



**MTN'S RESPONSE TO THE ICASA NOTICE 229 OF
2014 - "PUBLIC INQUIRY INTO THE STATE OF
COMPETITION IN THE ICT SECTOR" AS PUBLISHED IN
GOVERNMENT GAZETTE No. 37456 DATED 20 MARCH
2014**

23 June 2014

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1. INTRODUCTION

Mobile Telephone Networks (Pty) Limited ('MTN') would like to thank the Independent Communications Authority of South Africa ('the Authority') for the opportunity to respond to its Government Gazette No. 37456 dealing with the public enquiry into the state of competition in the ICT sector ('the ICT Competitive Assessment Notice').

The ICT Competitive Assessment Notice sets out the Authority's intent to address the following issues:

- The current state of competition in the ICT sector;
- The challenges to creating a level playing field across platforms;
- The impact of convergence, net neutrality and disruptive technologies on the competitive landscape;
- The role of fixed (fibre) and wireless (high demand spectrum) in enabling competition; and
- The tension between consolidation and plurality in the ICT sector.

MTN welcomes the ICT Competitive Assessment Notice, in so far as it seeks to assess effective competition within the context of a Section 67 market enquiry in the Electronic Communications Act, No. 1 of 2014 ("the ECA"). However, MTN believes the ICT Competitive Assessment Notice could be strengthened and clarified in a number of respects and where possible, MTN has responded by using models of what we consider to be international best practice guidelines. In particular, we have drawn suitable text from:

- The Competition Commission's *Market References* guidelines;
- The European Commission's *Guidelines on market analysis and the assessment of significant market power under the Community regulatory framework for electronic communications networks and services*; and
- Publications from international communications regulators.

In submitting its written comments, MTN confirms its commitment to the application of a rigorous market review process mandated by Section 67 of the ECA and would like an opportunity to make an oral representation to the Authority on its submission and indeed welcomes the iterative approach articulated by the Authority in the ICT Competitive Assessment Notice.

The assessment of the state of Competition as contained in the ICT Competitive Assessment Notice is very broad and some may suggest that it is too wide in its goals. Because of the uncertainty that this created in terms of the market or markets that the Authority wishes to address, MTN has had to make its comments within such context. We trust that in and during the iterative process that will follow, that the markets and issues will be refined and polished as the process unfolds. Unfortunately, that approach as followed by the Authority causes certain administrative issues that we would like to bring to attention of the Authority. It is hoped that those issues of clarity will receive the necessary attention by the Authority. Whilst MTN is in many respects not sure about the exact goal, it will participate and contribute to the process.

This submission is structured as follows:

- Section 1: This introduction;
- Section 2: The executive summary;
- Section 3 provides general commentary to the ICT Competitive Assessment Notice;
- Section 4 provides MTN's views on the framework that should be applied to the determination of the effectiveness of competition in the context of ex-ante regulation; and
- Section 5 contains detailed comments on the text of the ICT Competitive Assessment Notice.

2. EXECUTIVE SUMMARY

MTN welcomes the ICT Competitive Assessment Notice, in so far as it seeks to assess effective competition within the context of a Section 67 market enquiry in the ECA. However, MTN believes the ICT Competitive Assessment Notice could be strengthened and clarified in a number of respects. In particular:

- The empowering provisions in the Independent Communications Authority of South Africa Act, No. 13 of 2000 (the “ICASA Act”) provide no guidance in respect of the legal status of the findings of such an inquiry. This is of course of importance to MTN as it is necessary to understand whether or not this inquiry will eventually lead to an ‘administrative action’, as contemplated by the Promotion of Administrative Justice Act, No. 3 of 2000 (“PAJA”), on the part of the Authority;
- It would have been very helpful if a framework as to how to proceed in the ICT Competitive Assessment Notice could have been published together with the Notice. Unfortunately no procedure is set out in the ICT Competitive Assessment Notice save to broadly state that the inquiry will take place through a number of iterative stages. MTN is of course willing to participate in an iterative process, but it also seems to indicate that the procedure will be formulated as the inquiry goes along. The procedure of the inquiry is important as such a procedure must be informed by lawfulness, fairness and reasonableness within the context of South African law. It could be said that a lack of clear procedure in itself is not lawful, fair or reasonable as without a clearly defined procedure prior to the inquiry, the interested parties may be prejudiced;
- Market definition is an essential first step to assessing effective competition in a relevant market. Hence, MTN seeks clarity on the specific ICT industry market(s) the Authority intends to assess as the current lack of context and specificity makes it very difficult indeed and virtually impossible to respond with evidentiary criteria required in relation to a defined market;
- MTN notes with some concern that the focus of the ICT Competitive Assessment Notice is on the current state of competition in the ICT industry. However, in the context of ex-ante regulation, criteria for assessing whether a market is effectively competitive requires a forward looking assessment. Accordingly, MTN is of the view that this inquiry should contain questions which would enable the Authority to

assess the likelihood of the development of effective competition in the ICT sector being developed in the next 18 months. Should the Authority find that effective competition in the ICT market is not expected to develop in the future, then the Authority would need to consider whether or not the current competition laws are sufficient to deal with the perceived market failures. It is in this way that the Authority would be fulfilling its mandate;

- MTN welcomes the fact that the scope of the ICT Competitive Assessment Notice highlights the relevance of innovation and technologies on the competitive landscape given the central role of innovation in telecommunications markets. However, greater clarification is required on how this criteria will be factored into the Authority's framework for the assessment of competition in a relevant market;
- Regarding the Authorities stated tension between market consolidation and plurality, there needs to be a distinction between wholesale and retail markets. With regard to wholesale markets, MTN submits that the Authority needs to acknowledge market realities that access to additional spectrum suitable for deployment of LTE technologies in a cost effective manner is a vital component for the current operators to evolve their networks;
- It should be noted that RAN sharing is fast becoming a global trend since it significantly reduces CAPEX and OPEX costs through a reduction in network duplication and an improvement in spectrum utilisation, which thereby increases the rate of broadband penetration. Any cost saving initiatives should be encouraged as it reduces network rollout costs, which could result in lowering the cost to communicate in retail markets.
- Regarding the stated arguments made in public fora that traditional gate keepers to spectrum are ensuring that spectrum remains a barrier to market entry; this argument should take into account the significant capital investment required in telecommunications. A case in point is Telkom Mobile, (the mobile division of Telkom Limited) and its current financial predicament of the infeasibility of rolling out a new network from scratch in an already mature market. The key lesson regarding the role that the assignment of higher demand spectrum can play in enabling competition is that spectrum alone is not enough. Current operators are able to leverage their existing infrastructure to deploy new technologies with new

spectrum far more cost effectively than a new operator rolling out a green field network;

- Assigning spectrum to new entrants in order to service historically disadvantaged people will not guarantee a sustainable business, nor will it level the playing field within the telecommunications market. The ability to transform the spectrum resource into a communications service at an acceptable cost will require the efforts of existing mobile network operators as they already possess much of the infrastructure needed to deploy communications services on additional spectrum;
- Regarding the role that OTT service providers play with respect to increasing competitive constraints in the telecommunications sector, these players have been in existence for some time, offering voice, instant messaging and data services. OTT players have the incentive and ability to lower network operators' revenue streams and this market development has resulted in OTT and traditional SP's seeking business opportunities of mutual benefit. As such, OTT players are placed on a level competitive footing with traditional network operators in retail markets as they offer direct competitive constraints in the retail market and indirect competitive constraints in the wholesale market to traditional network service providers in the broadband connectivity space.

3. GENERAL COMMENTS

On 20 March 2014, the Authority published a notice of its intention to conduct a 'high level' public inquiry into the state of competition in the information and communications technology sector, which inquiry is to be conducted in terms of section 4B(1)(a) of the ICASA Act. This section 4B(1)(a) empowers the Authority to conduct an inquiry into any matter with regard to the achievements of the objects ICASA Act or the underlying statutes.

The ICT Competitive Assessment Notice states that the inquiry will take place through a number of iterative stages commencing with the responses to the issues being solicited through written and oral representations at a public hearing. Once key issues which require further research and engagement with stakeholders have been identified, a draft position paper on competition in the ICT sector will be published, which draft position paper will be subject to further public comment. The further public comment will be followed by the publication of the Authority's final position paper.

MTN would like to, at the outset, outline a few of its concerns in respect of the ICT Competitive Assessment Notice and the inquiry, and does so below. These concerns can be addressed by the Authority and should not be perceived that the concerns are raised in an effort to block the assessment. The concerns are raised so that clarity and certainty can be obtained which would be a positive development for all participants to the process.

The Issue of Vagueness

While MTN advocates the promotion of competition in the ICT industry and is willing to cooperate with the various industry regulators, MTN is concerned at the lack of certainty surrounding this inquiry. Below are a few of MTN's concerns in this regard –

- Although the inquiry is conducted in terms of section 4B(1)(a) of the ICASA Act, the ICT Competitive Assessment Notice does not substantiate how this inquiry will assist ICASA to achieve the objects of the ICASA Act or its underlying statutes. The ICT Competitive Assessment Notice only states that the inquiry will assist ICASA to achieve the objects of the ECA, being to promote competition within the ICT industry;
- It is unclear as to the purpose of the inquiry, its intended outcome and the effect that it may have on the ICT industry, if any. Further, the empowering provisions in the ICASA Act unfortunately provide no guidance in respect of the legal status of the

findings of such an inquiry. This is of importance to MTN as it is necessary to understand whether or not this inquiry will eventually lead to an 'administrative action', as contemplated by PAJA on the part of ICASA; and

- It would have been very helpful if a framework as to how to proceed in the in the ICT Competitive Assessment Notice could have been published together with the Notice. Unfortunately no procedure is set out in the ICT Competitive Assessment Notice save to broadly state that the inquiry will take place through a number of iterative stages. MTN is of course willing to participate in an iterative process, but it also seems to indicate that the procedure will be formulated as the inquiry goes along. Consequently, the procedure of the inquiry is important as such a procedure must be informed by lawfulness, fairness and reasonableness within the context of South African law. It could be said that a lack of clear procedure in itself is not lawful, fair or reasonable as without a clearly defined procedure prior to the inquiry; the interested parties may be prejudiced.

The empowering provisions of the ICASA Act in respect of public inquiries are unfortunately vague and ambiguous as to the procedures to be followed in an inquiry and the outcomes thereof. Consequently any administrative action that flows from this inquiry must be administrative action that is lawful, reasonable and procedurally fair.

Accordingly, MTN is of the opinion that, in order for there to be a lawful, reasonable and procedurally fair process, the inquiry should set out clearly in the ICT Competitive Assessment Notice its objectives, its scope and procedures. MTN is of the view that what is provided by the ICT Competitive Assessment Notice does not sufficiently detail the objectives, scope and procedures of the inquiry. Due to the fact that the objectives, scope and procedure of the inquiry are so insufficiently detailed, MTN is of the view that –

- Participants may be prejudiced in attempts to respond to the inquiry because of the very wide and context; and
- This inquiry may not provide ICASA with the answers it is looking for, as the inquiry lacks specificity in respect of what it is trying to discover. ICASA is urged to give the necessary clarity in the next iteration of the process so that a more meaningful and constructive participation could be forthcoming.

In addition, as part of the operation of a lawful, fair and reasonable inquiry, the inquiry must be, and appear to be, unbiased. MTN therefore expresses concern at the fact that the ICT Competitive Assessment Notice contains certain statements, such as “*the cost to communicate has not come down in substantially and South Africans pay considerably more than their counterparts in Africa*”. There is no reference to any empirical evidence that ICASA has taken into consideration in coming to such conclusion. ICASA has in the past expressed a view that it wishes to do “evidence based” regulation (a view that MTN agrees with). It is only when ICASA in an open manner shares its evidence that it bases its conclusion on that the anxiety pertaining to ICASA’s aims will be addressed.

Statements such as these can also be perceived that the Authority has already drawn certain conclusions in respect of the competitive landscape of the ICT industry in South Africa while it is precisely this landscape that the inquiry purports to be investigating. Further to this, these statements are made without any reference to empirical evidence relied upon to reach such conclusions. MTN expresses this concern because, not only could it appear that the Authority has pre-judged this matter, but that the Authority has based its pre-judgements on empirically unsubstantiated conclusions and statements which MTN believes to be factually incorrect.

MTN notes that the inquiry itself may not necessarily amount to an administrative action as contemplated in PAJA, and that no “decision” has been made which may adversely affect the rights of MTN. That said however, it is not possible for MTN to determine, at this stage, whether or not this inquiry may lead to an administrative action due to the fact that the ICT Competitive Assessment Notice does not indicate the purpose of this inquiry or the expected outcomes of same. The ICT Competitive Assessment Notice does make reference, *inter alia*, to ‘corrective measures’ that may be put in place depending on the outcome of the inquiry. Accordingly, MTN is of the opinion that the inquiry should be conducted in line with the principles of procedural fairness and free of any bias so as to avoid any perception of prejudice, partiality or unfairness should the inquiry lead to an administrative action. A protracted outcome of the inquiry would be counterproductive and contrary to the interests of all the relevant stakeholders in the industry, as all such stakeholders would like to have certainty and be able to contribute meaningfully to the competitive landscape of the industry.

The Issue of *Ex Ante* Jurisdiction

MTN would like to, at the outset, note the recent amendments to the ICASA Act, in terms of the Independent Communications Authority of South Africa Amendment Act, No. 2 of 2014

(the “ICASA Amendment Act”), which challengingly contains no transitional provisions, and thus increases the uncertainty surrounding the processes of this inquiry.

The ICASA Amendment Act makes substantial amendments to section 4B of the ICASA Act, by *inter alia*, the insertion of subsection 8 which requires that before the exercise and performance of any of its powers and duties in terms of section 4B, the Authority must—

- consider whether or not, in terms of any concurrent jurisdiction agreement concluded between the Authority and any other authority or institution, it would be appropriate to refer an inquiry to such authority or institution; or
- subject to section 67 of the ECA and the terms and conditions of any concurrent jurisdiction agreement concluded between the Authority and the Competition Commission, bear in mind that the Competition Commission has primary authority to detect and investigate past or current commissions of alleged prohibited practices within any industry or sector and to review mergers within any industry or sector in terms of the Competition Act, No. 89 of 1998.

Further to the aforementioned, and as ICASA is aware, it has a concurrent jurisdiction agreement with the Competition Commission in terms of which –

- the Competition Commission has jurisdiction over complaints of prohibited practices in terms of the Competition Act; and
- the Authority has jurisdiction over contraventions of telecommunications and broadcasting licence conditions and legislation.

It is widely accepted that the Competition Commission would have *ex post* jurisdiction, while the Authority would have *ex ante* jurisdiction, over competition matters in the ICT industry. In fact, this is embodied in the concurrent jurisdiction agreement as described above. Further to this, subsection 4B(8) of the ICASA Act, as amended, echoes this principle as it states that the Competition Commission has primary authority to detect and investigate past or current commissions of alleged prohibited practices within any industry or sector in terms of the Competition Act. It is clear that this amendment seeks to cement the aforementioned principle (of *ex post* jurisdiction of competition matters residing primarily with the Competition

Commission) in respect of the issue of concurrency between the Competition Commission and the Authority.

Accordingly, when the Authority states in the ICT Competitive Assessment Notice that the Authority, through the inquiry, seeks to address the current state of competition in the ICT sector, it seems as though the Authority may seek to exceed its mandate by exercising *ex post* jurisdiction over competition matters in the ICT sector. MTN submits, with respect, that the Authority should be focussing its energies on looking forward in order to assess the future state of competition in line with its *ex ante* mandate. In addition, international best practice suggests that *ex-ante* regulation is justified only if –

- effective competition is not expected to develop within a reasonable time horizon; and
- there is no other constraint, such as competition law, which would prevent a licensee from exploiting their position.

Accordingly, MTN is of the view that this inquiry should contain questions which would enable the Authority to assess the likelihood of the development of effective competition in the ICT sector being impeded in the next 18 months. Should the Authority find that effective competition in the ICT market is not expected to develop in the future, and then the Authority would need to consider whether or not the current competition laws are sufficient to deal with the perceived market failures. It is in this way that the Authority would be fulfilling its mandate.

Further to the aforementioned, the Competition Commission has, fairly recently, been granted powers to conduct its own market inquiries into any industry or sector in respect of the competitive landscape thereof. In line with the Competition Commission's *ex post* jurisdiction, it would exercise this power by assessing the current state of competition in any given sector or industry. Accordingly, it can be argued that an inquiry into the current state of competition in the ICT industry falls more comfortably under the ambit of the Competition Commission's authority.

Duplication of Resources

As the Authority is aware, the Department of Communications embarked on the ICT Green Paper process in 2013. The ICT Green Paper seeks to review the ICT industry in South

Africa, looking at developments in the industry since 1994, global trends, changes in technology and address changes needed in the industry. Accordingly, the ICT Green Paper explores various issues, including competition issues in the ICT industry and explores questions as to how to address competition in the industry and policy changes that would assist to address these issues.

The Authority has noted in the ICT Competitive Assessment Notice that this inquiry seems to mirror the ICT Green Paper and it is correct in this regard. Accordingly, it suggests that this inquiry may be a duplication of efforts.

MTN is of the view that the Authority is correct when it states that it is compelled to guard against market failure (through its regulatory function), but believes that the inquiry, as currently drafted in the ICT Competitive Assessment Notice, does not give effect to this mandate.

Further to the aforementioned, it would seem that this inquiry to be conducted by the Authority would be a time consuming and expensive venture (especially considering the broad nature of the inquiry) which would require a number of internal as well as external resources to be employed in order to properly conduct the inquiry, gather evidence and interpret such evidence. Not only is this inquiry time consuming and expensive for the Authority, but it is also for the stakeholders who are required to respond to the inquiry. Accordingly, conducting this inquiry in tandem with the Department of Communications' inquiry seems to be an inefficient use of the Authority's resources, as well as cumbersome upon the resources of the relevant stakeholders.

Be that as it may, the Authority has argued that it is entitled to use its resources as it deems fit. In this regard, MTN trusts that the Authority has taken into account the possibility of the Department of Communications and the Authority coming to different, and possibly conflicting, conclusions and remedies, and has put the necessary processes in place to deal with such an eventuality.

4. ECONOMIC APPROACH SUPPORTING THE *EX-ANTE* ASSESSMENT OF EFFECTIVE COMPETITION

MTN welcomes the Authority's stated objective of promoting competition within the ICT sector. However, we believe that regulatory certainty is paramount for the ICT industry to

thrive and flourish, and without this regulatory certainty, the large amounts of capital investment required to grow the sector will not necessarily flow.

Accordingly, MTN seeks clarity from the Authority in respect of the economic regulatory framework it proposes to use going forward for determining whether markets are effectively competitive in the ICT industry. In particular, how the Authority will principally treat markets which are determined to be prospectively competitive¹ in an ex-ante regulatory context.

MTN welcomes clarification on the definition of the market(s) that the Authority will be assessing as this is an indispensable preliminary step in the determination of the effectiveness of competition. This preliminary step is in accordance with Competition law practices and regulatory best practice on the interpretation of the concept of dominance. In *Coca Cola Co v Commission*², the Court of First Instance found that whenever the Commission adopts a decision on a finding of dominance, it must define the relevant market and make a fresh analysis of the conditions of competition within the market at the appropriate time. Accordingly, we query and raise a principled concern that the inquiry is seeking to address the state of competition in the ICT sector without any context of the relevant product/service in question which simply leads to confusion. Notwithstanding this dilemma, and in the interest of the recording our willingness to assist we have responded to the questions posed in the various parts of the published notice in the ensuing section.

We believe that it is important that there should be an explicit recognition in the ICT Competitive Assessment Notice that high market shares need not imply market power, and some discussion of the various reasons why this may not be the case, is best provided by referencing the international guidelines on the subject and we address this matter below.

We have reproduced (as a useful summary) paragraph 4.4 of the UK Office of Fair Trading's Guideline on the "Assessment of Market Power" for the Authority's consideration:

"4.4 ...market shares alone might not be a reliable guide to market power, both as a result of potential shortcomings with the data [...] and for the following reasons:

¹ Prospectively competitive markets which, while not currently competitive, are expected to become effectively competitive within the period of the review.

² Case T-125/97 etc [2000] ECR II-1733, [2000] 5 CMLR 467 available at http://eur-lex.europa.eu/smartapi/cgi/sga_doc?smartapi!celexplus!prod!CELEXnumdoc&lg=en&numdoc=61997A0125.

- **Low entry barriers** - *An undertaking with a persistently high market share may not necessarily have market power where there is a strong threat of potential competition. If entry into the market is easy, the incumbent undertaking might be constrained to act competitively so as to avoid attracting entry over time by potential competitors [...]*
- **Bidding markets** - *Sometimes buyers choose their suppliers through procurement auctions or tenders. In these circumstances, even if there are only a few suppliers, competition might be intense. This is more likely to be the case where tenders are large and infrequent (so that suppliers are more likely to bid), where suppliers are not subject to capacity constraints (so that all suppliers are likely to place competitive bids), and where suppliers are not differentiated (so that for any particular bid, all suppliers are equally placed to win the contract). In these types of markets, an undertaking might have a high market share at a single point in time. However, if competition at the bidding stage is effective, this currently high market share would not necessarily reflect market power.*
- **Successful innovation** - *In a market where undertakings compete to improve the quality of their products, a persistently high market share might indicate persistently successful innovation and so would not necessarily mean that competition is not effective.*
- **Product differentiation** - *Sometimes the relevant market will contain products that are differentiated. In this case undertakings with relatively low market shares might have a degree of market power because other products in the market are not very close substitutes.*
- **Responsiveness of customers** - *Where undertakings have similar market shares, this does not necessarily mean that they have similar degrees of market power. This may be because their customers differ in their ability or willingness to switch to alternative suppliers [...]*
- **Price responsiveness of competitors** - *Sometimes an undertaking's competitors will not be in a position to increase output in response to higher prices in the market. For example, suppose an undertaking operates in a market where all undertakings have limited capacity (e.g. are at, or close to, full capacity and so are unable to increase output substantially). In this case, the undertaking would be in a stronger*

position to increase prices above competitive levels than an otherwise identical undertaking with a similar market share operating in a market where its competitors were not close to full capacity”.

Additionally, we would like to counter any impression provided to the Authority that industrial economic theory suggests that there is an automatic relationship between high market share and high price-cost margins. In fact, it is recognised both by modern economic theory and by competition authorities that there is no such automatic relationship.

Finally in the context of an *ex-ante* regulatory framework, MTN strongly believes that markets that are expected to become prospectively competitive during the course of the assessment period should not be regulated on an *ex-ante* basis. Instead, if any competition issues were to arise in these markets as a result of dominant positions held by a single company (single dominance) or a group of companies (collective dominance); those should be dealt with under the provisions of the South African Competition Act.

MTN believes that this principle should be clearly stated in the regulatory framework of the ICT Competitive Assessment Notice. There is clear precedent of such best-practice approach being applied in international jurisdictions. For example, the European Commission and National Regulatory Authorities in Europe apply a three step test to determine whether it is appropriate to regulate electronic communications markets on an *ex-ante* basis. The Commission distinguishes between structural and legal or regulatory barriers to entry. Legal or regulatory barriers which can be removed within the relevant time horizon are not taken into account. Moreover, the Commission writes that "*barriers to entry may also become less relevant with regard to innovation-driven markets characterised by on-going technological progress.*"³ Additionally, the Commission states that "*the application of the three criteria should limit the number of markets within the electronic communications sector where ex-ante regulatory obligations are imposed and thereby contribute to the aim of the regulatory framework to reduce ex-ante sector specific rules...*"⁴

5. DETAILED COMMENTS ON THE TEXT

(Referenced text in Notice 229 of 2014)

³ View http://ec.europa.eu/information_society/policy/ecomm/doc/library/proposals/rec_markets_en.pdf

⁴ View http://ec.europa.eu/information_society/policy/ecomm/doc/library/proposals/rec_markets_en.pdf

The Cost to Communicate, Competition and Consolidation

[Regulator]

“Since 2005 there has been considerable flux in the electronic communications network service (ECNS) and electronic communications services (ECS) markets. After the Altech court challenge, there are more than 700 ECNS/ECS licensees, of which 416 are operational. Despite this profusion, the cost to communicate has not come down substantially and South African consumers pay considerably more than their counterparts in Africa. So there is the problem that the simple equation that increased competition automatically leads to a reduction in the cost of communication has not taken place in reality. In the mobile communication market, MTN and Vodacom control about 80% of the market and have indicated in public that they are planning to acquire other ECNS/ECS licensees. The Authority is concerned as to the implications of such unprecedented market consolidation on competition and concomitantly, on the cost to communicate, and the digital divide.”

Challenging market transition to a data driven business

Despite the fact that the communications sector is surging in terms of exponential growth of data traffic, the operator business is very competitive as the industry matures and it faces the difficulty of monetising the mobile data boom. This is compounded by the fact that operators are reporting declining voice revenues and they have to maintain or increase investments in physical infrastructure. Accordingly, the market conditions are such that operators face increasing pressure in that they have CAPEX ratios which are at historical highs with increasing cost of capital and potentially forcing operators to lower dividends.

Moreover, the transition to an all IP network separates the transmission of communication from content to services in that communication services are now understood to mean that multiple services are now carried across a common transmission medium rather than dedicated technology platforms. The transition from voice to data is challenging in that operators have been forced to increase efficiency levels, cut operational expenditure, reduce headcount and reduce network operational costs. Consequently, cost cutting has become an integral part of the operator business.

A response to these market developments has been the growing number of network sharing initiatives and merger activity between operators because achieving the necessary economies of scale is key. The development of network sharing is a global development and

Jan Markendahl and Bengt Molleryd (2013)⁵ argue that the overall global trend on the market for electronic communications is consolidation. The authors find that the market conditions have seen increased usage of network sharing throughout the world and in the longer term this moves the focus from infrastructure based competition to service based competition. In so doing operators strive to lower network operational costs and this has resulted in, as an example, the development of dedicated tower and infrastructure companies which releases capital for operators.

However, the Author's conclude that despite the extensive usage of network sharing – where companies are pooling resources, competition in the retail market prevails. Accordingly, the Authority needs to consider the market requirements and business models facing operators as well as the social benefits of larger coverage and improved capacity which has seen the resultant extensive regulatory approval for network sharing and merger activity becoming an established practice within the market for electronic communications. This market consolidation is already happening in the South African context. The Authority should not view this as alarming and the Authority should consider being a facilitator to consolidation. Market forces are already dictating that this is inevitable.

Additionally, the Authority needs to concurrently consider the issue of the demand for access to additional spectrum suitable for deployment of LTE technologies in a cost effective manner which is a vital component for the operators to evolve their networks. It should be noted that in the absence of a regulatory framework allowing for operators to pool their spectrum, it is not possible to implement the more efficient RAN sharing solutions in the manner done elsewhere, for example, the 50:50 joint venture between T-Mobile and Orange S.A in the UK. RAN sharing is fast becoming a global trend since it significantly reduces CAPEX and OPEX costs through a reduction in network duplication and an improvement in spectrum utilisation, which thereby increases the rate of broadband penetration. Therefore, MTN believes that the Authority should be encouraging and facilitating RAN sharing deals between operators allowing for reduced network rollout costs, which will result in lowering the cost to communicate and help bridge the digital divide.

⁵ Bengt Molleryd and Jan Markendahl “ *The role of network sharing in transforming the operator business- impact on profitability and competition*” Paper submitted to the 24th European Regional Conference of the International Telecommunications society, Florence, Italy, 20-23 October 2013

[Regulator]

“Whilst those in metropolises have access to wide choice of 2G, 3G and increasingly LTE, in rural areas 2G and 2.5G remain the only choice.”

MTN has been and continues to deploy UMTS900 (3G coverage) in rural areas for the past four (4) years in order to offer subscribers a superior broadband experience. It is MTN's intention to continue aggressively rolling out U900 where it is able to do so without impacting on its quality of service requirements in order to reach more rural areas and towns. To date MTN provides 3G coverage to over 75% of the population. This can be significantly increased through the allocation of suitable spectrum, such as the 700MHz or 800MHz band, which is ideally suited for rural broadband access.

Spectrum

[Regulator]

“The Authority has heard arguments in various public fora that what is holding back competitive activity in the ECNS/ECS market is lack of access to high demand spectrum and condonation of first mover advantage preventing many smaller players from gaining market entry as a result.”

Assigning all newly released high demand spectrum to new players will simply delay its use, as deploying networks from scratch takes time and requires significant capital investment. Telkom Mobile's current predicament is a prime example of the infeasibility of rolling out a new network from scratch in an already saturated mobile market. Spectrum alone is not enough; incumbent operators are able to leverage their existing infrastructure to deploy new technologies with new spectrum far more cost effectively than a new operator rolling out a green field network. In Telkom Mobile's case it had access to significantly more infrastructure than another new operator is likely to have, but it has still publicly stated that it urgently needs to reduce its operating costs.

Additionally, international evidence demonstrates that frequency fragmentation is likely to require downstream consolidation to create the network and distribution scale economies needed to deliver Broadband for All. Current spectrum trading rules would substantially hamper this process, and require consideration if the Authority is to press ahead with these plans.

International best practice suggests that entry promotion (and the associated market fragmentation) through spectrum licensing as has previously been proposed by the Authority, is both difficult to achieve in practice and carries its own dangers in terms of unit costs, and, ultimately, consumer prices.

For example, in Europe, 3G licensing was used to create 19 new entrants in 2000. In 2011, returned licences, M&A and bankruptcies meant just 7 of these entrants were still operating, many in a precarious financial situation. Handing over new licenses, therefore, does automatically lead to increasing long-term industry participation.

In their 2008 paper^[1], Benzoni and Geoffron suggest that forcing market outcomes towards competitive fragmentation via licensing (or mandated MVNO access) carries both competitive and end-user price risks, as the benefits of more competitive pressures may be outweighed by the loss of economies of scale in the market (driving higher unit costs). Observing 14 European markets, they find that markets with both 2 players and 4-5 players have higher end-user prices than 3-player markets:

“The comparative analysis of 14 European countries thus reveals that the markets with a three-operator structure present both lower average prices per minute, and higher average consumption per user.”

They are careful not to suggest that a 3-player structure is the golden rule of optimal market structure, but nevertheless advance that their findings:

“should incite reflection relating to the European Commission’s policy that attempted to promote market structures with four or five players when third generation licenses were granted, and to any regulatory authority that would like to believe that, in a sector of infrastructures such as mobile networks, no matter what the circumstances, granting additional licenses is a gauge of the increased collective long-term welfare.”

[Regulator]

“Additional questions are surfacing as to whether the traditional gatekeepers to spectrum are actively and passively ensuring that spectrum remains a barrier to entry, and whether free-riding is being condoned de facto.”

^[1] Laurent Benzoni, Patrice Geoffron (2008) Optimal Mobile Telephony Market Structure in Europe: “Two are too Few and Four are too Many”?

Mobile network operators are probably the most optimal users of spectrum in South Africa (i.e. based on users per MHz, MTN supports nearly half a million users per MHz allocated), and where it is possible they are continually re-farming traditional spectrum used for GSM to deploy more efficient radio access via WCDMA and LTE. The fact is that current spectrum assignments to MNOs will not be able to cater for user data demand in the future and for that reason spectrum sharing/pooling should be allowed and encouraged, as it will improve capital and operational efficiencies, while increasing the overall network capacity.

[Regulator]

“The questions cannot remain unanswered and arguments cannot subsist unresolved indefinitely. The issue is what role should the assignment of high demand spectrum play in enabling competition, recognizing that the empowerment of historically disadvantaged people is also a matter of levelling the playing field.”

Assigning spectrum to new entrants in order to service historically disadvantaged people will not guarantee a sustainable business, nor will it level the playing field within the telecommunications market. The ability to transform the spectrum resource into a communications service at an acceptable cost will require the efforts of existing mobile network operators, as they already possess much of the infrastructure needed to deploy communications services on additional spectrum.

Given the goals of 100% broadband penetration by 2020 in conjunction with the much stated World Bank’s statistics linking broadband penetration to an increase in GDP, one can conclude that one of the best ways to empower historically disadvantaged individuals is to aggressively increase broadband penetration and not by fragmenting the available frequency in small but unusable portions. In order to expedite this process, the Authority would be well advised to assign spectrum to proven entities that can leverage their knowledge and current infrastructure to meet the goals of the country. Now is not the time for experimentation when more and more countries have assigned the necessary frequencies to current operators and their subscribers and citizens are already enjoying the fruits of such assignment.

Convergence and the Internet

[Regulator]

“In the arena of convergence, there has been little debate within the ICT sector about the impact of convergence on the way the ICT market as a whole is functioning and restructuring.”

There has been an exponential increase in mobile data traffic due to the advent of smartphones and tablets with open mobile application development environments. In response to this increase in traffic, mobile and fixed network operators have converged all of their access technologies to form heterogeneous networks, or “HetNets”. A key benefit of HetNets, is that they provide subscribers with improved coverage as well as capacity, since subscribers are now able to seamlessly connect to data services via numerous separate access technologies.

An example of a HetNet architecture is depicted in Figure 1, which demonstrates that mobile devices are always able to connect to data services, either via mobile or wireless fixed access technologies, and are thus able to achieve ubiquitous access to data services.

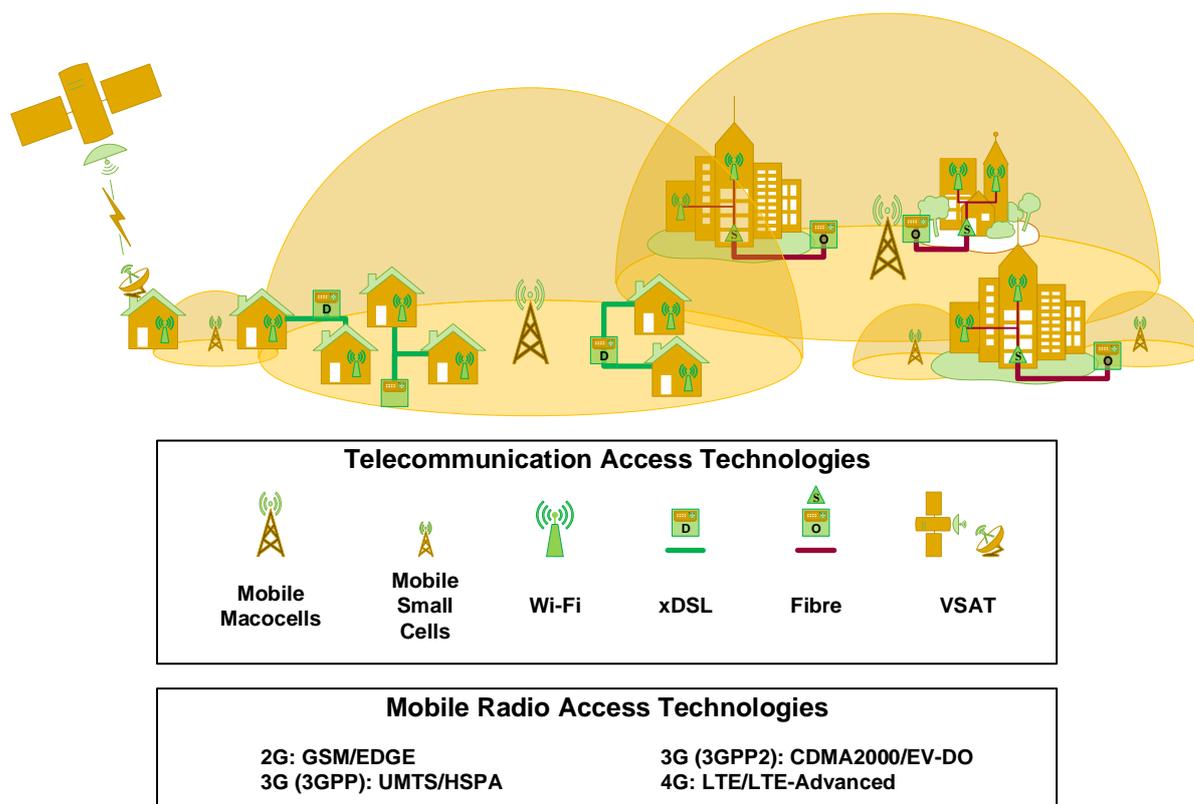


Figure 1: The Heterogeneous Network

As HetNets have evolved, mobile devices have adapted to support the myriad of mobile and wireless fixed access technologies contained within the HetNet, and have therefore become access technology agnostic. Wi-Fi has played a crucial role in this evolution, as it provides a universal mechanism to connect mobile devices to fixed access technologies such as xDSL and Fibre.

Mobile device manufacturers, taking note of the popularity of Wi-Fi, have ensured that almost all modern mobile devices support Wi-Fi connectivity, and that such connectivity is preferred over mobile connectivity in all instances. This approach by the mobile device manufacturers has resulted in the direct substitution of mobile access technologies with Wi-Fi, which in turn biases the telecommunications market in favour of Wireless Fixed Access Providers. This concept is clearly illustrated in Figure 2, and is summarised as follows:

- In the event that mobile and Wi-Fi connectivity are both available in the same location, then Wi-Fi is a substitute wireless data access technology for mobile devices; and
- In the event that only mobile or Wi-Fi connectivity are available in a particular location, then the mobile device will only be able to access data services via whichever access technology is available.

As Wi-Fi operates in unlicensed spectrum, any organisation with an ECNS license from ICASA can deploy their own Wi-Fi network, which represents a significant risk to mobile network providers' data revenue. As such, many mobile operators have begun to incorporate Wi-Fi into the HetNet architecture, usually via roaming agreements established between the mobile network operators and the incumbent Wi-Fi service providers. This relationship between the mobile operators and the incumbent Wi-Fi service providers enables both parties to utilise each other's mobile and Wi-Fi networks should either of them choose to do so.

In addition to enabling the mobile operators and Wi-Fi service providers to utilise each other's networks to improve the coverage and capacity available to end-users, this approach has the following cost benefits for the both organisations -

- Mobile operators are able to improve the coverage and capacity of their mobile networks by enabling their subscribers to roam on 3rd party Wi-Fi networks, which

thereby act as a directly substitution to their mobile networks and reduce the investment needed to achieve the same result via traditional methods, i.e. by deploying additional mobile network equipment and acquiring additional spectrum; and

- Wireless Fixed Access Providers are able to improve the coverage and capacity of their Wi-Fi and fixed networks by enabling their subscribers to roam on 3rd party mobile networks, which thereby act as a direct substation to their Wi-Fi and fixed access networks and reduce the investment needed to achieve the same result via traditional methods, i.e. by deploying a new mobile network and by acquiring additional spectrum.

Finally, it should be noted that the proliferation of packet-based voice services (i.e. Voice over IP (VoIP)) have enabled Wireless Fixed Access Providers to directly compete with mobile operators for voice revenue. As mobile devices are already biased towards utilising Wi-Fi connectivity, mobile operators must utilise their roaming agreements with the incumbent Wi-Fi service providers to provide similar VoIP services, so as to limit the erosion of their traditional circuit-switched voice revenue.

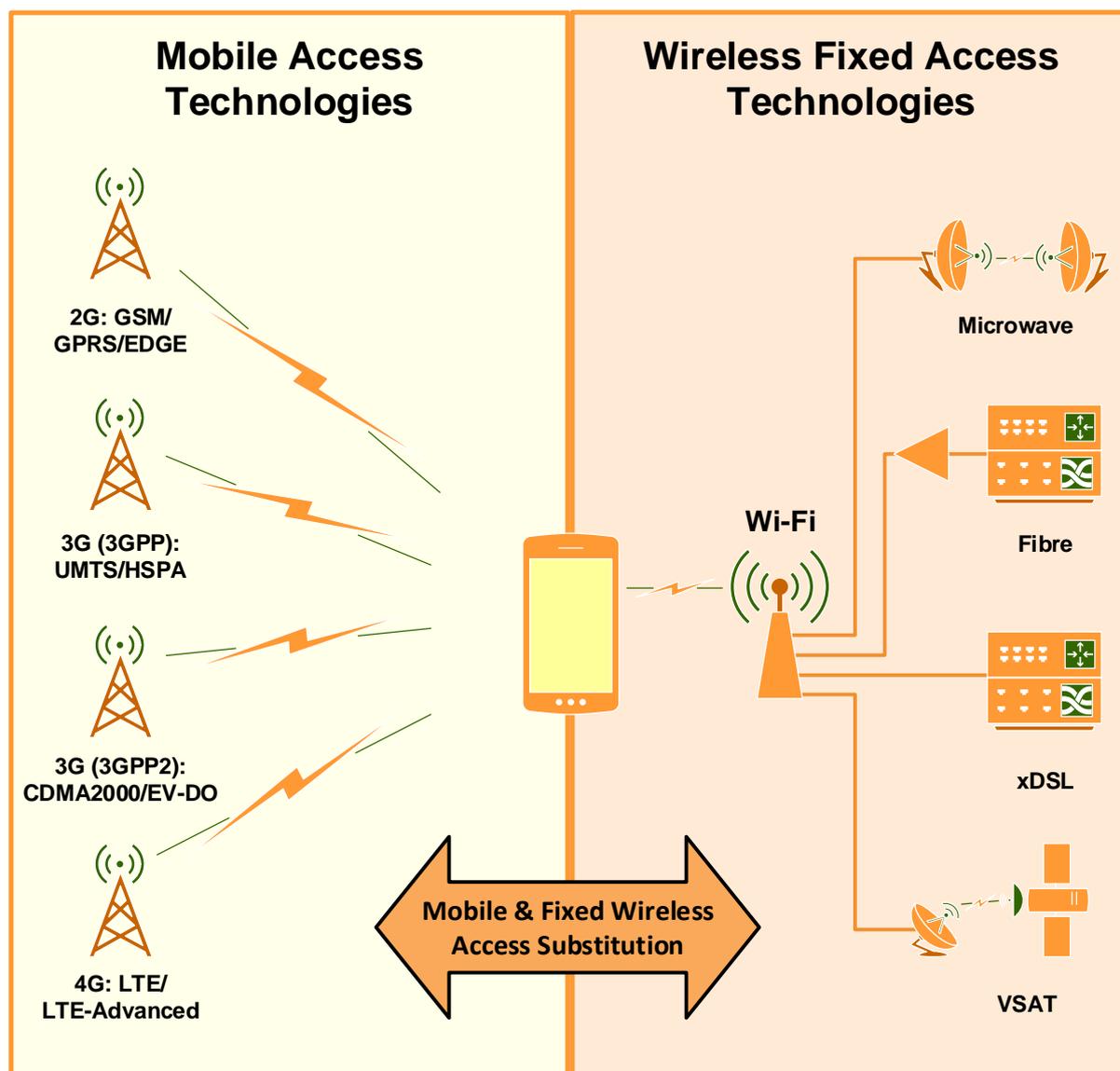


Figure 2: Mobile Device Connectivity

[Regulator]

“South Africa's per capita Internet penetration should be much higher and this raises questions as to what the multifaceted problems obstructing Internet growth are.”

MTN believes the key obstructions to internet growth include: Access to spectrum, long lead times for the regulatory approval of telecommunications infrastructure (making the rapid roll out guidelines a necessity), access to power infrastructure in remote areas, capital expenditure required for network expansion, and issues of equipment theft and vandalism.

[Regulator]

“For example, while South Africa's broadband capacity and speed increases over the coming years are also a source of concern, what roles will Over-the-Top services play with respect to competition in the sector?”

OTT service providers have been in existence for some time, offering voice, IM and data services. Network operators' revenue streams have been affected and both OTT and Cellular SP's are looking to build relationships of mutual benefit. One concern may be sole partnerships between OTT service providers and network operators as this could disadvantage the other operators. However, the OTTs have never made such concessions to any single network operator. As such, the network operators are placed on a level footing. As these services emerge in SA they are unlikely to drive or hinder the competition that is already evidenced in the broadband connectivity space as the services will be available to all network operators.

[Regulator]

“The focus on voice services and termination rates are a distraction since these are supposed to be approaching zero, especially considering the transition to IP. Should the actual focus not be data pricing, considering the need for a sustainable information society?”

MTN believes the focus of the Authority should be on identifying markets where markets don't tend towards effective competition, and still need sector-specific regulation. The Authority should concentrate on those markets where structural competition problems persist. However, those markets that are prospectively competitive and no longer covered by *ex ante* regulation are still subject to the scrupulous scrutiny by the competition authorities which have powerful instruments at their disposal to investigate and sanction anti-competitive behaviour. Accordingly, MTN is very much in favour of light touch regulation where competition is progressing to the benefit of consumers, and in favour of regulation only where competition is not developing. This mature approach will significantly relieve the regulatory burden on industry and regulators in that it will reduce unwarranted public intervention and very likely encourage investment in the SA communications industry.

If indeed, data pricing is of concern, ICASA should provide clarity as to what information it is lacking in data pricing. There has been exponential data growth at much lower prices. Data prices have fallen by more than 70% in the last 3 years but require further and continuous investment to attain the policy goal of Broadband for All. The necessary empirical evidence should be obtained as to what data pricing is relevant in the market today. While pricing may be one of the parameters of a sustainable industry, equally important is that investors in networks are capable of making the necessary returns to invest further in the required infrastructure. A focus on only one factor, namely pricing, may not necessarily lead to a

sustainable information society. The necessary network infrastructure should be there as well to support the traffic.

Innovation, net neutrality and disruptive technologies

[Regulator]

“Innovative technologies introduced through dynamic spectrum management are finding ways of accessing artificial restrictions of spectrum. Is it time to introduce them into the market in the short term?” and “What role will new disruptive technologies such as TV White Spaces play in making our ICT sector more competitive?”

The current processes used to allocate and monitor spectrum usage, both within South Africa and throughout the world, can result in poor utilisation of significant portions of the spectrum, especially when that utilization is measured across a large geographical area. Dynamic spectrum management (DSM) would offer the Authority the means to efficiently allocate spectrum within a given geographic area, while ensuring that the spectrum is actually used within that area.

Although there are significant practical challenges that would need to be overcome before a National DSM System could be deployed, it is MTN’s recommendation that the implementation of such a system be considered a long-term goal for the Authority. The deployment of a National DSM System would provide the Authority with a centralised database from which to determine where individual spectrum bands were being used throughout South Africa and provided that such a system was used to govern all spectrum allocation within South Africa, the system would also enable the Authority to issue and retract spectrum licenses quickly and efficiently depending on the utilisation of such spectrum. The Authority could even consider adjusting the costs of leasing spectrum based on how efficiently a network operator utilises their spectrum within a given area, provided that the National DSM System was capable of accurately determining the utilisation of all spectrum across South Africa.

MTN is very supportive of the Authority’s efforts to conduct TV White Space trials, and to utilise this technology to improve communication services in areas where such services are unavailable or of a poor quality. The combined implementation of a National DSM System and a TV White Space policy would enable the Authority to develop and test the capabilities of the National DSM System, while improving the utilisation of spectrum in the TV spectrum bands.

Provided that the Authority ensures that all interested parties (i.e. anyone with an ECNS license) are able to license TV White Space spectrum via the National DSM System, the system would also improve competition in the industry by enabling new entrants into the market, while allowing the industry incumbents the opportunity to improve their existing services. It is MTN's belief that new entrants and industry incumbents should equally be permitted to use TV White Spaces, as each group will utilise the facility for different purposes. New entrants will use TV White Spaces to service areas with minimal/poor communication services, and they could also deploy their own networks in areas already serviced by the industry incumbents. At the same time, industry incumbents will use the TV White Spaces in areas where their spectrum is over utilised to improve their communication services to their existing subscribers.

MTN is more than willing to engage with the Authority on issues relating to DSM and TV White Spaces.

[Regulator]

“How will issues of net neutrality come into play?”

Network neutrality as a concept has acquired two distinct meanings in the public debate. Unfortunately it is not clear from the very short reference to “net neutrality” what ICASA’s understanding is of the concept or what ICASA sees as net neutrality. Consequently, MTN had to take a broad approach to answering the question.

One meaning of net neutrality is focused on the regulation of *bandwidth*. Some advocates of net neutrality are worried about attempts by broadband Internet suppliers to depart from the traditional best-effort packet forwarding and wish to prevent network operators from differentiating the speeds with which packets are delivered. The second approach focuses on *universal access to the resources connected to the internet*. It is derived from the end-to-end principle and seeks to prevent the blocking of access to web sites by network operators, and their establishment of walled gardens or similar kinds of limits on the content, applications and services that can be accessed by Internet users.

MTN maintains that bandwidth management is not network neutrality. However, for some, network neutrality means the opposition to any form of differentiation of a network operators bandwidth. MTN address both interpretations below -

Given the wide variety of services and applications that can be delivered over broadband Internet, carriers are beginning to consider business models that differentiate the speed or priority with which packets are delivered. It has been argued before the US Congress, that the heart of the Internet protocol is the agreement that all data packets will be passed through without regard to which application created them or what’s inside of them. This reliable, uniform treatment of packets is precisely what has made the Internet a marketplace of innovation so critical to an economy, thereby implying that the Internet protocol itself somehow embodies an agreement to treat all packets equally. But this is misleading and inaccurate. The TCP/IP protocols define an address space and a manner in which to assign information into packets, assign addresses to them, and reassemble them at the destination. The protocols don’t care whether someone reads what is inside the packet or makes a routing priority decision based on the header information or the payload along the way; TCP/IP continues to work as designed irrespective of whether that happens.

In fact, prior to the issue of net neutrality, Internet Engineering Task Force (IETF) working groups were creating “quality of service” protocols such as “Diffserv”, which were designed

to differentiate between packets based on the type of service involved. Today, virtual private networks (VPN's) carve out special "tunnels" for the exclusive use of heavy users, either for traffic prioritization or security purposes. In addition, Akamai and similar network management firms offer their clients faster content delivery by removing critical traffic from best-effort routing and moving it onto routes that are prioritized. One critical addition is that the content delivery networks (CDNs) distribute content to caches sitting on the network edge. Access to this higher priority and caching technology does come at a premium.

Services that are popular enough (based on distributed consumer uptake) will utilise a CDN service to optimise service delivery to the benefit of the consumer. Under the net-neutrality proposal (i.e. all data treated equally arrangement) this would not be possible as smaller firms would not be able to access expensive CDN infrastructure and are disadvantaged. As such, under a purely net neutral network all of this infrastructure would be removed. The result would be a breakdown of the internet's global backbone as it would need to carry this huge static content from source to destination, without any intermediaries to minimise this impact.

Furthermore, if we want to encourage a faster and more capacious broadband Internet it makes sense to encourage network operators to try to gain a competitive advantage by offering faster speeds for a higher price. In addition, bandwidth differentiation also might make service cheaper by reducing the amount of capital investment required to expand infrastructure (Houle, Ramakrishnan, et al, 2007).

To imply that the differentiation of bandwidth or management of bandwidth would divide the user experience of the internet between rich and poor ignores the fact that the public Internet is and will continuously be characterized by huge differences in the levels of bandwidth consumed by households, businesses, hosting providers and web-based service providers. Indeed, there would be no broadband Internet at all if some people weren't allowed to pay more than dial-up subscribers for the higher speeds of cable modems, DSL or fibre.

It is true that anti-competitive abuses of bandwidth tiering are possible. However, the argument holds that without neutrality rules, network operators could use packet-inspection technologies to favour the transmission of their own content and applications, or those of their affiliates. These concerns are real and important. But they are relevant only insofar as bandwidth management techniques are part of a strategy of vertical integration by network operators into content and applications, or when they are used to censor or block access to

Internet resources. In other words, the issue is not bandwidth differentiation per se, but rather anti-competitive discrimination.

There are many real incidents of Internet blocking and censorship by network operators and governments. The most famous example is probably the Madison River case, in which a regional telephone company in the United States used port blocking to prevent its subscribers from using Vonage's voice over Internet protocol (VoIP) service.

In addition to interference with content and applications by private players, governmental blocking and filtering of Internet content has become increasingly common, even in some nominally democratic countries. This view of Net neutrality does not necessarily mean that any and all restraints on content and expression must be eliminated. It simply asks that public Internet service providers not be used as the chokepoints to impose them. Possession, production and publication of illegal content can still be punished, but a net neutrality principle requires that we confine that regulation to the responsible users and avoid, or minimize, interfering with universal Internet connectivity in our attempt to do that.

This view of net neutrality also permits blocking of users or domains that disrupt or impair the technical functioning of the network, such as illegal spam sites or generators of DDoS attacks. These kinds of activities are, quite literally, "crimes against the network." They threaten the very freedom of access a net neutrality policy is intended to defend, and thus it is legitimate to suppress them. Whereas the bandwidth-oriented approach to net neutrality is grounded in a belief in the inherent ills of market-driven service differentiation, the access-oriented approach welcomes competitive markets and innovation.

Further to this it appears that respected regulators in both the US and the UK support the view that the management of bandwidth by operators who supply broadband is not deemed to be defined as "net- neutrality".

Accordingly, MTN is in line with the position taken by both the FCC and OFCOM regarding the concept of net neutrality, in that it can result in a de-investment in infrastructure from network operators. The concept limits the network operator's ability to monetise a massive investment and hence would deter the operator from making that required investment in the sector. Further, with the exponential growth of data traffic being experienced globally, so too does the capital investment in the networks to cater for this need. Subsequently, the pricing for the traffic needs to be transferred to either the consumer or a service provider all whilst the consumer is demanding lower pricing.

MTN supports the idea of an open internet where no service need be concerned of censorship of their service. However, due to the vast investment MTN has made in broadband infrastructure to enable South Africans to communicate, MTN should be able to monetise that investment in ways that don't disadvantage smaller players. With that recommendation in mind MTN proposes the following:

- To ensure effective competition the operators should adhere to principles of transparency to ensure that consumers can make informed decisions;
- Subsequently, MTN suggests that the management of such a task is left to the market within an open competitive environment. This approach would minimise the effort in regulating the issues of blocking and discrimination as it would be in the operator's best interest to provide access to services the consumer demands; and
- To allow the operators to still remain innovative and ensure returns on the investments made without prejudicing any services through the imposition of a minimum quality of service. This would safeguard the best effort access commonly associated with an open internet whilst still allowing the network operators the freedom to monetise their investments as desired.

[Regulator]

“What are the implications of the current anxieties in the traditional telecom market regarding becoming 'dumb pipes', simple purveyors of bandwidth?”

The main concern is that while the network operators are enabling OTT and other Value-Added Services that have high demand and good returns, the network operators are essentially enabling the OTT service providers for very little gain, while still bearing the brunt of the CAPEX investment required to develop the bearer network. It may not be fair at all to the Network operators but it is a reality that all operators are facing. The implication is that network operators will be looking to diversify their offerings through new lines of business or partnerships.

[Regulator]

“The mobile sector has effectively moved to an IP platform. What are the immediate implications for the ICT market?”

The implications of an IP platform are that services offered becomes a data bearer and that the convergence of multiple access technologies is now possible.

-END-