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INDEPENDENT COMMUNICATIONS AUTHORITY OF SOUTH AFRICA

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Independent Communications Authority of South Africa

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Private Bag X10002, Sandton, 2146

NOTICE REGARDING THE INDEPENDENT COMMUNICATIONS AUTHORITY OF SOUTH AFRICA'S ANALYSIS OF THE REVIEW OF PRO-COMPETITIVE CONDITIONS IMPOSED ON LICENSEES IN TERMS OF THE CALL TERMINATION REGULATIONS OF 2014 IN ACCORDANCE WITH SECTION 67(8)(a) OF THE ELECTRONIC COMMUNICATIONS ACT NO. 36 OF 2005

Date of issue: 08 June 2017

1. Purpose

- 1.1. The Independent Communications Authority of South Africa (herein referred to as "the Authority") hereby gives notice on the Authority's analysis of the review of pro-competitive conditions imposed on licensees in terms of the Call Termination Regulations of 2014, published in the Government Gazette No.38042 ("the 2014 Regulations").

2. Process followed

- 2.1. The Authority undertook a review of the 2014 Call Termination Regulations in line with regulation 8, of the 2014 Regulations read with section 67(8)(a) of the Electronic Communications Act No. 36 of 2005 ("the ECA").

2.2. Section 67(8)(a) of the ECA states that:

“(a) Where the Authority undertakes a review of the pro-competitive conditions imposed upon one or more licensees under this subsection, the Authority must -

- (i) review the market determinations made on the basis of earlier analysis; and
- (ii) decide whether to modify the pro-competitive conditions set by reference to a market determination...”

2.3. In order to ensure that the Authority has the necessary up to date information to undertake this review, the Authority published a media statement and a questionnaire on 30 January 2017¹ and also in the Government Gazette Notice (No 40603)² dated 8 February 2017.

2.4. Subsequent to this the Authority received letters with questions of clarity with regard to the questionnaire and process from Vodacom, Cell C, Telkom and MTN.

2.5. The Authority published a media release³ together with the briefing note⁴ to respond to licensees’ questions of clarity with regard to the questionnaire on 1 March 2017.

2.6. Furthermore, the Authority held a stakeholder briefing session on 15 March 2017, to respond to licensees’ questions of clarity on process as raised by

¹ <https://www.icasa.org.za/AboutUs/ICASANews/tabid/630/post/icasa-reviews-pro-competitive-conditions-imposed-on-licensees-in-respect-of-the-call-termination-regulations-of-2014/Default.aspx>

² http://www.gpwonline.co.za/Gazettes/Gazettes/40603_8-2_ICASA.pdf

⁴ <https://www.icasa.org.za/LegislationRegulations/FinalRegulations/TelecommunicationsRegulations/CallTermination/tabid/462/ctl/ItemDetails/mid/1457/ItemID/13935/Default.aspx>

Vodacom, Cell C, Telkom in their respective letters dated 10 February 2017, and MTN's in its letter dated 14 February 2017.

3. Review of pro-competitive conditions

3.1. After having considered the data submitted by licensees' and international precedent, the Authority's analysis is as follows:

- 3.1.1. the definitions of Mobile termination markets and Fixed termination markets in terms of regulation 3 of the 2014 Call Termination Regulations remain unchanged.
- 3.1.2. competition in Mobile termination markets and Fixed termination markets still remain ineffective.
- 3.1.3. each individual Electronic Communications Network Service and Electronic Communications licensee that offers wholesale voice call termination services continue to have Significant Market Power as defined in section 67(5) of the ECA in respect of access to their own networks.
- 3.1.4. the four market failures as per regulation 7(1) of the 2014 Call Termination Regulations continue to exist.
- 3.1.5. the pro-competitive conditions imposed on licensees in 2014 are still relevant.

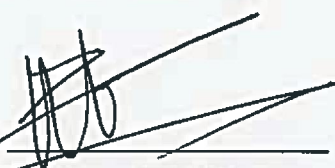
3.2. Stakeholders are referred to the attached Discussion Document for additional information with regard to point 3.1.

4. The next steps

4.1. The Authority invites stakeholders to submit written representation within twenty-one (21) days after the publication of this notice and the Discussion Document on Authority's analysis of the review of pro-competitive conditions imposed on licensees for the attention of the Chairperson: Call Termination Committee at CTRreview@icasa.org.za.

- 4.2. The Authority may hold public hearings on issues raised in the context of this review process, if deemed necessary.
- 4.3. The Authority will, if it deems it necessary to hold public hearings, notify stakeholders of the date, time and the venue of the hearings.
- 4.4. After taking into consideration written representation on the Discussion Document, if relevant, the Authority will publish a Findings Document.
- 4.5. Depending on the outcome of this consultation process, the Authority may embark on the next phase of this review process which is to determinate suitable termination rates by no later than 30 September 2017.

Any enquiries relating to should be directed to Chairperson: Council Committee on Call Termination Regulations Review at CTRreview@icasa.org.za.



Rubben Mohlaloga

Acting Chairperson

Date:

**Discussion document on the review of
the 2014 pro-competitive remedies in
accordance with section 67(8)(a) of the
Electronic Communications Act No. 36 of
2005**

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1. Introduction

Following the review of the 2010 Call Termination Regulations⁵, the Independent Communications Authority of South Africa ("the Authority"), published the ("2014 Call Termination Regulations") on 30 September 2014. The 2014 Call Termination Regulations determined that, the Mobile termination markets and the Fixed termination markets, as defined in regulation 3 of the 2014 Call Termination Regulations, remained ineffectively competitive and also that the following market failures continue to exist:

- (a) A lack of provision of access;
- (b) The potential for discrimination between licensees offering similar services;
- (c) A lack of transparency; and
- (d) Inefficient pricing.

To remedy the abovementioned market failures, the Authority imposed an obligation upon all licensees to charge fair and reasonable prices for wholesale voice call termination in terms of regulation 7(2) of the 2014 Call Termination Regulations. Additional obligations in the form of publication of a reference interconnection offer and price control (cost-based pricing) were imposed upon Vodacom Pty (Ltd), and MTN Pty (Ltd) in the Mobile termination markets, and Telkom SA SOC (Ltd) in respect of the Fixed termination markets in line with regulation 7(3) of the 2014 Call Termination Regulations.

This Discussion Document outlines the approach used to review the 2014 pro-competitive remedies as indicated below:

- (a) An outline of the process followed.
- (b) A review of pro-competitive conditions of the 2014 Call Termination Regulations:
 - 2010 market definition determination

⁵ Call Termination Regulations, Government Gazette 33698, published on 29 October 2010.

- Methodology applied to review the effectiveness of competition in the defined markets
- Determination of Significant Market Power
- Pro-competitive terms and conditions

2. An outline of the process followed

The Authority undertook a review of the 2014 Call Termination Regulations in line with regulation 8 of the 2014 Call Termination Regulations⁶ read with section 67(8)(a) of the ECA.

Section 67(8)(a) of the ECA states that:

“(a) Where the Authority undertakes a review of the pro-competitive conditions imposed upon one or more licensees under this subsection, the Authority must -

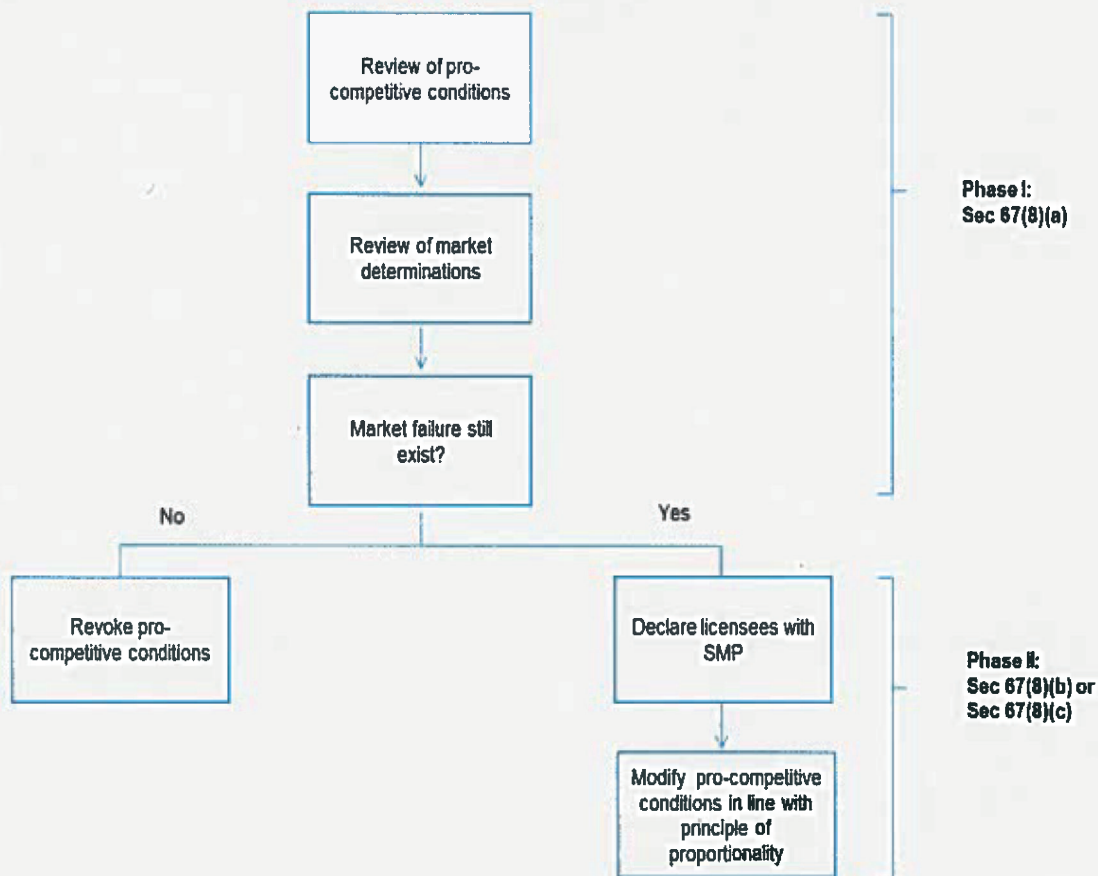
- (i) ***review the market determinations*** (our emphasis) made on the basis of earlier analysis; and
- (ii) decide whether to modify the pro-competitive conditions set by reference to a market determination...”

The Authority therefore used a two-phased approach in undertaking the review in accordance with the provisions of section 67(8) of the ECA.

⁶ Regulation 8 states that “the Authority will review the markets for the wholesale voice call termination services, to which these regulations apply, as well as the effectiveness of competition and the application of pro-competitive terms and conditions in those markets when the Authority deems it necessary but not earlier than two (2) years from the date of publication of these regulations.”

The process outlined in section 67(8) of the ECA is depicted in figure 1 below:

Figure 1: Section 67(8) of the ECA



In terms of Phase I, the Authority conducted a review of the pro-competitive conditions imposed on licensees in terms of section 67(8)(a) of the ECA. The Authority's public consultation process to implement section 67(8)(a) of the ECA included the following:

- (a) Publication, on the Authority's website of a media statement and a questionnaire on 30 January 2017⁷. Publication of the Authority's intention to

⁷ <https://www.icasa.org.za/AboutUs/ICASANews/tabid/630/post/icasa-reviews-pro-competitive-conditions-imposed-on-licensees-in-respect-of-the-call-termination-regulations-of-2014/Default.aspx>

review the abovementioned pro-competitive measures in line with section 67(8)(a) of the ECA in the Government Gazette Notice (No 40603)⁸ dated 8 February 2017.

- (b) Receipt of letters with questions of clarity with regard to the questionnaire and process by Vodacom, Cell C and Telkom on 10 February 2017, and MTN on 14 February 2017.
- (c) Publication of a media release⁹ together with the briefing note¹⁰ on questions of clarity with regard to the questionnaire on 1 March 2017.
- (d) A stakeholder briefing session on 15 March 2017. The purpose of this session was for the Authority to clarify the process in respect of the review of the pro-competitive conditions owing to process related questions raised by Vodacom, Cell C, Telkom in their respective letters dated 10 February 2017, and MTN's letter dated 14 February 2017.

⁸ http://www.gpwonline.co.za/Gazettes/Gazettes/40603_8-2_ICASA.pdf

⁹ <https://www.icasa.org.za/AboutUs/ICASANews/tabid/630/post/update-on-the-review-of-pro-competitive-conditions-imposed-on-licensees-in-respect-of-the-call-termination-regulations/Default.aspx>

¹⁰ <https://www.icasa.org.za/LegislationRegulations/FinalRegulations/TelecommunicationsRegulations/CallTermination/tabid/462/ctl/ItemDetails/mid/1457/ItemID/13935/Default.aspx>

3. Review of pro-competitive conditions in the 2014 Call Termination Regulations

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

3.1. Regulation 3 – Market definition

Regulation 3 of the 2014 Call Termination Regulations provided a definition of the relevant markets namely; Mobile termination and Fixed termination markets.

Markets were categorised in accordance with the type of service provided to the end-user 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.

The Authority outlined the rationale for the aforementioned definitions in detail, in section 1 of the Explanatory Note of the draft Call Terminations Regulations of 2010¹¹, section 2.2 of the Explanatory Note for the final Call Termination Regulations of 2010¹², section 3.1 of the Explanatory Note of the draft Call Termination Regulations of 2014, section 3 of the Reasons Document for the Call Termination Regulations of 2015¹³. Additionally, the Authority outlined the factors that it may consider when

¹¹ GG 33121

¹² GG 33698

¹³ GG 38609

defining a market in section 3.2 of a Guideline for conducting market reviews published on 8 March 2010. Stakeholders are urged to review not just the analysis in this document but also the analysis and conclusions outlined in the aforementioned documents.

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 might be constrained via demand-side and supply-side substitution possibilities at the retail and wholesale levels. The Authority applied a Hypothetical Monopolist test ("HMT test") to review the definition of Mobile termination markets and Fixed termination markets. In applying the HMT test, the question posed is whether a hypothetical monopolist can profitably impose a small but significant and non-transitory increase in price ("SSNIP") in the product market as defined.¹⁴

(a) Retail demand-side substitution for an off-net mobile voice calls.

The Authority considered the following potential retail demand-side substitutes for an off-net mobile voice call:

(i) Mobile-to-fixed voice calls;

The Authority considers the potential demand-side substitute of mobile to fixed or fixed to fixed voice call for mobile to mobile off-net voice calls to be still ineffective in constraining the price of wholesale mobile termination as detailed in the 2007 Findings Document, and also summarised in the Explanatory Note for the draft Call Termination Regulations of April 2010.

¹⁴ If the answer to the question posed is yes, and the price increase would be profitable for the hypothetical monopolist, then the market is correctly defined. If a hypothetical monopolist could not profitably impose a small but significant and non-transitory price increase, then the relevant product market is defined too narrowly and must be expanded.

(ii) On-net mobile-to-mobile voice call;

The Authority is still of the view that on-net mobile-to-mobile voice calls does not act as a constraint to wholesale voice call termination charges as detailed in section 3.5.6.7 of the 2007 Findings Document.

(iii) Short Message Service (SMS) and Instant messaging(IM);

The Authority considers that SMS and IM still does not act as a constraint to wholesale voice call termination and there are still sufficiently different number of functionalities between sending an SMS and making a mobile voice call. SMS's and voice calls still qualify as complementary services rather than substitutes.

(iv) Voice over Internet Protocol (VoIP);

The Authority still believe that VoIP is still unlikely to constrain wholesale mobile termination rates, on the basis of quality differences and product characteristics, at least for the current period under review. This difference may however disappear in the future as the quality improved and technical features change. The Authority will nevertheless continue to monitor the developments of VoIP services in South Africa.

(b) Retail demand-side substitution for fixed services;

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

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

The Authority still maintain 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, and also as summarized in the Explanatory Note for the draft Call Termination Regulations of April 2010.

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

The Authority is still of the view 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 and also summarized in the Explanatory Note for the draft Call Termination Regulations of April 2010.

(iii) Voice over Internet Protocol (VoIP);

The Authority still believe that VoIP is still unlikely to constrain wholesale fixed termination rates, on the basis of quality differences and product characteristics, at least for the current period under review.

(c) 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 licensee has no alternative but to purchase voice call termination from a licensee to which the called party is subscribed. This therefore means that there is no potential substitute for the retail supply-side substitute.

(d) 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. The Authority is of the view that there are no technical or commercial substitutes for wholesale voice call termination on the terminating licensees' network.

(e) 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 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. The Authority is of the view that this is unlikely to change during the period under review.

(f) Common pricing constraints;

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

Geographic market definition

Stakeholders are urged to refer to the detailed discussion and conclusions on Geographic market for wholesale call termination outlined in Section 3.8 of the 2007 Findings Document and Section 1.14 of the Explanatory Note of the 2010 draft Call Terminations Regulations as the Authority does not intend to repeat the discussion here.

Nevertheless, the Authority is still of the view that the geographic scope of Fixed termination markets is a national market for the fixed termination on each licensee's network. In addition, the geographic scope of Mobile termination markets is a national market for mobile call termination on each licensee's network.

However, the Authority is of the view that voice calls originating outside of South Africa and terminating in South Africa do not fall within the geographic scope of Mobile termination markets and Fixed termination markets.

In respect of the analysis presented above, the Authority is, therefore, of the view that the definition of Mobile termination markets and Fixed termination markets remain appropriate. The Authority is still of the view that "...markets are categorised according to the type of service to the end-user and are 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."*

3.2. Regulation 4 – Methodology

Regulation 4 of the 2014 Call Termination Regulations specified the methodology used to determine the effectiveness of competition in the defined market. The Authority stated that it "...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 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 section 67(4A) of the ECA. Therefore, this methodology was

applied in the analysis of the effectiveness of competition in the Mobile termination markets and Fixed termination markets for the period 2017-2020.

3.3. Regulation 5 – Effectiveness of competition

In 2014 the Authority determined that "...the following market failures continue 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 reviewed each determination made on the assessment of competition below:

3.3.1. Legislative requirements

The definition of Significant Market Power in terms of Section 67(5) of the ECA remains largely unchanged.

3.3.2. 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"¹⁵

The Authority also stated that it would consider the "*impact that relevant downstream retail markets may have on competition*"¹⁶." In 2014, the Authority continued with this

¹⁵ GG 33121:51

¹⁶ Ibid

approach throughout its review of each determination made on the assessment of competition.

The Authority maintained this approach in its review of each determination made on the assessment of competition in 2014.

3.3.3. Market shares

The tables below compare the state of the downstream retail markets between June 2009 and December 2016.

Table 1: Retail mobile market shares by total customer connections

	Market share by customers				
	2009	2013	2014	2015	2016
Licensee 1	54%	43%	45%	42%	43%
Licensee 2	32%	39%	32%	33%	31%
Licensee 3	14%	17%	21%	22%	23%
Licensee 4	-	2%	2%	2%	3%

Source: licensee data

Table 2: Retail mobile market shares by total market revenues

	Market share by market revenues				
	2009	2013	2014	2015	2016
Licensee 1	55%	49%	53%	51%	51%
Licensee 2	36%	39%	34%	36%	35%
Licensee 3	9%	9.5%	11%	11%	12%
Licensee 4	-	2%	1%	2%	2%

Source: licensee data

Table 3: Retail fixed market shares by total customer connections

	Market share by customers				
	2009	2013	2014	2015	2016
Licensee 1	99.5%	90%	93.0%	91.8%	90.1%
Licensee 2	0.4%	10%	6.9%	8.1%	9.7%
Licensee 3	*	*	0.1%	0.1%	0.2%

Source: licensee data

* Other licensees did not provide information.

Table 4: Retail fixed market shares by market revenues

	Market share by market revenues		
	2014	2015	2016
Licensee 1	98.9%	99.0%	98.1%
Licensee 2	1.1%	1.0%	1.1%
Licensee 3	*	*	*

Source: licensee data.

* Other licensees did not provide information.

3.3.4. Actual and potential existence of competitors

3.3.4.1. Wholesale voice call termination

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

3.3.4.2. Relevant downstream markets

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.

3.3.5. Level, trends and concentration and history of collusion

3.3.5.1. Wholesale voice call termination

The Authority is still of the view that “the possibility of collusion in the wholesale market is irrelevant for the assessment of competition in the wholesale call termination market”.

3.3.5.2. Relevant downstream markets

The Authority, as indicated earlier, is still of the view that these downstream markets remain highly concentrated.

3.3.6. Overall size of each of the market participants

Table 5: Share of total minutes terminated on mobile networks

Share of mobile termination minutes					
	2009	2013	2014	2015	2016
Licensee 1	43%	45%	45%	47%	45%
Licensee 2	42%	42%	39%	37%	38%
Licensee 3	14%	12%	16%	15%	15%
Licensee 4	-	1%	1%	2%	2%

Source: licensee data

Table 6: share of total minutes terminated on fixed networks

Share of fixed termination minutes					
	2009	2013	2014	2015	2016
Licensee 1	98%	90%	93.5%	92.9%	91.8%
Licensee 2	2%	10%	5.6%	5.9%	6.5%
Licensee 3	*	*	0.9%	1.2%	1.7%

Source: licensee data

*Other licensees did not provide information.

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

The HHI for mobile decreased from 3803 in 2009 to 3698 in 2016 while HHI for fixed decreased from 8774 to 8472 during the same period. Typically, a HHI of 1800 and above indicates a market that is highly concentrated.

3.3.7. 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" therefore allowing the service provider to *"set the price for call termination above competitive levels."*

3.3.8. Impact of technological advantages or superiority of a given market participant

3.3.8.1. 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, licensees face *"no existing or potential competitors"* in the provision of wholesale voice call termination service.

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.

3.3.8.2. 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 allocation 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."*

3.3.9. Firms' access to capital markets and financial resources

3.3.9.1. 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.

3.3.9.2. 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.

3.3.10. Dynamic characteristics of the market, including growth, innovation and products and services differentiation

The Authority acknowledges recent developments such as Over the Top services, Wi-Fi calling, VoLTE, etc. Nevertheless, the Authority sees no need to change the 2010 and 2014 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. The Authority will, however, continue to keep these potential constraints under review.

3.3.11. Economies of scale and scope

The Authority is still of the view that economies of scale and scope are still relevant in the assessment of the effectiveness of competition. The criterion remains 20% of the share of termination minutes.

3.3.12. Nature and extent of vertical integration

3.3.12.1. 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)."*

3.3.12.2. Relevant downstream markets

The Authority is still of the view that this factor was not relevant for wholesale voice call termination.

3.3.13. Market and regulatory barriers to entry

3.3.13.1. 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.

3.3.13.2. 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 licenses
- 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, challenges with property owners, etc.)
- The lack of availability of spectrum

The Authority is still of the view that absolute barriers to entry in the downstream relevant market continue to exist.

3.3.14. Countervailing bargaining power

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

3.3.15. Conclusion on the assessment of effectiveness of competition

3.3.15.1. 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) remain 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 is effectively competitive. The Authority is of the view that competition in the wholesale voice call termination markets remain ineffective.

3.3.16. Determination on market failures

Each licensee faces no competition owing to the fact that other licensees have no option but to purchase termination service from the terminating licensee.

Despite the recent technological developments such as Voice over LTE, Wi-Fi calling, etc. and increased presence of OTT VoIP services such as WhatsApp, Skype, FaceTime, etc., the Authority is of the considered view that these services are not perfect substitutes for off-net voice calls for the period under review.

In the absence of a potential demand-side and supply-side alternative to the provision of voice call termination over a particular network, licensees could therefore act independently of competitors and retail subscribers in the setting of termination rates.

In 2010 and 2014, the Authority identified the following four market failures:

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

The Authority is still of the view that the above four market failures continue to exist.

3.4. Regulation 6 – Significant Market Power determination

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 is of the view that each individual ECNS and individual ECS licensees that offers wholesale voice call termination services still has significant market power in its own market for wholesale voice call termination.

3.5. Regulation 7 – Pro-competitive terms and conditions

3.5.1. The nature of pro-competitive terms and conditions

The Authority sees no reason for change in the use of behavioral remedies and is of the view that these remedies are still relevant to address market failure in the markets for wholesale voice call termination services.

3.5.2. The 2014 Call Termination regulations pro-competitive terms and conditions

In 2014, the Authority determined that "...the following market failures continue to exist:

- (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 these market failures, the Authority imposed pro-competitive remedy on all licensees to *"...charge fair and reasonable prices for wholesale voice call termination..."* in terms of regulation 7(2) of the 2014 Call Termination Regulations.

The Authority determined that additional pro-competitive remedies were necessary to correct the market failures identified. These additional remedies were imposed upon Vodacom, MTN and Telkom.

Even though market failure continues to exist, the Authority is however pleased that the current regulations have at least achieved the following:

- (a) A more efficient and effective access regime;
- (b) A dynamic retail environment; and
- (c) Continued access and investment in electronic communications networks in South Africa.