Draft Call Termination Regulations 2014

Explanatory Note

05 September 2014

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1. Introduction

The Authority's Vision is to *"Bridge the Digital Divide"* and Mission is to *"Ensure the provision of high quality electronic communication services at affordable prices."*

One of the tools available to the Authority in achieving this is to *"Promote competition within the ICT Sector."*[1]

The Authority conducted a market review of the provision of wholesale voice call termination services in 2010 under the ECA, culminating in the Wholesale Voice Call Termination Regulations of October 2010. In these Regulations the Authority determined that the defined markets were ineffectively competitive and identified the following market failures:

- *"A lack of the provision of access*
- *The potential for discrimination between licensees offering similar services*
- *A lack of transparency*
- *Inefficient pricing."*[2]

The Authority imposed the following pro-competitive terms and conditions on all licensees to rectify the above market failures:

(a) Compliance with the provisions of the Interconnection Regulations (of 2010).
(b) Compliance with the Compliance Manual Regulations.
(c) Charge fair and reasonable prices for wholesale voice call termination.

Additional pro-competitive remedies in the form of price control (cost-oriented pricing), publication of a reference interconnect offer and the imposition of accounting separation and cost accounting obligations were imposed on MTN, Vodacom and Telkom.[3]

This note outlines the review of the 2010 Regulations that the Authority has conducted in terms of Section 67(8) of the ECA. It is structured as follows:

- An outline of the process followed
- A review of the
  - o 2010 market definition determinations
  - o methodology applied to review the effectiveness of competition in the defined markets

[1] Object 2(f) of the Electronic Communications Act, no 36 of 2005, as amended (the "ECA")
[2] GG 33698: Regulation 7(1)
[3] GG 33698: Regulation 7(2) to 7(5)

- determination of Significant Market Power (SMP)
- pro-competitive terms and conditions

- The Authority’s draft determinations for 2014-2018.

2. An outline of the process followed

The Authority initiated a review of the 2010 Regulations in June 2013 with the publication of a questionnaire on 10 June 2013.

The Authority subsequently published draft Regulations on 11 October 2013[4] and final Regulations on 4 February 2014.[5]

On 12 February 2014 MTN lodged papers before the South Gauteng High Court seeking a review application on an urgent basis. MTN was subsequently joined by Vodacom on 25 February 2014. The South Gauteng High Court ruled on 31 March 2014 that the regulations were *“invalid and unlawful”* and instructed the Authority to redo the review of the 2010 Regulations. [6]

ICASA’s public consultation process included the following:

- An industry workshop to develop discuss the questionnaires used as the basis for data collection as inputs to the financial models.

- Individual meetings with operators to discuss the data validation, cost standards, the assumptions used in the developing the cost models and principles informing asymmetry.

Draft briefing notes were published on the assumptions and asymmetry prior to consultations to enable informed. The table below outlines the consultation process.

The Authority received responses to the questionnaires from 74 licensees. However, only five licensees complied with the requirements of the questionnaires.

[4] GG 36919
[5] GG 37295
[6] Judgement of the South Gauteng High Court: Section 124(iii), page 48

In summary, the process followed by the Authority is shown below:

Action	Date	Deadline
(a) Release of Questionnaires seeking both market and cost related information	21 May 2014	20 June 2014
(b) Industry Workshop to clarify how to answer the questionnaires	23 May 2014	-
(c) Receipt of Questions of Clarity on the questionnaires from the industry	28 – 30 May 2014	-
(d) Responses published as FAQs on the ICASA website and sent to relevant licensees	5 June 2014	Ongoing as queries arise
(e) Clarification Meetings (Individual) with regard to information required by the Authority	11 – 12 June	-
(f) Extension of submission date	19 June 2014	23 June 2014
(g) Data validation meetings with licensees that responded to the questionnaires.	1 – 9 July 2014	-
(h) Further extension for submission of information	11 July 2014	14 July 2014
(i) Receipt of additional information from licensees and analysis thereof by the Authority[7]	24 June 2014 to 04 September 2014	23 June 2014
(j) Briefing Note on Cost Standards For Call Termination	18 August 2014	-
(k) Briefing note on asymmetry in mobile and fixed wholesale voice call termination	27 August 2014	-

2.1. Operator Access to the Top-Down and Bottom-Up Models

ICASA used a three-pronged method to derive the appropriate rates for call termination in the mobile (Market 1) and fixed line (Market 2) markets in accordance with the 2010 Call Termination regulations. These included,

- Top down models that used operator specific information
- Bottom-up models based on efficient operators
- Benchmarking

The multi-pronged approach was used for quality assurance.

[7] Despite three extensions to submit information some licensees did not submit adequate information by the deadlines

ICASA considered the outcome of both the top down and the bottom up models in determining the suitable termination rates for South Africa.

1. The Top-Down cost modelling approach is based on financial accounting information and employs a stepwise allocation for direct and indirect costs to services.

2. The Bottom-Up cost modelling approach is based on a planned network investment required to meet demand (e.g. traffic, coverage and subscribers). Bottom-Up cost models have a direct reference to actual or hypothetical network structures.

The Authority used operator-specific data to model the cost of termination using the Top Down approach. As agreed during the industry workshop of 23 May 2014, the Authority gave operators access to their specific top down models. As part of the consultative process, operators were able to cross check inputs that the Authority used and the correctness thereof

As indicated, during the May 2014 workshop, it was not able to provide the Bottom-Up model due to the fact that the model was going to use confidential operator-specific data protected in terms of Section 4D of the ICASA Act. The data used was derived from the operator's submitted data and used in the calculations. Instead, ICASA committed to sharing the assumptions underpinning the model and the results thereof, which it did in August 2014.

The data is generalized and in some cases provided in ranges due to the sensitive and confidential nature of the data. It is not possible to disaggregate the model unless it is provided as a shell, which in the Authority's view, would not be usefully manipulated.

The model utilizes assumptions that allow for sensitivity analyses. Operators provided comments. These were considered and adopted where relevant. Other technical comments received close to the date of publication of the draft regulations are still being considered.

3. Review of 2010 Call Termination Regulations

This section is structured to outline the Authority's position on each regulation of the 2010 Regulations published on 29 October 2010.

3.1. Regulation 3: Market Definition

Regulation 3(2) of the 2010 Call Termination Regulations provided a definition of the relevant markets:

(2) These markets are categorised according to the type of service provided to the end-user and are defined as follows:

(a) Market 1: The market for wholesale voice call termination services to a mobile location on the network of each licensee who offers such a service within the Republic.

(b) Market 2: The market for wholesale voice call termination services to a fixed location on the network of each licensee who offers such a service within the Republic, consisting of:

i. The market segment for wholesale voice call termination to a fixed location within an 0N geographic area code; ***and***

ii. The market segment for wholesale voice call termination to a fixed location between 0N geographic area codes.

The Authority outlined the rationale for these market definitions in Section 1 of the Explanatory Note for the draft Call Termination Regulations, published on 16 April 2010[8] and Section 2.2 of the Explanatory Note for the final Call Termination regulations, published on 29 October 2010.[9]

The Authority's determination is that there is no change in:

- wholesale demand-side substitution;
- wholesale supply-side substitution;
- retail demand-side substitution[10];
- retail supply-side substitution; and
- common pricing constraints[11]

[8] GG 33121
[9] GG 33698
[10] The Authority acknowledges the increasing presence of Over The Top (OTT) VoIP services on both fixed and mobile networks (e.g. Viber, Facebook Messenger, Truphone, WhatsApp and Skype). However the Authority's draft determination is that these services do not yet affect the definition of the market for call termination owing to the limited penetration of devices and sufficient quality access to the internet.
[11] See Section 1 of GG 33121, pages 22-48

However, the Authority has reviewed its position on the geographic nature of the service. According to the 2010 determination was that there were two distinct geographic markets for termination to a fixed location based on near-end and far-end handover within and between the 0N geographic area codes of the National Numbering Plan.[12]

The introduction of IP-based networks and packet-switching of traffic (both voice and data) removes the dedicated flow of traffic over specific network links. The introduction of IP-based networks will in future make this difference less relevant and therefore the Authority aims to phase out the differences over the course of the regulatory period. This technological change therefore removes the need to differentiate between geographic market segments.

The Authority acknowledges that the market for termination is in fact the market for access to each network. Therefore, the Authority proposes the following amended market definitions:

- *Mobile termination markets: The market for wholesale voice call termination services on the network of each licensee who offers termination to a mobile location within the Republic.*
- *Fixed termination markets: The market for wholesale voice call termination services on the network of each licensee who offers termination to a fixed location within the Republic.*

The Authority retains its position that this definition refers to the *"logical network layer"* as discussed in GG 33121[13], meaning that termination services are offered by I-ECS licensees.

3.2. Regulation 4: Methodology

Regulation 4 of the 2010 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;

[12] GG 33698, page 20
[13] Explanatory Note for the draft Call Termination Regulations, published on 16 April 2010

(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 methodology it used in 2010 and finds no need to amend the specified approach in the review of the markets as per Section 67(8) of the ECA. Therefore it was applied in the analysis of the effectiveness of competition in the defined markets for the period 2014-2018.

3.3. Determination of Significant Market Power

The Authority determined in 2010 *that "every licensee that offers wholesale voice call termination services has SMP in its own market."*[14]

The Authority sees no need to change the 2010 determination that each licensee has 100% significant market power with regard to calls terminating on its own network.

3.4. Regulation 5: Effectiveness of Competition

The Authority determined in 2010 that competition in the wholesale voice call termination markets was ineffective. The Authority identified the following 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 reviewed each determination made on the assessment of competition below:

3.4.1. Legislative requirements

The definition of significant market power in terms of section 67(5) of the ECA remains largely unchanged.

3.4.2. Relevant markets

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

[14] Regulation 6 of the 2010 Regulations

- *"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 stated that it would consider the *"impact that relevant downstream retail markets may have on competition.[16]"* The Authority continued with this approach throughout its review of each determination made on the assessment of competition.

3.4.3. Market share of existing firms

The tables below compare the state of the downstream retail markets between June 2009 and December 2013.

Table 3.1: Retail Mobile Market Shares, by total customer connections, originated voice minutes, and voice revenues, as at December 2013

	Market Share by customers		Market Share by originated voice traffic		Market Share by market revenues	
	2009	2013	2009	2013	2009	2013
Licensee 1	54 %	42.9 %	55 %	56 %	55 %	49.4 %
Licensee 2	32 %	37.8 %	36 %	34 %	36 %	38.7 %
Licensee 3	14 %	17.2 %	9 %	9.1 %	9 %	9.5 %
Licensee 4	-	2.1 %	-	1 %	-	2.4 %

Source: analysis of licensee data

Table 3.2: Retail Fixed Market share by total customer connections, as at 31 December 2013

	Retail Market Share	
	2009	2013
Licensee 1	99.5 per cent	90.0 per cent
Licensee 2	0.4 per cent	10.0 per cent
Other fixed licensees	0.1 per cent	*

****Other licensees did not provide information on customer connections.***

Source: analysis of licensee data

[15] GG 33121: 51
[16] ibid

Both fixed and mobile retail 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 4151 in 2010 to 3570 in 2013 while HHI for fixed decreased from 9120 to 8200 during the same period. Typically, a HHI of 1800 and above indicates a market that is highly concentrated.

3.4.4. Actual and potential existence of competitors

3.4.4.1. Wholesale voice call termination

In 2010 the Authority determined that there are *"no actual or potential competitors in the defined wholesale call termination markets given the technical and practical constraints to an alternative provider offering call termination services on a licensee's network"*.

The Authority discussed the potential for accessing subscribers on other networks via OTT VoIP technologies in 2010 as well as under Section 3.2 of this note. The Authority has no evidence to justify changing the 2010 determination and therefore determines that for the current period, there are no competitors in the defined markets.

3.4.4.2. Relevant downstream markets

In 2010 the Authority indicated that *"potential competition in the retail markets will largely occur at the service provider layer*." The Authority also stated that the *"overall competitiveness of downstream relevant retail markets play little, if any part, in constraining the prices of wholesale call termination prices."*

The Authority sees no need to change the 2010 determination and therefore determines that for the current period there are no competitors in the defined markets.

3.4.5. Level, trends and concentration and history of collusion

3.4.5.1. Wholesale call termination

The Authority retains its position of 2010 *that "the possibility of collusion in the wholesale market is irrelevant for the assessment of competition in the wholesale call termination market."*[17]

[17] GG 33121: 54

3.4.5.2. Relevant downstream markets

In 2010 the Authority stated that both relevant downstream retail markets were highly concentrated. The Authority, as indicated earlier, retains the view that these downstream markets remain highly concentrated.

3.4.6. Overall size of each of the market participants

3.4.6.1. Wholesale call termination

In 2010 the Authority stated that *"the overall size of the operator may influence the extent to which it can use countervailing buying power to constrain wholesale call termination rates offered by other licensees*[18]*"*.

The tables below indicate the overall size of each participant with respect to the termination of voice minutes on their networks

Table 3.3: Share of total minutes terminated on mobile networks

	Share of mobile termination minutes	
	2009	**2013**
Licensee 1	43.0 per cent	45.0 per cent
Licensee 2	42.0 per cent	42.4 per cent
Licensee 3	14.0 per cent	12.0 per cent
Licensee 4	-	0.6 per cent

Source: analysis of licensee data

Table 3.4: Share of total minutes terminated on fixed networks

	Share of fixed termination minutes	
	2009	**2013**
Licensee 1	98.0 per cent	90.0 per cent
Licensee 2	2.0 per cent	10.0 per cent

Source: analysis of licensee data. Other licensees did not provide termination data

3.4.7. Control over essential facilities

In 2010 the Authority determined that "*the network elements that supply wholesale call termination do not constitute an essential service*[19]" but that wholesale call termination represents a "bottleneck service" therefore allowing

[18] GG 33121: 55
[19] GG 33121: 57

the service provider to *"set the price for call termination above competitive levels.*[20]*"*

This reality was one of the reasons why the Authority declared the markets for wholesale voice call termination to be ineffectively competitive, and prescribed a price control.

We continue to adopt the same approach as that of the 2010 Call Termination Regulations in respect Essential Facilities.

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

3.4.8.1. Wholesale voice call termination

In 2010 the Authority determined that this factor is not relevant given "*absolute barriers to entry"* and therefore competitors face *"no existing or potential competitors."* [21]

The Authority sees no need to change the 2010 determination and therefore determines that for the current period under review this factor is not relevant for the analysis of the effectiveness of competition.

3.4.8.2. Relevant downstream markets

In 2010 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."*[22]

A table of spectrum allocations to mobile operators is included below:

[20] ibid
[21] Ibid: 57
[22] Ibid: 58

Table 3.5: Spectrum allocations to mobile licensees

	2010				2013			
	900 MHz band - (FDD)	**1800 MHz band - (FDD)**	**1900/2100 MHz band - (FDD)**	**2010-2025 MHz (TDD)**	**900 MHz (FDD)**	**1710-1880 MHz (FDD)**	**1920-1980 MHz/ 2110-2170 MHz (FDD)**	**2010-2025 MHz (TDD)**
Vodacom	2x11MHz	2x12MHz	2x15MHz	1x5MHz	1x11MHz	2 x 12 MHz	2x 15 MHz	1 x 5 MHz
MTN	2x11MHz	2x12MHz	2x15MHz	1x5MHz	1x11MHz	2 x 12 MHz	2x 15 MHz	1 x 10 MHz
Cell C	2x11MHz	2x12MHz	2x10MHz		1x11MHz	2 x 12 MHz	2x 15 MHz	
Telkom						2 x 12 MHz	2x 15 MHz	

Source: ICASA

3.4.9. Firms' access to capital markets and financial resources

3.4.9.1. Wholesale Call Termination

In 2010 the Authority determined that this factor is *"not considered relevant in this market"*[23]

The Authority sees no need to change the 2010 determination and therefore determines that for the current period under review this factor is not relevant for the analysis of the effectiveness of competition.

3.4.9.2. 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 determines 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 ("WACC").

However, the Authority does not, at this stage view that access to capital markets plays a significant role in determining the effectiveness of downstream relevant markets.

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

3.4.10.1. Wholesale Call Termination

In 2010 the Authority was of the view that there were *"no significant recent product innovations or diversification that have impacted on the effectiveness of competition in wholesale call termination markets in South Africa".*

The Authority acknowledges recent developments such as VoLTE and the increased presence of OTT VoIP services. Nevertheless, the Authority sees no need to change the 2010 determination and therefore determines that for the current period under review this factor is not relevant for the analysis of the effectiveness of competition.

[23] Ibid: 58

3.4.11. Economies of scale and scope

3.4.11.1. Wholesale call termination

In 2010 the Authority was of the view that economies of scale and scope were not a relevant factor in the analysis of the effectiveness of competition.[24] However, the Authority did determine that economies of scale and scope as represented by *"a share of total minutes terminated in the respective markets of greater than 25 per cent"* were to play a role in the determination of pro-competitive remedies.

In this review, the Authority is of the view that economies of scale and scope are relevant in the determination of pro-competitive remedies. The Authority's view is based on the potential significant cost differentials between smaller/late entrants and operators already conveying significant volumes of traffic.

Accordingly, the Authority has reviewed its previous determination of 2010 and its draft determination is that economies of scale and scope are relevant in the assessment of the effectiveness of competition. Further, the criterion has been reduced from 25% to 20%, in line with international experience.

3.4.12. Nature and extent of vertical integration

3.4.12.1. Wholesale call termination

The Authority determined in 2010 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)."*[25]

The Authority sees no reason to amend this determination in 2014.

3.4.12.2. Relevant downstream markets

The Authority discussed the nature and extent of vertical integration in the 2010 review.[26] The Authority determined then that this factor was not relevant for wholesale voice call termination.

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[24] Ibid: 59
[25] GG 33121: 59
[26] GG 33121 section 2.3.12 page 59-60

In view of the way the market has been defined for 2014, the Authority sees no need to change the 2010 determination that this factor is not relevant for the assessment of the effectiveness of competition.

3.4.13. Market and regulatory barriers to entry

3.4.13.1. Wholesale call termination

The Authority determined in 2010 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 (2010-2013).*"

The Authority retains this view, courtesy of the definition of the market and the state of technological development today.

3.4.13.2. Relevant downstream markets

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

- Large sunk costs and economies of scale and scope
- The regulatory requirement to acquire licences
- The need to acquire spectrum[27]

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

The Authority therefore retains the 2010 position that absolute barriers to entry in the downstream relevant market continue to exist.

3.4.14. Countervailing Buying Power

In 2010 the Authority determined that *"larger licensees may possess CBP over smaller fixed and mobile licensees [and that] this is the case even if cost-based regulation of call termination rates is implemented."* The Authority went further

[27] Ibd: 60

to state that *"no small licensees have CBP that may act as an effective constraint on wholescale call termination rates offered by large licensees in South Africa[28]"*

The Authority retains this determination based on the relative shares of total terminated minutes reported by the various licensees.

3.4.15. Conclusions on the assessment of the effectiveness of Competition

3.4.15.1. Assessment of competition

In 2010 the Authority determined that all the markets as defined in 2010 were ineffectively competitive.

The Authority's initial view is that the defined markets remain ineffectively competitive for the following reasons:

- The existence of cost differentials based on economies of scale and scope; and
- The continued existence of CBP.

3.4.16. Determination on market failures

In 2010 the Authority identified the following market failures:

- A lack of the provision of access
- The potential for discrimination between licensees offering similar
- services
- A lack of transparency
- Inefficient pricing[29]

The Authority's determination is that these market failures continue to exist at varying levels.

3.5. Regulation 6: Significant Market Power (SMP) Determination

The Authority determined in Regulation 6 of the 2010 regulations that *"every licensee that offers wholesale voice call termination services has Significant Market Power (SMP) in its own market"[30]*

[28] Ibid: 67
[29] See GG 33121: 75-79

The Authority's determination is that there is no reason to change this determination given that access to networks is still governed by mutually agreed interconnection agreements. This means that each licensee has 100% SMP on its own network. This is above the 45% threshold for dominance defined in the Competition Act No. 89 of 1998. [31]

3.6. Regulation 7: Pro-competition terms and conditions

3.6.1. The nature of pro-competitive remedies

In 2010 the Authority specified its intention to target wholesale remedies to competition problems and regulate *"as deep into the network as possible."* Furthermore the Authority committed to introducing behavioural remedies as a means of addressing the identified market failures.

The Authority sees no reason to change this approach and therefore proposes to continue the use of behavioural remedies to address any identified market failures in the markets for wholesale voice call termination services.

3.6.2. A review of the 2010 pro-competitive remedies

The Authority identified two forms of remedies, those that applied to all licensees offering wholesale termination services and those applicable to licensees who *"benefitted from economies of scope and more efficient lower band spectrum"* as specified in Regulation 7.

The general obligations imposed in 2010 were:

- Compliance with the provisions of the Interconnection Regulations
- Compliance with the Compliance Procedure Manual Regulations
- Obligation to charge fair and reasonable prices for wholesale call termination[32]

The specific obligations were imposed on licensees that met the following criteria:

Spectrum allocation: *"licensees that have historically benefitted from the allocation of more efficient lower band spectrum"*

[31] Section 67(5) of the ECA and Section 7 of the Competition Act of 1998 define the criteria for dominance of a firm in a market.

[32] See Annexure A

- Economies of scale and scope: *"licensees that benefit from economies of scale and scope in maintaining a share of total minutes terminated in the respective markets of greater than 25 % as of June 2009"*[33]

The specific obligations were imposed on:

- Wholesale termination to a mobile location:
    - MTN
    - Vodacom
- Wholesale termination to a fixed location
    - Telkom

3.6.3. A review of the general obligations

All licensees are required to comply with the Interconnection Regulations and the Compliance Procedure Regulations. The Authority retains the obligation to charge fair and reasonable prices.

3.6.4. A review of the specific obligations

- The specific obligations were an obligation to:
- Develop and publish a Reference Interconnect Offer (RIO);
- To charge cost-oriented prices for wholesale call termination services; and
- Comply with accounting separation and cost accounting regulations

3.6.4.1. Obligation to publish a RIO

A combination of compliance with the Interconnection Regulations and the obligation to publish a Reference Interconnection Offer was expected to substantively lessen the market failures of:

- A lack of the provision of access
- The potential for discrimination between licensees offering similar services
- A lack of transparency[34]
- The Authority holds the view that the obligation to provide a RIO is still a necessary obligation as minimum traffic and price floor volumes are not standardised
- The need to standardise the practice of bank guarantees or prepayment option for call termination services
- The change in technologies and the adoption of IP-based interconnection, where the Authority expects that the upfront fixed costs of providing an interconnection point should have reduced over the past three-year period.

[33] GG 33698: 7
[34] For a detailed discussion on the justification for these remedies please see GG 33121: 71-72

The Authority is further of the view that licensees are obliged to offer interconnection using IP-based protocols upon on request.

3.6.4.2. Obligation to charge cost-oriented prices

The Authority discussed the competition problems of inefficient pricing on pages 70 and 71 of GG 33121 and does not intend to repeat the discussion here. The implementation of the cost-oriented remedy in 2010 was to address this concern.

The Authority set the wholesale voice call termination rates based on cost information submitted by Vodacom, MTN and Telkom (for fixed line services) in terms of the Charts of Account and Cost Allocation Manual Regulations in terms of Section 96(1) of the Telecommunications Act of 1997.

The rate for termination to a mobile location (Market 1) was set at Fully Allocated Cost ("FAC") and rate for termination to a fixed location (Market 2) was set at Long-Run Incremental Cost. (LRIC)[35].

For 2014, the Authority determines that it is proportionate to adopt a single cost standard applicable to all licensees offering wholesale call termination services.

The Authority takes note of the significant developments in international jurisdictions as to what best represents the true cost of terminating a voice call in Calling Party Pays environments. LRIC+ is the most widely adopted cost standard in the following jurisdictions, including many European, African and Asian markets. Increasingly, many jurisdictions are moving to or considering moving to a pure LRIC cost standard.

3.6.4.3. Determination on the form of LRIC to be used

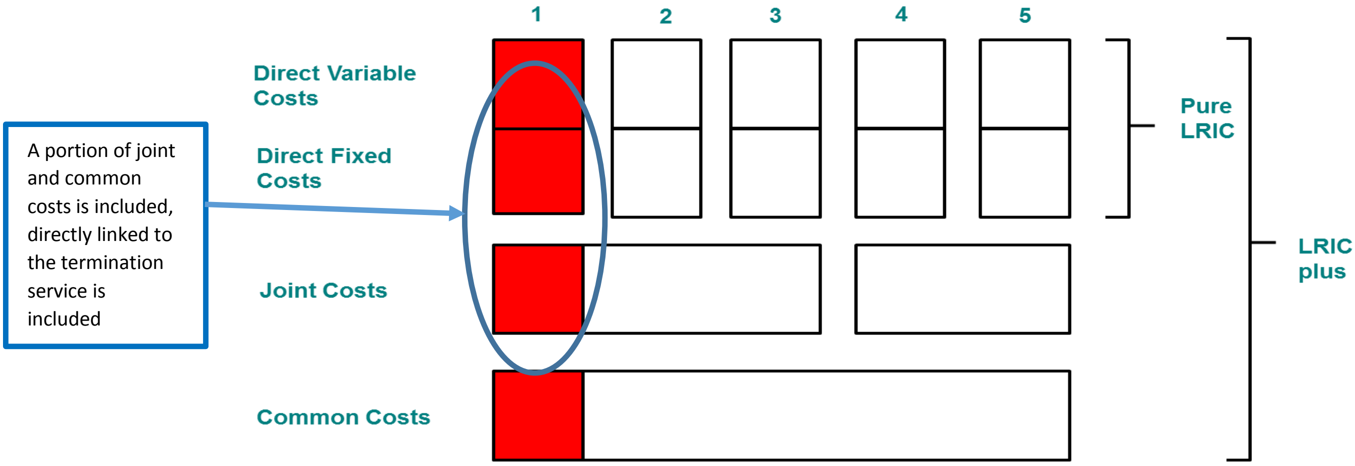
The Authority considered the two forms of LRIC cost standards namely, pure LRIC and LRIC+. The fundamental difference between the aforementioned forms of LRIC is that LRIC+ includes a portion of joint and common costs[36] while these costs are excluded for pure LRIC.

This difference between the two cost standards is illustrated below.

[35] Long Run Costing needs to consider the time period in which the service provider can realise capital investments (or divestiture of capital) in order to increase (or decrease) its productive capacities. In the long run, all capital inputs, and therefore all costs vary, due to a change in the volume or in the structure of production, in response to changes in demand. All investments are therefore considered as variable costs in this long run view as all will require replacement at some time.

[36] Joint and Common costs are costs incurred in the provision of two or more increments and are not related to any one product or service. Source: Charts of Accounts and Cost Allocation Manual Regulations of 2004.

Figure 3.1: Cost elements of Pure LRIC and LRIC+



Source: ITU

The Authority determined that the adoption of LRIC+ is the correct proportionate remedy for the following reasons:

- LRIC+ would allow operators to recover a portion of joint and common costs incurred in the provision of wholesale voice call termination service through termination rates.
- to ensure continued investment in electronic communications networks in South Africa.
- to correct the imbalances created in 2010 wherein the 2010 Call termination Regulations applied different cost standards to different markets[37], viz. fixed and mobile.
- to ensure a smooth transition from a Fully Allocated Cost standard used in 2010 to an eventual cost standard of pure LRIC.
- During this regulatory period, the Authority considered a move to pure LRIC as potentially too harsh and LRIC+ was a better transitory measure for the current period.

3.6.4.4. The efficient cost of wholesale call termination services

The Authority has determined the cost of providing a wholesale call termination service to a mobile and fixed location through a combination of top-down financial cost modelling and a bottom-up network engineering model. The top-down model is aimed at establishing the true costs as experienced by existing licensees regardless of efficiencies.

[37] The mobile termination rate was set at Fully Allocated Cost while the fixed line termination rate was set on a Long-Run Incremental basis.

The bottom-up model is aimed at establishing the hypothetically efficient cost of providing a wholesale call termination service.

These figures have been determined in consultation with all those licensees who submitted cost information as per the information request issued on 21 May 2014.

The Authority determines that it is proportionate to introduce a glide-path from the current termination rates to the actual cost of termination. The table below is the Authority's proposed glide-path.

Table 3.6: Glide path towards the efficient cost of termination

Period	Termination to a mobile location	Termination to a fixed location	
		W0N	**B0N**
1 October 2014 to 28 February 2015	R 0.20	R 0.12	R 0.19
1 March 2015 to 29 February 2016	R 0.16	R 0.16	R 0.16
1 March 2016 to 28 February 2017	R 0.12	R 0.12	R 0.12
1 March 2017 to 28 February 2018	R 0.08	R 0.08	R 0.08

The table indicates that there is a gradual move from the two-tier termination rate determination of 2010 for termination to a fixed location towards a single termination rate in the final year of the glide-path, to be in line with the revised market definition.

3.6.4.5. Asymmetry

The Authority has determined that economies of scale and scope and CBP remain a cause of market failure. The Authority determines that a further and final period of asymmetric termination rates, based on cost differentials is required.

The Authority has revised its qualification criteria for asymmetry, based on economies of scale and scope, from 25% of total terminated minutes to 20% of total terminated minutes in line with global practice.

It is no longer of the view that spectrum should be used as a qualification criterion for asymmetry.

Cost differentials were determined by modelling the top-down and bottom up costs of providing call termination services of a licensee with less than 20% of total terminated minutes. [38]

The Authority has determined that the following licensees may claim asymmetry:

- a licensee that participates in the downstream mobile access and call markets with less than 20% of total minutes terminated to a mobile location, as of 31st December 2013
- a licensee that participates in the downstream fixed access and call markets with less than 20% of total minutes terminated to a fixed location,[39], as of 31st December 2013

The tables below indicates the Authority's proposed provisions for asymmetry

Table 3.7: Maximum asymmetric rate for termination to a mobile location

	Asymmetric termination rate
1 October 2014 to 28 February 2015	R 0.30
1 March 2015 to 29 February 2016	R 0.22
1 March 2016 to 28 February 2017	R 0.16
1 March 2017 to 28 February 2018	R 0.10

Table 3.8: Maximum asymmetric rate for termination to a fixed location

	W0N	**B0N**
1 October 2014 to 28 February 2015	R 0.18	R 0.29
1 March 2015 to 29 February 2016	R 0.22	R 0.22
1 March 2016 to 28 February 2017	R 0.16	R 0.16
1 March 2017 to 28 February 2018	R 0.10	R 0.10

[38] The Authority is not considering any of the current mergers/transactions currently under review by both the Authority and the Competition Commission.

[39] The Authority retains its determination that VoIP services remain classified as a fixed services

Annexure A: APPLICATION OF THE FAIR AND REASONABLE OBLIGATION

1. Principles of implementation of fair and reasonable obligation

   1.1. For the purposes of regulation 7(2), "fair and reasonable prices" are rates that are equivalent to the cost-oriented rates imposed on the licensees identified in regulation 7(3).

   1.2. A licensee must charge the following rates:

      1.2.1. Reciprocal rates with the rate set for MTN and Vodacom if that licensee offers termination to a mobile location within the Republic of South Africa

      1.2.2. Reciprocal rates with the rate set for Telkom if that licensee offers termination to a fixed location within the Republic of South Africa

2. Licensees not listed in regulation 7(4) may charge higher termination rates based on:

   2.1. Economies of scale and scope based on the share of minutes terminated in the relevant market where:

      2.1.1. a licensee participates in the downstream mobile access and call markets with less than 20% of total minutes terminated to a mobile location as of 31 December 2013.

      2.1.2. a licensee participates in the downstream fixed access and call markets with less than 20% of total minutes terminated to a fixed location[40] as of 31 December 2013.

   2.2. However, ICASA may maintain asymmetry for a longer period for operators whose share of terminating minutes is below 10% after March 2018.

   2.3. A licensee who qualifies for an asymmetric rate may charge a maximum rate according to the following tables:

[40] The Authority retains its determination that VoIP services remain classified as a fixed services

Table A1: Maximum asymmetric rate for termination to a mobile location

	Asymmetric termination rate
1 October 2014 to 28 February 2015	R 0.30
1 March 2015 to 29 February 2016	R 0.23
1 March 2016 to 28 February 2017	R 0.16
1 March 2017 to 28 February 2018	R 0.10

Table A2: Maximum asymmetric rate for termination to a fixed location

	W0N	**B0N**
1 October 2014 to 28 February 2015	R 0.18	R 0.29
1 March 2015 to 29 February 2016	R 0.20	R 0.20
1 March 2016 to 28 February 2017	R 0.16	R 0.16
1 March 2017 to 28 February 2018	R 0.10	R 0.10