INDEPENDENT COMMUNICATIONS AUTHORITY OF SOUTH AFRICA

NO. 1480 **5 November 2021**

Independent Communications Authority of South Africa
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DISCUSSION DOCUMENT ON THE REVIEW OF THE PRO-COMPETITIVE CONDITIONS IMPOSED ON LICENSEES IN TERMS OF THE CALL TERMINATION REGULATIONS, 2014

1. On 28 May 2021, the Authority published a notice (Government Gazette No. 44636) declaring its intention to review the pro-competitive conditions imposed on relevant licensees in terms of the call termination regulations, 2014 (as amended) published in Government Gazette No. 38042 ("the Regulations")

2. The above review process is to be undertaken as follows:

   2.1. Phase 1 (Commencement of the Review and Request for Information);

   2.2. Phase 2 (Discussion Document);

   2.3. Phase 3 (Public hearings on the Discussion Document); and

   2.4. Phase 4 (Findings Document).

3. The Authority concluded phase 1 of the review process on 31 August 2021.[1] It on this premise that the Authority herewith commences with Phase 2 of the review process by publishing the Discussion Document on its website (https://www.icasa.org.za) and in the *Government Gazette*.

4. A copy of the Discussion Document is also available at the Authority's head office library (Block C, 350 Witch-Hazel Avenue, Eco Point Office Park, Eco Park, Centurion) during office hours (Mon-Fri from 09:00 to 16:30).

5. Interested persons are invited to submit written representations with regard to the Discussion Document, by no later than forty-five (45) working days after publication of this Discussion Document, by post, hand delivery or electronically (in Microsoft Word) and marked specifically for the attention of the Chairperson: Call Termination Committee at : E-mail: CTR2021@icasa.org.za or ICASA, Block B, 350 Witch-Hazel Avenue, Eco Point Office Park, Eco Park, Centurion. **Responses should follow the sections set out in the Discussion Document, where the section is relevant to the interested person.**

6. All written representations submitted to the Authority pursuant to this notice will be made available for inspection by interested persons on the Authority's website and at the Authority's library, where copies of such representations will be obtainable on payment of the prescribed fee.

[1] Submission deadline for responses to the Questionnaire on the review of the 2014 Call Termination Regulations.

7. At the request of any person who submits written representations pursuant to this notice, the Authority will determine whether such representations or any portion thereof is confidential in terms of section 4D of the Independent Communications Authority of South Africa Act, 2000 (Act No. 13 of 2000 ("ICASA Act"). If the request for confidentiality is refused, the person making the request will be allowed to withdraw such representations or portion thereof. Persons requesting confidentiality are urged to acquaint themselves with the ICASA Guidelines for Confidentiality Request published in Government Gazette No 41839 (Notice No 849) of 17 August 2018.

DR. KEABETSWE MODIMOENG
CHAIRPERSON
DATE: 28/10/2021

DISCUSSION DOCUMENT ON THE REVIEW OF THE PRO-COMPETITIVE CONDITIONS IMPOSED ON LICENSEES IN TERMS OF THE CALL TERMINATION REGULATIONS, 2014

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1. Introduction and Background

1.1. On 28 May 2021, the Independent Communications Authority of South Africa ("the Authority / ICASA") undertook the review of the pro-competitive conditions imposed on licensees as required in terms of section 67(8) of the Electronic Communications Act, 2005 (Act No. 36 of 2005) ("ECA") and Regulation 8 of the Call Termination Regulations, 2014 (as amended) ("the Regulations").

1.2. In order to carry-out the above review as required in terms of the ECA, the Authority solicited information and views from stakeholders in order to assess the current and future market conditions in the relevant markets.

1.3. The Authority's preliminary views are as follows:

<u>Market definition</u>
The definitions of Mobile termination markets and Fixed termination markets in terms of Regulation 3 of the Regulations remains unchanged.

<u>Evaluation of effectiveness of competition:</u>
Competition in Mobile termination markets and Fixed termination markets will be ineffective in the absence of regulation. Therefore, the four market failures as per regulation 7(1) of the Regulations will continue to exist without regulatory intervention.

<u>Significant Market Power:</u>
Each individual Electronic Communications Network Service (I-ECNS) and individual Electronic Communications Service (I-ECS) licensee that offers wholesale voice call termination services in South Africa still has 100% share of the market in respect of voice calls terminating on its network, and has Significant Market Power ("SMP") as defined in section 67(5) of the ECA.[2]

[2] Section 67 (5) provides that : A licensee has significant market power in a market or market segment if that licensee-
(a) is dominant;
(b) has control of an essential facility; or
(c) has a vertical relationship that the Authority determines could harm competition.

Remedies:

- The pro-competitive conditions imposed on licensees in 2014 are still necessary in order to address the market failures in the wholesale voice termination markets as identified in regulation 7(1) of the Regulations.
- However, the Authority's preliminary view is that asymmetry should be granted to new entrants for a period of up to three years upon entry.

1.4. On 11 June 2021, the Authority held a virtual stakeholder workshop to discuss questions of clarity on the process and on the abovementioned questionnaire.

1.5. The Authority received written submissions on questions of clarity from Vodacom(Pty) Ltd ("Vodacom"), Cell C (Pty) Ltd ("Cell C"), Mobile Telephone Networks Proprietary Limited ("MTN"), Telkom SA SOC Limited ("Telkom") and Switch Telecom (Pty) Ltd ("Switchtel") before the closing date of 21 June 2021 stipulated in the Notice.

1.6. On 28 June 2021, the Authority published a briefing note to respond to stakeholders' questions of clarity.[3]

1.7. The Authority received responses to the questionnaire from Vodacom, MTN, Cell C, Telkom, FirstNet Technology Services ("FirstNet"), Switchtel and Electronic Communications Network ("ECN") before the submission deadline of 31 August 2021.[4]

1.8. The above stakeholders requested confidentiality on some of the information and or data submitted in response to the questionnaire, which was subsequently granted by the Authority in terms of section 4D of the ICASA Act.[5]

1.9. The Authority considered the responses from the abovementioned licensees in drafting this Discussion Document, which outlines the Authority's preliminary view with regards to the review of the pro-competitive conditions outlined in the Regulations.

[3] https://www.icasa.org.za/legislation-and-regulations/response-to-stakeholders-questions-of-clarity-on-the-review-of-the-2014-call-termination-regulations

[4] A revised submission by one of the licensees was not considered, as it was submitted after the submission deadline.

[5] Letters were sent to the relevant licensees on 20 September 2021.

2. The review of pro-competitive conditions in the Regulations

This section consists of five sub-sections and is structured in a manner that outlines the Authority's analysis in respect of the review of market determinations.

2.1. Regulation 3 of the Regulations – Market definition

Regulation 3 of the Regulations provides a definition of the relevant markets, namely: Mobile termination and Fixed termination markets.

The markets were categorised in accordance with the type of service provided, and were defined as follows:

(a) Mobile termination markets: The market for wholesale voice call termination services on the network of each licensee that offers termination to a mobile location within the Republic of South Africa.

(b) Fixed termination markets: The market for wholesale voice call termination services on the network of each licensee that offers termination to a fixed location within the Republic of South Africa.

(c) The market definitions contained in this regulation do not include internationally originated voice traffic terminating on a mobile and /or fixed location within the Republic of South Africa.

The Authority outlined the rationale for the aforementioned definitions in detail in the Reasons Document for the Call Termination Regulations of 2014.[6] Additionally, the Authority outlined the factors that it may consider when defining a market in clause 3.2 of the Guideline for Conducting Market Reviews published on 8 March 2010. Stakeholders are encouraged to review not just the analysis in this document, but also the analysis and conclusions outlined in the aforementioned documents.

[6] GG 38609 of 25 March 2015

2.1.1. Product market definition

In reviewing the definitions of the markets, the Authority considered the extent to which the provision of voice call termination and the setting of termination charges by I-ECS and I-ECNS licensees might be constrained via demand-side and supply-side substitution possibilities at the retail and wholesale levels. The Authority applied a Hypothetical Monopolist test (“HM test”) to review the definition of Mobile termination markets and Fixed termination markets. In terms of the HM test, a product or service is regarded as part of the different market if the hypothetical monopolist provider of wholesale voice call termination service can profitably impose a small but significant and non-transitory increase in price (“SSNIP”) of between 5–10%. However, if the price increase is not profitable, then the market definition should be expanded to include the substitute products or services.

(i) Retail demand-side substitution for mobile off-net voice calls

The Authority considered the following potential retail demand-side substitutes for an off-net mobile voice call. Consideration of retail services is necessary, given that the demand for wholesale voice termination service is derived from and depends on the demand for retail services. Understanding the link between retail services and wholesale voice call termination services is important in order for the Authority to understand the extent of the indirect price constraint posed by retail services on wholesale voice call termination services.

(a) Mobile-to-fixed voice calls

The Authority’s preliminary view is that the potential demand-side substitute of mobile-to-fixed voice call for mobile-to-mobile off-net voice calls remains ineffective in constraining the price of wholesale mobile termination, as was detailed in the 2007 Findings Document.[7] Mobile-to-fixed line voice calls do not pose a strong constraint on mobile termination rates, given that fixed line is fixed. It may be difficult for the calling party to reach the receiving party if the latter is not at home or in the office, especially in case of emergency or if urgent contact is required.

[7] GG 30449, section 3.5.6

(b) On-net mobile-to-mobile voice call

The Authority's preliminary view is that on-net mobile-to-mobile voice calls do not act as a constraint to wholesale voice call termination charges, as was detailed in clause 3.5.6.7 of the 2007 Findings Document. The main reason why the on-net voice calls do not pose a strong constraint is because the calling party does not typically know the underlying cost of a voice call, and is largely unaware of the termination charges. Therefore, the mobile termination rate is highly unlikely to affect the choice of the originating network.

(c) Short Message Service (SMS)

The Authority considers that SMS does not act as a constraint to wholesale voice call termination, and that there are still a sufficiently different number of functionalities between sending an SMS and making a mobile voice call. The former does not have the two-way responsiveness of the latter. Therefore, SMSs and voice calls are complementary, rather than substitutes.

(d) Over-The-Top services (OTT) and Voice over Internet Protocol (VoIP);

In the 2017 Findings Document, the Authority found that OTT services "exercise limited competitive constraints" to traditional voice services, mainly due to the following:

- Barriers to the use of OTT services owing to, among others: low smartphone penetration of approximately 33%; lack of compatibility between OTT applications (e.g. the WhatsApp application is not compatible with Apple iMessage); both users needing to be connected to the Internet;
- Poor quality of service compared to traditional voice service;
- VoIP apps provide only a minimal price advantage compared to traditional voice calls;
- Average mobile voice minutes per user is still growing;

The Authority received responses from Vodacom, MTN, Cell C, Telkom and Switchtel in relation to the question on the competitive constraints posed by OTT services, which are outlined below.

Vodacom

Vodacom disagreed with the Authority's 2017 finding that OTT services do not constrain wholesale voice call termination service. Vodacom was of the view that the analysis conducted by the Authority was limited and outdated. Vodacom indicated that OTT services are a demand-side substitute due to the following:

- The growing popularity and take-up of OTT services;
- Rapidly decreasing barriers for using OTT services as an alternative to traditional mobile services, owing to the increase in smartphone penetration, widespread 3G/4G coverage, reduction in effective data prices and improved OTT voice quality;
- Advantages of OTT services over traditional mobile voice calls, such as the ability to add video and to have group calls.

Vodacom contends that market power in mobile termination markets could potentially be reduced by the strong indirect constraint of OTT services at the retail level and the significantly strong constraint on international voice calls due to high switching costs.

In addition to the above, Vodacom indicates that OTT services are perfect substitutes for SMS, and that regulation of SMS termination was not necessary.

Cell C

Cell C is of the view that OTT services are substitutes to traditional voice or SMS services due to similarities in functionality. Cell C, however, indicated OTT services were not regarded as direct substitutes to traditional voice services in many jurisdictions.

Telkom

Telkom indicates that OTT services exercise a significant competitive constraint on traditional voice services, and they represent both direct and indirect constraints. Telkom indicates that this is due to the following factors:

- The availability and increased penetration of OTT services across South Africa;
- OTT services attract no charge or a low charge;
- Improved quality of OTT services due to significant investments by licensees.

Telkom indicates that the increased usage of OTT services has resulted in the significant loss of call termination revenue, and may disincentivise licensees from investing in the underlying network infrastructure that supports both OTT and traditional telecommunications services - to the disadvantage of end-users and the economy.

The Authority's preliminary view with regard to OTT services

The Authority does not consider OTT Instant Messaging as a potential demand-side substitute, given its similar characteristics with SMS service (i.e. lack of immediacy and two-way communication in comparison to voice call service). Therefore, the Authority only considered VoIP calls using OTT applications (such as WhatsApp, Skype, FaceTime, Instagram Call, etc.) as the most likely potential retail demand substitute for voice calls.

With regard to OTT voice calling, the Authority was not able to determine growth in OTT services in South Africa, due to lack of historical data on OTTs. Also, licensees submitted limited information in response to the Authority's questionnaire on OTTs.

However, research reports cited by some licensees in their submissions[8], and data also provided by some licensees, seem to suggest that the adoption of OTT services in SA is increasing. Given the limited amount of relevant data available to it, the Authority has had to place more reliance on economic theory, and to consider decisions made by regulators[9] in other jurisdictions.

The Authority acknowledges that some of the barriers highlighted in 2017 - e.g. smartphone penetration (currently around 63%[10]) and household Internet access levels (at 63.3%)[11] - are weakening. The relative importance of voice[12] to data is also declining, as reflected in the significant increase in data usage and revenue.

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8 Page 9-10 of Vodacom's confidential submission.
Page 5-6 of Telkom's confidential submission.

9 The Authority considered recent decisions of, among others, the EU (https://digital-strategy.ec.europa.eu/en/news/commission-updated-recommendation-relevant-markets); the UK (https://www.ofcom.org.uk/__data/assets/pdf_file/0029/216794/statement-2021-26-wholesale-voice-markets-review.pdf); Australia (https://www.accc.gov.au/regulated-infrastructure/communications/mobile-services/mobile-terminating-access-service-access-determination-inquiry-2019/final-report) and New Zealand (https://comcom.govt.nz/__data/assets/pdf_file/0018/224127/Final-decision-on-Mobile-Termination-Access-Services-MTAS-2-September-2020.pdf)

10 State of the ICT sector Report in South Africa 2021.

11 http://www.statssa.gov.za/publications/P0318/P03182019.pdf

12 It should be noted that voice traffic and revenue is growing, albeit at a slow rate.

Despite the above, the Authority is not convinced that OTT voice calling services are an indirect competitive constraint on wholesale voice call termination services, and that they could mitigate SMP that each licensee has in the markets under review.[13]

For OTT voice calling services to exercise a constraint on termination rates, the switch to OTT voice calling services by voice subscribers in response to the increase in retail voice tariffs should be significant, and render the increase in termination rates above efficient levels unprofitable. Therefore, the Authority considers that the use of OTT voice calling services is not likely to be a perfect substitute for voice calls during the period under review due to the following reasons:

- Voice subscribers, especially post-paid and top-up subscribers who receive an allocation of bundles of voice, SMS and data, might not be able to act on the retail voice price increase due to limited information on the unit price of voice calls. The Authority is of the view that the price differential[14] between OTT voice calling services and traditional voice services is not strong enough to result in the substitution of voice for OTT voice calling services. In addition, even if subscribers are aware of the price of traditional voice services, they might not be able to switch immediately due to, among other reasons, high switching costs and customer stickiness.
- OTT voice calling services are in many cases used as a complement to traditional voice calling services.[15] This is because the end-user's preference or choice for traditional voice calls over OTT voice calling is also driven by non-price factors, such as service quality, lack of compatibility between OTT applications, access, etc.
- OTT voice calling requires simultaneous connection to strong and stable data connection by both the calling party and the receiving party. This might not necessarily be possible at all times, making it difficult for the calling party to reach the receiving party in case of emergency or if the urgent contact is required. Also, OTT voice calling service alters the pricing model from Calling Party Pays ("CPP") to a hybrid of CPP and Receiving Party Pays ("RPP"), which might be undesirable to a certain segment of end-users.

[13] This is also consistent with international best practice, particularly in the EU and the UK.
[14] It is assumed that the maximum impact of 5-10% increase in fixed and mobile termination rates on voice tariffs is R0.01.
[15] Arnold, R., Schneider, A. and Hildebrandt, C., 2016. All communications services are not created equal–Substitution of OTT communications services for ECS from a consumer perspective. Available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2756395.

- Significant numbers of subscribers should switch to OTT voice calling services in order to make an increase of 5-10% in termination rates unprofitable.

(ii) Retail demand-side substitution for fixed off-net voice calls

The Authority considered the following potential retail demand-side substitutes for fixed services:

(a) On-net fixed voice calls as a substitute for mobile to fixed ("M2F") voice calls

The Authority still maintains its view, in that it is highly unlikely that on-net ("fixed to fixed") F2F voice calls are an effective substitute for M2F voice calls - as discussed in detail in the 2007 Findings Document.[16]

(b) M2M voice calls as a substitute for M2F and off-net F2F voice calls

The Authority's preliminary view is that the potential switch to M2M will be ineffective as a demand-side substitute for M2F and off-net F2F, and will therefore not constrain wholesale voice call termination - as discussed in detail in the 2007 Findings Document.[17]

(c) Fixed-to-Mobile voice calls as for off-net fixed-to-fixed voice calls

An increase in fixed termination by 5-10% will be unprofitable if, in response the increase, a significant number of end-users switch to F2M voice calls instead of off-net F2F voice calls. The switch will be to avoid the higher retail price of off-net F2F voice calls. The switch will not happen, given that the majority of, if not all, end-users are not ordinarily aware of the cost of voice calls per minute, due to the fact that they typically receive an allocation of a bundle of F2M and F2F voice minutes. Therefore, the Authority is of the preliminary view that F2M voice calling is not likely to pose an effective competitive constraint on fixed termination rates.

(d) OTT and VoIP

Similar to mobile termination markets, the Authority is of the view that usage of OTT voice calling services does not pose a sufficiently strong constraint on the setting of fixed termination

[16] GG 30449, section 3.5.6.7
[17] Ibid, section 3.5.6

rates. The Authority is also of the view that OTT calling services will not mitigate and or potentially eliminate SMP concerns that the Authority has identified during the period under review[18].

(iii) Retail supply-side substitution for mobile and fixed calls

An I-ECNS and I-ECS licensee wishing to allow its subscribers or users to call subscribers or users of any other licensee has no alternative but to purchase voice call termination from the licensee to which the called party is subscribed. This means that there is no potential retail supply-side substitute.

(iv) Wholesale demand-side substitution

The Authority is not aware of any new viable and effective wholesale substitutes for call termination that exist, or are likely to emerge over the period of this review. This means that there is still no potential for demand-side substitution at the wholesale level. The Authority's preliminary view is that there are no technical or commercial substitutes for wholesale voice call termination on the terminating licensees' network.

(v) Wholesale supply-side substitution

The Authority did not receive new evidence where other firms (either new or existing), are able to switch production relatively quickly in order to provide wholesale voice call termination services to a specific subscriber of another operator in response to an increase in wholesale termination charges. The Authority is therefore of the view that there is still no potential for a new or existing firm to offer termination services to a customer who is a subscriber of a particular network. Even if this were to exist, it must happen immediately in order to prevent the 5-10% increase in call termination rates from being profitable for the wholesale call termination service provider. The Authority is not aware of any licensee or provider that can readily substitute the supply of wholesale voice call termination services on a mobile and fixed network. The Authority's preliminary view is that this is unlikely to change during the period under review.

[18] Please refer to OTT and VoIP section under mobile voice calling section for detailed information.

(vi) Common pricing constraints

The Authority's preliminary view is that there is no common pricing constraint linking the wholesale voice call termination rates set by different licensees.

Question 1
Do you agree with the Authority's preliminary conclusion on the product market definition? Please explain the reasons for your answer and provide the relevant factual or other evidence supporting your views.

2.1.2. Geographic market definition

Stakeholders are urged to refer to the detailed discussion and conclusions on Geographic market for wholesale call termination outlined in clause 3.8 of the 2007 Findings Document, as the Authority does not intend to repeat the discussion here. However, given that each licensee is issued a national license and offer geographically homogeneous termination services throughout SA, the Authority's preliminary view is that geographic market for the provision of wholesale termination services is national in scope.

In 2017, the Authority amended Regulation 3 of the Regulations (Government Gazette 41167) to exclude internationally originated voice traffic terminating on a mobile and /or fixed location within the Republic of South Africa from the market definitions. Prior to the 2017 amendment, international termination rates were regulated. South African licensees were therefore not allowed to charge above regulated termination rates or match high termination rates charged by licensees in some jurisdictions. This resulted in a negative balance of payments or outflow of funds from SA in respect of certain international routes and or destinations. The amendment was therefore meant to empower SA operators to charge reciprocal and commercial termination rates and to reduce or eradicate the net outpayments for international termination rates.

The Authority received responses from Vodacom, Switchtel, Cell C and Telkom in relation to the question on the impact of the 2017 amendment to the geographic market definition, which are outlined below.

Vodacom

Vodacom indicated whilst the Authority may have authority over international termination rates, however it does not have the authority over international termination rates charged by operators in other jurisdictions. Vodacom contend that its subscribers might still be subsidising subscribers of other countries due to the waterbed effect.

Vodacom argued that regulation of international termination rates for calls originating outside of South Africa will exacerbate its net outpayment position to the disadvantage of subscribers due to high international voice call tariffs. Vodacom also argued that regulation of international termination rate will not be in line with object 2(n) of the ECA, which enjoins the Authority to promote the interests of consumers.

Switchtel

Switchtel is of the view that the 2017 amendment of the market definitions to exclude calls originating outside of SA, was anti-competitive and harmful to consumers. Switchtel argued that this intervention reversed some of the gains made since the Authority's regulation of the wholesale voice call termination markets in 2010.

Switchtel indicated that the 2017 amendment had resulted in a significant increase in international termination rates of around 2600% of the regulated termination rates. Switchtel argued that the increase was unfair and unreasonable, and also that licensees didn't discriminate against international termination rates before the regulation of wholesale voice call termination markets in 2010.

Switchtel argued that large operators in South Africa have the ability and incentive to set excessively high international termination rates, with adverse effects on competition. According to Switchtel, this is an indication of market failure and also grounds for regulatory intervention in the international termination market.

Furthermore, Switchtel argued that the significant increase in international termination rates which are significantly higher than the national retail voice tariffs created market for bypass fraud by non-licensees who use SIM-boxes (including hacking of subscriber systems) to re-route international voice traffic as local traffic in SA. Switchtel attribute the increase in bypass fraud to the 2017 amendment, as bypass fraud was less prevalent before 2017. Switchtel contend that unless the differential between international termination rates and national retail voice tariffs is addressed, the illicit grey market will persist. Switchtel is therefore, of the view that the Authority should regulate international termination rates in order to address, among others, bypass fraud.

Switchtel indicated that deregulation of the international termination rates not only harm effective competition but also SA customers due to poor quality of service and the reduction in international voice calls to SA.

Switchtel raised a concern with regard to the increase in the number of inter-licensee disputes relating to manipulation of call line identity of internationally originated voice calls, which the terminating licensees always attribute to bypass fraud, resulting in suspension or disruption of interconnection services to the detriment of SA subscribers.

Switchtel proposed that the Authority intervene in the international termination market as follows:

- National Rates: Specify the maximum rates in respect of nationally originated calls.
- Reciprocity: In respect of calls originating from countries that reciprocate with termination rates lower than or equal to the rates set out in 1 above, licensees must charge rates no greater than those in 1 above.
- Recognition: In respect of calls originating from any country that the Authority has an agreement with the country's regulator with respect to the application of non-discriminatory rates, licensees must charge rates no greater than those in 1 above. The Authority should publish, from time-to-time, an amended list of such countries and should, in particular, engage with regulators with which it already has MoU's and/or through regional regulators in the mutual interests of reducing the cost-to-communicate for citizens of both countries. In particular, they would strongly encourage the Authority to engage CRASA members in this regard for the interest of the SADC region.
- International rates: Specify maximum rates in respect of internationally originated calls that do not meet the criteria set out in 2 and 3 above. In order to mitigate against an illicit grey market, these rates should not exceed retail call originated rates and should not exceed double the rates set out in 1 above.

Cell C

Cell C agreed with the Authority's 2017 amendment due to different market conditions between the national and international termination markets. Cell C indicated that regulation of the former market will benefit SA consumers while regulation of the latter market will benefit consumers from other countries.

Telkom

Telkom indicated that whilst the 2017 amendment has bolstered the negotiating powers of the SA licensees, it was of the view that the Authority must address the resultant increase in bypass fraud and the impact thereof on SA consumers. Telkom also indicated that the Authority should conduct a regulatory impact assessment of the 2017 amendment.

The Authority's preliminary view with regard the 2017 amendment

As indicated above, before the 2017 amendment of the Mobile termination markets and Fixed termination markets to exclude voice calls originating outside of SA, the Regulations did not differentiate between traffic originating within and outside SA, and also the termination rate was the same irrespective of country of origin. Therefore, SA licensees were charging international termination rates in line with the regulated national cost of wholesale voice call termination since the Authority's intervention in the wholesale voice call termination markets in 2010. The national termination rate dropped significantly from R1.25 per minute in 2009 to R0.13 per minute in 2017 (before the amendment of the geographic market definition). The implication of this was that SA licensees endured asymmetrically high international termination rates for outbound international traffic in comparison to what they charged for foreign inbound traffic.

The Authority's preliminary view is that deregulating the international termination market is in the best interest of the country as SA licensees are given pricing freedom to charge reciprocal rates in order to minimise or mitigate exploitation of SMP by licensees in other jurisdictions. The Authority is also of the view that this approach is the best option for SA given that the Authority does not have legislative powers to directly control the international termination rates charged by terminating licensees for voice calls that originate in SA. While the Authority is mindful that reciprocity might not necessarily deliver the preferred low international termination rates, the Authority's view is that the impact of high international termination rates on licensees' revenue

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and traffic volumes as well as the prevalence of OTT services in the international calling market[19] should disincentivise licensees from charging high international termination rates.

Question 2
Do you agree with the Authority's preliminary conclusion on the geographic market definition? Please explain the reasons for your answer and provide the relevant factual or other evidence supporting your views.

2.1.3. Fixed and Mobile Convergence

The Authority received submissions from Cell C, Switchtel, Vodacom and Telkom in response to the question on convergence of fixed and mobile technologies, which are outlined below.

Cell C

Cell C stated that it is it is becoming increasingly common for the same core network equipment to be used to carry fixed and mobile voice services. Therefore, an operator offering both fixed and mobile services on a significant scale can use a common core network.

Switch Telecom

Switchtel stated that, at a technological level, there is not much difference between fixed and mobile voice networks, with both networks largely migrated to VoIP technology at the core. Switchtel further submitted that the difference between fixed and mobile voice services is becoming increasingly minimal.

At the service level, Switchtel contends that the differentiator between mobile and fixed services is not technological, but based on pricing structure. Switchtel indicates that mobile services are merely services in which billing for the data bearer has been bundled into the call charges, while

[19] This is based on the assumption that the switch to OTT services by consumers in response to the increase in retail international voice call rates would be high due to high international voice calling rates.

fixed services are merely services in which the billing for the data bearer has been bundled into the base monthly subscription fee. Switchtel argues that the above pricing structure has been largely dictated by the termination rates applicable. However, as mobile data bearer costs continue trending downward, the differentiation is increasingly arbitrary.

Furthermore, Switchtel indicates that the decline in traditional copper fixed-line demonstrates that the market for fixed services no longer exists.

Telkom

Telkom submits that there are high levels of convergence between mobile and fixed in terms of services, technology and numbering, which means there is no need for differentiation between fixed and mobile termination rate. Telkom contends that the current call termination rate acts as a constraint on convergence at the expense of fixed line operators due to the asymmetry between fixed and mobile termination rates.

Telkom indicates that the current asymmetry between MTRs and FTRs in favour of MTRs is unjustified and is distorting competition to the detriment of consumers. Telkom is of the view that parity would reflect and support technological and service convergence between mobile and fixed services in SA, and is in line with technological neutrality. Telkom also cites Brazil, Nigeria, Namibia, Kenya and Botswana where symmetric termination rates are imposed.

Vodacom

Vodacom states that there is international precedence for setting different mobile and fixed termination rates. This is because the cost of providing the respective services is different, and, moreover, fixed and mobile termination services do not fall into the same product market. The respective services are not substitutes at the wholesale level and any indirect constraint due to switching at the retail level is likely to be weak.

Vodacom submits that the level of convergence in South Africa is limited. The limited availability of converged services suggests that mobile and fixed services are complementary services.

Vodacom indicates that the Authority should use a consistent methodology in determining mobile and fixed termination rates. The rate should be set based on the relevant LRAIC+ of the respective networks. Vodacom contends that setting the same fixed and mobile termination rate may result in economic inefficiencies because the cost structures of mobile and fixed operators differ. Vodacom states that the cost related to incremental traffic is more on a mobile network than on a fixed-wired network.

Vodacom further submits that it does not view fixed wireless access as an appropriate choice for the Modern Equivalent Asset when determining the costs for fixed termination services.

The Authority's preliminary view

Whilst the Authority acknowledges some convergence between fixed and mobile services in terms of services, technology and numbering, the Authority's preliminary view is that mobile voice services and fixed services are not provided in the same market.

In order for the two services to be in the same market, mobile voice services and fixed voice services must be effective substitutes for each other. As highlighted above, mobile services and fixed services are complements rather than substitutes. Also, the major difference between mobile and fixed is in terms of the cost of terminating a voice call, with the cost on a mobile network being slightly higher than the cost of terminating a voice call on fixed network. However, the Authority expects this cost difference to diminish over time due to lower incremental cost of terminating a voice call on a mobile network under 5G technology.

Question 3
Do you agree with the Authority's preliminary conclusion on fixed and mobile convergence? Please explain the reasons for your answer and provide the relevant factual or other evidence supporting your views.

2.2. Regulation 4 - Methodology

Regulation 4 of the Call Termination Regulations specified the methodology used to determine the effectiveness of competition in the defined market. The Authority stated that it had applied the following methodology:

(a) *the identification of relevant markets and their definition according to the principles of the Hypothetical Monopolist Test, taking into account the non-transitory (structural, legal, or regulatory), entry barriers to the relevant markets and the dynamic character and functioning of the relevant markets;*

(b) *the assessment of licensees' market shares in the relevant markets; and*

(c) *the assessment on a forward-looking basis of the level of competition and market power in the relevant markets.*

The Authority has reviewed the abovementioned methodology, and finds no need to amend the specified approach in the evaluation of effectiveness of competition in the defined markets as per clause 67(4A) of the ECA.

Question 4
Do you agree with the Authority's preliminary conclusion on the methodology used? Please explain the reasons for your answer.

2.3. Regulation 5 – Effectiveness of Competition

In 2014 the Authority determined that the following market failures continued to exist:

(a) *A lack of provision of access.*

(b) *The potential for discrimination between licensees offering similar services.*

(c) *A lack of transparency.*

(d) *Inefficient pricing.*

The Authority's preliminary view is that the above market failures will continue to exist, resulting in ineffective competition, due to licensees having SMP in respect of the calls terminating on their networks. This is based on the strong presumption of monopoly power, given that each licensee has a 100% share of minutes terminating on its network. Therefore, if the provision of wholesale voice termination service is not regulated, each licensee has the ability and incentive to engage in the following:

- Unduly delay requests for access to its network, and / or the use of specific network elements or associated facilities by other licensees or withdraw (or suspend) access already granted to the detriment of consumers.
- Engage in price discrimination or foreclosure by charging itself (in terms of vertically integrated licensees), or its subsidiary or affiliate(s), a termination rate that is lower than what it charges other licensees.
- Not provide sufficient information (a lack of transparency) to access seekers concerning termination rates, network and technical specifications, etc. and frustrate entry into the wholesale voice call termination market.
- Charge termination rates above cost and competitive levels. Under the CPP pricing regime, the terminating licensee does not face competition in respect of calls terminating on its network. The terminating licensee has the ability and incentive to charge excessive prices because the receiving party (terminating licensee's subscriber) is not affected by the increase in termination rates. Therefore, the terminating licensee has an incentive to charge an excessive termination rate in respect of voice calls originating from other licensees in order to increase termination revenues and subsidise their on-net voice call prices.

2.3.1. Legislative Requirements

The definition of Significant Market Power in terms of section 67(5) of the ECA remains unchanged. Each I-ECNS and I-ECS licensee that offers wholesale voice call termination services is dominant and has SMP in its market for wholesale voice call termination.

2.3.2. Relevant Markets

In 2010 the Authority determined that the relevant downstream markets were:

- *The national retail market for mobile access and calls (mobile retail market)*
- *The national retail market for fixed line access and calls (fixed retail market)*[20]

[20] GG 33121:51

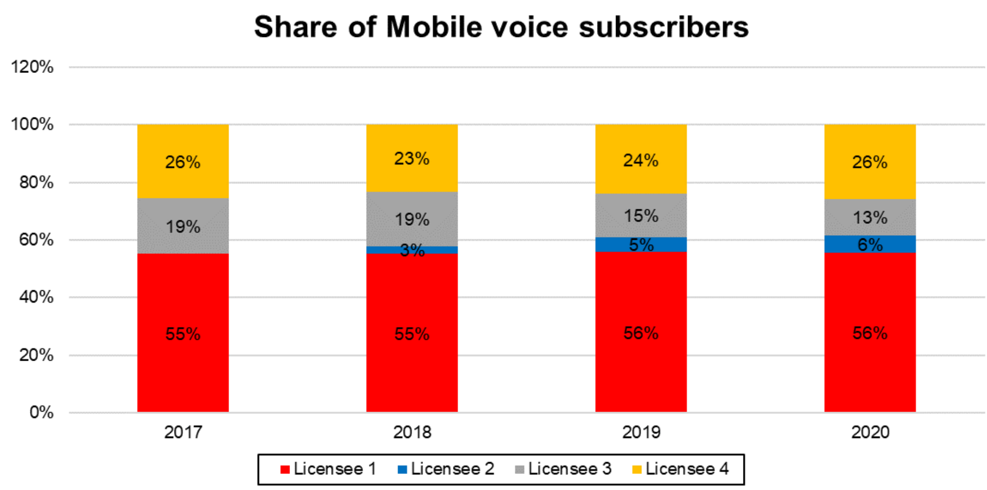
The Authority also stated that it would consider the *"impact that relevant downstream retail markets may have on competition[21]."* In 2014, the Authority continued with this approach throughout its review of each determination made on the assessment of competition.

The Authority has maintained this approach in the current review period.

2.3.3. Markets Shares[22]

The tables below compare the state of the downstream retail markets between 2017 and 2020.

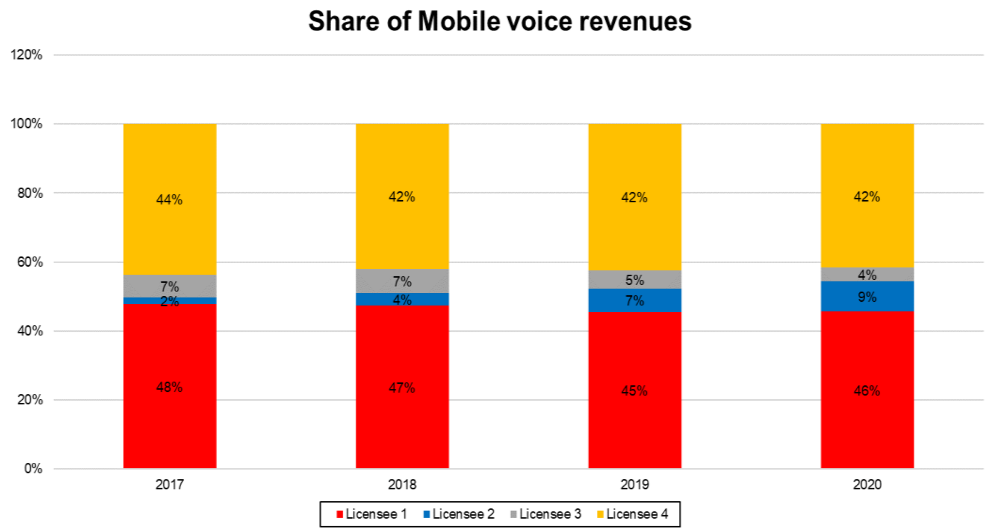
Figure 1: Retail mobile market shares by total voice subscribers



Source: ICASA analysis

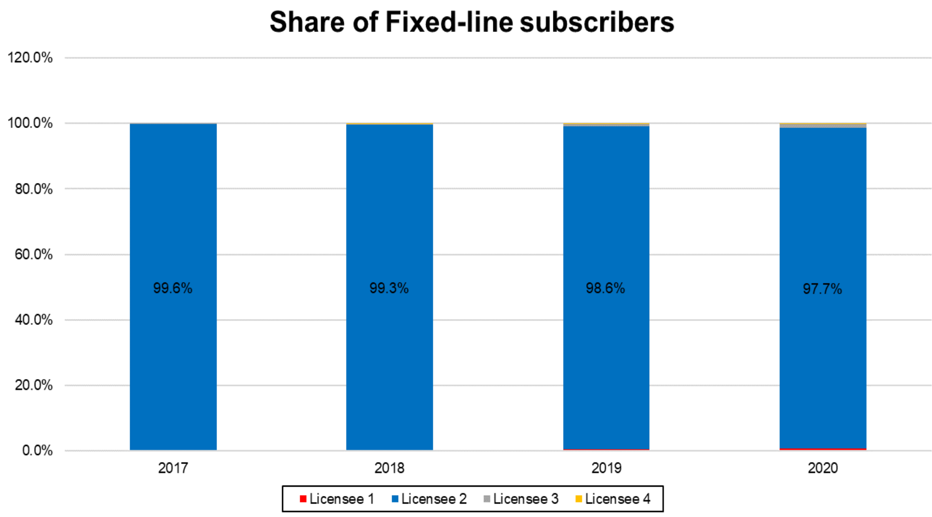
[21] Ibid
[22] Market share calculations are based on limited data submitted by Vodacom, MTN, Cell C, Telkom, FirstNet, Switchtel and ECN in response to the questionnaire. Therefore, market share graphs might not necessarily represent the actual market shares, including all licensees, in South Africa.

Figure 2: Retail mobile market shares by total voice revenues



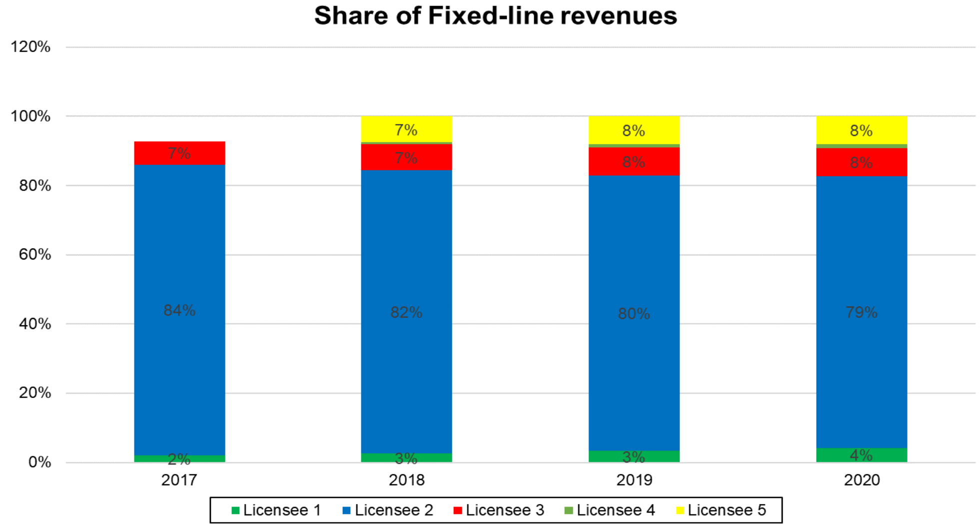
Source: ICASA analysis

Figure 3: Retail fixed market shares by total voice subscribers



Source: licensee data

Figure 4: Retail fixed market shares by fixed voice revenues



Source: ICASA analysis.

2.3.4. Actual and potential existence of competitors

(i) <u>Wholesale voice call termination</u>

The Authority's preliminary view is that there is no evidence to justify changing the 2014 determination. It is of the view that, for the current period, there are no competitors in the defined markets.

(ii) <u>Relevant downstream markets</u>

The Authority sees no need to change the 2014 determination, and is of the view that, for the current period, there are no competitors in the defined markets. The Authority, however, acknowledges that downstream retail markets may not be relevant to the assessment of the wholesale voice call termination markets.

(iii) Level, trends and concentration and history of collusion

(a) Wholesale voice call termination

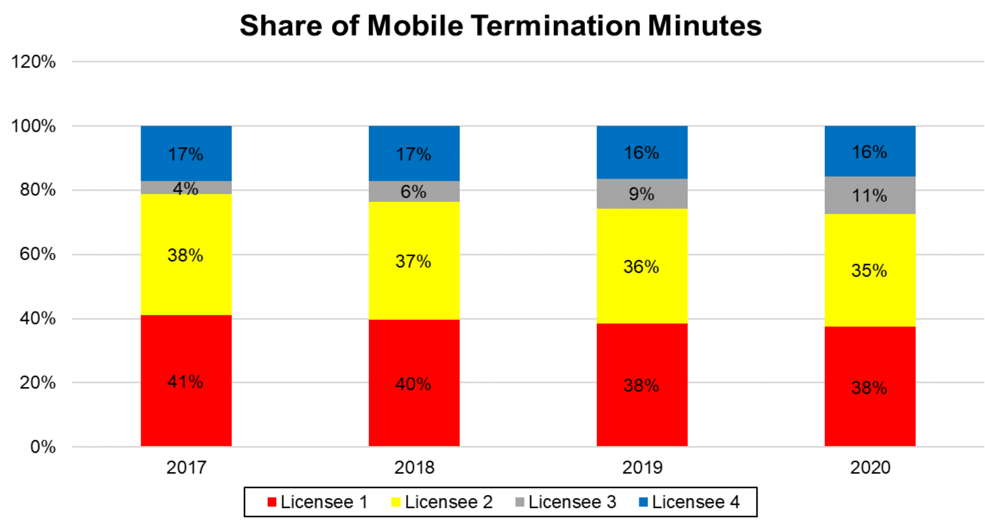
The Authority's preliminary view is that "the possibility of collusion in the wholesale market is irrelevant for the assessment of competition in the wholesale call termination market".

(b) Relevant downstream markets

The Authority, as indicated earlier, is still of the view that these downstream markets remain highly concentrated. The Authority, however, acknowledges that downstream retail markets may not be relevant to the assessment of the wholesale voice call termination markets.

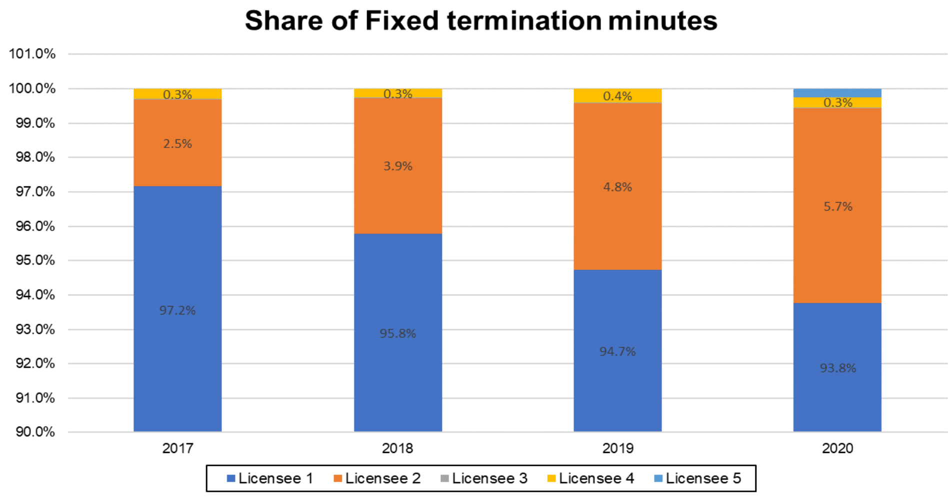
(iv) Overall size of each of the market participants

Figure 5: Share of total minutes terminated on mobile networks



Source: ICASA analysis

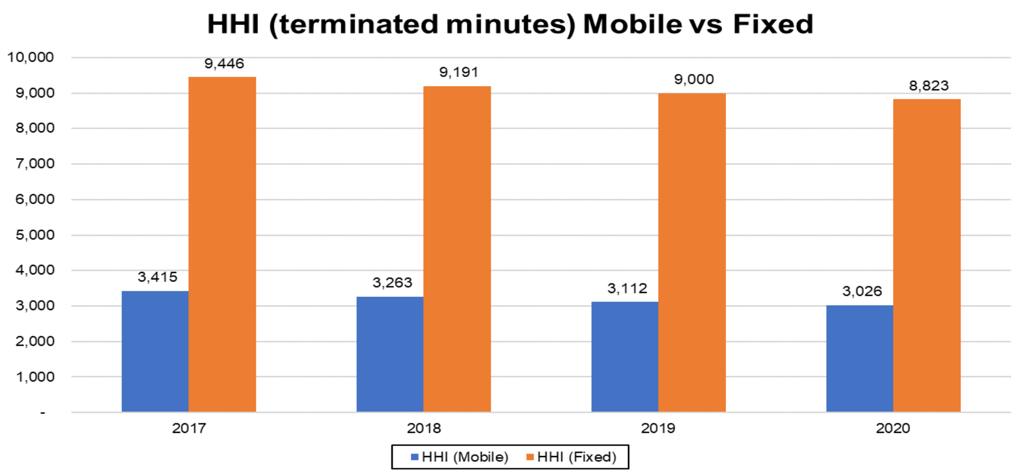
Figure 6: share of total minutes terminated on fixed networks



Source: ICASA analysis

Both fixed and mobile termination markets still remain highly concentrated, despite the slight decrease in the Herfindahl-Hirschman Index (or HHI) in both markets.

Figure 7: Herfindahl-Hirschman Index (HHI) - Terminated minutes



Source: ICASA analysis.

(v) Control over essential facilities

The Authority is still of the view that “*the network elements that supply wholesale call termination do not constitute an essential service*”, but that wholesale call termination represents a “bottleneck service”, thereby allowing the service provider to *“set the price for call termination above competitive levels.”*

(vi) Impact of technological advantages, or superiority of a given market participant

(a) Wholesale voice call termination

In 2010 and 2014, the Authority determined that the impact of technological advantages or superiority of a given market participant is not relevant, given “*absolute barriers to entry”* and, therefore, that licensees face *“no existing or potential competitors”* in the provision of wholesale voice call termination services.

The Authority is not aware of any technological breakthroughs, nor are these being envisaged within the timeframe of this review, that would allow for an alteration in the dynamics of wholesale voice call termination services. The Authority sees no need to change this determination and is of the view that, for the current period under review, this factor is not relevant for the analysis of the effectiveness of competition.

(b) Relevant downstream markets

In 2010 and 2014, the Authority discussed the relative importance of spectrum assignment and particularly the equitable assignment of spectrum. The Authority determined that spectrum assignment does not have a significant impact on the assessment of competition in the wholesale call termination markets, but *“it may be relevant when considering the appropriate pro-competitive remedies.”*

(vii) Firms access to capital markets and financial resources

(a) Wholesale voice call termination

In 2010 and 2014, the Authority determined that firms' access to capital markets and financial resources is *"not considered relevant in this market."*

The Authority sees no need to change this determination for the current period under review, and is of the view that, for the current period under review, this factor is not relevant for the analysis of the effectiveness of competition.

(b) Relevant downstream markets

In 2010, the Authority referred to the discussion on access to capital markets to how this may or may not affect countervailing buying power.

In 2014, the Authority determined that access to capital markets plays a role in determining the effectiveness of competition to the extent that different licensees face different weighted average costs of capital. The Authority sees no need to change this determination.

(viii) Dynamic characteristics of the market, including growth, innovation and products and services differentiation

The Authority acknowledges the purported growth in usage of third-party services such as Over the Top services, as well as innovation in terms of different ways to delivering a voice call such as Wi-Fi calling, VoLTE, etc. Nevertheless, the Authority sees no need to change the 2010 and 2014 determination, and considers this factor not relevant for the analysis of the effectiveness of competition.

(ix) Economies of scale and scope

The Authority's preliminary view is that economies of scale and scope are not relevant in the assessment of the effectiveness of competition in the relevant market since each licensee controls

100% of its own termination market. However, the Authority is of the view that economies of scale and scope might be relevant when considering appropriate pro-competitive remedies.

(x) Nature and extent of vertical integration

(a) Wholesale voice call termination

The Authority determined in 2010 and 2014, that

> *a vertically integrated service provider may have an advantage over its competitors, as access to sales and supply markets might be more easily attainable for the integrated firm. Vertical integration also makes it possible to leverage market power into adjacent markets (both upstream and/or downstream).*

The Authority remains of the view that vertical integration is relevant when assessing the effectiveness of competition.

(b) Relevant downstream markets

The Authority's preliminary view is that this factor is still not relevant for wholesale voice call termination.

(xi) Market and regulatory barriers to entry

(a) Wholesale voice call termination

The Authority determined in 2010 and 2014, that

> *there are absolute barriers to entry into the market – which means that the current dominance of firms providing wholesale call termination is unlikely to be challenged effectively by new competitors over the time of the current review…*

The Authority sees no need to change the 2010 and 2014 determination, in light of the review of the definition of the Mobile termination markets and Fixed termination markets, and the state of technological development.

(b) Relevant downstream markets

In 2010 and 2014, the Authority determined that the following barriers to entry existed, amongst others:

- Large sunk costs;
- Economies of scale and scope;
- The regulatory requirement to acquire licences;
- The need to acquire spectrum.

Market entry has potentially become more challenging over the period for the following reasons:

- The increasing challenges related to network deployment (delays in the granting of rights of ways, Environmental Impact Assessment requirements, challenges with property owners, etc.);
- The lack of availability of spectrum.

The Authority’s preliminary view is that absolute barriers to entry in the downstream relevant market continue to exist.

(xii) <u>Countervailing bargaining power</u>

The Authority’s preliminary view is that neither fixed nor mobile network operators can exert countervailing bargaining power to constrain the setting of high termination rates by a fixed nor mobile operator.

(xiii) <u>Conclusion on the assessment of effectiveness of competition</u>

(a) Assessment of competition

In 2014, the Authority determined that competition in the wholesale voice call termination markets (i.e., Mobile termination markets and Fixed termination markets) remained ineffective.

In light of the above analysis, no new evidence has been submitted to persuade the Authority that the market for the provision of wholesale mobile voice call termination services and wholesale fixed termination services will be effectively competitive in the absence of regulation. The Authority's preliminary view is that the wholesale voice call termination markets should be regulated.

(b) Determination on market failures

Each licensee faces no competition, owing to the fact that other licensees have no option but to purchase termination services from the terminating licensee. In the absence of a potential demand-side and supply-side alternative to the provision of voice call termination over a particular network, licensees with SMP have an incentive and ability to act independently of their competitors in the setting of termination rates.

Also, in the absence of regulations, the Authority is of the view that the following four market failures will exist, either in isolation or jointly:

- A lack of the provision of access;
- The potential for discrimination between licensees offering similar services;
- A lack of transparency;
- Inefficient pricing.

Question 5
Do you agree with the Authority's preliminary conclusion on the assessment of effectiveness of competition? Please explain the reason for your answer and provide the relevant factual evidence supporting your views.

2.4. Regulation 6 – Significant Market Power (SMP)

In 2014, the Authority declared that "…each individual ECNS and individual ECS licensee that offers wholesale voice call termination services is dominant and has SMP in its own market for wholesale voice call termination."

In terms section 67(5) of the ECA,

a licensee has SMP in a market or market segment if that licensee-

(a) is dominant;

(b) has control of an essential facility; or

(c) has a vertical relationship that the Authority determines could harm competition.

The Authority's preliminary view is that each individual ECNS and individual ECS licensees that offers wholesale voice call termination services has SMP in its own market for wholesale voice call termination.

Question 6
Do you agree with the Authority's preliminary conclusion on SMP in the Mobile termination markets and Fixed termination markets? Please explain the reason for your answer and provide the relevant factual evidence supporting your views.

2.5. Regulation 7 – Pro-competitive terms and conditions

In 2014, the Authority determined that the following market failures will exist in the absence of regulation:

(a) A lack of provision of access;

(b) The potential of discrimination between licensees offering similar services;

(c) A lack of transparency;

(d) Inefficient pricing.

To address the above market failures, the Authority imposed a pro-competitive remedy on all licensees, requiring them to *"…charge fair and reasonable prices for wholesale voice call termination…"* in terms of Regulation 7(2) of the Call Termination Regulations. Also, the Authority imposed additional pro-competitive remedies on Vodacom, MTN and Telkom.

Based on the evidence supplied in response to Phase 1[23] of this review process, the Authority's preliminary view is that it is not necessary to change materially the pro-competitive terms and conditions imposed on licensees in terms of the Regulations. These pro-competitive terms and conditions and the proposed changes are outlined below.

Obligation to charge cost-based termination rates:

This remedy should be seen in the context of addressing the market failure with regards to the incentive and ability of SMP licensees to charge termination rates above cost (inefficient pricing and potential of price discrimination).

Each licensee is required to charge cost-based termination rates determined by the Authority using the top-down and bottom-up cost models in terms of the Regulations.

However, a licensee in the Mobile termination market or Fixed termination market with a share of less than 20% of Total minutes terminated in the relevant markets as at 31 December 2016 (excluding MTN, Vodacom and Telkom fixed) was allowed to charge a higher termination rate.

The Authority's preliminary view is that price control for termination services should be retained.

However, the Authority is of the view that only new entrants should be allowed to charge temporary high termination rates: for a limited period of up to three years upon entry, in order to account for cost differences, if any, between new entrants and the incumbents. The transitional period of three years, as opposed to perpetual asymmetry, will encourage new entrants to be efficient and grow their market share.[24]

Obligation to publication of a Reference Interconnection Officer ("RIO"):

This remedy should be seen in the context of addressing the market failure with regards to a lack of provision of access and lack of transparency.

Vodacom, MTN and Telkom are required to publish on their websites a RIO, after approval by the Authority in terms of the Regulations.

[23] Response to the questionnaire on the review of the Regulations.

[24] This is in line with the EC's principle for asymmetric termination rates. https://ec.europa.eu/smart-regulation/impact/ia_carried_out/docs/ia_2009/sec_2009_0600_en.pdf

The Authority is of the view that this obligation is still relevant as it would ensure that licensees have sufficient information that they would not have access to if the wholesale voice call termination markets were not regulated.

Question 7
Do you agree with the Authority's preliminary conclusion on pro-competitive terms and conditions? Please explain the reason for your answer and provide the relevant factual evidence supporting your views.