The South African Government's ECA amendments Bill: an assessment

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In August 2018, the Department of Telecommunications and Postal Services of the Government of South Africa's published a Draft Bill ("2018 Bill") to amend the Electronic Communications Act 36 of 2005 ("ECA"). The 2018 Bill contains a number of modifications to the original ECA as well as to the draft Amendment Bill published in November 2017 ("2017 Bill"). In February 2018, I prepared a report, at the request of Vodacom, that discussed certain high-level aspects of the proposals in the 2017 Bill relating to the regulation of the mobile communications sector in South Africa. This included changes in institutional arrangements and in the substance of regulatory outcomes.

I have been asked to review the 2018 Bill proposals and provide an updated assessment. As with my previous report, this updated assessment focusses on a subset of the proposed changes to the ECA, including the ones which are likely to have the greatest impact on the performance of the telecommunications sector as a whole.

The report is organised as follows:

- Section 1 outlines the Government's policy goals for the sector and some of the provisions of the draft legislation;
- Section 2 evaluates the likely impact of the proposed redistribution of powers between the legislature, the Minister and the independent regulator, ICASA;
- Section 3 evaluates proposals relating to open access;
- Section 4 focuses on the policy of introducing into the South African market place a wholesale only access network, or WOAN; and
- Section 5 summarises and evaluates the package as a whole.

Section 1: the policy goals of the sector and the legislative proposals

There are number of objectives for the communications sector in South Africa, including: equality, accessibility, social development, economic growth, investment, innovation and competition, transparency and accountability.[2] Also important in the present context are the White Paper's principles and values: "In line with this, the following principles and values have guided the development of this policy and will steer implementation of this White Paper framework:

- Any interventions must be *necessary* to meet clearly defined public interest objectives.

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2 White Paper, pp. 10-11

- Any interventions must be *proportionate, consistent and evidence-based* and determined through public consultation.
- The policy maker and regulator must consider the *least intrusive* mechanism to achieve the defined public interest goal/s, and will consider, where appropriate, alternative models such as co-regulation and/or self-regulation.
- The *socio-economic and regulatory impacts* of any action will be assessed and
- The policy maker and regulator will *act fairly* and *ensure regulatory* parity in defining markets and deciding on interventions.
- The regulator must perform regulatory activities and functions in line with policy. When taking decisions the regulator must *function without undue external influences and carry out its decision-making functions independently."* (Emphasis in the original) (p. 12).

The legislative proposals in the Bill, now to be evaluated in the light of the White Paper's objectives and its principles and values, fall into the following categories:

- Those relating to the independence of regulation and the distribution of powers between the legislature, the Minister and ICASA. In particular, I note that many discretionary powers over what are conventionally seen as regulatory matters are either pre-empted by the legislation or transferred from ICASA to the Minister, such as the assignment of spectrum to the WOAN, remedies etc. This raises the issue of whether this will diminish the benefits resulting from the independent exercise of authority of the regulator;

- Those relating to spectrum licensing and open access provisions. Many substantive changes in regulation are proposed in the Bill. They raise questions as to their effect on the overall performance of the sector, on the scope of competition and on levels of investment and innovation; and

- Those relating to the plan to create a wholesale open access network or WOAN. Issues arise as to the objectives of the WOAN; the interrelations between the WOAN and existing networks; and the resources to be made available to the WOAN.

Section 2: Effects of the Bill proposals on the independence of the regulator

It is useful to briefly elaborate upon the above-noted principle underlying the White Paper:

> "The regulator must perform regulatory activities and functions in line with policy. When taking decisions the regulator must *function without undue external influences and carry out its decision-making functions independently***."** (Emphasis in the original.)

Such a discussion unlocks an important aspect of regulation.

The principle explicitly makes the distinction between policy and regulation. Policy is the preserve of the legislature and the democratically elected government. It goes to the nature of the country's overall goals for advancement and the correct balance amongst them. The political element in the choice is inescapable.

However, it is likely that the technical and operational means by which the objectives are achieved are better off left to a technical agency operating within a clear legislative framework which prescribes the agency's objectives, duties, and (in outline) its processes. Such an agency is separated from the hurly-burly of political strife; it can follow clear and internationally recognisable processes and procedures; and it can be made subject to a specified appeal process to a court. This equips it to make technical firm-specific decisions.

Why is this division of responsibilities so widely observed? A basic reason is that many of the assets owned by firms in network industries, such as local access networks, require a commitment of funds which cannot be reversed: in other words, the assets are sunk, or irretrievable. Private sector firms require confidence in the arrangements to make the necessary investments. If there is a lack of confidence in the firm's capacity to recover its efficient costs, willingness to invest in the future will diminish and firms' required rate of return will go up. In the case of mobile communications, this will have not only a direct effect on the sector but will delay the benefits that digital transformation can bring throughout the whole of South Africa's society and economy.

This explains the nearly universal difference in the manner in which policy decisions are taken via by a political process and more technical implementation of those decisions by an independent agency which "must *function without undue external influences and carry out its decision-making functions independently."* Such a rules-based implementation process can mesh with a variety of policy objectives.

The problem arises in part because regulatory decisions cannot be taken in advance over the lifetime of the major investments required in the telecommunications sector. They have to be adapted to changing conditions of demand, cost and technology, as well as changes in policy objectives. As a result, they cannot be normally set in stone by legislation or other means.

There are some exceptions to this rule. Sometimes, in order to make a decision irreversible, it is embodied in legislation or even in a more fundamental constitutional document.[3] Sometimes regulatory objectives are accomplished by the conclusion of a concession agreement which is engrossed in a long-term private law contract, enforceable in the courts.[4]

3 For example, in order to ensure a particular spectrum assignment for a WOAN in Mexico, it was incorporated in a Transitory Article in the Mexican constitution.

4 Such a contract was concluded by the Jamaican government several decades ago as a result of problems with regulation of the telecommunications sector which are noted in section 3 below.

However, it is only on rare occasions that the precise nature of the subsequent interventions (for example, efficient future spectrum assignments or allowable price levels) can be set over the whole lifetime of the assets in which an operator has to invest. In such circumstances, prospective technical decisions can lie within the competence and discretion either of the Minister, or of a regulator which is bound by specified duties and obligations, subject to certain procedural rules, and open to an appeal process through the courts.

Important examples of such technical decisions which frequently lie within the regulator's remit include the following:

1) How should spectrum be assigned?

The assignment of high value spectrum, often within an overall framework of spectrum allocation to different broad *uses* based on government policy, is a highly technical matter which requires expertise which government departments may not possess. Access to such a valuable resource is often very contentious, and the assignment is often better done by a separated implementing body with specialised skills than (as in the Bill) by a Minister-led government department, which is inevitably subject to pressure from applicants and other interested parties.

2) Which firms exercise market power? What remedies are required to prevent it from being used?

These too are technical, quasi-legal determinations which have important consequences for all firms in the market place. For the same reason as specified above, it is widely considered to be better done by a regulatory agency than by a Minister. By the same token, the legislation should not, under normal circumstances, try to pre-empt the regulator's technical choices in such matters, by (for example) limiting the discretion of the regulator to make decisions concerning how to rectify market failures.

While there may be some demarcation problems in deciding what belongs to policy and what to implementation and regulation, experience suggests that there is a high degree of similarity in international practice of such determinations.

Yet the Bill removes discretionary authority from ICASA in a number of ways, either by prescribing what ICASA must do when previously it exercised discretion, or by transferring the exercise of discretion to the Minister.

In more detail, the Bill:

> *- gives the Minister the role of deciding what constitutes high demand spectrum;*
> *- gives the minister the power to decide which unassigned high demand spectrum must be reserved for assignment to the WOAN and so how much is available to other licensees;*

- requires all vertically integrated mobile operators to produce separated accounts – irrespective of their market size; ctr 8, 43, 1A
- requires ICASA to designate as a 'deemed entity' any licensee which has 25% or more of an electronic communication network in an infrastructure market; (44, 3A, (a))
- requires ICASA to mandate that cost oriented-access to be offered by MNOs that are declared 'deemed entities' by ICASA[5]; ctr 8, 43, 1B
- requires ICASA to develop within 18 months of the Bill, wholesale open access regulations (to facilitate open wholesale access); 8, 44, 1.
- indicates that any licensee that controls spectrum, identified for International Mobile Telecommunications, should also be designated by ICASA as a deemed entity; (44, 3A, (b))
- removes the ability of ICASA not to require access to fibre loops – (44, 7) – this seems to have been a measure to try and encourage investment in fibre;.
- limits ICASA's power to determine the terms for the award of spectrum to the market participants, by imposing a rule that for a potential bidder to acquire LTE spectrum they have to first commit to buying 30% of the capacity of the WOAN;
- transfers from ICASA to the Minister some of ICASA's key responsibilities, including the establishment of a National Radio Frequency Planning Committee and a National radio Frequency Planning Division. S29A (d)
responsibility for the Development of the National Radio Frequency Plan which currently resides with ICASA. S29A(e)
ensuring equitable distribution of radio frequency spectrum resources
responsibility for approval of Universal Service Access and Universal Service Obligations.

This amounts to a substantial 'hollowing out' of ICASA's functions. Accordingly, my conclusion from this section is that the Bill contains provisions for the redistribution of decision-making authority among the legislature, the Minister and regulator (ICASA), which depart from international practice which itself is designed to introduce certainty into the environment in which major investment decisions are made. The resulting greater uncertainty runs the risk of chilling firms' incentives to invest.

Finally, it is worth pointing out the administrative consequences of the redistribution of powers. When an independent regulator is first created, it typically appoints new staff, some of them may be transferred from the ministry itself, where they may have been performing some tasks now transferred to the regulator. As a result, the ministry loses expertise in tasks now performed elsewhere. When – as is proposed in the Bill here – some of these tasks are transferred back, that expertise has to be rebuilt or replicated with the Ministry. This is a difficult and possibly costly process. The blurring of the dividing line between Minister and ICASA may also lead to disputes between the two sides which may take some time to resolve.

5 The Bill also seems to suggest that any licensee that controls exclusively used spectrum should also be designated by ICASA as a deemed entity – this means effectively everyone that controls exclusively any type of spectrum (44, 3A, (b).

Section 3: The likely effects of mandating cost-oriented wholesale open access

As mentioned above, the Bill requires that operators that are classified as deemed entities (which includes all mobile spectrum licensees) provide wholesale open access to communications network services and facilities at cost-oriented rates.

Mobile communications were developed on the basis of heavy reliance on vertically integrated companies, which controlled the infrastructures on which they sold services. This reflected the fact that duplication of infrastructures is quite feasible – unlike the situation in fixed networks.

In recent years, the general trend globally has been to confirm a preference in favour of the maintenance of infrastructure competition; for example, proposed consolidations via mobile mergers have been rejected in the EU and the USA.

This has not precluded substantial network sharing in many jurisdictions, especially of passive assets such as towers. This approach allows cost economies to be exploited while at the same time operators can make choices and compete with respect to the services they provide – for example the quality of service offered, the generation of mobile technology employed, and the geographical extent of the coverage offered. As a result of this differentiation, they are under competitive pressure to offer services which are advanced, of high quality and good value, and to improve them continuously.

As noted in Section 2 above, in the case of deemed entities (including MNOs holding IMT spectrum and networks which have a market share of more than 25%), the Bill proposes to mandate wholesale open access at cost-oriented rates. This involves sharing not just of the passive facilities or assets, such as towers or spectrum itself[6] but also active wholesale services. This amounts to full network sharing - offering access in effect to all the components (electronic and non-electronic) in the value chain, with the exception of the retailing activity itself. As such, the Bill extends the scope of facilities leasing regulation (which is currently confined to passive infrastructure) to potentially cover communication providers' entire networks. This raises significant incentive problems, especially in a rapidly changing sector like mobile communications. If access is mandated, then every investment an operator makes in a 4G or 5G is shared with its competitors. This means that the Bill's objective "to promote service-based competition and avoid concentration and duplication of electronic communications infrastructure in urban areas," might suitably be qualified by a recognition that too much network sharing, particularly of network components which support differentiation and innovation, may harm end users' interests.

6 Open access is thus quite different from spectrum sharing, which is many recent applications involves creating a 'pecking order' of access rights to spectrum, which ensures priority access by the primary licensee to spectrum in a band, while unutilised spectrum is made available to secondary users, usually on a dynamic and interruptible basis, using a data base of utilisation.

The Bill contains a further objective of "redressing market dominance and control". Assessing the level of competition in mobile markets, and adopting remedies to prevent the exercise of market dominance, is a world-wide pre-occupation of regulators. In South Africa as in many jurisdictions, the degree of competitive pressure in the mobile market place is the subject of periodic review by the regulator, ICASA. Such a review is underway, and I am in no position to anticipate its conclusions.

However, one acknowledged response to any finding of the exercise of market power is the imposition of appropriately calibrated access obligations. I have suggested above that on-going market reviews of this kind are normally the regulator's responsibility, because they require detailed technical analysis and affect the fortunes of individual firms in a way which make it desirable to insulate them from political decision-taking.

The current legislation provides for such market reviews, and one is projected. One factor which ICASA would have to take into account in its forward-looking market analysis is the WOAN. This introduces a new network player, which by its very nature provides a route to market for any entrant into the retail market. It would therefore be appropriate, before making a decision on open access arrangements, to consider the degree to which the WOAN expands the competitive potential of the mobile sector. In my view, using the existing scheme of regulation is a more satisfactory way of dealing with such decisions than using the legislative process to pre-determine the solution.

Section 4: The WOAN proposal

The Bill's WOAN proposal represents a major structural intervention in mobile communications. It follows in the footsteps of similar ventures in some other countries, but the number of such government-inspired plans for a wholesale only network is still quite small.

Using the spectrum assignment process directly to affect industry structure is as old as the mobile sector itself. The number of licensees in most national markets was ratcheted up from initially one or two to three to six – or in some cases to as many as a dozen.

However the current WOAN proposal has additional features: i) the network created is wholesale only: ii) every MNO which wants to acquire unassigned high demand spectrum are required to purchase 30% or more of the network's capacity; and iii) creates the opportunity to pursue non-commercial objectives such as increasing the diversity of mobile ownership. I first consider how a WOAN can best be used to keep prices down, and then how it can pursue other objectives.

In the case of the WOAN being rolled out in Mexico, the most prominent raison d'être was to combat a situation in which a strongly dominant mobile operator (with 70% of subscribers) had raised prices and restricted take-up in the mobile sector.[7] This was accomplished by assigning the 700MHz band to a public private partnership, for which the private partner has been chosen via a tendering process.

In competition terms, it is noteworthy that the impact of a WOAN is to enhance network competition by an additional network, and to expand service competition by as many new retailers as can be enticed by the WOAN into the market.

The WOAN's impact on increasing network numbers should benefit customers because it will put downwards pressure on costs, limit profit margins and encourage the innovation which has been such a visible and beneficial feature of mobile communications since the sector came into existence a very few decades ago.

I believe that a non-dominant (competitive) WOAN that competes on a level playing field with other MNOs at the wholesale level can usefully be introduced in South Africa. It should maintain and enhance existing levels of network competition, and deliver better, cheaper services to end users. It will also promote service competition.

If this policy were adopted it would be necessary for competition between the WOAN and existing MNOs to be put on a fair basis. To achieve this 'fair competition' objective alone, this would mean that the WOAN should not as a matter of course receive all special advantages mentioned in the Bill.

7 See OECD Review of Telecommunications and Regulation in Mexico, 2012.

However, it should transparently receive resources to recover its costs which are incurred in respect of the important non-commercial goals which it is pursuing, including increased diversity and any obligations related to coverage. As the white paper makes clear, enhancing the diversity of providers of mobile services is a major objective of policy.

As for implementation of the WOAN, ICASA has already responded to the policy push towards a WOAN in its previous reservation of some spectrum for it.

ICASA will also, in its ongoing market review, conduct an investigation into the question of market power in mobile market, which will illuminate the WOAN's role in imposing an additional competitive constraint on the market. As noted above, the existence of a WOAN is likely to reduce the need for fuller access remedies, and in particular, the need going forward for open access provisions on existing operators. At the same time, with the WOAN existing 'universal service' provisions for the wider availability of mobile services in under-served areas will have an additional instrument to deliver these benefits.

In my view, these are good illustrations of the above-noted White Paper principle that:

> "The regulator must perform regulatory activities and functions in line with policy. When taking decisions the regulator must *function without undue external influences and carry out its decision-making functions independently."*

There is no doubt that a number of major decisions concerning the WOAN are still outstanding. I have mentioned a subset of them, with a focus on how to bring the benefits of choice and competition to end users

Section 5: The Bill package as a whole

The goal of this report has been to provide a high-level review of the South African Government's proposals in the Bill for the mobile sector.

I note that a major feature of the Bill is its proposal to rebalance power among legislators, the Minister and ICASA, to the detriment of ICASA. Thus much more of the regime is prescribed in law than before, and discretion formerly exercised by the regulator is transferred to the Minister. I am concerned that taking decisions of a technical rather than a policy nature from a neutral implementing body to a more political institution runs the risk of introducing greater uncertainty into the sector, to the harm of end users.

The second aspect considered is the Bill's explicit intention to impose harsher access obligations on existing operators. I am concerned that such policies risk increasing perceived regulatory risks and discouraging much needed investment in the sector.

Finally, I welcome the introduction of a WOAN, to enhance both service and network competition and to achieve equity objective such as increased participation in the sector and wider access to mobile services. However, the WOAN should not be granted unassailable advantages, such as a disproportionate share of unassigned spectrum. This would undermine the ability of other operators to compete and hence their incentives to invest.

Curriculum vitae of
Professor Martin Cave, B.A., BPhil, DPhil

Date of birth : 13 December 1948

Education

BA, First Class, Philosophy, Politics and Economics, Balliol College, University of Oxford, 1969

BPhil in Economics, Nuffield College, University of Oxford, 1971

DPhil, Nuffield College, University of Oxford, 1977

Principal Academic Employment

1974 to 1989 Lecturer, Senior Lecturer and Professor of Economics, Brunel University.

1989 to 2001 Dean of the Faculty of Social Sciences, Pro-Vice Chancellor and Vice-Principal (Deputy Vice Chancellor), Brunel University.

2001 to 2010 Professor and Director, Centre for Management under Regulation, Warwick Business School, University of Warwick

2010 to 2011 BP Centennial Professor, London School of Economics and Political Science

2011 to 2017 Visiting Professor, Imperial College Business School, London.

2018 to 2021 Visiting Professor, London School of Economics.

Principal Public Sector Advisory and Other Activities

From October 2018, **Chair of Ofgem** (the GB energy regulator).

From January 2012 to January 2018 I was successively **deputy chair of Competition Commission** and **deputy panel chair of the Competition and Markets Authority**. My role was to chair merger inquiries, market investigations and regulatory appeals.

I have conducted a number of independent reviews for the UK Government, as follows:
- Appointed by the **Chancellor of the Exchequer and the Secretary of State for Trade and Industry** to conduct an independent review of radio spectrum Management 2001-02
- Appointed by the **Chancellor of Exchequer** to conduct an independent audit of major spectrum holdings, 2004 - 05
- Appointed by **Secretary of State for Communities and Local Government** to undertake an independent review of the regulation of social housing, 2006-07
Appointed by the **Chancellor of the Exchequer and the Secretary of State for DEFRA** to conduct a review of competition and innovation in the water sector, 2009-10.
- Appointed by the **Secretary of State for Transport** to chair an expert panel on airport regulation, 2008-09

Also:

-Member, panel advising **UK Government** on spectrum valuation, 2014/5
-Member, panel advising **French Government** on fibre policy, 2013/14
-Consultant to the UK **Office of Railway Regulation** on competitive and contestable regulation, 2010-11
-Regulatory adviser to UK Government **Review of Royal Mail**, 2010
-Member, **UK Payments Council**, 2006-2011; Acting Chair, Nov 2009-April 2010.
-Special adviser to **European Commissioner Reding** on the reform of European telecommunications regulation, 2006..
-Adviser to **Lord Chancellor's Department** on reforms in legal regulation 2004-5.
-Economic Advisor to **Ofcom,** 2003 to 2006.
-Non-Executive Advisory Director at **OFWAT**, 2001 - 2005.
-Member, **MMC/Competition Commission**, 1996-2002.
-Adviser to **Oftel**, 1990-2000.
-Economic Adviser, part-time, **at HM Treasury**, 1986-90.

I am joint academic director, at the **Centre on Regulation in Europe (CERRE**), a Brussels-based think tank.

Selected books and articles

Selected books, reports etc.

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