econeX competition and applied economics

Project Lion – Comments on select aspects of the 2018 EC Amendment Bill

20 November 2018

FINAL REPORT

eco next competition and applied economics

Table of Contents

| 1 | Executive summary and introduction | 1 |
|---|---|------|
| 2 | Policy context | 3 |
| | 2.1 The EC Amendment Bill (2018) | 3 |
| | 2.2 The National Integrated ICT White Paper | 3 |
| | 2.3 Concurrent policy processes | 5 |
| | 2.3.1 Identification of Priority Markets for Review | 5 |
| | 2.3.2 Data Services Market Inquiry | 6 |
| 3 | Industry context and structural challenges | 7 |
| | 3.1 The mobile market | 7 |
| | 3.2 The fixed broadband market | 10 |
| | 3.3 Quality of Service | 13 |
| | 3.4 Summary remarks | 14 |
| 4 | Key issues emanating from the EC Amendment Bill | 15 |
| | 4.1 Open access to encourage service-based competition | 15 |
| | 4.1.1 Open access should be subject to a market review | 16 |
| | 4.1.2 The determination of deemed entities is too wide | 16 |
| | 4.1.2.1 The definition of deemed entities creates a disjoint between the 2018 Amendment | Bill |
| | and the Competition Act | 17 |
| | 4.1.2.2 The current definition unnecessarily imposes regulation on players who are not | |
| | dominant | 18 |
| | 4.1.3 Active infrastructure sharing should only be mandated where SMP has been identified . | 19 |
| | 4.1.4 Deemed entities should provide access through cost-oriented pricing | 20 |
| | 4.1.5 Accounting separation should only be required if an operator has SMP | 21 |
| | 4.2 The viability of the WOAN as set out in the 2018 Amendment Bill | 21 |
| | 4.2.1 Relevant policy processes relating to spectrum allocation | 22 |
| | 4.2.2 Concerns with the viability of the WOAN | 23 |
| | 4.2.2.1 Spectrum assignment | 23 |
| | 4.2.2.2 Wholesale open access prices of the WOAN should be regulated from inception | 24 |
| | 4.2.2.3 Population and network coverage targets should be set at the appropriate level | 25 |
| | 4.3 Rapid deployment | 26 |
| | 4.3.1 Rapid deployment policy as set out in the White Paper | 26 |
| | 4.3.2 Rapid deployment policy as set out in the 2018 Amendment Bill | 27 |
| | 4.4 Concurrent jurisdiction | 27 |
| | 4.4.1.1 A timeline should be set for amending the concurrent jurisdiction agreement | 28 |

| 5 | Summary a | Ind conclusions | .31 |
|---|--------------|--|-----|
| | 4.5 Internat | ional roaming | .29 |
| | market re | views | .29 |
| | 4.4.1.2 | The Authority should consult with the Competition Commission when conducting its | |

Table of Figures

| Figure 1: Expected growth in mobile data in South Africa for consumers (left) and business services (rig | jht) |
|--|------|
| | 7 |
| Figure 2: MNO Service Revenue Market Share, 2012 - 2017 | 8 |
| Figure 3: Number of DSL and fibre connections under high (left) and low (right) fibre scenarios | .11 |
| Figure 4: Market price of SA-UK 10Gbps link | .12 |
| Figure 5: Leased line prices, 2013 v 2017 | .12 |
| Figure 6: Openserve's price reductions as in July 2017 | .13 |

List of Tables

| Table 1: Characteristics of an oligopolistic market and how they compare to the South African mobile | Э |
|--|---|
| telecommunications market |) |
| Table 2: Unassigned HDS in different frequency bands 22 | 2 |

1 Executive summary and introduction

- Econex has been instructed by TGR Attorneys to provide economic and competition advisory support to Telkom SOC Limited ("Telkom") on the Draft Electronic Communication Amendment Bill 2018 ("2018 Amendment Bill"). Econex has on a previous occasion also assisted Telkom in commenting on the previous version of the Draft Electronic Communication Amendment Bill 2017 ("2017 Amendment Bill").
- 2. The focus of our commentary is on whether the stipulations of the 2018 Amendment Bill will allow the policy objectives as captured in the Integrated ICT White Paper ("White Paper") to be realised, and specifically whether it will address the structural competition issues that characterise South Africa's telecommunications market, specifically in the mobile space. It also considers whether the concerns that were raised in response to the 2017 Amendment Bill have been addressed.
- 3. The general consensus amongst academics and policy analysts is that access to broadband encourages economic development. The White Paper, published in 2016, emphasises the need for more competition in the ICT sector to reduce prices and stimulate economic growth. The ICT sector is an important enabler of economic growth and bottlenecks in this sector have to be addressed as a matter of urgency. The White Paper envisaged that certain changes to legislation will have to be made to enable the fulfilment of these goals.
- 4. These changes were first published in the 2017 Amendment Bill on 17 November 2017, on which Econex provided comments on behalf of Telkom. Key issues in the 2017 Amendment Bill to which we responded were the allocation of unassigned high demand spectrum (HDS) and the implementation of a Wireless Open Access Network (WOAN), radio frequency spectrum trading, open access and the determination of deemed entities, international roaming within the SADC region, and the introduction of regular market reviews.
- 5. As we elaborate in this economic report, it is a concern that the uncertainty created by the different sections dealing with the proposed WOAN and obligations of the WOAN, will negatively impact on the viability of the WOAN. The introduction of a wholesale open access player is crucial to levelling the playing field, especially for smaller mobile networks (MNOs) such as Telkom Mobile, and if this ends up as a 'lost opportunity', it will simply further entrench the current duopoly market structure. We therefore discuss in some detail the apparent (and remaining) contradictions between the determination of deemed entities, open access and regulated wholesale rates, cost orientation, etc.
- 6. A central point to our analysis is that it is not prudent to impose pro-competitive remedies before a finding of market failure has been made. The European Commission's Recommendation on relevant

markets in the electronic communications sector susceptible to *ex ante* regulation¹ provides a threecriteria test that should be applied to examine whether a market exhibits ineffective competition and therefore should be regulated: (i) if there exist high and non-transitory barriers to entry of a structural, legal or regulatory nature; (ii) if the market structure does not tend towards effective competition in a relevant time horizon; and (iii) if the application of competition law alone would not adequately address the market failure(s) concerned. In the case of the 2018 Amendment Bill this means that a market review is required (in terms of section 67) to first determine whether a market is subject to market failure and whether any player has significant market power (SMP). We also note that closer cooperation between the different policy processes dealing with market reviews (e.g. the ICASA Priority Markets Study and the Competition Commission's Data Services Inquiry) is required to prevent further uncertainty.

- 7. Imposing regulatory remedies and obligations in dynamic markets characterised by effective competition (as we show is the case with the fixed broadband sector) is unnecessary and will simply add to the cost of doing business. The aim of regulatory intervention should be to reduce prices and not to unnecessarily add to the burden of compliance, especially not in markets characterised by competition. We provide evidence in section 3.2 of how competition has increased in the fixed market during recent years, and where the conditions of the 2018 Amendment Bill are likely to unnecessarily increase the regulatory burden.
- 8. We start with an overview of the policy context, in order to emphasize the need for coordination between the different policy processes.

¹ COMMISSION RECOMMENDATION of 17 December 2007 on relevant product and service markets within the electronic communications sector susceptible to *ex ante* regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services (notified under document number C(2007) 5406) (2007/879/EC) (para. 5)

2 Policy context

9. This section deals with the policy objectives set out in both the EC Amendment Bill and the White Paper. It shows that while the overall objectives are aligned, the definitions and meanings are not always well coordinated and at times contradictory. We also highlight where concurrent policy processes need to be coordinated to achieve the overall goal of a more competitive ICT sector.

2.1 The EC Amendment Bill (2018)

- 10. Section 2 of the EC Bill has been amended by adding the following important objectives that need to be achieved by the Act:
 - "(cA) redress the skewed access by a few to economic and scarce resources, such as radio frequency spectrum, to address the barriers to market entry;
 - (cB) promote service-based competition and avoid concentration and duplication of electronic communications infrastructure;
 - (cC) promote an environment of wholesale open access to electronic communications networks on terms that are effective, transparent and non-discriminatory;
 - (cD) redress market dominance and control."
- 11. These objectives are a welcome addition as they allow the 2018 Amendment Bill to align with the relevant policy documents discussed below. Specifically, the inclusion of the objective to 'redress market dominance and control' is important. Dominance has been defined in the ECA as having the same meaning as section 7 of the Competition Act and this further strengthens the coordination between the Authority and the Competition Commission. It does, however, pose a potential conflict with the concept and definition of a 'deemed entity' and the 25% market share reference. We elaborate on this later in this document.
- 12. The aim of promoting service-based competition is also central to expanding growth in the ICT sector, as we explain more fully below.

2.2 The National Integrated ICT White Paper

13. The White Paper, published on 3 October 2016, emphasises the need for more competition in the ICT sector, to reduce prices and stimulate economic growth. The ICT sector is an important enabler of economic growth and bottlenecks in this sector have to be addressed as a matter of urgency. The White Paper highlights that certain changes to legislation have to be made to fulfil the stated policy

goals. It also envisions that the ICT policy will fundamentally change the structure of the market to promote service-based competition and reward infrastructure-sharing.

- 14. Chapter 9 of the White Paper deals with policy frameworks to address supply-side challenges in transforming South Africa into an "*inclusive, people-centred and developmental digital society.*" It sets out the open access policy, spectrum policy, and a policy framework for licencing unassigned HDS to a WOAN. A number of specific goals for spectrum policy are highlighted, including:
 - To allow for <u>effective service-based competition</u> and to ensure accessible, affordable, high quality and reliable services for consumers;
 - To <u>increase network coverage</u>, and enable the rapid deployment of broadband infrastructure and services across all areas of the country;
 - To promote shared and equal access to broadband infrastructure;
 - To remove barriers to competition and innovation in the provision of broadband services; and
 - To foster innovation and development of applications and services.
- 15. A number of the policy objectives highlighted throughout the chapter are directly linked to these goals. For instance, *encouraging service-based competition*, which will increase consumer choice of services and service providers, reduce costs and increase innovation; *reducing market entry barriers* and enabling the sharing of infrastructure and scarce resources, thereby reducing the duplication of infrastructure; *promoting broadband coverage* in rural areas and underserviced areas; and *promoting innovation* that addresses national developmental challenges and goals.
- 16. In addition, the White Paper sets out a number of broad policy objectives for the regulation of the ICT sector in general. According to the White Paper, there is an obligation to ensure maximum public value from radio frequency spectrum as a national resource, and to ensure that it enhances equitable outcomes. The policy framework must therefore promote inclusive economic growth and investment, which is critical for addressing inequality and facilitating socio-economic transformation. Among these broader objectives for the ICT sector are the following:
 - <u>Equality</u>: All South Africans must have affordable access to communications infrastructure and services and the capacity and means to access, create and distribute information.
 - <u>Accessibility</u>: Services, devices, infrastructure and content must be accessible for all sectors of the population, so that all can equally enjoy and benefit from communication services;
 - <u>Economic Growth</u>: Policy must facilitate access by all South Africans to quality communication infrastructure and services to enable economic growth, employment and wealth creation;
 - <u>Investment</u>: Policy must promote and stimulate domestic and foreign investment in ICT infrastructure, manufacturing, services, content, and research and development;

- <u>Innovation and Competition</u>: Innovation, fair competition and equitable treatment of all role players must be facilitated to ensure a range of quality services are available to end-users and audiences.
- 17. The overarching policy aim is to promote economic growth through increased access to affordable telecommunication services. The structural challenges that plague South Africa's mobile and fixed telecommunication sectors are summarised below.

2.3 Concurrent policy processes

18. The White Paper provides the relevant policy context which is to be captured in the EC Amendment Act. There are, however, two other important policy processes underway which also closely tie into the policy objectives of the White Paper: (a) ICASA's inquiry into the Identification of Priority Markets in the Electronic Communications Sector, and (b) the Competition Commission's Data Services Market Inquiry. In section 4.4 we consider the implications of the 2018 Amendment Bill for how the sector regulator and competition authorities will work together. The importance of this is emphasised by the brief overview below of how the inquiries of each of the authorities need to align.

2.3.1 Identification of Priority Markets for Review

- 19. ICASA has the mandate to identify markets that need to be prioritised for review to determine whether they should be susceptible to *ex ante* regulations. It published its intention to conduct such an inquiry in June 2017, and in February 2018 released its Discussion Document for public comment. Their Findings Document was released in August 2018, and identified the following markets that should be prioritised for potential market review:
 - <u>Wholesale fixed access</u>, which includes the wholesale supply of asymmetric broadband origination, fixed access services and relevant facilities. This refers to the provision of last mile connectivity in fixed networks.
 - <u>Upstream infrastructure markets</u> incorporating national transmission services (national leased line services providing high-bandwidth connectivity between distant locations within South Africa) and metropolitan connectivity (connectivity between local sites within high-density urban and sub-urban areas and metropolitan points of presence) and relevant facilities.
 - <u>Mobile services</u>, which includes the retail market for mobile services and the wholesale supply of mobile network services, including relevant facilities.
- 20. Many of the issues raised in the 2018 Amendment Bill which we describe in section 4 speak to ex ante regulations that would relate to the three markets identified above. According to section 67 of the ECA, these markets should undergo a market review process to establish if ex ante policy is required. The Amendments to the ECA should therefore allow for enough flexibility in the policy process so that

regulations are not imposed on markets, to the extent that if a market review has been followed in such markets, such markets would be found to not be in need of regulatory intervention. This is especially true in the fixed space market, as we elaborate on below.

21. There is also a need for policy coordination in terms of timing. The amendments to section 67 of the ECA specify (in 3A(a)) that ICASA must define all the relevant markets and market segments relevant to the broadcasting, and electronic communications sector within 12 months of the coming into operation of the EC Amendment Act. This must be done by notice in the Government Gazette. Such notice must set out a schedule for market reviews of the defined markets and market segments prioritising those markets with the most significant impact on consumer pricing, quality of service and access. In addition, ICASA must at least every three years review and update the market definitions and schedule for market reviews. It is also stated (4C) that a market review under this Chapter must not take longer than 12 months. Taken together, it would seem that ICASA will be permanently engaged in a number of rolling market reviews, and this must be coordinated closely with the Priority Markets identification which is ongoing.

2.3.2 Data Services Market Inquiry

- 22. The need for collaboration between the Authority and the Competition Commission is especially clear in light of the latter's inquiry into Data Services. The Commission initiated its inquiry in August 2017, shortly after ICASA announced its inquiry into priority markets. The purpose of the Data Services Inquiry is to "examine whether there are features or a combination of features in data services markets which prevent, distort or restrict competition".²
- 23. The Competition Commission held public hearings in October 2018 during which stakeholders were given the opportunity to comment on the state of competition in the data market in South Africa. While a lack of access to HDS was one of the key issues that were raised, other concerns such as a lack of measures to ensure rapid deployment³, policy uncertainty⁴, constraints in terms of number portability⁵, and more were also highlighted. It is arguable that many of these issues fall within the ambit of *ex ante* sector regulation rather than *ex post* competition policy. It is therefore important that the Competition Commission and the Authority align their findings and processes, specifically in light of the three markets that the Authority has identified for review.

² Competition Commission (2017). Data Services Market Inquiry, Terms of Reference. *18 August*.

³ Vodacom (2018). Presentation at the Public Hearings of the Data Service Market Inquiry.

⁴ Vodacom (2018). Presentation at the Public Hearings of the Data Service Market Inquiry.

⁵ Telkom (2018). Presentation at the Public Hearings of the Data Service Market Inquiry, 18 October.

3 Industry context and structural challenges

24. As mentioned above, the ICT sector is an important enabler of economic growth and bottlenecks in this sector have to be addressed as a matter of urgency. The White Paper envisaged that certain changes to legislation have to be made to fulfil the policy goals described above. It also envisioned that the ICT policy will need to fundamentally change the structure of the market to promote service-based competition and reward infrastructure-sharing. Before we discuss whether the 2018 Amendment Bill will help achieve these aims, we provide more detail on the structure of the mobile and fixed broadband markets. This is important, as competition dynamics differ between these markets. While the fixed segment of the market has become very competitive during recent years, this is not the case in the mobile segment. These different levels of competition have significant implications for where and how *ex ante* policy measures should be implemented.

3.1 The mobile market

25. South Africa's demand for mobile data is set to increase exponentially in the next number of years. This is expected to be the case for consumer as well as for business services, as shown in the figures below.

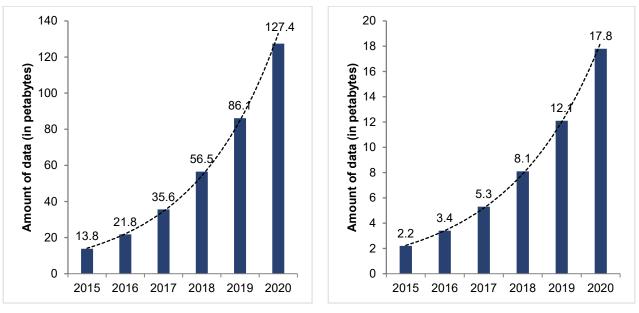


Figure 1: Expected growth in mobile data in South Africa for consumers (left) and business services (right)

econex

26. Given the increasing demand for data, it is important to have a well-functioning, competitive telecommunications market structured to meet this demand. However, specific characteristics of how

competition and applied economics

Source: Cisco, 2016

South Africa's mobile telecommunications markets have developed have resulted in the formation of a duopolistic market structure. One of the defining characteristics of a network industry is that customers derive utility not only from the product or service itself, but also from the networks surrounding these products. In other words, mobile subscribers derive utility from having a large number of other mobile subscribers on the same network. Thus, the mobile telecommunications market structure offers a natural competitive advantage to the biggest players (and early entrants) and as a result, later entrants into the market find it more difficult to gain subscribers. As stated above, these network effects aid in perpetuating and entrenching a highly concentrated, or duopolistic, market structure. Regulatory intervention is therefore often needed to allow for a competitive mobile telecommunications sector.

27. The South African mobile market is dominated by two large incumbent operators, Vodacom and MTN. Figure 2 below shows the market shares of the incumbents, based on service revenue.

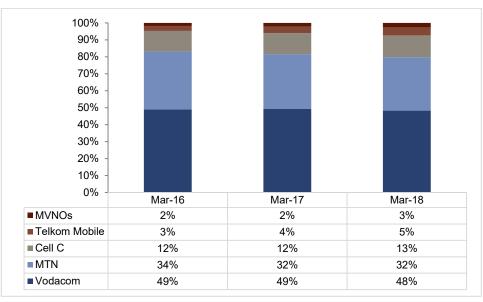


Figure 2: MNO Service Revenue Market Share, 2012 - 2017

Source: Africa Analysis (Note: The data for March 2017 and March 2018 are forecasted values)

28. Vodacom and MTN dominate the mobile market with a combined revenue market share of more than 80%. The later entrants, i.e. Cell C and Telkom Mobile, have found it difficult to gain significant market share. Telkom Mobile has not been able to grow its service revenue market share to above 5% since commencing its operations in 2010. The high market shares of the incumbent operators have been stable and have endured over time, even following the entry of smaller disruptor firms such as Telkom Mobile.

- 29. The market remains very concentrated, with an HHI⁶ value of 3,731 based on the above market shares. The US Department of Justice Horizontal Merger Guidelines specify that a market with an HHI of greater than 2,500 can be considered highly concentrated. We explain below why certain characteristics of the mobile telecommunications market make it more difficult for effective competition to occur, but also why the specific dynamics of South Africa's mobile market has prevented effective competition from taking place.
- 30. In general, the cost structures of firms impact on competition and pricing in a given market. Mobile telecommunication networks characteristically have high fixed and common costs and relatively low variable or incremental costs. The main part of a MNO's costs (such as, for example, network roll-out costs associated with coverage) therefore does not vary with the number of subscribers, calls or connection minutes, but is fixed and is also, to a large degree, sunk. Sunk costs relate to specific investments (such as the building of a mobile telephone network) where outlays can either not be recovered at all or can only be recovered partly if an operator exits the market. Such a cost structure, with high sunk fixed and common costs and relatively low incremental costs, is characteristic of mobile telecommunication markets and affects competition and price setting behaviour.
- 31. This cost structure gives Vodacom and MTN significant scale advantages. Operators with a larger subscriber base will necessarily have lower average costs than operators with a smaller subscriber base, such as Cell C and Telkom Mobile. In addition, the fact that Vodacom and MTN entered the market much earlier than Cell C and Telkom Mobile implies that the incumbent operators have covered a portion of their sunk costs by the time the later entrants or disruptor firms entered the market. As such, later entry into the market puts newer operators at a natural disadvantage, as they have not had enough time to roll out their network and gain significant coverage compared to the earlier entrants.
- 32. The table below summarises the main characteristics of a highly concentrated market which result in sub-optimal competition, and how the South African telecommunications market compares to the theoretical points.

| Table 1: Characteristics of a highly concentrated market and how they compare to the South |
|--|
| African mobile telecommunications market |

| Theory | South African Mobile Telecommunications Market | |
|-------------------------------------|---|--|
| High degree of market concentration | Service revenue market share HHI (2016) = 3,731 | |
| Few firms | Only 4 firms in the market. Vodacom and MTN have a collective service revenue market share of more than 80% | |

⁶ HHI is a statistical measure of concentration, calculated as the sum of the squared market share percentages. A value of zero is indicative of perfect competition, and a value of 10,000 is indicative of a monopoly (i.e. a single firm with a 100% market share).

| Market shares are relatively symmetric | Vodacom and MTN have market shares that are close to the 35% threshold for dominance "unless a firm can show that it does not have market power". ⁷ | |
|--|--|--|
| High barriers to entry | License needed under regulatory regime Very high (sunk) cost to enter market | |
| Lack of countervailing power | Consumers not well organised | |
| Economies of scale and scope | Large sunk cost favour early entrants – Vodacom and MTN | |

- 33. All of the theoretical factors listed in the first column are evident in the South African mobile telecommunications market: the market is highly concentrated, with two firms having a combined (service revenue) market share of more than 80%, the market shares of the large firms are largely symmetric, there are high barriers to entry, there is a lack of countervailing power and large sunk costs favour the early entrants who can benefit from their economies of scale.
- 34. In contrast to the mobile market, the following section illustrates that there is a higher degree of competition evident at each of the different levels of the fixed broadband market.

3.2 The fixed broadband market

- 35. In contrast to the mobile market, technological progress in the fixed broadband market has resulted in a highly dynamic market and introduced fierce competition into this sector. It is however important to remember that in terms of overall broadband connections in South Africa the fixed broadband market is comparatively small.
- 36. Telkom has traditionally provided broadband services over copper via DSL but has recently expanded into the FTTH market as technology for providing fixed broadband services has evolved. Telkom was relatively late to enter the fibre market, as competition increased from early entrants. Important players in the FTTH market include Vumatel, who acquired Fibrehoods during 2016 and more recently (July 2017) certain parts of the Link Africa business. Frogfoot is another player that started deploying fibre already in 2008. The entry of Vodacom and MTN into the FTTH market is also noteworthy, and MTN illustrated its intention to become an important player when it acquired Smart Village during 2016.
- 37. In response to the growth in the FTTH market, Telkom launched its FTTH services during 2015 (via Openserve). Telkom could no longer rely on its DSL customers, as individual homes also wanted access to fibre and were migrating to this new technology. This has been described as follows by BMI-T: "Meanwhile, the vast proportion of its [Telkom] broadband customer base remain[s] DSL subscribers on its quickly deteriorating copper last-mile network, which has suffered as Telkom prioritised

⁷ South Africa Competition Act (No. 89 of 1998), section 7.

investment in its core backhaul network over the last two years. This poses a risk to the operator as it faces quickly escalating competition in the broadband market, with many small fibre operators gaining traction, the entry of mobile giants MTN and Vodacom, and Liquid Telecom's acquisition of alternative wireline operator Neotel in early 2017".

38. BMI-T provides two scenarios for the growth of FTTH in South Africa. Under a high growth assumption, the number of FTTH connections are expected to exceed the number of DSL connections by 2019, but both scenarios indicate the expected exponential growth of FTTH during the next four years.

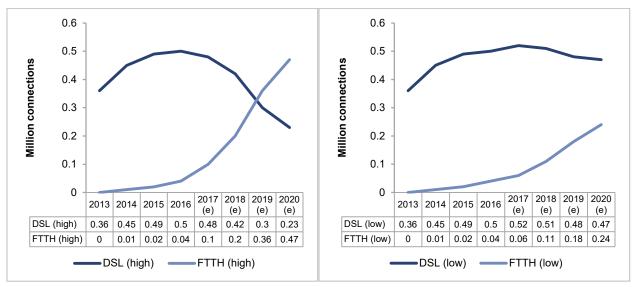
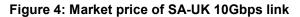
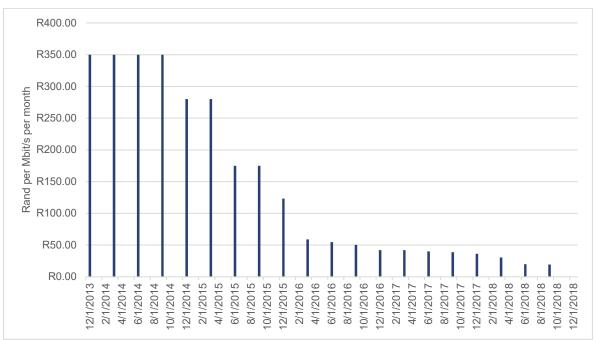


Figure 3: Number of DSL and fibre connections under high (left) and low (right) fibre scenarios

Source: BMI (2017), The Fibre Land Grab

- 39. The growth in fibre connections has been made possible by entry at all levels of the fixed services supply chain. Telkom's presentation at the Public Hearings of the Competition Commission's Data Inquiry dealt with competition at each level of the supply chain. It showed that prices have come down at each level of the fixed line market.
- 40. The market price of **international connectivity** has dropped considerably over the past five years as new entrants into this market increased capacity and competition.





Source: Market related estimates based on Telegeography, Telkom's own sales and customer feedback regarding other providers, from Data Services Market Inquiry – Public Hearings – 18 October 2018

41. The same is true in the market for **leased line connectivity** where prices have similarly decreased, as shown in the figure below.

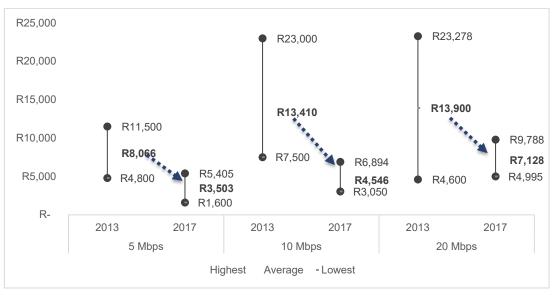


Figure 5: Leased line prices, 2013 v 2017

econex

Source: BMIT, from Data Services Market Inquiry – Public Hearings – 18 October 2018

competition and applied economics 42. As competition intensifies in the FTTH market, wholesale (and retail) prices have also dropped. BMI Research⁸ in 2017 noted that "reduced wholesale rates and proliferation of open access fibre network operators is helping drive broadband prices down to more accessible levels, while improving quality of service". Price reductions can be seen as evidence of a competitive market. On 19 July 2017, Openserve announced price reductions in the wholesale price at which it makes its network available to ISPs. Openserve's recent price reduction announcements also included the upgrading of 2Mbps offerings to 4Mbps, and 8Mbps to 10Mbps free of charge. The average price reductions amount to 9.5%.

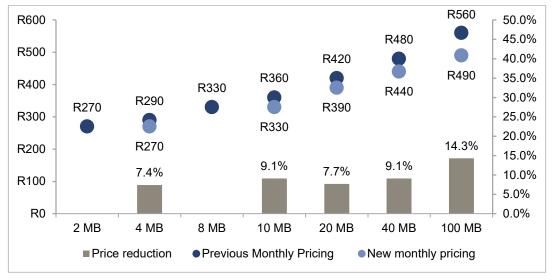


Figure 6: Openserve's price reductions as in July 2017

43. Numerous FTTH providers have entered the market in the past number of years, providing competition for Telkom's DSL and fibre networks. It is a highly dynamic market with clear downward pressure on prices.

3.3 Quality of Service

44. Quality is important in the ICT sector and it is therefore important that a new section 69A is included that provide for quality of service issues, in line with ITU and international best practice. It empowers the Authority to prescribe regulations that must be reviewed at least every three years. It provides the type of quality of service standards that must be included in the regulations such as broadband download and upload speeds and latency, call quality, time frames for service installations etc. The amendments place obligations on the Authority and licensees towards the promotion of awareness of the quality of service standards. Importantly, as required under SA Connect, an obligation is placed on

Source: Openserve (2017)

⁸ BMI Research (2017). South Africa Telecommunications Report, Q3 2017.

the Authority to monitor and advise the Minister on the review of national broadband policy targets, and compliance with broadband quality of service standards.

3.4 Summary remarks

- 45. Econex has previously shown that the fixed broadband market in SA has become very competitive. It was explained in our January 2018 report that a number of network operators already offer wholesale access to their networks, of which Openserve is one example. The large number of players that are active in e.g. the fibre to the home (FTTH) market is evidence of the intensity of competition in the market at the wholesale access level. Regulating access would therefore be counterproductive, as the desired outcome is currently being achieved through competitive pressures. Prices for fixed access are already determined by competition and there is no need for *ex ante* regulation in this space. Overregulating a market in which effective competition is already taking place only increases the regulatory burden and imposes unnecessary costs on the fiscus, operators and the economy.
- 46. Within the context of the duopolistic structure of the mobile market and the more competitive fixed broadband market, we next consider whether the 2018 Amendment Bill will allow the objectives of the White Paper to be achieved.

4 Key issues emanating from the EC Amendment Bill

47. In this section we emphasize aspects of the Bill that could increase prices in the telecommunications sector, reduce the viability of the WOAN, or unnecessarily increase regulatory costs without achieving the intended outcomes. These aspects should be addressed as a matter of urgency if the aim of a more competitive ICT sector is to be attained.

4.1 Open access to encourage service-based competition

- 48. Chapter 9 of the White Paper deals with open access to infrastructure and supply-side challenges. It identifies various fundamental problems in the mobile market, such as ineffective competition, bottlenecks in sharing infrastructure, unnecessary duplication of infrastructure (especially in urban areas), and the inefficient use of scarce resources (e.g. high demand spectrum). Multiple networks have been rolled out across the country, with deployment skewed towards urban areas. In the mobile market, competition is limited by access to scarce frequency spectrum resources. These problems increase the costs of offering telecommunication services, and the White Paper argues that open access is key to overcoming these challenges.
- 49. The White Paper envisions that the enforcement of an open access regime will facilitate lower costs and more efficient networks that use the latest technologies and are able to deliver high-quality affordable services. One of the concerns of the current market is that network roll-out is skewed towards urban areas, with few prospects of expanding access to rural and less affluent areas. According to the White Paper, three key challenges have resulted in this skewed network roll-out: an ineffective regulatory regime, a concentrated broadband infrastructure market and high prices. If these challenges persist, the national ICT policy objectives will not be achieved.
- 50. The 2005 ECA already provided for an open infrastructure-sharing regime that obliged every licensee to interconnect on request and ECNS licensees to provide access to EC facilities, on negotiated terms, unless the request was unreasonable. Operators with significant market power (SMP) also faced additional open access obligations. The process outlined for addressing SMP however required a market review. It involved the definition of a relevant market, a test of whether the market was competitive, an analysis of an operator's market power and its potential to behave in an anticompetitive manner by abusing its market power. If this was found to be the case, regulatory interventions could be implemented. This process is broadly aligned with global best practice.
- 51. The White Paper responded to some obvious flaws in how the process was implemented. It argued that the process was overly prescriptive in the way market reviews had to be conducted. Thus, even when SMP was obvious (e.g. a duopoly with 90% market share) the regulator was prevented from

implementing regulatory interventions without first conducting lengthy and expensive inquiries. This resulted in a delayed responses and ineffective regulation. However, as we describe next, the mandate in the 2018 Amendment Bill to force <u>all</u> ECNS licensees to provide open access unless in the case of technical infeasibility, is also not appropriate.

4.1.1 Open access should be subject to a market review

- 52. To respond to the concerns raised in the White Paper the 2018 Amendment Bill adds a definition for "wholesale open access". It means the sale, lease or otherwise making available of an ECNS facility by an ECNS licensee on a wholesale basis on general open access principles, and, to the extent applicable, additional wholesale open access principles. These additional principles are that access should be non-discriminatory, involve active infrastructure sharing, at wholesale rates to be prescribed by ICASA, and which comply with network and population coverage targets. These principles apply to all ECNS licensees, except in the case of *technically inability* (29(1)).
- 53. While the condition of technical inability may exclude operators from needing to provide open access where it is not viable for them to do so, it unnecessarily burdens the regulatory process and increases costs.
- 54. In the context of vertical integration (which we deal with in more detail in section 4.1.5) rather than mandating all vertically integrated operators to provide open access or prove technical inability, the Amendment should focus on identifying where operators are found to have SMP. Only then, following a market review, should open access be granted.

4.1.2 The determination of deemed entities is too wide

- 55. The definition of deemed entities is one of the central features of the Amendment Bill as it determines which licensees will be subject to different forms of ex ante regulation. Deemed entities will have to engage in (i) *active infrastructure sharing*, (ii) at wholesale rates as prescribed by the Authority in terms of section 47 (i.e. they must be *cost-oriented*, as opposed to cost-based in the 2017 Amendment Bill), (iii) with specific network and population *coverage targets*.
- 56. In terms of both the 2017 and 2018 Amendment Bills, there are four instances in which an ECNS license holder can be considered a deemed entity:
- 57. Under the 2017 Amendment Bill, a licensee is classified as a deemed entity if:
 - The ECNS license holder has SMP; or
 - The ECNS license holder's network constitutes more than 25% of total electronic communication infrastructure in such market;

- The ECNS license holder controls an essential facility; or
- The ECNS license holder controls a scarce resource such as exclusively assigned radio frequency spectrum.
- 58. Under the 2018 Amendment Bill, a licensee is a deemed entity if:
 - The ECNS license holder has SMP; or
 - The ECNS license holder's network constitutes more than 25% of total electronic communication infrastructure in such market
 - The ECNS license holder controls an essential facility; or
 - The ECNS license holder controls a scarce resource <u>such as radio frequency spectrum that is</u> <u>identified for international mobile telecommunications (*own emphasis*)</u>
- 59. The 2018 Amendment Bill has therefore added the control of radio frequency spectrum identified for international mobile telecommunications as an explicit example of a scarce resource, and thus a licensee that controls high demand spectrum will by definition be classified as a deemed entity. It must be noted that section 67(5) of the ECA already defines SMP with relation to 'control of an essential facility'.
- 60. We discuss our concerns with the proposed definition of deemed entities in what follows.

4.1.2.1 The definition of deemed entities creates a disjoint between the 2018 Amendment Bill and the Competition Act

- 61. For the determination of deemed entities, 2018 Amendment Bill proposes that ICASA must first define the relevant infrastructure markets. As in the 2017 Amendment Bill, an ECNS licensee will be considered a "deemed entity" if it has SMP, or if it constitutes more than 25% of the total EC infrastructure in the defined relevant market. There are some problems with this proposed determination. SMP is defined in Section 67 of the 2005 ECA, with one of the conditions of SMP being dominance. A dominant firm is defined in the Competition Act (section 7) as a firm with a market share of at least 45%, or 35% unless it can show that it does not have market power, or less than 35% but with market power. The 25% cut-off therefore does not correspond to the normal thresholds for dominance and runs contrary to the ideal to achieve closer alignment between the Authority and the Competition Commission. Besides the lack of alignment between policies, there is no theoretical basis for the 25% threshold and which would also capture firms that are not dominant under the Competition Act (discussed in more detail below).
- 62. Furthermore, the 2018 Amendment Bill does not make clear on what basis the 25% of electronic communications infrastructure will be measured. This was also a concern that we raised in relation to

the 2017 Amendment Bill. For instance, it could refer to 25% in terms of value, or 25% in terms of network coverage. If it refers to 25% in terms of value, should depreciation be taken into account? If it refers to coverage, what type of network elements are to be included, and will different networks (e.g. 2G, 3G and 4G) be considered as part of the same or separate markets? Moreover, defining relevant markets in the telecommunications sector can be complex due to rapid technological change and convergence. This could delay the process whereby licensees are identified as deemed entities and wholesale open access is granted or enforced.

63. In response to the 2017 Amendment Bill, Econex suggested that the regulations will be easier to implement and enforce and clearer to interpret if they only apply to ECNS licensees with SMP in a relevant market, irrespective of their market shares. Relying on SMP makes it easier to align policy between the Competition Authorities and the Sector Regulator, as discussed in more detail in section 4.4. It will also create less uncertainty or room for regulatory arbitrage (whereby players search for loopholes that allow them to circumvent regulations) and prevent enforcing stringent regulations on markets were no market failure has been identified.

4.1.2.2 The current definition unnecessarily imposes regulation on players who are not dominant

- 64. Besides the lack of alignment between policies, the proposed definition of deemed entities implies that markets in which there is no evidence of market failure will be subject to regulation. Any ECNS licensee whose network constitutes more than 25% of an infrastructure market, or controls an essential facility or scare resource, such as HDS, will also be considered a deemed entity. This mean that even small licensees without SMP in any market, would be mandated to comply with open access policies and that all mobile operators irrespective of their market shares by virtue of having HDS will have to engage in active infrastructure sharing, wholesale rate regulation based on cost-oriented principles, and will have to comply with specific network and population coverage targets.
- 65. In this context, it should be emphasised that all spectrum is not equal in terms of its propagation and capacity characteristics, and the cost of network rollout is influenced by the spectrum frequency bands to which an operator has access. An MNO that is at a spectrum disadvantage relative to its competitors needs to invest more in its Radio Access Network (RAN) to achieve the same amount of coverage. It is important that the conditions imposed on MNOs classified as deemed entities need to take account of these underlying cost differences
- 66. Econex has argued that the implementation of open access principles should decrease mobile network expansion costs and facilitate service-based competition in the mobile market. While the South African mobile telecommunications market is dominated by two incumbents whose position will further be entrenched if they are assigned more spectrum the same does not apply to the fixed market. This is already largely the case in the fixed-line market where, as explained in section 3.2, the provision of

econe X | competition and applied economics

wholesale access is part of the business case of many fibre operators and where it is clear that prices for consumers have decreased.

67. We illustrated in section 3.2 above that the fixed broadband market is characterised by fierce competition, as evidenced by new entry and decreasing prices. Regulating a competitive market is an ineffective use of state resources and could introduce inefficiencies into the system. In addition, the FTTH market functions on the basis of open access, where FTTH providers such as Openserve compete to sell network access to ISPs. With pricing set a national level and much evidence of new entry, this market is highly competitive. Applying open access principles to fixed services may therefore be counterproductive and increase barriers to entry, where there is already effective competition in this market.

4.1.3 Active infrastructure sharing should only be mandated where SMP has been identified

- 68. It is our understanding that active infrastructure sharing would only pertain to the mobile market. According to the White Paper, active infrastructure sharing can allow assigned spectrum to be used more efficiently by giving more service providers access to spectrum, resulting in increased consumer choice and competition. The White Paper states that active infrastructure sharing can include national roaming, Radio Access Network (RAN) sharing, and providing MVNOs access to operators' networks.
- 69. While the 2017 Amendment Bill included these three options as characteristics of active infrastructure sharing, the 2018 Amendment Bill is less specific. It simply states that operators determined as deemed entities in the wholesale open access regulations should *inter alia* comply with active infrastructure sharing.
- 70. The conditions imposed on deemed entities in relation to active infrastructure sharing may have very different implications for large and small MNOs. Under the 2018 Amendment Bill all operators with assigned spectrum are considered as deemed entities and hence will need to comply with active infrastructure sharing. However, as we pointed out above, not all spectrum has the same propagation and capacity characteristics. The quality of a MNO's network and ability to attract subscribers are not only a function of its own investment, but also of the spectrum that is assigned to it. Telkom with a lack of access to spectrum in the sub-1GHz band is at a spectrum disadvantage relative to other players. This might influence the technical feasibility of engaging in active infrastructure sharing, and it is likely that larger players with more developed networks would be the more favourable candidates for active infrastructure sharing. Mandating later entrants with smaller networks to also offer access to their networks will only serve to further entrench the position of the incumbents.

71. It is important that the wholesale rates prescribed by the Authority are set at a level that does not provide undue advantage to the large MNOs in this regard, thereby further entrenching their dominance. We deal with the issue of cost-oriented wholesale pricing in the following section.

4.1.4 Deemed entities should provide access through cost-oriented pricing

- 72. According to the White Paper (section 9.1.5.3), a deemed entity should grant cost-<u>based</u> wholesale access to its network. It defines cost-based pricing as "the general principle of charging for services in relation to the cost of providing these services", and that the wholesale price of a service should not exceed the minimum costs that an efficient firm would incur to provide the service in the long run. The relevant costs that should be considered are the ongoing cost of providing the service, including a commercial return on an efficient investment.
- 73. According to the 2018 Amendment Bill, deemed entities must grant access at wholesale rates prescribed by ICASA, which must be cost-<u>oriented</u>. While less prescriptive than cost-based pricing, the 2018 Amendment Bill adds that ICASA must ensure that any cost-recovery mechanism or pricing methodology promotes efficiency and sustainable competition and maximises consumer benefits. The pricing methodology must be fair and reasonable, as wells as non-discriminatory, unless there are procompetitive or efficiency justifications and it does not prevent or distort competition. It also states that ICASA should also take prices in comparable competitive markets into account.
- 74. As we mentioned above, to prevent the unnecessary regulation of a competitive market, only markets that are characterised by market failure and dominant players should be subject to regulated wholesale rates. The problem is that given the proposed definition of deemed entities (which we critiqued in section 4.1.2), the requirement of cost-oriented access will apply to smaller players as well. It would therefore be more effective to narrow the definition of deemed entities (and hence the licensees that would be subjected to regulated wholesale pricing), to include only those that have SMP (as argued above) and apply the new definition of cost oriented (as opposed to cost-based) to them.
- 75. The 2018 Amendment Bill calls for a review of the regulations every three years, compared to every two years in the 2017 Amendment Bill. Given the regulatory costs associated with determining wholesale rates we agree that the three year review period should be preferred. A cost-study is an extensive exercise, and needs to include a cost study methodology, the identification of an appropriate cost model, data collection, the calculation of the cost of the network components and the cost of providing the service, and the validation of the service cost. The Authority will have to determine which cost methodology and cost model would be most appropriate, to make sure that the access prices are set at the correct level. Network access is an important input into downstream mobile services, and access prices are reflected in the retail tariffs at which services are sold. If the price of obtaining

e c o n e x | competition and applied economics

wholesale access is too high, this will translate into higher retail prices, running counter to the policy objectives of the White Paper.

76. The regular reviews and cost determinations will be easier to perform if limited to markets where market failure has been identified following a market review (as determined in section 67) and where entities with SMP have been defined. We emphasise in section 4.4 below why it is important that the Authority coordinate these reviews with the Competition Commission. This may have the further benefit of reducing the associated costs.

4.1.5 Accounting separation should only be required if an operator has SMP

- 77. According to the White Paper, vertical integration may compromise open access principles. It recommends that to ensure that fixed and mobile access providers cannot abuse or leverage their market power, vertically integrated providers should adhere to the principle of accounting separation. This requires separate accounts for each of the different businesses operated by the same entity, by identifying and allocating the costs and revenues associated with each business, as well as the dealings between them. To follow the least costly approach, the White Paper proposes accounting separation to ensure functional separation, although structural separation may be considered if the desired outcome of open access is not achieved.
- 78. According to the 2018 Amendment Bill, as well as the 2017 Amendment Bill, an ECNS licensee that is determined to be a vertically integrated operator must implement accounting separation. However, accounting separation is typically used as a pro-competitive remedy in markets where a failure in competition or an abuse of dominance has been identified. In our view there are no clear benefits associated with requiring a vertically integrated entity without SMP in any market to adhere to the principles of accounting separation, and this condition would therefore unnecessarily increase costs for the industry as well as the regulators.
- 79. We therefore recommend that accounting separation should only be mandated where a market review has found that a vertically integrated operator has SMP at one or either levels of the market.

4.2 The viability of the WOAN as set out in the 2018 Amendment Bill

80. Frequency spectrum is a national resource, and policy makers have an obligation to ensure maximum public value from its use and to ensure that it enhances economic equality. The policy framework within which it is licenced must therefore promote inclusive economic growth and investment, which is critical for addressing inequality and facilitating socio-economic transformation.

- 81. As the White Paper points out, effective competition in the mobile market is a prerequisite for attaining the goal of economic growth through increased access to affordable mobile communication services. As a key input into mobile services, access to HDS is therefore critical for achieving the objectives set out in the national broadband policy. HDS must be used as a public good to support the broader policy objectives of open access, reducing costs and spurring service-based competition.
- 82. There is substantial HDS that has not been assigned to operators, summarised in the table below.

| Band | Range | Amount available |
|-------------|--|------------------|
| 700 MHz | 703 – 733 MHz 758 – 788 MHz | 2 x 30 MHz FDD |
| 800 MHz | 796 – 821 MHz 837 – 842 MHz | 2 x 25 MHz FDD |
| 2,600 MHz | 2,500 – 2,570 MHz 2,620 – 2,690 MHz | 2 x 70 MHz FDD |
| 2,000 11112 | 2,590 – 2,615 MHz | 1 x 25 MHz TDD |
| Total | | 275 MHz |

Table 2: Unassigned HDS in different frequency bands

83. The lack of access to HDS has created a bottleneck for operators, contributing to increased network rollout costs and a decreased quality of service as the growing demand for especially mobile data causes networks to become congested. The need for HDS to urgently be assigned was highlighted by all mobile operators during the October 2018 Public Hearings that formed part of the Competition Commission's Data Inquiry. MTN highlighted that it has re-farmed its existing spectrum from 3G and LTE deployment, and that spectrum constraints are one of the four factors that affect data pricing. Vodacom highlighted that the capacity constraints that are caused by a lack of HDS can to some extent be managed by how operators set their prices, and that operators will not reduce prices if this would cause unacceptable network congestion and a reduced quality of services. Cell C referred to the inequitable nature of existing spectrum in contiguous bands. Telkom also referred to the inequitable nature of existing spectrum allocations, arguing that it requires access to sub-1GHz spectrum. Its lack of sub-1GHz spectrum increases its reliance on roaming for in-building coverage and for peri-urban areas.

4.2.1 Relevant policy processes relating to spectrum allocation

84. ICASA is aware of the bottleneck caused by the unassigned HDS, but since issuing an Information Memorandum in September 2015 for a radio frequency prospective license to provide mobile broadband wireless access services for urban and rural areas using complementary bands 700 MHz, 800 MHz and 2600 Mhz, has not been able to assign the spectrum. On 15 July 2016, ICASA published an Invitation to Apply for a radio frequency spectrum license ('ITA') to provide mobile broadband wireless access services for urban and rural areas using complementary bands 700 MHz, 800 MHz

and 2600 Mhz. However, the way in which the ITA was designed and the spectrum lots were allocated would have entrenched the duopoly in the mobile market.

- 85. The White Paper (published in October 2016) envisaged an open access regime in which all unassigned spectrum should be allocated to a Wireless Open Access Network ('WOAN') that is to provide wholesale open access on regulated terms. This recommendation was captured in the 2017 Amendment Bill, published in November 2017. A public consultation followed, and the Council for Scientific and Industrial Research ('CSIR) was commissioned to conduct a study to determine the spectrum requirements for the WOAN to ensure its viability. On 22 August 2018 the DTPS through a Cabinet decision adopted a hybrid policy in terms of which part of the HDS will be reserved/assigned to the WOAN and the remainder will be assigned to the market. The 2018 Amendment Bill, published in August 2018, therefore stipulates that the Minister in consultation with the Authority should determine "which unassigned high demand spectrum must be reserved for assignment to the wireless open access network service licensee" (31E(1)(b)(2)) and "must issue radio frequency spectrum licences for unassigned high demand spectrum not reserved for assignment to the wireless open access network service licensee" (31E(4)).
- 86. Following the 2018 Amendment Bill, on 27 September 2018 the Minister published Draft Policy Directions on the licencing of unassigned high demand spectrum ("the Draft Policy Directions") which dealt with (a) the licensing of the WOAN (individual electronic communications network service license and spectrum license), and (b) the assignment of the remaining HDS spectrum to the market. Against this backdrop, we consider below whether the proposals contained in the Draft Policy Directions will contribute to achieving the policy objectives of the White Paper. Importantly, these draft policy directions deviate from the intention in the EC Amendment Bill, i.e. that all remaining HDS should be assigned to the WOAN. It now proposes a hybrid model, where some of the spectrum will be assigned via an auction and some will be assigned to the WOAN. This might however undermine the viability of the WOAN.

4.2.2 Concerns with the viability of the WOAN

4.2.2.1 Spectrum assignment

87. The 2018 Amendment Bill conceptualises the WOAN as an entity holding a wireless open access licence which must, except in the case of technical inability, provide wholesale open access in accordance with general open access principles. In addition, it states that it should engage in active infrastructure sharing, charge wholesale rates as prescribed by the Authority, and comply with specific network and population coverage targets (19A(4)). The remaining HDS that is not assigned to the WOAN should then be issued to the market. Determining the optimal allocation of HDS that is to be

assigned to the WOAN is therefore critical: if too little HDS is assigned to the WOAN, the WOAN will be unviable and eventually exit the market.

- 88. The purpose of this submission is not to critique the findings of the CSIR study as contained in the Draft Policy Directions. However, Telkom has identified a number of critical flaws in CSIR's methodology and assumptions, which suggests that the WOAN as envisioned in the 2018 Amendment Bill will not have the intended effects. An insufficient allocation of spectrum to the WOAN will not promote fair access to spectrum and service-based competition, but rather encourage infrastructure-based competition and entrench the current duopoly in the mobile market, in contrast to the policy objective of increasing service-based competition as set out in the White Paper. The broader policy goals of promoting economic growth and improving access to services will not be achieved without fostering a more competitive mobile market. Without ensuring that smaller mobile operators gain access to critical spectrum bands, network coverage will not be expanded sufficiently to cover the entire population.
- 89. An important benefit of the WOAN, if correctly designed, is that it can create a fair way of allowing operators to access the currently unassigned HDS. To meet the growing demand for mobile data (both in absolute terms and relative to voice services), MNOs need networks that can deliver the speed and quality required by the market. Access to HDS is crucial in this regard. If the WOAN fails and the incumbents by virtue of their "deeper pockets" obtain the best of the spectrum not allocated to the WOAN, this would put the smaller players (Cell C and Telkom Mobile) at a competitive disadvantage. Their only alternative to increase coverage would be to build more RAN sites, putting them at a clear cost disadvantage. It is therefore of utmost importance that the WOAN is designed in a manner that allows it to be viable. If the WOAN is designed in a manner that does not allow it to become a viable wholesale operator, it will, in the event that it fails, leave the late entrants in a significantly disadvantaged position.
- 90. There is thus a perpetuating effect: if the WOAN is not viable, meaning that smaller MNOs are not able to obtain capacity from it and the incumbent MNOs get access to preferred spectrum which allows them to add capacity to their networks immediately, they will have a significant advantage which will serve to entrench the duopolistic market structure.

4.2.2.2 Wholesale open access prices of the WOAN should be regulated from inception

91. The 2018 Amendment Bill stipulates that the WOAN should comply with wholesale open access principles, including active infrastructure sharing, charging wholesale rates as prescribed by the Authority, and comply with specific network and population coverage targets (section 19A(4)(b)). It also states in 19A(8)(a) that ICASA must: "consider imposing regulatory remedies on the wireless open access network service licensee, to ensure effective service-based competition, and to avoid any anti-

competitive effects". This seems to contradict earlier directions e.g. that the Authority must determine incentives for the operation of the WOAN, such as that it may refrain from prescribing the wholesale rates that can be charged to the WOAN for a specific period (section 19A(7)(b)).

- 92. By virtue of its access to HDS, the WOAN will have SMP in the market for wholesale open access from inception⁹. If the price at which it offers access to its network is not regulated, it will therefore be in a position to charge monopoly prices. This will defeat the purpose of the WOAN to help reduce prices in the telecommunications sector. It is therefore necessary that the wholesale access price that the WOAN charge will have to be regulated from the start, irrespective of whether it is classified as a deemed entity.
- 93. Importantly, these regulated wholesale prices should account for e.g. the population coverage targets that the WOAN should achieve. The onus will be on the Authority to set these coverage targets at a rate high enough to allow the necessary infrastructure investments to be made, but not so high as to unnecessarily increase the cost of wholesale access in the market.

4.2.2.3 Population and network coverage targets should be set at the appropriate level

- 94. The White Paper also envisaged that deemed entities must meet specific network and population targets set by ICASA, which align with national policy goals to achieve affordable, high-quality national broadband access at designated speeds. Because spectrum creates a bottleneck, the idea is that a shared approach will reduce duplication and the inefficiency that arises from the building and operation of multiple networks. It will encourage service-based competition in a way that the current oligopoly does not. Both the 2017 Amendment Bill and the 2018 Amendment Bill include compliance with specific network and population targets as part of the open access obligations.
- 95. Econex has argued that it is vital that the coverage targets be set at a reasonable level. In the context of the WOAN, for instance, initial network and population coverage targets that are overly ambitious will increase the WOAN's costs and undermine its business case. Once the WOAN has been established as a sustainable entity, its network and population coverage targets could be extended.

(b) has control of essential facilities; or

(c) has a vertical relationship that the Authority determines could harm competition in the market or market segments applicable to the particular category of licence".

⁹ ECA (2005) Section 67(5): "A licensee has significant market power with regard to the relevant market or market segment where the Authority finds that the particular individual licensee or class licensee—

⁽a) is dominant;

4.3 Rapid deployment

- 96. Rapid deployment refers to the process of gaining access to and using property to deploy electronic communications networks. According to the White Paper, there are currently no uniform nationwide requirements for granting permits and authorisations for the rollout of ECN infrastructure, such as towers and ducts, or for the use of existing public infrastructure. There are few legislated or regulated deadlines for granting them and landowners have wide discretion to dictate terms for access to their property. This delays network rollout and increases costs, as well as causes legal disputes between operators and landowners. If this situation is not addressed, it will hamper the implementation of the national broadband policy. Any delays in the rollout of critical broadband infrastructure will undermine national policy goals.
- 97. The open access regime outlined in the White Paper complements the rapid deployment regime. Through the effective sharing of infrastructure, licensees can avoid many of the costs and delays associated with new wayleave and permit applications. Open access and infrastructure sharing mechanisms reduce unnecessary and inefficient duplication and promote rapid deployment.

4.3.1 Rapid deployment policy as set out in the White Paper

- 98. The purpose of the Rapid Deployment policy is to provide a simplified, streamlined and coordinated framework, supported by clear strategies and measures, and to fast-track infrastructure deployment. The policy sets out the principles that govern the rights of all parties involved and addresses the following challenges in relation to rapid deployment: the need to balance the rights of ECNS licensees to enter onto property to deploy critical broadband infrastructure with those of public and private landowners; the duplication of infrastructure and its negative impacts on the environment; and the lack of coordination between large numbers of affected stakeholders across different sectors (i.e. the three levels of government, various regulators and operators).
- 99. Existing processes, procedures and fees are not streamlined and there is no standard process for obtaining rights of way, wayleaves and servitudes. Not only do the processes, procedures and fees differ between municipalities and other landholders, but in many cases these processes are unnecessarily time-consuming and cumbersome. An ECNS licensee has to deal with a multitude of requirements to obtain approvals for essentially the same thing. This increases the administrative burden borne by licensees, the time to deploy, as well as the costs of deployment and ultimately investment in the network.
- 100. The current legislative process takes almost a year from the submission of the application to the final regulatory decision, which is far too long in such a fast-moving environment. In the case of deployment of EC facilities, the White Paper envisions that notification and application procedures for rapid

deployment should take no more than a month from date of submission of all relevant documents, to date of final decision. Entities must communicate with applicants, as soon as possible and certainly within a month, if any delay beyond a month is expected and the reasons for the delay.

- 101. The White Paper envisages that approvals will take place at municipal level. Municipalities will make provision for the installation of ICT infrastructure such as fibre ducts. This will enable proper planning and reduce the incidences of duplication of infrastructure. Municipalities are obliged to provide information on municipal infrastructure, including plans for ICT infrastructure, to the appropriate coordinating structure in a digitised format for easy retrieval and processing.
- 102. The White Paper recommends that rapid deployment can be simplified by an improved digitised and automated GIS database, which will permit the identification of available sites and coordinate approval and permit systems. The GIS database should be a central database that records locations and planned locations of services infrastructure. Access to such data could reduce planning complexity and promote sharing. All licensees should submit detailed information on their infrastructure types and locations. The GIS database will be open to the extent that it does not compromise security or lead to anticompetitive outcomes. This database is critical to reducing the timeframes for property owners to revert to licensees once an application is lodged.

4.3.2 Rapid deployment policy as set out in the 2018 Amendment Bill

- 103. In terms of rapid deployment, the provisions in the 2018 Amendment Bill are similar to those in the White Paper and the 2017 Amendment Bill. However, there are also a few changes to ICASA's obligations in the 2018 Amendment Bill. It adds that information on existing EC networks and facilities must be provided within 12 months of the coming into operation of the EC Amendment Act, and that information on planned EC networks and facilities must be provided within 30 days. This information is to be included in the GIS database.
- 104. Rapid deployment is crucial to the open access regime that is put forward in the policy papers in order to stimulate service-based competition. It is therefore important that the rapid deployment timelines and requirements are clear to prevent parties entering into long disputes. Clear policies around rapid deployment will help to stimulate growth and competition in telecommunications markets.

4.4 Concurrent jurisdiction

105. Chapter 6 of the White Paper speaks to Innovation and Fair Competition, highlighting that "both *ex ante* and *ex post* competition interventions can play a crucial role in limiting the digital divide through addressing market inefficiencies, promoting investment in the ICT sector and facilitating investment" (p.40). In terms of interventions into the market through market reviews, the White Paper stipulates

that [the Authority] "will be required to consult with the Competition Commission before finalizing and publishing the market reports and reviews" (p.42). It further states that the "government will explicitly encourage more meaningful cooperation between the sector regulation and competition authorities, while ensuring that this in no way blurs the separation of roles between the Competition Commission and the sector regulator and *ex ante* and *ex post* competition regulation" (p.43). In terms of mergers and acquisitions, the White Paper notes that both the competition and sector specific regulators have responsibilities for the approval of horizontal and vertical transactions in the ICT sector, and therefore also calls for increased coordination between the different regulators in this regard.

106. The 2017 Amendment Bill stipulated that the Authority should enter into a concurrent jurisdiction agreement with the Competition Commission (section 67A(1)) and that such agreement should include a mechanism to facilitate consultation between the authorities on market definition, market reviews and mergers. The 2018 Amendment Bill however stipulates in more detail than the 2017 Amendment Bill, the conditions under which the Authority should enter into a concurrent jurisdiction agreement with the Competition Commission. Specifically, it specifies that the Authority and Commission must put in place mechanisms that will facilitate consultation, information sharing, and the management of complaints, market reviews, market definitions, and other relevant matters between the parties (section 67A(2)).

4.4.1.1 A timeline should be set for amending the concurrent jurisdiction agreement

- 107. While the 2017 Amendment Bill stated that the existing concurrent jurisdiction agreement between the Authority and the Competition Commission must be amended within three months of the coming into operation of the EC Amendment Act, the 2018 Amendment no longer includes a timeframe within which the agreement should be amended. To ensure that the process of closer collaboration between the authorities is not unnecessarily delayed, we recommend that the time frame of three months be reinserted into the Amendment.
- 108. The relevance of this addition and the need for a timeframe within which this needs to happen becomes especially clear in light of the Competition Commission's Data Market Inquiry, and the Authority's investigation into the identification of priority markets in need of ex ante regulation. The Priority Market Inquiry for instance identified wholesale fixed access, upstream infrastructure markets, and mobile services as market which should be prioritised for potential market reviews.¹⁰ It is important that the findings and recommendations of the Competition Commission's Data Market Inquiry (once concluded) should feed into the market reviews that the Authority will conduct on each of these identified markets.

¹⁰ ICASA (2018). Findings Document on Priority Markets Inquiry in the Electronic Communications Sector.

4.4.1.2 The Authority should consult with the Competition Commission when conducting its market reviews

- 109. We explained above why the determination of deemed entities should be subject to a market review to determine if market failure is present and SMP exists, and consequently which operators or providers should be classified as deemed entities. It is important that the Authority should consult with the Competition Commission in conducting these market reviews. The Competition Commission arguably has a deeper level of expertise in defining relevant markets and can provide valuable input into ICASA's market review processes, as mandated under section 67(3) of the 2018 Amendment Bill.
- 110. In addition, it is important that the regulations of the Authority are aligned with the recommendations of the Competition Commission. In Section 2.3 we briefly described the concurrent policy processes between the Authority and the Competition Commission that are underway. ICASA has recently identified three priority markets that should be made subject to market review, while the Competition Commission has simultaneously been conducting an inquiry into the data services market.
- 111. It should be a foremost priority for the Authority to consult with the Commission in conducting the market reviews of the three priority markets that they identified. The Amendment Bill should stipulate that the Authority must consult with the Competition Commission on each of the market reviews that will need to be conducted to determine SMP, and hence which players should be defined as 'deemed entities'.

4.5 International roaming

e c o n e x competition and applied economics

- 112. The White Paper does not explicitly refer to international roaming in the context of fixed or mobile services, but instead focuses on the importance of regional internet connectivity "to encourage peering between ISPs in SADC" (p.55). The 2017 and 2018 Amendment Bills however introduce the concept of international roaming.
- 113. The 2017 Amendment Bill set out SADC Roaming Policy Guidelines to which the SADC Ministers should agree, also noting that regulations may be "conditional on reciprocal terms and conditions" and that it may include rate regulation for the provision of roaming services including price controls on wholesale and retail rates as determined by the Authority. In contrast, the 2018 Amendment Bill stipulates that the Authority must <u>prescribe</u> international roaming regulations, including SADC regulations. It is however unclear whether the Authority has the necessary jurisdiction to do so.
- 114. The 2018 Amendment Bill further notes that the regulations "must be conditional on reciprocal terms and conditions", which "means that the [ECS] provider of another country must offer similar tariffs" as those offered by the South African ECS provider. It is however unclear what would constitutive "similar"

tariffs and how this would account for ECS providers of different scale. Mobile incumbents in South Africa, for instance, may due to their scale be able to offer other providers in SADC more favourable tariffs in return for reciprocal rates. This will allow them to attract more customers to their networks by offering better prices for roaming and while this may reduce roaming prices for customers in the short term, it will serve to entrench the dominance of the incumbents. It is therefore important that the international roaming regulations are developed in a manner that does not discriminate against smaller players with a higher cost base.

115. The 2018 Amendment Bill retains the section in the 2017 Amendment Bill stating that "the regulations may include rate regulation for the provision of roaming services, including without limitation price controls on wholesale and retail rates as determined by the Authority" (section 42A(3)(b)). In Econex's response to the 2017 Amendment Bill we cautioned against price regulation at the retail level, and we repeat our concerns here. The European Commission notes that "[by] intervening at the wholesale level, [National Regulatory Authorities] can ensure that as much of the value chain is subject to the competition process as possible, thereby delivering the best outcomes for end-users". If retail price regulation is considered necessary, it should only be implemented as an interim and last resort measure once it has been established that wholesale price regulation would not have the desired outcomes.

5 Summary and conclusions

- 116. This report considers whether the EC Amendment Bill of 2018 is an improvement on the 2017 version and whether the changes will lead to a more competitive ICT sector, as envisaged in policy documents such as the ICT White Paper. To answer this question, we describe the policy context and concurrent policy processes in section 2. We caution that there is a need for coordination between these different processes, specifically the market reviews envisaged under the EC Amendment Bill and the ICASA Priority Markets Inquiry, as well as the ongoing CC Data Inquiry. While it is important that the EC Amendment Bill now also lists as an objective the redress of market dominance and control, this needs to align with the definition of dominance in the Competition Act and definitions of deemed entities and SMP in the ECA and Amendment Bill.
- 117. In section 3 we elaborate on the structural issues in the mobile market, noting that the current duopoly will persist if the EC Amendment Bill is not successful in levelling the playing field. Importantly, we show that the fixed sector has become more competitive over time and does not require procompetitive remedies, as no market failure has been identified. The mobile market has already been defined as a priority market by ICASA and the next steps should be a section 67 market review and identification of market failures and pro-competitive remedies.
- 118. In section 4 we discuss key issues emanating from the EC Amendment Bill. We deal with aspects that are problematic, in the sense that it will increase the regulatory burden on some players and have unintended consequences. While it is important to define deemed entities and enforce pro-competitive obligations such as wholesale open access and cost-oriented wholesale rates, this cannot be imposed on all licensees before defining market failure through a proper market review. We note that the current definition of a deemed entity unnecessarily imposes obligations on players who are not dominant or do not have SMP. We also discuss our concerns regarding the viability of the WOAN and point out that wholesale access rates for the WOAN should be regulated from inception to prevent the WOAN from exercising market power. If the WOAN is rendered not viable through inappropriate regulatory requirements, it will be a missed opportunity to level the playing field in the mobile market via proper regulation. We also comment on issues of rapid deployment, concurrent jurisdiction, and international roaming.
- 119. In sum, we find that there are many aspects of the Amendment Bill that need further consideration and refinement if the overarching goal of increased competition, in especially the mobile sector, is to be reached.

e c o n e x competition and applied economics