Draft Telecommunications Bill 2008: lessons from South Africa

The latest version of the draft telecommunications bill contains sections copied from the South African Electronic Communications Act of 2005 which will lead to difficulties in implementing the act and regulating the industry. The bill, in principle, does all that is required to make operators compete fairly but is impractical for Namibia. An opportunity exists to create a regulatory framework that maximises competition and minimises administrative burden for everyone involved.

Interconnection
Cost based interconnection rates would be ideal but too expensive and difficult to implement for operators and the new regulator. Benchmarking countries that implemented it already would be an efficient alternative.

Universal Service Agency
Namibia does not need another agency. The universal service fund can be administered by the new regulator.

Once off Licence fees
Once off licence fees are not required for regulating the industry or funding the regulator and are counter productive to the objective of network expansion.

Dominant Market Position
Defining what a dominant market position is without defining markets can lead to major delays in implementing the new act and regulating the industry. Definition is not required if all individual licensees are required to provide facilities sharing.

Powers of Minister
The powers of the minister should be limited to policy directives. The bill needs to separate the functions of policy making and policy implementation clearly.

Responsibilities of Regulator
The responsibilities, skills and resources of a regulator need to be matched. Requiring it to prescribe cost accounting procedures and use them for regulating the industry might set it up for failure.

Introduction
The key objectives for the new telecommunications bill should be to create a legal framework that promotes investment in the ICT sector and ensures that operators compete fairly. Competition will take care of service quality, prices and consumer protection issues. In a competitive environment companies compete on either price or quality. It would not make sense for all operators to compete on price. If they did there would be room for another operator focusing on quality.

The regulators have several tools at their disposal to ensure that operators compete fairly:
- Interconnection rates: Determines how far a dominant player can misuse its market power. High interconnection rates will mean high off-net tariffs for smaller operators, which is a disincentive for individuals to move from the dominant operator to a smaller operator. The higher the interconnection rates, the higher will be the gravitational pull towards the biggest operator.
- Licensing: Determines the terms under which companies operate in particular market segments and also how many companies operate within each segment.
- Tariff regulation: Prevents predatory pricing and harmful cross subsidisation.

The law prescribes how and when a regulator may use these tools. South Africa has not seen any interventions or license convergence since the ECA act was passed in 2005 due to unclear definitions and legal concepts that are difficult to implement. These are mistakes that Namibia can hopefully avoid.

Policy, Regulation and Sector Performance
Parliament passes the laws that constitute the legal framework of a country. The legal framework establishes the regulator and defines its powers and duties. As telecommunications gets increasingly complex, it is becoming even more critical that the regulator is well resourced, both financially and in terms of skills.

The diagram below is illustrative of the links between policy, regulation and sector performance. Parliament and the Ministry of Information & Communication Technology develop the overall strategy for the telecommunications sector - what its objectives are and how it is going to encourage investment. These become concretised in the form of laws. The implementation of these laws (and their interpretation) is left to the regulator. The Minister can also influence regulation through policy directives. However, policy directives are meant to provide greater clarity for the regulator (and the public) on what the policy for the sector means and how the law should be interpreted.

Directives are not intended to be specific pieces of legislation - that would impinge on the regulator’s independence, which has its own negative consequences. Four components (parliament, the Minister,
the legislative framework and the regulator) have a direct impact upon the structure of the market (how many operators there are) and, in turn, upon the conduct of these players. The most obvious mechanism that determines market structure is the licensing process. The more operators that are licensed, the greater the likelihood is that there will be competition. However, if a market has been dominated by a limited number of players (as is the case in most countries because telecommunications was historically considered a natural monopoly) then competition policy plays a key role in ensuring that players do not abuse their dominant positions. Regulation can therefore have a significant influence on the conduct of players as well. Each of these components impacts upon the sector performance. Analysis of the telecom sector that ignores any of these components runs the risk of being too simplistic. For example, the assumption that operators are entirely at fault for high prices tends to ignore the policy choices, legislative framework and regulatory competence of the institutions that created the framework for telecom companies to compete.

Independent Regulator

As the ICT market matures, the regulator plays an increasingly important role. When a new technology enters the market (such as mobile telephony in the early 90’s) regulation is limited mainly to licensing. Issues such as quality control, competition policy and efficiency take a back seat. Once the technology is established (the mobile operators are now the incumbents) the need increases for regulatory intervention to safeguard that dominant firms do not abuse their market power. Without an effective regulator the result is the exclusion of new competitors and newer technologies. The incumbent operators ensure that they are the only game in town. The clearest example of this occurring is in South Africa. Vodacom and MTN are the new incumbents and have used their market power to keep mobile termination rates amongst the highest on the continent by a dramatic margin.

A similar picture emerges for Namibia, where the mobile-to-mobile interconnection rate of N$ 1.09 is among the highest in Africa. The figure below displays mobile-to-mobile interconnection rates in US$ for October 2007. Using an average exchange rate for October 2007 the Namibian interconnection rate equals to US cents 16,12, which is on par with South Africa and only lower than Cote d’Ivoire. Lower symmetrical interconnection rates would allow CellOne to offer cheaper off-net calls, therefore weakening MTC’s advantage of being the bigger network.

Since greater regulatory intervention is needed as the market matures, so the basis for intervention needs to be objective. If the regulator is perceived to be serving a narrow set of interests (government for example) rather than the good of the industry as a whole, the perception of risk increases. This has several consequences: firstly, investors are reluctant to allocate money to the sector. Secondly, and probably more important, the expectation on the part of those investors prepared to invest is for a much higher return than would normally be justified. This often forms the basis for operators to justify higher retail prices. There are nearly always investors to be found regardless of the political risk (for example, Neotel still invested in South Africa even though the licensing process was flawed and lengthy) but prices will continue to be high for some time to justify the higher levels of risk.

4. (1) The Communications Regulatory Authority of Namibia is hereby established.
(2) The Authority is a juristic person with the objects and powers provided for in this Act.
(3) The Authority is independent and subject only to the Constitution and the law and must be impartial, and perform its functions without fear, favour or prejudice and in an objective, equitable and non-discriminatory manner. The objects of the Authority are to regulate the electronic communications industry in Namibia in accordance with the provisions of this Act.
5. The objects of the Authority are to regulate the electronic communications industry in Namibia in accordance with the provisions of this Act.
6. In order to achieve its objects the Authority has, in addition to the powers granted to it elsewhere in this Act, the power to -
(a) own movable and immovable property and to deal with such property in the manner that it thinks fit; Provided that the Authority may only acquire, alienate or mortgage immovable property with the approval of the Minister;
(b) conclude any contract;
(c) institute and defend legal proceedings in its own name;
(d) appoint any panel to hear disputes between licensees or licensees and others or complaints or allegations regarding breaches of a licence condition;
(e) make recommendations to the Minister on policy matters including amendments to this Act;
(f) monitor and investigate the postal and electronic communications sectors to ensure compliance with this Act;
(g) manage the radio frequency spectrum;
(h) develop and enforce licence conditions;
(i) grant, renew, amend, transfer and suspend or revoke licences;
(j) approve technical standards;
(k) require licensees to provide information or documents to it on notice;
(l) conduct research in relation to the postal and electronic communications sectors;
(m) make regulations in relation to the matters referred to in section 13 including in relation to a determination or the deeming of market power and/or dominance; and
(n) except in the case of (m), delegate any of these powers to any other person.
7. (1) After consulting the policy unit and the Authority, the Minister shall determine the sector policy for electronic communications in Namibia and publish the sector policy in the Gazette.
(2) The Minister may issue general policy guidelines to the Authority following a consultation with the Authority or on the request of the Authority and in accordance with sector policy, subject to which the Authority must exercise the powers vested in it by virtue of the provisions of this Act in accordance with the sector policy for communications and such policy guidelines.
(3) The Minister may direct the Authority to charge an extraordinary fee for the award of a licence, subject to the provisions of this Act.

The draft bill foresees an independent regulator an the formulation, reproduced in the text box above, is adequate. However, the bill also contains sections and paragraphs that contravene this formulation.

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Regulatory Interference by Minister

One of the greatest difficulties for any government to understand is the role of the regulator. For many governments it doesn’t make sense to be elected into power yet have no say over the precise implementation of government policy. Yet this is precisely what regulators are charged to do. It makes sense, therefore, to have a highly skilled regulator that understands both the needs of the sector as well as the intended objectives of the government. Unfortunately, clause 7(3) of the Act has the potential to cross the line between policy and regulation by allowing the Minister to direct the regulator to charge an extraordinary fee for a licence. There are two problems with this clause: firstly, it directly impacts upon the independence of the regulator and therefore its ability to make good long-term decisions. Secondly, charging extraordinary fees for licensing merely discourages new entrants and adds a level of political risk to licensing - a process that is usually fraught with difficulties anyway.

The best route would be to ensure that the policy and legislative framework work together (rather than obstruct one another as is the case in South Africa) and that the regulator has the skills to implement policy.

SCHEDULE 1 THE COMPOSITION AND PROCEEDINGS OF THE AUTHORITY

Board of the Authority

1. The Authority is managed by a Board that consists of five members unless a different number is determined in accordance with section 14(1)(a) of the State-owned Enterprises Governance Act, 2006 (Act No. 2 of 2006).

2. (1) The Board must be constituted, and its members, including the chairperson and the vice-chairperson of the Board, must be appointed in accordance with, and for a period as determined under sections 14 and 15 of the State-owned Enterprises Governance Act, 2006 (Act No.2 of 2006).

It is quite possible to have a well-resourced and skilled regulator, but have the wrong leadership. Many of the decisions of a regulator are likely to be controversial. If the leadership (usually the board) are not insulated from the vagaries of political life, the likelihood of the regulator making tough decisions is low. This does not mean that the regulator is not accountable. It must be accountable because its decisions heavily impact upon the health of the sector. So, the composition of the regulator must be allied to clear metrics that determine the success or failure of the regulator. These metrics are currently missing.


15 (5) The portfolio Minister appoints - (a) the members of the board of a State-owned enterprise; (b) the chairperson and vice-chairperson of the board; and (c) the alternate members of the board, if any.

Another weakness of the draft bill is that it allows the line minister in accordance with the State-owned Enterprise Governance Act to appoint the regulator’s board. The regulator is first of all not a State-owned enterprise nor is its supervision restricted to state-owned enterprise but also covers the private sector. Secondly, parliament would be a more neutral instance not just to approve but also appoint the board for the regulator to safeguard its impartiality.

Competition Policy

In the 1970’s and 80’s, telecommunications was synonymous with fixed line technology. It took the radical technology of wireless to break this perception. At the same time, it has also become clear that telecommunications is not immune to the problems facing all other sectors of the economy in terms of monopolies. As fixed line operators saw their margins slaughtered, so they tried to limit the number of mobile companies allowed to operate. This same tactic is now being used by mobile operators to prevent new entrants using alternative wireless technologies from gaining entry to a market.

One of the main tools, used by competition authorities around the globe, to prevent this sort of abuse is competition policy. Unfortunately, competition policy is a very complex field, requiring an unusual mix of legal, economic and policy skills. Very few developing countries have a sufficiently established legal or economic system to be able to conduct competition investigations. For example, the Competition Commission of South Africa has started being successful over the last 3 years even though it was established in 1999. It has taken the Commission over six years to develop the skills to apply competition policy effectively.

What this means is that competition policy needs to be a long term view of policy-makers and regulators. Assuming that competition investigations can be turned on like a tap is more counter-productive than productive. South Africa has followed precisely this approach in the telecommunications sector. The Electronic Communications Act of 2005 laid the foundations for the telecom regulator (ICASA) to conduct market reviews and, on the basis of these reviews, to intervene in the market. Unfortunately, the legislation has not been allied with a strategy to develop appropriate skills or timelines. The result has been a chaotic experience with incumbent operators able to stall the process at every turn. Processes, such as market definition have been woefully behind deadline because of a lack of skills.

What lessons are to be learnt for regulators about to start the same process? The starting point is not to deny the efficacy of competition policy. It must form part of a long-term strategy and be a fundamental tool to avoid market abuse by incumbent operators. This means that interim tools must be used to check the natural tendencies of incumbent operators to deny new entrants access to facilities. There are three main methods that can be used:

Firstly, the licensing regime should be opened up as much as possible to allow new technologies (and players) the opportunity to operate (technological and service neutral licences).

Secondly, allied to an open licensing regime must be a clear spectrum policy. In South Africa, one of the methods used to prevent new entrants is for incumbents to sit on unused spectrum. A clear policy of “use it or lose it” should be implemented. In addition, as new spectrum allocations become available (for example, through digital migration) there needs to be a clear mechanism to allocate this spectrum. The most successful mechanism to date has been auctions, but these must be designed appropriately to meet the interests of the country. For example, a simple auction where the highest bidder wins is often not the best design because it encourages incumbents to outbid new entrants. Instead an auction process where certain spectrum is allocated to new technology and incumbents prohibited from bidding is a potential mechanism that can be used.

Thirdly, access regulations such as interconnection and facilities leasing must be promulgated as soon as possible. Critical to the success of these access regulations is pricing. In South Africa, pricing is the domain of what economists call a market definition process. This is an extremely complex and long-winded process that can take years to complete. However, this can be bypassed through several simple alternatives. Benchmarking can be used to give a broad indication of access pricing. A gradual declining glide-path can be used to encourage incumbents to become more efficient over time.

Eventually the rigorous tools of competition policy (such as market definition and significant market power) must apply to ensure that the telecommunications sector is viable and innovative.
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The raison d’être of competition policy is to curb market abuse by dominant operators. It has to, therefore, take into account the historical context in which a particular country finds itself. Has the country been dominated by a single operator (such as Telecom Namibia) for some time? How was that operator funded? Have new entrants had access to the facilities of the dominant operator?

Usually the answer the last question is in the negative and this is the justification for the inclusion of essential facilities legislation. However, the regulator is always fighting a rear-guard action by the dominant operator who is desperate to deny any access to its facilities. The legislation must be clear and precise in its meaning of essential facilities. Unfortunately, the draft Telecommunications Act has borrowed the wording of essential facilities from South African legislation along with all its opacity and vagueness. For example, what exactly is meant by a “limited number” of licensees? Two? Three? Four? How does the regulator determine whether it can be “feasibly” substituted or duplicated? What methodology should be used to determine that?

Some indications of the right way to approach the problem can be found in the hearings on essential facilities regulation that were conducted by the South African regulator, ICASA. In the hearings, the regulator agreed that a clear test had to be conducted in order to identify essential facilities. This test considered the environmental, technical and economic feasibility of duplicating an essential facility. If the regulator found that a piece of equipment could not be duplicated for any of these reasons, then it could be declared an essential facility and access to that facility mandated.

### Licensing

Technological advance has meant that building ICT networks is not as capital intensive as it has been in the past. Of course, a national network covering all the population is still an expensive undertaking limited to few companies that have the capital. But it is possible to build localised networks at reasonable cost. The purpose of class versus individual licenses is to allow for this possibility.

The South African EC Act distinguishes further between electronic communications services (ECS) and electronic communications network services (ECNS). Simplistically, the distinction is between infrastructure builders and those provision of services on top of that infrastructure. However, the distinction is increasingly blurred as building a localised network becomes easier and cheaper. This means that converting traditional licenses based on technology (for example, a fixed line licence) to a technology-neutral licence treads a fine line between the right to build a network and the right to only offer services on top of a network.

In South Africa this line is so blurred that the distinction is becoming meaningless. In 2004 the Minister of Communications issued a directive allowing Value Added Network Services (VANS) to self-provide. In 2005 this right was withdrawn via a press release. Subsequently

The Namibian draft bill adopted the ECA definition partially. However it distinguishes between individual and class licences by their socio-economic impact. This distinction is difficult to test or expensive to prove when it is challenged in court. It would be more useful to define Class licences as restricted to geographic area and/or specific category of user. Possible criteria for distinction could be:

1. Individual licences are technological and service neutral and allow the licence to provide any telecommunication service and build any telecommunication infrastructure.
2. Class licences may be restricted to:
   - specific category of users
   - specific infrastructure deployment
   - specific category of services
   - geographic areas

Telecom Namibia, CellOne and MTC would then get an individual licence and everyone else a class licence which can be suited accordingly to the relevant services and areas. Schoolnet could then, for example, apply for a class licence to service only schools.
Interconnection and Facility Sharing

The South African experience regarding interconnection and facilities leasing regulations provides a valuable lesson to other countries embarking on this vital process. In 2001 the Amendment to the 1996 Telecommunications Act was passed requiring all telecom companies to submit their accounts in a certain template to the regulator (the technical name for this process was the Chart of Accounts / Cost Allocation Manual (COA/CAM). CellC, which was licensed only at the end of 2001 was temporarily excused from this regulation. COA/CAM is a highly complex regulatory tool which takes years to implement. Conclusions from COA/CAM could only be drawn from around 2007 onwards. In the intervening period the EC Act was passed. The EC Act only requires COA/CAM once a finding of Significant Market Power (SMP) and ineffective competition in a particular market has been found. This means that the regulator could not use COA/CAM results to force lower interconnection rates (for example) under the new legal regime.

However, the COA/CAM process was definitely a lengthy one and could have been much shorter. But ICASA (and the Department of Communications) made the same mistake that they had made regarding competition policy: both parties assumed that the skills could be easily developed. Unfortunately, COA/CAM is highly complex and specialised with very few people possessing the skills around the world, let alone within South Africa.

(1) ...all individual licensees must allow any other licensee to interconnect...
(2) ...charges must be limited to the individual licensee’s forward-looking incremental costs of providing such interconnection.
(3) ...written agreement (4)... submitted to the Authority for approval...(5) ...Authority must publish in the Gazette...
(7) If licensees fail to agree ... Authority determines terms of interconnection in accordance with this section
(8) A dominant licensee must (a) publish a reference interconnect offer (b) allow interconnection at any technically feasible point within its network and at cost orientated prices, in a manner that is just, reasonable and non-discriminatory... (c) ensure that the quality of the interconnection must be at least equal to that provided by the dominant licensee to itself...

The Namibian draft bill would lead to a similar disaster if implemented as is. Generally, it is based on accepted best practice and in accordance with the Interconnection rules stipulated by the Regulation Reference Paper of the World Trade Organisation.2

Given that Namibia has a small economy and does not have the required skills to implement a cost-based interconnection regime swiftly it would be advisable to base the default interconnection rate on benchmarking with countries that have implemented cost based interconnection rates already. This approach would not require operators to implement prescribed accounting systems and their judgement by the regulator.

Botswana spent, for example, US$ 372,0003 for consultancy on cost-based interconnection regime in 2004. The result of this study was a recommendation for benchmarking based on EU averages.

Recommendations
• Definitions: Either define markets in the bill or avoid using dominant market position definition. The definition of a dominant market position would not be required in the bill if all individual licensees were required to provide feasibility leasing and cost based interconnection.
• Interconnection: Cost based interconnection is the right principle. Benchmarking countries that introduced it already would be a cheaper and quicker way to implement it. The regulator would need to be required to determine benchmarked interconnection termination rates or the Sender-Keeps-All (SKA) principle. This interconnection regime maximises competition and minimises regulatory intervention (no approval and publishing of interconnection agreements, no cost studies). It promotes fixed-mobile convergence and portability since all the revenues from an operator’s own subscriber stays with the operator regardless of origin and destination of communication. It also provides more incentive to invest in new technology as the full benefit from cost reductions goes to the operator. SKA is technologically neutral and was used in France for Mobile-to-Mobile interconnection until 2004 and in Uganda, Tanzania and Kenya until 2003. A drawback is that SKA could provide less incentive to provide rural services (more incoming traffic). However this can be addressed with Universal Service Fund (USF).

Given that traffic flows are still uneven between operators in Namibia and that these operators are still far away from implementing converged next generation networks, IP based networks and services it would be advisable to take the Benchmarking route.

Number Portability

An important competitive measure would be to establish number portability as soon as possible. Being able to keep the numbers allows individuals and businesses to choose the best product on offer more freely and increases the competition between operators. The draft bill makes provision for number portability. An option to speed up its implementation would be to outsource the number administration to a third party.

Universal Service

The most common feature of a universal service funds globally is their lack of success. Usually created separately from the regulator they suffers from a lack of direction and usually an unclear legislative mandate. Invariably, the institution is unable to identify what the precise problem is or how to address it. The Universal Service Agency of South Africa (USASA) provides a clear example of all of these problems. More than a decade into its existence it is still unable to identify what its purpose is in the South African market. It has been allocated hundreds of millions of Rands. However, the South African Treasury has held its funds back because it doesn’t understand the business plan of USASA.

The solution is twofold: Firstly, to minimise the overhead costs of the Agency. This means that incorporation into the regulator is usually the best option. Setting up an entirely new institution unwisely results high overhead costs. Secondly, there must be clear and precise measurement criteria for the success of the service. If individuals cannot deliver on these criteria then they must be held accountable. The nearly universal failure of US institutions only emphasises the importance of accountability and transparency.

References
rates. Operators could have the option to apply for lower or higher interconnection rates based on forward looking long run incremental costs.

- Licensing: The definitions in the draft bill are not clear and would be difficult to implement for the regulator. Individual licences should be unrestricted and technologically and service neutral. Class licence may be restricted geographically, by category or type of service. There is no need to distinguish between service and network licenses.

- Universal Service Agency: There is no need for another institution. The universal service fund can be administered by the regulator. Universal service fund should have a finite monetary ceiling. Funds that cannot be disbursed by the regulator for universal access projects should be returned to the industry.

- The regulator needs to be independent and impartial. The role of the Minister is to provide policy guidance and not intervene with the regulatory process. The draft bill needs to be modified to separate these functions clearly.

- The board of the regulator would best be appointed by parliament. The regulator is not a state-owned enterprise.

- Once-off licence fees limit market entry and restrict new entrant’s abilities to roll out networks. They are equally not required for funding the regulator, which is best funded by recurrent licence fees on turnover or profit and spectrum fees.

Conclusion
In an infamous quote, the CEO of South Africa’s largest mobile operator stated that the role of the regulator should be limited to the issuance of licenses and to the allocation of spectrum. What is remarkable about this statement is that nobody challenged it as entirely self-serving. The fact that the dominant operator in the South African market believes that there is competition is not surprising. In an ideal, perfectly competitive world, the issuance of licenses would be sufficient to ensure competition. Sadly, we do not live in an ideal world, the telecom sector is increasingly diverse and historically many countries have given their incumbent operators a significant step up.

Regulation is therefore needed to ensure that there is a level playing field and that new entrants are afforded the opportunity to compete. This requires a difficult balancing act with increasingly complex demands being made on the regulator. What this policy brief has argued is that a long-term strategy needs to be adopted that will allow the regulator to build up the skills to be able to effectively regulate the sector. This strategy must recognise that the skills are not immediately available and need to be developed. In the meantime, there are several strategies available to the regulator. Unfortunately, many of these options have been ignored by the current Draft Telecommunication Act. To deliver on the objectives of lower prices and greater penetration, they need to be addressed as a matter of urgency.

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