in every country except Namibia (which no doubt will follow by the end of 2002). In one half of the countries listed, mobile subscribers now make up between two-thirds and three-quarters of total subscribers. Almost as striking as the meteoric rise of mobile, is the rather flat growth of fixed line over the same period. A few countries have made some significant gains, notably Botswana, Mauritius and Malawi (though off a very low base), but for the rest of the countries there has been negligible improvements in the teledensity from fixed line. Yet a disturbing trend in three-quarters of the countries under review, is that the number of fixed lines is actually on the decline over the past year or two due to increasing number of subscribers disconnecting. Malawi and Tanzania are the only two countries that do not show a decline from 2001 to 2002. Yet even in these two countries the increase in the number of lines has slowed dramatically in this recent period, indicating that fixed line rollout may well be in trouble in these countries too.

Table 7: Line growth in fixed and mobile 1997-2002

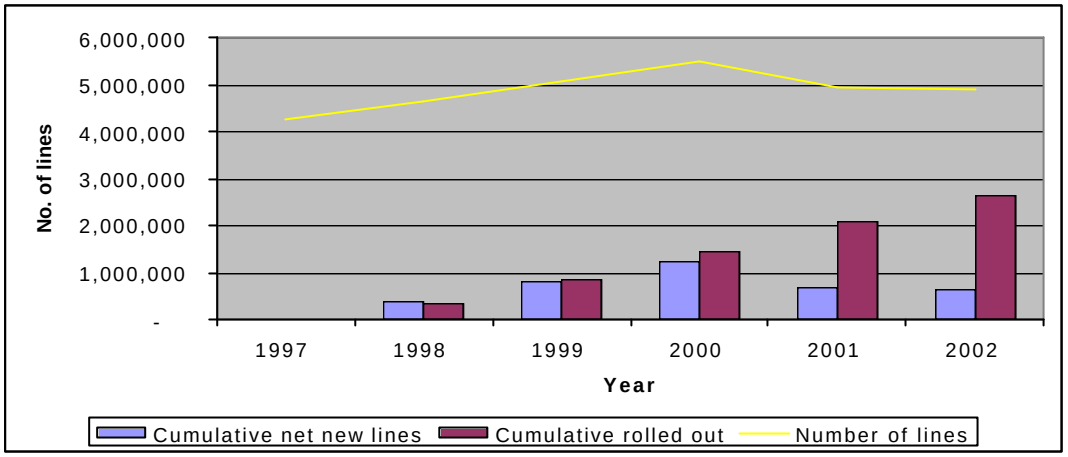
	FIXED LINES			MOBILE SUBSCRIBERS			TELEDENSITY		
	1997	2001	2002	1997	2002	As % of total lines	Fixed Line 1997	Fixed Line 2002	Mobile 2002
Botswana	85592	153000	142600	0	278000	66.1%	5.64	8.64	14.24
Lesotho	20400	22200	21100	1262	52000	71.1%	0.96	0.99	2.43
Malawi	35471	54100	56000	7000	59000	51.3%	0.35	0.56	0.59
Mauritius	222747	306800	281000	37000	300000	51.6%	19.50	23.42	10.33
Namibia	92829	117400	114000	12500	100000	46.7%	5.76	6.0	4.32
South Africa	4645000	4969000	4925000	1600000	11000000	69.1%	10.72	10.95	25.00
Tanzania	105095	148500	150000	20200	427000	74.0%	0.33	0.45	1.01
Zambia	77277	85400	84300	3752	121300	59.0%	0.91	0.82	1.18

Source: ITU Telecommunications Indicators and SATRN Telecommunications Research Project

The true extent to which fixed line has performed poorly is also masked by the aggregate data on the number of active lines. A true picture of the number of disconnections in fixed line requires us to compare the number of lines rolled out during this period to the number that remain active at the end of the period.

Probably one of the more dramatic cases of fixed line disconnections has been South Africa. As part of the exclusivity agreement, the incumbent was required to rollout 2.7 million new lines over the five-year period, of which 1.7 million had to be rolled out in 'underserviced areas'. Figure 1 tracks the cumulative rollout of lines against the net growth in active lines in each year. While the net addition of active lines tracks the rollout closely for the first three years of the exclusivity period, there is a dramatic drop-off in the number of subscribers in 2001 that is continued in 2002. In 2001 there was a decrease of 530,000 active lines despite 630,000 new lines being rolled out (a total disconnection of 1,160,000 lines!). In 2002, there was a more modest decline of 36,000 active lines, despite an additional 570,000 new lines being rolled out (a total disconnection of 606,000 lines). After five years of exclusivity, 2 million of the 2.7 million lines were disconnected. This dramatic spate of disconnections was prompted by a decision in 2001 by the incumbent operator, Telkom, to clamp down on bad debt and enforce more strictly the timely payment of accounts (Telkom annual report 2001).

Figure 1: Fixed line rollout versus net line growth in South Africa 1997-2002



Source: Telkom Annual Reports 1996-2002

Number of lines or subscribers provides a good global picture of what is happening, but it does not give us much information about how access is changing amongst the poor and the rural households. Table 8 uses household survey data from South Africa to paint a picture of how ownership has changed in low income and rural households. The picture at this level reflects the global trends we see in the teledensity data - fixed line has made very little progress in extending ownership amongst the poor and rural households, while mobile access has grown at a phenomenal pace. It is apparent that the initial hypothesis that mobile was a luxury good has been disproved and even the poorest households are getting access through this technology. It is also apparent that for the low income market, mobile is a substitute for fixed line (few households own both) which implies that a policy of introducing mobile service will create competition for the fixed line operator.

Table 8: Changes in the ownership in low-income and rural households in South Africa

MONTHLY INCOME		FIXED LINE	MOBILE	BOTH	TOTAL ACCESS
Up To $50	1998	5.58%	0.11%	0.06%	5.63%
	2001	5.56%	4.94%	0.82%	9.67%
$50-$90	1998	7.00%	0.28%	0.17%	7.11%
	2001	9.39%	6.20%	0.90%	14.69%
$90-$140	1998	15.25%	0.45%	0.28%	15.43%
	2001	15.03%	9.27%	1.94%	22.36%
LOCATION					
Rural	1998	4.37%	1.27%	0.87%	4.77%
	2001	6.43%	8.84%	2.09%	13.18%

Source: AMPS 1998-2001

So what is behind the poor performance of fixed line in this initial reform period and the success of mobile, and is it in any way connected to the reform programme? A rash conclusion some have made is that the difference in performance between mobile and fixed line is due to differences in the amount

of competition in each sector[11]. However, the dynamic is more complex than that. Hodge (2002) finds that the single biggest reason for the success of mobile at the expense of fixed line has been the tariff structure, not levels[12]. Around 80% of all mobile phones in Southern Africa are brought on a prepaid basis where the subscriber pays no monthly connection charges after they have purchased a phone[13]. The cheapest phones come at a cost of around $50 in the region, or possibly lower if the market for second-hand and stolen phones is used. This puts getting connected within the grasp of a far greater number of households.

Tables 9 provides a comparison of prices for the two options in the region and the extent of tariff restructuring that has taken place in fixed line. For every country in the region there is a prepaid mobile option that has no monthly charges, only initial connection charges (and sometimes a minimum monthly spend). While fixed line performance has been clearly hurt by the competition from mobile, it has appears to have become less affordable to low-income consumers as the tariffs are rebalanced in preparation for competition. Under the public monopoly model, residential consumers were cross-subsidised by the business sector. Inflated long-distance/international call rates and under-priced local call rates helped residential consumers who made relatively less long-distance and international calls than business. Rebalancing is necessary to prevent 'cream-skimming' entry into the business sector only once competition is permitted. Local call charge increases have been quite dramatic in some countries while the two countries that have not seen any increases (Mauritius and Zambia) have not yet rebalanced their tariffs (as seen by the high international-to-local call ratio). A further source of increases in the price of local calls for fixed line has come from the introduction of mobile. The success of mobile means that calls to mobile phones now constitute a large portion of local calls, and these calls are priced as long-distance calls. For instance, a large number of disconnections amongst fixed line subscribers in Botswana have been partly blamed on subscribers getting unexpectedly high bills from calling mobile phones.

Table 9: Prices and Affordability measures for Residential Consumers (1997-2002)

	FIXED LINE ACCESS PRICES (US$)		3 MINUTE LOCAL CALL (US$)		FIXED LINE RATE REBALANCING (1997-2002 IN DOMESTIC CURRENCY)		
	Installation	Monthly subscription	Fixed line	Mobile	monthly subscrip-tion	local calls	Inter-national/ local

[11] In a similar fashion, many observers have argued that high levels of universal service in telecoms in industrial countries were achieved because of having a public monopoly, while it is far more likely to be due to the growth in the levels of income in these countries, with the market structure have a more marginal impact.

[12] Mobile call rates in Southern Africa are not cheap by international standards

[13] Usually one is required to make a minimum number of calls per month, but this is usually set at an extremely low level because its main purpose is to identify inactive numbers.

							price ratio*
Botswana	35.21	2.50	0.11	0.94	4.4%	666.7%	24
Lesotho	29.94	2.99	0.11	Na	57.5%	650.0%	17
Malawi	15.60	1.30	0.04	0.45	0.0%	441.7%	73
Mauritius	33.44	2.01	0.03	Na	0.0%	0.0%	109
Namibia	25.34	4.70	0.08	0.53	18.8%	315.0%	44
South Africa	22.72	6.44	0.06	0.51	36.6%	117.7%	17
Tanzania	48.04	4.20	0.13	0.35	14.0%	78.3%	45
Zambia	11.76	1.18	0.05	0.99	400.0%	-33.3%	147

* the international rate used was that of a call to New York from each country and not a representative basket of call rates
Source: ITU Telecommunications Indicators and SATRN Telecommunications Research Project

Table 10 examines the issue of affordability more closely by constructing a measure of affordability - annual access fees (annuitised installation or phone costs plus monthly rental) as a percentage of GDP p/capita. The low access charges for mobile mean that basic access is a far lower percentage of GDP per capita in all countries in the region. The lowest ratio of fixed line affordability to mobile is in two countries that have not yet fully rebalanced their fixed line tariffs - Malawi and Zambia (no data on cellular rates was available for Mauritius but we expect similar results there).

Unsurprisingly, the level of mobile penetration in each country as measured by teledensity in table 7 is closely correlated with this measure of affordability (a correlation coefficient of -0.68)[14]. Similarly, fixed line penetration is closely correlated with this measure of affordability (a correlation coefficient of -0.64). It is interesting that despite some of the tariff rebalancing, fixed line affordability has actually increased in every country but Zambia. The reason is that although access tariffs have increased, GDP per capita has increased as well.

Using income distribution data one can get a good estimate of how many households in a country can afford access to telephony. Based on South African income distribution data, Hodge (2002) estimates that if one takes an affordability measure of 1.5% of income for communications, then a mobile phone connection is affordable to 70% of households in South Africa, while fixed line is only affordable to 30% of households. Of course subscribers do not only want access, they also want to make calls and the usage tariffs in mobile are much higher than fixed line. However, low access charges and high usage charges are better for those households that spend little on communications. Hodge (2002) estimates for South Africa that if a household's total communication spend in each month is less than $9, then a mobile phone gives the subscriber more call minutes for their money. Using

[14] The countries with the highest mobile teledensity - Botswana, Mauritius, Namibia and South Africa - all have the lowest access fees as a percentage of GDP p/capita.

household expenditure data, he finds that this threshold applies to the bottom 60% of consumers. Similar calculations for other Southern African countries put their threshold levels at between $4 and $9 in most cases. The exceptions are again those countries that have failed to rebalance the fixed line tariffs (Malawi and Zambia).

Table 10: Access fees as % of GDP per capita

	ACCESS FEES AS A % OF GDP P/C			RATIO OF MOBILE TO FIXED LINE AFFORDABILITY	MOBILE-FIXED LINE MONTHLY CROSS-OVER POINT (US$)*
	Fixed Line 1997	Fixed Line 2002	Mobile 2002	2002	2002
Botswana	2.1%	1.3%	0.4%	3.3	4.52
Lesotho	17.3%	10.1%	2.7%	3.7	6.04
Malawi	32.2%	12.0%	7.1%	1.7	2.82
Mauritius	1.6%	0.8%	0.3%	2.7	NA
Namibia	6.1%	3.3%	0.6%	5.5	9.21
South Africa	3.8%	2.9%	0.4%	7.3	8.73
Tanzania	33.8%	22.9%	4.2%	5.5	9.78
Zambia	4.9%	5.3%	3.6%	1.5	3.36

*Point of communication spend at which fixed line becomes the cheaper option
Source: SATRN Telecoms Research and ITU Telecoms Indicators

Aside from the affordability of access, there are other reasons why mobile is more successful in the region than fixed line. First amongst those is the availability and zero waiting times. It is very quick and relatively cheap for a mobile service to get coverage off the main urban areas and large rural towns. Once this is achieved, potential subscribers can sign up immediately. In contrast, exchange infrastructure for fixed line is slow and expensive to roll out, leaving many potential subscribers unable to get a connection or facing long waiting periods.

3.1.2 Efficiency

A common measure of efficiency in fixed line telecommunications is the number of lines per employee. Table 11 shows the level and changes in this efficiency measure for the past five years in the same selection of Southern African countries. There is a wide disparity in the levels of efficiency and also the rate at which they have improved. The level of efficiency is most closely linked to the income level of the country, which again is reflective of its technical capacity. However, changes in efficiency levels in the past five years do tend to demonstrate some differences that can be linked to the reform programme pursued. The worst performers by a long way were Zambia and Malawi, both of whom lagged behind in the reform programme by not getting equity partners. The only other countries that did not get equity partners were Botswana and Namibia. There performance does not seem that poor compared to Zambia and Malawi, but it considerably worse than that of a country like Lesotho which started off with very low levels of efficiency but did get an equity partner. South Africa and Mauritius started off with much higher levels of efficiency and so it is expected that it is more difficult to get the same leaps in efficiency. Given that no country has introduced fixed line competition

yet, there is no way of seeing if that brings about greater efficiency changes than just some private ownership.

Table 11: Number of fixed lines per employee 1997-2002

	1997	2002	CHANGE
Botswana	49	81	63.1%
Lesotho	24	63	162.4%
Malawi	8	9*	14.2%
Mauritius	124	153*	23.7%
Namibia	55	79	42.2%
South Africa	80	123	53.2%
Tanzania	22	42	89.2%
Zambia	23	24	3.0%

* Figures are for 2000
Source: ITU Telecommunications Indicators and SATRN Telecommunications Research Project

3.1.3 Employment

A big political issue in any liberalisation programme is the potential for employment losses at the public monopolist. This is especially the case in Southern African countries where employment opportunities are so scarce anyway. We expect some employment losses in the incumbent fixed line operator because the quickest path to raising efficiency and cutting costs is to retrench workers. Turning around the efficiency of capital assets takes a little longer. However, if there is a substantial rollout of lines as part of the reform programme, employment figures may remain at previous levels for a while until this intense investment period is over. There is also the addition of jobs from new services - like mobile and the VANS.

Table 12 examines the changes in employment in the telecoms sector from 1997 to 2002. Assuming a starting point of no mobile services, we can calculate the net loss or gain in employment in this period from the change in fixed line employment plus the additional jobs that mobile and the Internet Service Providers have created. This is likely to be an underestimate because it does not include the mobile-related jobs that are created in the retail sector selling connection and airtime, and any jobs from the non-incumbent value-added network services that are not ISPs. The results are mixed, with half of the selected countries experiencing a decline[15]. Interestingly, the three that have not experienced a decline (Botswana, Malawi and Zambia) are three of the four countries that have not yet engaged in the reform step of selling off a private equity stake. It is likely that pressure to retain employment is overriding other objectives for Malawi and Zambia given their lack of improvement in efficiency. With Botswana there has been a massive rollout investment drive that has kept employment levels high for now. Another interesting observation is that the employment in mobile and ISPs is relatively small in comparison to

[15] Although there is no mobile employment figures for the competing mobile provider in Mauritius, it is likely to employ more than the loss in the incumbent fixed line and leading mobile provider.

fixed line, especially considering the fact that mobile now exceeds fixed line in subscriber numbers. Therefore any gains from mobile are being dwarfed by losses in fixed line in countries where losses do occur.

Table 12: Changes in employment in the telecommunications sector 1997-2002

	FIXED LINE			MOBILE	INTERNET PROVIDERS	NET LOSS/GAIN
	1997	2002	Change	2002	2002	1997-2002
Botswana	1734	1771	2.1%	180	200	+417
Lesotho	850	335	-60.6%	70	45	-400
Malawi	4500	5100	13.3%	450	75	+1125
Mauritius*	1801	1775	-1.4%	na	Na	+
Namibia	1673	1488	-11.1%	138	Na	-47
South Africa	57813	40000	-30.8%	9000**	Na	-8813
Tanzania	4719	3560	-24.6%	460	55	-644
Zambia	3260	3452	5.9%	335	Na	+527

*The data for fixed line includes the dominant mobile provider which is part of the incumbent fixed line provider
**estimate for 2002
Source: ITU Telecommunications Indicators and SATRN Telecommunications Research Project

However, direct industry jobs are only a part of the overall picture when assessing employment impacts. As an important intermediate input, decreases in the price of telecommunications should lower costs in downstream users which will hopefully stimulate employment in these sectors and offset some of the employment losses in the industry itself. One can use a simple SAM (Social Accounting Matrix) model to assess how much employment might be created downstream as a result of price decreases. Using the 1997 South African SAM, table 13 examines what the impact would be on employment in each sector of the economy for a 10% price decreases in fixed line. The results do depend heavily on the price elasticity of output and the output elasticity of employment. The experiment uses elasticities of 0.75 in both cases. Note that no effect on the communications sector is included because labour shedding is a source of the price decrease and so this needs to be accounted for too. It is taken that the losses in the South African sector are those in the table above - a drop in employment of 8800.

The results suggest that a modest 10% price decrease in fixed line communications might increase downstream employment by just over 6100 in South Africa. The impact of higher price decreases would just be a multiple of this amount. To cancel out the drop in employment of 8813 noted in the table above, the sector would need a price decrease of 14.5% - not a significant amount! The major downstream employment gains are in the manufacturing and tertiary services sectors. Given that the manufacturing and tertiary service sectors are much smaller in least developed countries in the region, the downstream employment impact is likely to be considerably less. However, the employment losses are less too and there is greater scope for price decreases given the lower levels of efficiency.

Table 13: Downstream Employment effects of a 10% price decrease in fixed line telecommunications

	Price effect	Employment effect
Agriculture	-0.07%	334
Mining	-0.11%	274
Manufacturing	-0.14%	1,097
Electricity	-0.08%	27
Transport	-0.12%	145
Communications	-10.98%	0
Construction	-0.22%	355
Internal trade/ accommodation	-0.25%	1,377
Finance & business	-0.24%	700
Other personal/ community	-0.94%	1,799
Total		6,107
Cost of Government	-0.06%	
Real income of consumers	0.23%	

Source: South African SAM 1997

3.2 Other Emerging Lessons from Reform

3.2.1 Investment Targets and Access

Exclusivity periods and holds on new entry for second and third operators have enabled the governments to negotiate rollout targets. In fixed line this has usually been quite specific in terms of the number of new lines and the target for those lines (the 'underserviced' areas). In mobile, they have been more generally defined as geographic coverage requirements but also some limited payphone rollout targets.

The experience of some Southern Africa countries in the fixed line sector is that although operators have met these rollout targets set them by the government, there has been a high level of disconnections by subscribers leaving only a small proportion of the lines active. Therefore, much of the investment has been socially wasteful. This demonstrates a number of problems with investment targets as a tool for furthering access. First, you can incentivise firms to connect customers to important social services, but in the case of a private firm you cannot force them to keep customers connected. This means that any strategy around expanding access should focus on both getting the investment and assuring affordability. In telecoms, the rebalancing of tariffs was in contradiction to the investment in expanding access. Second, if there are immediate plans to introduce competition in the sector, then any investment targets need to be consistent with what the market would be like post-competition. If not, these investments will be 'stranded' and therefore socially wasteful as soon as competition occurs. In telecoms the competition came from mobile which turned out to be more affordable to many consumers

despite initial forecasts that it was a luxury service for the wealthy. Consumers ultimately pay for this socially wasteful investment through higher prices in the exclusivity period and possibly a slowing down of the reform programme to enable the incumbent to recoup some of the now-stranded investment. Third, any access programme needs to be technology-neutral. Rollout targets for fixed line are a form of universal service policy but clearly are technology specific. The theoretical literature on universal service clearly concludes that the focus should be on getting the least-cost provider for the service regardless of the technology used. However, this lesson from Southern Africa also demonstrates that when there are two-part tariffs, regulators need to understand their consumer demand better to enable them to estimate the sustainable take-up of the service following the investment. The final lesson might be that investment directed by government may suffer from the same inefficiency problems as investment done by government utility firms, and these investments will come under scrutiny as soon as competition is introduced.

3.2.2 Raising Revenue

It was argued that one of the reasons for a gradual pace in reform was to increase the revenue raised from the sale of state assets and operating licences. In telecommunications, most Southern African countries sold a strategic equity stake in the public monopoly in the late 1990s but granted exclusivity periods. In mobile, they licenced a few operators only. They are all now in the position of offering greater equity in the public monopoly and new operators.

While limiting competition is clearly going to have the effect of pushing up the price of an equity stake or operating licence[16], the purchase price also critically depends on the general market outlook at the time and the cash reserves of potential investors. The negative changes in market conditions and the plummeting value of telecoms stocks in 2001 has meant that the strategy of gradual liberalisation has probably lowered the actual revenue that will be raised in the end by Southern African governments. Countries are now trying to attract investors in an environment where there is little appetite for new investment across all infrastructure services, from air transport to telecommunications. The exclusivity (or limited competition) premium is now dwarfed by the drop in market sentiments. Of course, this is partly a matter of bad timing and the strategy may have worked if market sentiments had not changed so dramatically.

The significant drop in interest in operating licences and equity stakes in general has also had a negative effect on the pace of reform in the relatively unattractive Southern African markets. Reform has been slowed from a mixture of responses - governments deliberately delaying reform to wait for

[16] By way of example, in South Africa, the front-runner for a 50% stake in the second national operator licence saw a 5% drop in its stock price following the announcement that there would be two new entrants and not one.

better prices for these assets, governments delaying reform because they are unable to attract an investor, or potential investors demanding slower reform given their increased bargaining power in these new circumstances. We see a similar outcome in electricity reform in the region where the drop-off in investor appetite for investments in developing economies started sooner in 1997. The response by all governments in the region has been to put off any equity sales for now and rather grant management contracts to raise the efficiency of the firms and their attractiveness for potential investors (Eberhard, Mula and Shirirma 2002).

3.2.3 Capacity of the Regulators

One of the major concerns for developing countries in implementing infrastructure service reforms is the cost and capacity required to effectively regulate private players in these markets where only few large firms will compete. It would be nice to assess the effectiveness of the regulators of the region to get an idea of capacity. An important measure of capacity might be how well it constrains the industry players to cost pricing given their potential for market abuse. However, a lack of true information on firm costs is the problem the regulator and any measure such as this faces.

It is not surprising to report that most regulators feel they lack capacity and the financial resources to regulate the industry properly. In fact, one regulator commented that their lack of capacity leaves them 'captured' by industry[17] - a term usually ascribed to influencing regulators to act in industry's interests and not the general public's. The regulator used this term to describe the situation where the firms have undue influence on regulatory policies and outcomes because of the inability of the regulator to challenge information provided by the firm. South Africa, which arguably should have the best resourced regulator in the region, still lacks the ability to do proper cost of service calculations that are necessary for good price control regulation. It also lacks the capacity to monitor the incumbent's compliance with quality and rollout targets - relying purely on information fed to it by the firm itself. Although the regulator performs many of the functions asked of it, the quality of regulation must surely be inadequate, even if regulation quality is not easily measurable. For instance, although the regulator does set a price control, given its lack of cost information and the ability of the firm to challenge decisions in court, the regulator must necessarily set a lenient control for it to be passed and accepted by the firm. Any stringent price control will immediately be challenged successfully once the regulator is shown to lack the capacity and information to make the decision.

This situation is made worse by the fact that there are no other organised groups that can challenge the telecoms firms in a public regulatory forum. Often a foundation of good regulation in industrial countries is that processes are made public in order to allow other interested parties to bring competing information to the table allowing the regulator to act as adjudicator rather than

[17] The comment was from a communications regulator in South Africa

using resources to uncover all the information itself. However, consumer groups are extremely weak in Southern Africa and only four countries in the region have a competition agency. This has important implications not only for the outcome of regulatory decisions, but also policy formation. There is a concern that the firms are having an undue influence on policy due to the lack of credible challenges to their influence and information. This is a problem because firms are not accountable to the voting public. In most cases, these firms have a greater interest in retaining limited competition rather than expanding it, so their influence has negative consequences for liberalisation. An earlier example showed how the South African equity partner successfully threatened to sell its stake in the incumbent in order to reduce the planned number of new entrants from two to one. If firms are able to capture most of the gains from reform at the expense of consumers, it is also likely to fuel stronger opposition to any reform programme. Distributional issues are at the forefront of the development and political agenda in Southern Africa which makes reform that has negative distributional effects difficult to sell politically.

However the outlook is not all bleak. Another important lesson is that the lack of internal capacity to regulate can be overcome to a limited extent by the outsourcing of some regulatory functions. Regulators throughout the region have made use of local and international consultants to assist them in the regulatory process. One can usually judge the level of internal capacity by the degree to which fundamental regulatory decisions are outsourced. However, this has many problems and limitations. First, it is costly especially when employing international consultants. A case in point is Namibia where the regulator had to abandon plans to licence a second mobile operator one year because it lacked the financial resources to pay for a consultant. Second, to lower costs, local consultants can be used. But the quality of local consultants will often be weak in Southern Africa because of the narrow business services market. Weak local consultants and the reliance on international consultants also leaves the regulator open to the problem that policy choices will not be informed adequately by local conditions. Third, the regulator cannot outsource a number of functions, such as mediating disputes. The lack of capacity will still plague the regulator in these cases. Fourth, the regulator's brief is to defend the public interest and they need to critically scrutinise the information passed on by the firm. There is little incentive for the consultant to fulfil this public interest role because of the problem the regulator has in monitoring the consultant's performance. This then weakens the outcome for consumers but improves it for the firms.

A final observation is that it takes time for the regulator to build credibility amongst current and potential investors in the market. In the beginning, the new regulator inherits its reputation from the government that appoints it and the performance of other regulators. It is not surprising therefore to find that the regulator with the best reputation in the region is found in Botswana, a country that already has a reputation for good governance.

3.2.4 Rate Rebalancing and Access

It has already been noted that using exclusivity periods and investment targets in pursuing greater access has some serious shortcomings. A more general lesson from the telecoms sector in Southern Africa is that changes in tariff structures may have a far more dramatic impact on consumer demand in poor countries than we see in industrial countries. The reason is that these services are barely affordable for the majority of consumers and so small changes in access price can have large effects. For instance, Hodge (2002) shows that in South Africa an increase in the monthly access fee for telecoms of $2 per month in the last five years has probably made it unaffordable for an additional 10% of households. Similarly, Torero, Schroth and Font (2001) find that the rising level of monthly access charges are a cause of welfare loss for consumers in Peru following the reform of telecoms. This implies that regulators in these countries needs to focus much more on tariff structures in addition to concerns around price levels. In contrast, these effects are likely to be minor in industrial countries, making them less of a concern to regulators and less of an issue in the advice dished out on reform to developing nations. For instance, Hausman, Tardiff and Belinfante (1993) estimated that the price elasticity of basic access is so low in the USA that higher monthly access charges following the breakup of AT&T in 1984 caused a drop in access of only 0.18%.

3.3 What would be the impact of more rapid reform?

All countries in the region are embarking on a liberalisation programme, just at a gradual pace. In anticipation of requests in the telecoms sector, it is useful to determine whether an acceleration of this liberalisation programme would have significant detrimental effects on the objectives of the policy. One means of assessing this is to determine if continued gradual liberalisation offers any additional benefits over rapid liberalisation given the limited reform experience to date and changes in the operating environment. If not, then countries can be assured that changing their policy to respond to negotiations will not be detrimental to their welfare. If so, then it is crucial to determine the source of the lower benefit and see if it cannot be addressed through use of a development clause in the commitment.

- *Political resistance* - many of the SADC countries have already gone through the most painful aspects of reform already - the rate rebalancing that hurts the poor and the employment losses that accompany the efficiency drive in expectation of competition. The implication is that the hard political sell is over. In fact, if continued gradual liberalisation results in lower price decreases than rapid liberalisation, then consumers and workers are worse off than under a rapid liberalisation. This is because they have had to bear the costs of reform without getting the full extent of benefits (lower prices and so more rapid demand and employment expansion). The only political force to overcome is the influence of the firms themselves, which might be more easily countered by the downstream business users. The group that have already gone through

much of the adjustment costs would appear to be Lesotho, South Africa and Tanzania (with Namibia bearing some). Amongst the others, Namibia has already seen some rate rebalancing and employment losses, while Botswana and Mauritius can expect these to occur in the near future given their current reform timetable.

- *Revenue-raising* - the slump in the global market and telecoms stocks in particular have reduced what governments can expect from the sale of their assets or licences. The technological developments in VOIP in particular have also made it more difficult for the regulations to protect the voice revenues of the incumbent. Given the inability of the incumbent to monitor VOIP abuse, they are being forced to negotiate lower long-distance tariffs with businesses anyway making it a small step to competition.

- *Improving the capacity of the incumbent* - a strong rationale for continued protection of the incumbent until it was competitive was because it is the provider of universal access. However, the mobile revolution in the region suggests that fixed line is no longer the major provider of universal access, making this rationale less important. Further, the incumbent firms in all cases would have had an exclusivity period already to improve capacity and already face competition from mobile operators for users and revenues. There is no need to protect incumbent mobile operators or the SNO on this rationale as they came in with the most recent technology anyway.

- *Raising the level of investment* - the problem identified in the review of the reform is that investment undertaken under restricted competitive scenarios may in fact be socially wasteful and be exposed as such as soon as competition occurs. The major concern rather is attracting investors in the first place. Possibly opening to competition enables investors to chose to duplicate only parts of the network thereby lowering the investment requirement and making the market more attractive.

- *Raising access* - most countries have already imposed the more harmful rate rebalancing in fixed line. Greater competition is expected to be accompanied by greater price decreases that should enhance access. Also, mobile has provided the increasing access and so taken the pressure off achieving this through the fixed line sector.

- *Building the domestic entrepreneurs* - more rapid liberalisation could harm the ability to include local entrepreneurs in the sector because of the potential size of the capital requirements in a short space of time. However, it can also be argued that by opting for full competition, one is creating numerous smaller opportunities rather than a few large opportunities. This would enable the inclusion of a broader base of domestic entrepreneurs rather than the elite few that can put together the capital required for national operators in all sub-sectors of the industry.

- *Building regulator capacity* - regulator capacity is a continuing problem but one that has proved less problematic than expected due to the use of

consultants. It is also expected that it is not a problem that will be solved in the immediate future given the need to create a depth of skills in this area to cope with labour turnover. Increased competition may actually lower the impact of weak regulation because less of the industry would need to be regulated. Whatever pace of reform is adopted, significant investments in regulator capacity have to be made.

A cursory examination of the potential reasons for continuing with a slow reform pace suggests that an acceleration of reform at this point - where mobile is already firmly established and the large pains of fixed line restructuring have already been incurred - may actually be a welfare-improving strategy. However, two factors may mitigate against governments changing their reform path. First, they may have entered implicit or explicit agreements with recent investors concerning how rapidly they will reform the sector and when these investors will face full competition. These investors may have invested on the understanding of a particular reform programme and may suffer stranded assets as a result of any changes to the reform speed. If an explicit agreement was made, then the government may be liable for some form of compensation if it reneges and accelerates reform. Second, if there is continued uncertainty on behalf of the government as to the impact of a rapid liberalisation, then they may continue to pursue the lower welfare path of a gradual liberalisation. There may be some means to provide safeguard measures to governments in the design of the trade agreement and the regulation of the sector.

4. THE CURRENT SADC NEGOTIATING POSITION

4.1 Current SADC Commitments in Telecommunications

Only four SADC countries have made any GATS commitments in the telecommunications sector during the previous round of talks. These are Lesotho, Mauritius, South Africa and Zimbabwe. However, the commitments made offer little in terms of liberalisation of the sector and are more a binding of monopolistic market structures. These will be worth very little in the upcoming negotiations and these countries will face similar pressures to those SADC countries that have made no commitments.

Table 1 summarises the commitments made to the GATS by these four SADC countries. The table examines the three main groups of services - fixed line, mobile and value-added services - as well as commitment to the reference paper. In fixed line, all making commitments have bound the monopoly status. South Africa goes furthest by precommitting to at least one new entrant (a second national operator - SNO), while Mauritius precommits to an unspecified reform of the sector. Only Mauritius and South Africa made commitments on mobile communications, and both just committed to the limited liberalisation of a duopoly status. South Africa again used the precommit device to include one additional operator in the future. In value-added services, only Lesotho offered full liberalisation (mode 2 is infeasible), while South Africa and Zimbabwe offered a limited liberalisation where all value-added service providers had to make use of the monopoly facilities to provide their service (use of leased data facilities only). South Africa was the only country to commit to the reference paper in full while Mauritius' schedule committed them to reforms that would satisfy the reference paper. South Africa also committed itself to opening up resale of fixed line services.

Table 14: Summary of Current GATS Commitments by SADC Countries in Telecoms

	FIXED LINE	MOBILE	VALUE-ADDED SERVICES	ADDITIONAL COMMITMENTS
Lesotho			Liberalised except unbound mode 2	
Mauritius	Bound monopoly; precommit reform	Bound duopoly	Liberalised	Precommit to adopt reference paper
South Africa	Bound monopoly; Precommit to second operator and resale	Bound duopoly Precommit to one new operator	Liberalised except for bypass of the fixed line operator	Commitment to reference paper
Zimbabwe	Bound monopoly		Liberalised except for bypass of the fixed line operator	

Source: WTO Schedules for SADC Countries

4.2 Potential Offers based on Current and Future Autonomous Liberalisation

The current commitments in the GATS by SADC countries do not reflect the current state of barriers to trade in the telecoms sector in SADC, nor the removal of certain barriers planned for the negotiating period. The current and future regulation of the sector provides the basis of the negotiation strategy. The current policy environment is an easy commitment to concede to other countries. There is probably little danger of significant backtracking on the main aspects of market structure and regulation in telecoms because firms have made sunk investments. Therefore there is little reason to hold back. Proposed future policy reforms offer the possibility of conceding to a more liberal environment in the WTO. Most often these reforms will fall within the time frame of the negotiations and so can be committed to. In cases where they are due to be implemented after the end of negotiations, the country can either rely on an implementation period or pre-commit to the reform in its schedule instead. Of course, proposed future policy changes are more easily backtracked on because they have yet to go through the political process of approving policy direction and devising appropriate legislation.

The current policy and reforms planned for the duration of the negotiations would give the SADC countries a baseline schedule similar to that in table 15 that they could commit to relatively easily (i.e. without having to go back home and negotiate domestically for further liberalisation). Table 6 represents an 'average' schedule for SADC countries but clearly some countries may differ. A GATS offer based on current policy and planned reform for each country appears in the appendix.

It shows that the restrictions that SADC is left with under the GATS will be limited to cross-border supply and commercial presence. Cross-border supply concerns international services. All countries reserve international services for the national fixed line operator - even mobile and value-added service companies must send their traffic through the national operator. The introduction of a second operator is only likely to change the restriction to the duopoly and not open it up to full competition.

Under commercial presence, the main restrictions that remain are restrictions on entry and foreign ownership restrictions. The SADC approach has been one of gradual introduction of competition, which means that these restrictions would need to remain in the schedule. The foreign investment criteria is not always explicit but often lurks in the selection criteria of the licensing process. As such, they would have to be scheduled. All countries should be able to make the commitment to the reference paper as it currently stands with only minor adjustments. Finally, mode 4 there is the generic referral to the horizontal commitments. Mode 4 is not a big issue beyond corporate transferees in the telecoms sector and so is unlikely to be contentious.

Table 15: Schedule for 'Average' SADC Country Reflecting Current and Proposed Reforms

SUB-SECTOR	MARKET ACCESS	NATIONAL TREATMENT	ADDITIONAL COMMITMENTS
Fixed Line voice telephony	1) Supply through duopoly 2) none 3) Supply through duopoly Foreign investment up to a maximum of X% Resale is/is not permitted 4) Unbound, except as indicated in the horizontal section	1) none 2) none 3) none 4) Unbound, except as indicated in the horizontal section	Reference paper in full
Mobile cellular	1) Supply through fixed line duopoly 2) none 3) Supply limited to X number of firms Foreign ownership limited to X% 4) Unbound, except as indicated in the horizontal section	1) none 2) none 3) none 4) Unbound, except as indicated in the horizontal section	Review additional licence in 200?
Value-added services	1) No bypass of the duopoly 2) none 3) No bypass of duopoly 4) Unbound, except as indicated in the horizontal section	1) none 2) none 3) none 4) Unbound, except as indicated in the horizontal section	

4.3 Negotiation Proposals, Initial Requests and Potential Minimum Acceptable Offers

The negotiating proposals and initial requests give a good indication of what certain countries expect from negotiations in telecoms. However, they are only initial positions and actual concessions will need to be negotiated. The telecommunications sector has received amongst the most commitments of any sector in the GATS agreement, with 73 countries with commitments in voice telephony, 76 with commitments in cellular, between 50 and 80 countries in the various VANS and 72 countries signed up to the reference paper. More importantly, most industrial countries have fully liberalised their markets already and the large developing countries have committed to significant liberalisation. The implication is that most countries will be looking for extensive commitments in this sector from those that have not made any commitments or those that have merely bound the monopolist status quo. The liberal markets in industrial countries and many middle-income countries

mean they have little reason to hold back on requests as it would not contradict their own domestic stance. Their interest in opening up other markets comes from three sources:

- gaining access to telecom markets globally for their multinationals (in the mainstream PSTN, mobile and data services). This even applies to middle-income countries that have the technological capacity to competitively tender for licences. Also, as a country concedes market share domestically to foreign operators, then there is pressure on domestic suppliers to expand sales abroad to compensate for revenue loss at home

- lower international charges for their domestic telecoms market by lowering accounting rates, which will naturally occur if competition for international calls occurs. This applies to countries at all levels of development.

- lowering the telecoms charges their multinationals face in other markets. This may be more of a concern to the industrial countries that have significant investment abroad.

4.3.1 Negotiation Proposals

There were 12 negotiating proposals received before the request deadline at the end of June 2002. These included a number of developing countries (Chile, Cuba, Mexico[18], Columbia[19] and Korea[20]) as well as the Quad Countries[21] and Australia, Switzerland[22] and Norway.

The negotiating proposals from the industrial countries are all looking for full liberalisation of the sector. Norway, Canada and Switzerland put forward the position that it is in the country's own interests to do so given the large positive effects it has had on their own economies. The focus of where additional commitments should come from merely reflect where existing barriers remain amongst those that have made commitments. They all look to remove limits on foreign equity holdings, limits on the number of licences in cellular and voice fixed line, open up resale and not just facilities-based competition and open up competition for international calls. There are also calls for more countries to sign up to the Reference Paper. Interestingly, two of the developing country proposals - those of Mexico and Colombia - also call on all countries to sign up onto the Reference Paper. Mexico argues that this would ensure there is no imbalance in competitive obligations amongst members. Colombia goes further and suggests that much of the reference

[18] WTO S/CSSS/W/101

[19] WTO S/CSS/W/119

[20] WTO S/CSS/W/83

[21] WTO S/CSS/W/30; WTO S/CSS/W/35; WTO S/CSS/W/53

[22] WTO S/CSS/W/72

paper form part of the Annex on telecommunications where it would be binding on all signatories to the GATS, not just those that commit separately to it. The other components of the developing country proposals voice the usual concern that negotiators should not forget Article XIX that permits a more gradual pace of liberalisation with fewer sectors committed for developing countries (Korea, Cuba, Mexico), Article IV that seeks to get other countries to open markets of export interest to developing countries and that autonomous liberalisation by developing countries be recognised (Colombia).

The negotiating proposals were also used to voice suggestions as to how the current negotiation framework in telecoms and the Reference Paper can be improved to minimise the application of other barriers to trade in telecoms.

Australia's proposal suggested numerous ways of strengthening the Reference Paper clarifying some of the components of the Paper such as what are the means of determining the independence of the regulator, what are fair licensing requirements and technical standards (including spectrum allocation). Japan called for the Paper to address unreasonably high licensing fees while Switzerland called for competition-enhancing methods of allocating radio frequencies. The EU makes a general call for countries to 'reduce restrictions to the minimum necessary to ensure quality of service, including universal service and to address the issue of scarce resources' (WTO S/CSS/W/35 :3).

Other broad proposals around the negotiating framework for telecommunications were centred around two themes - the need to include the new services that were emerging in the sector that were not covered by the list of sub-sectors (Switzerland, Australia, Norway) and the need to examine negotiating a cluster of services around telecommunications that impact on e-commerce and the networked economy in general (US, Chile).

The USA proposes that the context for telecoms negotiations is the broader development of e-commerce and so they wish to link commitments in telecoms with complimentary services for e-commerce (distribution services, advertising, express delivery, computer and related services, financial services and all other services that can be delivered electronically). This is in essence a cluster approach to e-commerce. As a result, the push in telecommunications is about growing global networks offering basic and value-added services. As these networks crucially interface with the public network, the focus is on preventing hold-up from interconnection. The USA therefore pushes that privatisation is not enough, but that viable competition must occur. They also emphasise that it is necessary to liberalise across all services and technologies in telecommunications because global networks make use of all to deliver the service. The last point is taken up by Switzerland who proposes that commitments in telecoms are technology-neutral.

Australia has been pursuing the issue of accounting rates falling within the ambit of the GATS through the Council meetings (as classified by termination

services in the telecoms section)[23]. They seem mostly concerned about the transparency and discrimination issues. However, they have not had support from the USA and EU who seem to feel that in a liberalised telecoms sector the accounting rate system will collapse anyway. The USA and EU are therefore more concerned about liberalisation of international services.

Finally, there have been no strong requests for greater mode 4 access, mainly because telecoms trade is conducted through commercial presence and cross-border supply. The only movement of labour issues revolve around skilled labour in commercial presence which the majority of countries have made some commitments too. However, it may well be impacted by the request from India for lower level information technology personnel with non-degree qualifications to get greater freedom of movement as they fall within the broader industry.

4.3.2 Initial Requests

I am only aware of some of the requests members of SADC have received. The requests from the EU, USA and Norway all follow their negotiating proposals and request full liberalisation of the sector, with the USA looking for a cluster of liberalisation around the telecoms sector to ensure no barriers to electronic commerce or the network operations of their multinationals in general. The EU request also incorporates other aspects of their proposal by requesting that regulatory requirements are kept to a minimum where they perceive unnecessary red tape.

4.3.3 What might be the minimum acceptable offer?

Although requesting countries have asked for full liberalisation of the telecoms sector, the final outcome will most likely be something less especially if developing countries use Article XIX to enable less commitments. However, there may be some non-negotiables in the telecoms negotiations that industrial countries will pursue and which developing countries may be forced to commit to. These may even be proposed as part of a formula approach to the sector. The author speculates that the following might form the basis of a minimum offer. This is based on the fact that it would go a long way to satisfying most of the industrial country requests and also that developing countries would find it easier to concede.

- Commitment to the telecoms Reference Paper without any changes
- Some facilities-based competition even if numbers are restricted
- Resale competition
- Full commitments in value-added services

This request list would enable a large degree of fair competition and flexibility for network access. The Reference Paper is the key component of such a

[23] See minutes of the Council for Trade in Services in WTO documents S/C/M/51 to 53.

request as it is the means of guaranteeing access and fair treatment in the industry whatever the limitations on the number of competitors. It also has the support of both developing and industrial countries. Signing up to the Reference Paper would enable requesting countries to accept limitations on competitor numbers in the specific commitments because even a single competitor could have a dramatic effect on the industry if it is guaranteed fair interconnection and competitive conditions. Also, developing countries are likely to resist removing limitations on the basis of development arguments (as outlined above). This would then provide the means to bring down prices and offer flexibility for multinational operating in these countries. It would also mean that when the country liberalises further in the future, the process of licensing will be fair and transparent. Of course, including some facilities-based competition is crucial, especially in enabling the demise of the settlement rate problem in international services.

Resale competition and full commitments on value-added services are generally easier to concede and therefore more likely to be part of any formula approach. They also focus on the needs of businesses rather than residential consumers and so are more likely to be of interest to multinationals from other countries.

It is also highly likely that the Reference Paper is strengthened in the process by clarifying some of the vaguer concepts and adding additional requirements such as those outlined in the negotiating proposals. Industrial countries seeking stricter definitions may feel they have a greater chance of imposing stricter definitions in a negotiating context rather than a dispute settlement context.

5. A NEGOTIATING STRATEGY FOR SADC COUNTRIES

5.1 Offers

5.1.1 How much should SADC countries commit?

It is this author's opinion that SADC countries should at the very least commit to the current and immediately planned future reform programme in telecoms in their country. The primary reason is that telecoms is an easy offer for the following reasons:

- All SADC countries are reforming the telecoms sector anyway.
- If countries are wanting to limit the number of sectors they make commitments on using the provisions of Article XIX, then there are other sectors that would be greater priorities for making no commitments in.
- Given that the next round of negotiations is only likely to be in another 10-12 years time at a minimum (after the end of the Doha negotiations and implementation period), this is likely to be the last opportunity to use autonomous liberalisation as credit in negotiating market access. This will help in selling the difficult reform domestically by
- The countries are not going to incur any additional implementation costs in terms of institutions and new legislation.
- Reform is strongly bound anyway and so committing in the WTO is not going to make the reform any more binding on the country. Infrastructure services in general involve large sunk costs and any reversal of enacted reforms even if not committed in the WTO would have a severe impact on investor perceptions of the country. That is a much stronger reason for countries not to reverse these reforms than a potential penalty under the WTO.

Commitments to the current policy would in most SADC countries imply a commitment to the Reference Paper, limitations on facilities-based competition, limitations on foreign ownership and no resale. This does not go as far as what is being requested, but it does come close to what author sees as the possible minimum offer acceptable to industrial countries (it just fails to liberalise resale).

This author feels that most SADC countries may be better off accelerating their reform programmes and making more far-reaching commitments in the telecoms sector. The reason is that the current gradualist reform programme does not continue to hold many advantages over the more rapid approach for the reasons cited in section 3.3 above. In fact, as noted in section 3.3, it may actually be welfare-decreasing because the countries have undergone the costs of reform without the benefits. If that is the case, then why not exploit

the opportunity to use greater telecoms reform to relieve the pressure to make greater liberalisation in sectors where countries will experience more costs and to get greater access to other markets. Where countries willing to accelerate the process faster may want to hold back is on foreign ownership requirements. These have a specific goal of developing domestic capital and entrepreneurs in this sector and can be defended in terms of Article IV of the GATS.

5.1.2 Using the Pre-commitment device

Countries not willing to liberalise immediately or who have made commitments to existing investors around the pace of reform, should consider pre-committing to reform to be phased in over a specific period. How much of the reform process they will need to precommit to and the time frame for implementation will depend on the negotiating pressure they come under. However, to adequately prepare for such eventualities, it is wise for SADC countries to discuss back home what time frames would be acceptable and what is the ultimate vision for the sector. Although time frames may differ by country, a SADC or Africa Group may also want to lend its negotiating weight to putting in a baseline time frame that they feel is reasonable.

A pre-commitment may also be the way around certain sticky issues such as foreign ownership restrictions. Pressure to drop these may be diffused with the use of a time frame for their removal which sits easily with them being a temporary developmental measure to build capacity (such as the infant industry argument).

5.1.3 Operationalising safeguards

A reason why some of the SADC countries may not want to commit is that they feel they need some safeguards for what are essentially irreversible reforms due to the sunk costs. Operationalising safeguards cannot be done in the traditional sense, but could be done in terms of offering a means of putting the brakes on pre-committed reform. For instance, SADC members have argued for a gradualist approach on the basis that there is inadequate regulatory capacity and there is a need to assess whether the market is able to take new entrants. These condition are placed on the domestic reform programme and could become safeguards in any offer - progress to each stage of liberalisation is dependent on market reviews and adequate regulatory capacity. The major problem with putting these forward are the moral hazard problems that countries then have an incentive not to build regulatory capacity in order not to liberalise. How can the other WTO members ensure they are acting in good faith?

Another avenue for imposing safeguards is in the area of international settlement rates. Although these lie outside the scope of GATS for now, the ITU and FCC are dealing with the issue and the introduction of competition in international services is likely to bring pressure on these rates. Countries that are particularly reliant on this source of income, may wish to keep open the

option to control this rate in the event of competition pushing it to levels that adversely affect its development policy.

5.1.4 Selling the Offer

For those countries uncomfortable with a more rapid pace of liberalisation or unable to get domestic political support for such a move, they will need a strategy for selling a lesser offer. Even those countries that concede a little more will fall short of the initial requests for full liberalisation and may also need to sell their offer. The obvious card to play is the special and differential treatment for developing countries allowing them to liberalise at a more gradual pace and in fewer sectors. However, if this card is to be played, then the countries must be able to put forward a clear development justification for such policies. If the hidden rationale for a particular gradualist approach is mere rent creation to buy political favour from pressure groups at home, then industrial countries are unlikely to be sympathetic and retain their pressure for liberalisation.

In the case of telecoms reform in SADC, there does appear to be genuine development justifications behind the gradualist reform process that is being adopted. This being the case, probably the best strategy for SADC countries that do not want to fully liberalise the sector over the next 3-4 years will be to put negotiating effort into pulling together a solid development justification for such policies. The next step will be to gain acceptance of this approach by other countries that want them to liberalise. Gaining this acceptance is unlikely to be straightforward. The reason being that opinions differ widely on what is the optimal approach. There are those that claim the gradualist approach through exclusivity periods and limited competition performs significantly worse than opening to competition (e.g. Mattoo, Wallsten). The argument about creating an attractive investment climate is often dismissed as investment pessimism and an attempt by the state to increase the asset value of the national operator for later sale. However, even this group would acknowledge that the quality of regulation is crucial for the success of liberalisation - a rationale put forward by TRASA. The implication is that putting together a development justification is made more complex than merely reciting a few individual cases where rapid liberalisation has gone wrong. It is in this circumstance that there are clear benefits to putting forward a united SADC or Africa Group position to ensure acceptance from industrial countries. Even if some countries wish to proceed faster than others, their support for a gradualist reform process grounded in clear development goals will lend weight to the negotiating effort of those wishing to proceed slowly.

A clear gradualist development strategy is also likely to be more easily sold to other countries in negotiations if SADC countries precommit to such reform in their schedules. By actively engaging with industrial countries around the demands for liberalisation and putting forward a clear development justification, timetable for reform and precommitting to this in the schedules, SADC countries are more likely to be able to reduce negotiating pressure in telecoms and emerge with their current policy approach intact.

5.1.5 Technical Support

SADC countries may want to pursue getting firm commitments for technical support. It is apparent that regulatory capacity is limited in SADC. Given that a lack of regulatory capacity is commonly seen to impede the benefits of liberalisation and is one of TRASA's reasons for a gradualist approach, getting a commitment to support regulatory capacity should be easy enough to justify. As noted above, it may also be strategic to specifically link the any precommitment to reform in the GATS to targets in capacity building by industrial countries. This will ensure that any failure on the part of industrial countries to deliver on promises to build developing country capacity (as in GATS article IV), will be met by failure to stick to a liberalisation process.

If this strategy is adopted, then it is crucial that SADC countries sit down and examine what type and level of technical support they require to build adequate capacity in their regulators. This exercise should also bear in mind that there is already a degree of regulatory capacity-building going on. An initial examination of what types of technical capacity are needed would suggest the following:

- Ongoing support for core functions - there are certain functions that are core to the regulatory oversight exercise that occur on a repetitive basis. This would include setting of price controls, monitoring adherence to legislation, assessment of anti-competitive behaviour and resolving disputes. These types of functions need to be conducted by regulatory staff and require the building of in-house capacity. By implication, the type of technical support would include training and some in-house support to ensure that staff are able to support the application of the theory in the practical case of their country. This type of support must be ongoing because of the turnover of staff that many regional regulators experience. It is no good to have once-off programmes.
- Once-off technical support - there are a number of regulatory functions that are only performed sporadically and do not necessarily require specific in-house regulatory capacity. This might include the issuing of a cellular licence or development of a numbering plan. In most cases regulators contract aspects of these functions out to consultants - for instance, the assessment of competing bids for a cellular licence. In these cases, the regulators in essence need financial resources for contracting consultants and an in-house capacity for absorbing the consultant's report. This is very different technical support to what is usually given and that is required in circumstances outlined above[24].

[24] For example, the primary reason the Namibian telecoms regulator did not issue a cellular licence in a particular year was the lack of funds to contract a consultant to assess the bids.

5.2 Requests

A number of the middle-income SADC countries (specifically South Africa, Mauritius, Botswana and Zimbabwe) may have some interests in liberalisation of telecoms markets in other countries for essentially the same reasons as industrial countries - access for their own telecoms firms, lower international call rates and lower telecoms costs for their growing force of multinationals. Examples of telecoms firms investing abroad include Mauritius Telecom (Mauritius), Econet (Zimbabwe), MTN (South Africa), Vodacom (South Africa), Eskom (South Africa) and M-Web (South Africa).

However, to date the real focus of their interests is in other African countries. It is then in the interests of the more developed SADC members to request market openings from their regional FTA members and other African countries. The requests may be more limited than those of the industrial countries because they are could be limited by what they are willing to offer in the same sector in reply[25]. However, this need not be the case if other sectors were opened in response. There are a number of considerations from both sides in this case:

- Whether the country that is being requested to liberalise more prefers favouring a regional approach or not? In telecoms, no developing country has any real incentive to favour regional agreement members in their liberalisation. The limited number of licences and the fact that there are first-mover advantages in facilities-based supply, means that favouring a regional firm may well leave the country with a less efficient provider that is difficult to dislodge. It is preferable to seek out the best global tenders, which is exactly what the countries of the region have done. This being the case, there is no incentive to first liberalise regionally and then multilaterally, so if another SADC country is going to request reform, it might as well be in the WTO and not the FTA.

- Whether any retaliatory response from the requested country to the fellow SADC member is likely to be in a sector that they would prefer to open unilaterally but first regionally? As the least developed of the SADC member states have no export interests in telecoms and few service export interests in general, they are likely to request a non-service sector which in response that the other member may not prefer to open on a multilateral basis first.

- Whether the requesting of fellow SADC members would weaken the common front on other issues in negotiations? A common front is going to be necessary on a number of issues within the full Doha Round, and so it seems that a request that is likely to be duplicated by a number of other non-SADC countries anyway gains little at a potentially large expense.

[25] This restriction on what can be requested need not apply if there is an offer to open up another sector of interest to that country in compensation.

It seems that if other countries are placing telecoms requests on the region, it may not be in the best interests of the more developed regional partners to request from each other.

While these telecoms firms are currently only active in Africa, they may well soon be looking at markets further afield and there are a number of VANS operators that are already there (e.g. M-web in China and Thailand). However, one does not want to put requests to countries unless there is some intent to invest as it uses up negotiating effort and creates an obligation to respond to requests from that country.

The movement of labour (mode 4) is often cited as an important means of supply for developing countries. However, in the case of telecoms there is little scope for mode 4 supply. Most of it is linked directly to commercial presence, and so falls under the intra-corporate transfer of employees - a component of mode 4 that is relatively open already.

5.3 Stance on additions to the Reference Paper and sub-sector scope

SADC countries have implemented a relatively standard regulatory approach in their liberalisation, which implies that they are likely to be in compliance with any clarification and extension of the Reference Paper. This would include additions such as specifying those aspects of industry regulation that the regulator should govern rather than the minister, and minimising the extent of regulation. However, there are a number of potential additions that SADC countries might want to consider more carefully and potentially vote against. These include:

- *Specifying the independence of the regulator from the operator to include no indirect link* - this in effect would force countries to divest any government equity holdings in the telecoms sector as they would have a conflict of interest in terms of ownership and rule-maker. While this may be wise in many countries anyway to assure investors, it *de facto* imposes privatisation as part of liberalisation which was not the original intent of the GATS

- *Shift to specifying auctions for allocating licences and spectrum* - some countries may prefer to force regulators to issue licences by auction only because there is no discretion in the process (and therefore potential for discrimination). However, auctions may not be the best approach in a small developing country. The reason is that a) they may want to maximise a range of objectives and not just price, and b) there is lower probability of the outcome being successful because that requires there is sufficient competition in the auction (which is less likely to occur in small unattractive markets) and that collusion is prevented (which is harder to do with weak institutions).

- *Limitations on licence charges* - developing countries may impose relatively high licensing fees on operators to support the regulator because the industry is smaller and there are a certain amount of fixed costs associated with running a regulator. Any attempt to limit these fees as a percentage of industry turnover may inadvertently reduce regulatory capacity in developing countries.

The broadening of the agenda to include emerging sub-sectors should not pose a problem to SADC countries as they can still choose whether to make commitments on the new sub-sectors or not.

6. BIBLIOGRAPHY

Ayogu, M & Hodge, J. 2002. 'Understanding the nature of reforms in the telecom sector in South Africa: A political economy perspective', Journal of Contempory African Studies July

Business Report. Liberalisation may erode Telkom's value, warns chief, 21 August 2002

Dinc, M, Haynes, KE, Stough, RR, Yilmaz, S. 1998. 'Regional universal telecommunication service provisions in the US: efficiency versus penetration', Telecommunications Policy, vol. 22(6), pp. 541-553

Eberhard, A, Mula, M & Shirima, H. 2002. 'Power Sector Performance, Reform and Regulation in Eastern and Southern Africa', University of Cape Town, mimeo

Estache, A, Gomez-Lobo, A, Leipziger, D. 2001. 'Utilities Privatization and the Poor: Lessons and Evidence from Latin America', World Development, vol. 29(7), pp. 1179-1198

Gasmi, F, Laffont, J-J, Sharkey, W.W. 2000. 'Competition, universal service and telecommunications policy in developing countries', Information Economics and Policy, vol. 12, pp. 221-248

Hausman, J, Tardiff, T, Belinfante, A. 1993. 'The Effects of the breakup of AT&T on Telephone Penetration in the United States', American Economic Review, vol. 83(2), pp. 178-184

Hodge, J. 2001. 'Promoting Competitive Outcomes in the Fixed Line Telecommunications Sector in South Africa', TIPS Annual Forum, September 10-12 2001, Johannesburg

Hodge, J. 2002. 'Extending Ownership in Telecommunications in South Africa: Policy, Performance and Future Options', TIPS Annual Forum, September 9-11 2002, Johannesburg

ICASA, 2001. "Findings & Conclusions on the Review of Rate Regime in the Public Switched Telecommunications Sector", RSA Government Gazette No. 22240, Pretoria, April

ICASA, 2001. "Notice of intention to make regulations on fees and charges in the Public Switched Telecommunications Sector", RSA Government Gazette No. 22241, Pretoria, April

ITU, 2002. World Telecommunication Development Report, March, Geneva

ITU, World Telecommunication Indicators, 1995-2001, Geneva

Laffont, JJ & N'Gbo, A. 2000. 'Cross-subsidies and network expansion in developing countries', European Economic Review, vol. 44, pp. 797-805

Laffont, J-J & Tirole, J. 2000. Competition in Telecommunications. MIT Press

Mattoo, A. 1999. Developing Countries and the New round of GATS Negotiations: From a Defensive to a Pro-active Role, World Bank

Milne, C. 2000. 'Affordability of basic telephone service: an income distribution approach', Telecommunications Policy, vol. 24, pp. 907-927

Republic of South Africa, 2000. 'An Accelerated Agenda Towards the Restructuring of State Owned Enterprises: Policy Framework.' Ministry of Public Enterprises, August 2000.

South African Advertising Research Forum, All Media Products Survey 1998-2001

Southern African Trade Research Network. 2002. Telecoms policy review for SADC countries.

Telecommunications Regulatory Association of Southern Africa, Model Telecommunications Policy, (www.trasa.org)

Telkom, Annual Reports 1994-2001

Torero, M, Schroth, E & Pasco-Font, A. 2001. 'Are Telephone Consumers better after the Privatization of Telecommunications in Peru?', GDN Conference, 2001

Wallsten, S. 2000. Telecommunications Privatization in Developing Countries: The Real Effects of Exclusivity Periods, The World Bank

7. APPENDIX I: INDIVIDUAL COUNTRY POTENTIAL OFFERS BASED ON CURRENT PLANNED REFORMS

7.1 Botswana

SUB-SECTOR	MARKET ACCESS	NATIONAL TREATMENT	ADDITIONAL COMMITMENTS
Fixed Line voice telephony	1) Supply only through the incumbent duopoly of network operators 2) none 3) Supply only through duopoly of network operators Foreign investment up to a maximum of X% Resale is permitted for domestic market only 4) Unbound, except as indicated in the horizontal section	1) none 2) none 3) none 4) Unbound, except as indicated in the horizontal section	Reference paper in full
Mobile cellular	1) No bypass of fixed line duopoly networks for routing international traffic 2) none 3) Supply limited to 3 licences Foreign ownership limited to 49% 4) Unbound, except as indicated in the horizontal section	1) none 2) none 3) none 4) Unbound, except as indicated in the horizontal section	
Value-added services	1) No bypass of the fixed line duopoly networks for routing international traffic 2) none 3) None 4) Unbound, except as indicated in the horizontal section	1) none 2) none 3) none 4) Unbound, except as indicated in the horizontal section	

7.2 Lesotho

SUB-SECTOR	MARKET ACCESS	NATIONAL TREATMENT	ADDITIONAL COMMITMENTS
Fixed Line voice telephony	1) Supply only through incumbent monopoly 2) none 3) Supply through incumbent monopoly only Foreign investment up to a maximum of 30% Resale is not permitted 4) Unbound, except as indicated in the horizontal section	1) none 2) none 3) none 4) Unbound, except as indicated in the horizontal section	Reference paper in full
Mobile cellular	1) Supply through fixed line monopoly 2) none 3) Supply through incumbent mobile monopoly only 4) Unbound, except as indicated in the horizontal section	1) none 2) none 3) none 4) Unbound, except as indicated in the horizontal section	
Value-added services	1) No bypass of the fixed line monopoly network for routing international traffic 2) none 3) No bypass of the fixed line monopoly network for routing domestic traffic 4) Unbound, except as indicated in the horizontal section	1) none 2) none 3) none 4) Unbound, except as indicated in the horizontal section	

7.3 Malawi

SUB-SECTOR	MARKET ACCESS	NATIONAL TREATMENT	ADDITIONAL COMMITMENTS
Fixed Line voice telephony	1) Supply through duopoly of national operators 2) none 3) Supply through duopoly of national operators except for local district operators that supply limited geographic areas Foreign investment up to a maximum of X% Resale is not permitted 4) Unbound, except as indicated in the horizontal section	1) none 2) none 3) none 4) Unbound, except as indicated in the horizontal section	Reference paper in full
Mobile cellular	1) Supply through fixed line duopoly 2) none 3) Supply limited to 3 licences 4) Unbound, except as indicated in the horizontal section	1) none 2) none 3) none 4) Unbound, except as indicated in the horizontal section	
Value-added services	1) No bypass of the fixed line duopoly network for routing international traffic 2) none 3) No bypass of the fixed line duopoly network for routing domestic traffic 4) Unbound, except as indicated in the horizontal section	1) none 2) none 3) none 4) Unbound, except as indicated in the horizontal section	

7.4 Mauritius

SUB-SECTOR	MARKET ACCESS	NATIONAL TREATMENT	ADDITIONAL COMMITMENTS
Fixed Line voice	1) Supply through duopoly only	1) none	Reference paper in

telephony	2) none 3) Supply through duopoly only Foreign investment up to a maximum of 40% Resale is not permitted 4) Unbound, except as indicated in the horizontal section	2) none 3) none 4) Unbound, except as indicated in the horizontal section	full
Mobile cellular	1) Supply through fixed line duopoly 2) none 3) Supply limited to 3 licences Foreign ownership limited to X% 4) Unbound, except as indicated in the horizontal section	1) none 2) none 3) none 4) Unbound, except as indicated in the horizontal section	
Value-added services	1) No bypass of the fixed line duopoly network for routing international traffic 2) none 3) No bypass of the fixed line duopoly network for routing domestic traffic 4) Unbound, except as indicated in the horizontal section	1) none 2) none 3) none 4) Unbound, except as indicated in the horizontal section	

7.5 Namibia

SUB-SECTOR	MARKET ACCESS	NATIONAL TREATMENT	ADDITIONAL COMMITMENTS
Fixed Line voice telephony	1) none 2) none 3) none	1) none 2) none 3) none	Reference paper in full

	4) Unbound, except as indicated in the horizontal section	4) Unbound, except as indicated in the horizontal section	
Mobile cellular	1) none 2) none 3) none 4) Unbound, except as indicated in the horizontal section	1) none 2) none 3) none 4) Unbound, except as indicated in the horizontal section	
Value-added services	1) none 2) none 3) none 4) Unbound, except as indicated in the horizontal section	1) none 2) none 3) none 4) Unbound, except as indicated in the horizontal section	

7.6 South Africa

SUB-SECTOR	MARKET ACCESS	NATIONAL TREATMENT	ADDITIONAL COMMITMENTS
Fixed Line voice telephony	1) Supply through three licences only 2) none 3) Supply through duopoly only	1) none 2) none 3) none	Reference paper in full

	except for low teledensity licences for SME operators Foreign investment up to a maximum of 49% Resale will be permitted in 2005 4) Unbound, except as indicated in the horizontal section	 4) Unbound, except as indicated in the horizontal section	
Mobile cellular	1) Supply through three fixed line licences only 2) none 3) Supply limited to 3 licences Foreign ownership limited to 30% 4) Unbound, except as indicated in the horizontal section	1) none 2) none 3) none 4) Unbound, except as indicated in the horizontal section	
Value-added services	1) No bypass of the three fixed line operators for routing international traffic 2) none 3) No bypass of the three fixed line operators for routing domestic traffic 4) Unbound, except as indicated in the horizontal section	1) none 2) none 3) none 4) Unbound, except as indicated in the horizontal section	

7.7 Tanzania

SUB-SECTOR	MARKET ACCESS	NATIONAL TREATMENT	ADDITIONAL COMMITMENTS
Fixed Line voice telephony	1) 0Supply through facilities of the duopoly only. Resale is permitted 2) none 3) Supply through duopoly only. Foreign investment up to a maximum of 35% Resale is permitted 4) Unbound, except as	1) none 2) none 3) none 4) Unbound, except	Reference paper in full

	indicated in the horizontal section	as indicated in the horizontal section	
Mobile cellular	1) Supply through fixed line duopoly facilities only 2) none 3) none 4) Unbound, except as indicated in the horizontal section	1) none 2) none 3) none 4) Unbound, except as indicated in the horizontal section	Review additional licence in 200?
Value-added services	1) No bypass of the facilities of the duopoly for routing international traffic 2) none 3) No bypass of duopoly for routing domestic traffic 4) Unbound, except as indicated in the horizontal section	1) none 2) none 3) none 4) Unbound, except as indicated in the horizontal section	

7.8 Zambia

SUB-SECTOR	MARKET ACCESS	NATIONAL TREATMENT	ADDITIONAL COMMITMENTS
Fixed Line voice telephony	1) Supply only through incumbent monopoly 2) none 3) Supply through incumbent monopoly only. VOIP permitted domestically. Foreign investment up to a maximum of 20% Resale is not permitted	1) none 2) none 3) none 4) Unbound, except	Reference paper in full

	4) Unbound, except as indicated in the horizontal section	as indicated in the horizontal section	
Mobile cellular	1) Supply through incumbent monopoly only 2) none 3) Foreign ownership limited to 60% 4) Unbound, except as indicated in the horizontal section	1) none 2) none 3) none 4) Unbound, except as indicated in the horizontal section	
Value-added services	1) No bypass of the fixed line monopoly for routing international traffic 2) none 3) No bypass of fixed line duopoly for routing domestic traffic 4) Unbound, except as indicated in the horizontal section	1) none 2) none 3) none 4) Unbound, except as indicated in the horizontal section	