# GENERAL NOTICE

**NOTICE 259 OF 2015**

**Independent Communications Authority of South Africa**
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## REASONS DOCUMENT FOR THE CALL TERMINATION REGULATIONS, 2014

The Independent Communications Authority of South Africa published the Call Termination Regulations, 2014 under General Notice 844 in *Government Gazette* 38042 of 30 September 2014, in terms of section 67(8) of the Electronic Communications Act 36 of 2005. The Authority hereby publishes the reasons for the Call Termination Regulations, 2014.

**Dr Stephen Mncube**
**Chairperson**

## I INTRODUCTION

1. On 30 September 2014, the Independent Communications Authority of South Africa ("the Authority") published the Call Termination Regulations, 2014 under General Notice 844 in *Government Gazette* 38042 of 30 September 2014 ("the Final Regulations"). The Final Regulations were adopted following an extensive public consultation process that took place after the Gauteng Local Division, Johannesburg of the High Court of South Africa ("Johannesburg Local Division") handed down its decision in *Mobile Telephone Networks (Pty) Ltd v Chairperson of the Independent Communications Authority of South Africa, In Re: Vodacom (Pty) Ltd v Chairperson of the Independent Communications Authority of South Africa* [1] ("*MTN v ICASA*"), including the publication of the Draft Call Termination Regulations, 2014 under General Notice 795 in *Government Gazette* 37985 of 9 September 2014 ("the Draft Regulations"), for public comment.

2. The Authority engaged the services of Detecon Consulting who assisted with the preparation of a Bottom Up Long Run Incremental Model (BU-LRIC) and Genesis Consulting who assisted with the preparation of a Top Down Long Run Incremental Model (TD-LRIC). These consultants are cost modelling experts and were engaged in line with section 14A of the Independent Communications Authority of South Africa Act 13 of 2000.

3. The Authority published an explanatory note with the Draft Regulations ("the Explanatory Note"). This document ("the Reasons Document") sets out the Authority's reasons for the Final Regulations. The Reasons Document must be read in conjunction with the Explanatory Note to the Draft Regulations.

## II BACKGROUND

4. The Authority published the Call Termination Regulations, 2010/11 under General Notice 1015 of 2010 in *Government Gazette* 33698 of 29 October 2010 ("the 2010 Regulations") under section 4 read with section 67(4) of the Electronic Communications Act 2005 ("the ECA"). Regulation 8 of the

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[1] [2014] 3 All SA 171 (GJ).

2010 Regulations obliged the Authority to review "the wholesale voice call termination markets to which [the 2010 Regulations] apply, as well as the effectiveness of competition and the application of pro-competitive measures in those markets, after a minimum period of three (3) years" from the publication of the 2010 Regulations.

5. On 4 June 2013, the Authority published a notice indicating its intention to, amongst other things, conduct such a review in terms of section 67(8) of the ECA.[2] On 10 June 2013, the Authority published a Call Termination Market Review questionnaire for the purpose of conducting this review.

6. After it received responses to this questionnaire, the Authority published the Draft Call Termination Regulations, 2013 under General Notice 1018 in *Government Gazette* 36919 of 11 October 2013 for public comment. After this, the Authority published the Call Termination Regulations, 2014 under General Notice 65 in *Government Gazette* 37295 of 4 February 2014 ("the February Regulations).

7. On 31 March 2014, the Johannesburg Local Division of the High Court of South Africa, in *MTN v ICASA*, held that the February Regulations were "*invalid and unlawful*", but suspended this declaration for six months to allow the Authority to enact new regulations to replace the February Regulations. Thus, the Authority had six months from 31 March 2014 (i.e. until 30 September 2014) to publish new regulations. This required the Authority also to conduct a new section 67(8) review ("the 2014 Review").

8. On 21 May 2014, the Authority published a second Call Termination Market Review questionnaire for the purpose of conducting the 2014 Review ("the Questionnaire").[3]

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[2] Notice of intention to implement a cost to communicate programme published under General Notice 574 in *Government Gazette* 36532 of 4 June 2013, pp 10 – 11.

[3] 'Call Termination Questionnaire' available at https://www.icasa.org.za/LegislationRegulations/MarketsCompetition/MarketsCompetitionAnalysis/CosttoCommunicateProgramme/CallTermination/tabid/743/Default.aspx.

9. On 23 May 2014, the Authority invited stakeholders to a workshop to discuss the content and structure of the Questionnaire and to outline the approach to be taken in the 2014 Review.

10. At the workshop, the Authority indicated that new call termination rates would be determined through the development of—

10.1 a TD-LRIC model;

10.2 a BU-LRIC model; and

10.3 principles to inform asymmetry.

11. Subsequent to the workshop, the Authority received various clarification questions on the Questionnaire. On 5 June 2014, the Authority published a frequently asked questions document ("FAQ") on its website in order to provide answers to these questions.[4]

12. Licensees were required to submit answers to the Questionnaire by 13 June 2014. However, various licensees did not meet this deadline, which prompted the Authority to extend the deadline to 23 June 2014. Some licensees met this extended deadline. The Authority further extended the submission deadline, to 14 July 2014.

13. A number of licensees did not meet the extended deadline of 14 July 2014. This compelled the Authority to continue receiving information past this date.

14. The Authority held meetings with licensees on 24 July 2014 to discuss the principles informing asymmetry being developed by the Authority, as well as the appropriate South African cost standard for the TD-LRIC and BU-LRIC models.

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[4] 'Consolidated pdf public response to questions 5 June 2014, available at https://www.icasa.org.za/LegislationRegulations/MarketsCompetition/MarketsCompetitionAnalysis/CosttoCommunicateProgramme/CallTermination/tabid/743/Default.aspx.

15. On 18 August 2014, the Authority published its decision, on its website, to apply the long-run incremental cost plus ("LRIC+") cost standard.[5]

16. On 26 August 2014, the Authority released a document detailing the assumptions underpinning the TD-LRIC and BU-LRIC models to Cell C Proprietary Limited ("Cell C"), Mobile Telephone Networks Proprietary Limited ("MTN"), Telkom SA SOC Limited ("Telkom"), Neotel Proprietary Limited ("Neotel") and Vodacom Proprietary Limited ("Vodacom") for comments, as these operators were the only licensees to provide the required and relevant information and to participate in the 2014 Review.

17. From 1 September 2014 to 3 September 2014, the Authority held meetings with Cell C, MTN, Telkom, Neotel and Vodacom to discuss the principles informing asymmetry, the assumptions underpinning the BU-LRIC model and the results of the TD-LRIC model. To this end, Cell C, MTN, Telkom, Neotel, and Vodacom provided input on asymmetry.

18. On 3 September 2014, the Authority published a briefing note on asymmetry, which provided further information in relation to the principles underpinning asymmetry in respect of mobile and fixed wholesale voice call termination in the 2014 Review.[6]

19. On 9 September 2014, the Authority published the Draft Regulations, together with an explanatory note. Comments on the Draft Regulations were to be submitted on or before 19 September 2014.

20. The Authority received written submissions on the Draft Regulations from—

20.1 Cell C;

20.2 The Internet Service Provider's Association ("ISPA");

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[5] 'Briefing Note on Cost Standards for Call Termination' available at https://www.icasa.org.za/LegislationRegulations/MarketsCompetition/MarketsCompetitionAnalysis/CosttoCommunicateProgramme/CallTermination/tabid/743/ctl/ItemDetails/mid/2697/ItemID/4047/Default.aspx.

[6] 'Briefing note on asymmetry in mobile and fixed wholesale voice call termination' available at https://www.icasa.org.za/LegislationRegulations/MarketsCompetition/MarketsCompetitionAnalysis/CosttoCommunicateProgramme/CallTermination/tabid/743/ctl/ItemDetails/mid/2697/ItemID/6054/Default.aspx.

20.3 MTN;

20.4 Neotel;

20.5 Switch Telecom Proprietary Limited ("Switch Telecom");

20.6 Telkom; and

20.7 Vodacom.

21. The Authority decided not to hold public hearings. The Authority determined that the most effective method of consultation, given the relatively short period in which to do so and the sensitive financial information submitted, was to invite representations and meet individually with licensees who submitted relevant information rather than to conduct public hearings.

## III LEGISLATIVE FRAMEWORK

22. The 2014 Review has been conducted in terms of section 67(8) of the ECA, read with regulation 8 of the 2010 Regulations. The Final Regulations are the result of this review. Regulation 8 of the 2010 Regulations provides:

"*The Authority will review the wholesale voice call termination markets to which* [the 2010 Regulations] *apply, as well as the effectiveness of competition and the application of pro-competitive measures in those markets, after a minimum period of three (3) years from the publication of these regulations*".

23. Section 67(8)(a) of the ECA stipulates:

*"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."*

## IV SUBMISSIONS RECEIVED ON THE DRAFT REGULATIONS AND THE AUTHORITY'S RESPONSE

### 1. Definitions

1.1 Submissions received

1.1.1 Submissions were made that a definition of "numbering plan regulations" should be included in the definitions section.

1.2 Authority's Decision

1.2.1 The Authority included a definition of "Numbering Plan Regulations" as suggested by the interested parties.

### 2. Purpose of Regulations

2.1 Submissions received

Vodacom proposed that the purpose clause of the Draft Regulations should be amended to state that an additional purpose of the 2014 Regulations is to assess whether the current pro-competitive measures are proportional and whether they should be modified to ensure proportionality.[7]

2.2 Authority's Decision

2.2.1 The purpose of the Final Regulations is a review under section 67(8) of the ECA: a review of the market determinations and pro-competitive terms and conditions imposed by the Authority in the 2010 Regulations.

2.2.2 The Authority considered Vodacom's submission and rejected it. Section 67(8) of the ECA does not explicitly require the Authority to determine whether existing pro-competitive

[7] Ibid.

conditions have remained proportional when conducting a section 67(8) review. If the Authority does not find that there have been changes in competition in the market, there is no need to engage in an assessment of proportionality. It is only necessary to look at proportionality if the Authority has determined that there have been changes to competition in the market.

## 3. **Market Definition**

### 3.1 Submissions received

3.1.1 The market definition in the 2010 Regulations differentiated between market segments for wholesale voice call termination services to a fixed location (a) within a 0N geographic area code ("W0N") and (b) between 0N geographic area codes ("B0N"). The market definition in the Final Regulations does not include this distinction. Several licensees agreed with this removal.[8]

3.1.2 Vodacom indicated that distinguishing between W0N and B0N rates has often proven difficult in practice due to, among other things, technical and economic challenges to network rollout and/or the difficulty of making use of points of interconnection in every region by every operator.[9]

3.1.3 Neotel was opposed to the introduction of blended W0N and B0N rates on the basis that W0N and B0N are two separate but complementary markets. Neotel submitted that it is neither necessary nor desirable to combine W0N and B0N so suddenly, because their separation fosters the growth of national networks.[10]

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[8] Telkom's submission in response to the Draft Regulations ("Telkom submission") p 1; ISPA's submission in response to the Draft Regulations ("ISPA submission") p 1; Vodacom submission p 5.

[9] Vodacom submission p 5.

[10] Neotel's submission in response to the Draft Regulations ("Neotel submission") p 7-8.

3.1.4 Neotel stated further that the distinction between W0N and B0N is in line with international best practice, where local and tandem (long-distance) termination rates generally remain separate rather than blended.[11]

3.1.5 Neotel was of the view that convergence of W0N and B0N would collapse the competitive long-distance carriage market. This market creates an incentive to invest in long-distance infrastructure. Neotel stated that small players without any national infrastructure would argue that W0N and B0N should be merged, as it grants them access to national long-distance markets at no cost. This is not a sound economic argument, according to Neotel.[12]

3.1.6 Vodacom disagreed with the statement in the Explanatory Note to the Draft Regulations that the market definition refers to termination services that are offered by individual electronic communications service ("ECS") licensees, as this contradicts regulation 6 of the Draft Regulations, which applies to *all* electronic communications network service ("ECNS") and ECS licensees.[13]

3.2 Authority's Decision

3.2.1 Notwithstanding Neotel's objection to the convergence of W0N and B0N, the Authority retained its determination as proposed in the Draft Regulations to remove the W0N/B0N distinction in the fixed market definition. However, the Authority determined that this distinction should be gradually phased out over the regulatory period and the extent of differentiation in the W0N/B0N rates be reduced in the intervening period

3.2.2 The Authority is of the view that it provided adequate explanation for the convergence of W0N and B0N in the

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[11] Ibid.

[12] Ibid.

[13] Vodacom submission p 5; Explanatory Note to the Draft Regulations p. 9.

Explanatory Note to the Draft Regulations.[14]

3.2.3 The Authority has amended regulation 6 to include individual ECNS and individual ECS licensees because the focus of the Regulation has always been individual ECNS and individual ECS licensees.

## 4. Effectiveness of Competition

4.1 Submissions received

Vodacom disagreed with the Authority's use of economies of scale and scope, and cost differentials based on economies of scale and scope, for the assessment of competition in the relevant market, as set out in the Explanatory Note to the Draft Regulations.[15]

4.2 Authority's decision

The Authority's current review of the market definitions and significant market power ("SMP") determinations confirms that there was no change to the status quo. In this respect, the Authority found that Vodacom's submission in this regard is misguided. The Authority did not assess competition in the market with reference to economies of scale and scope. Instead, economies of scale and scope are relevant to the assessment of appropriate pro-competitive remedies.

## 5. SMP Determination

5.1 Submissions received

Vodacom recommended that regulation 6 of the Draft Regulations be amended as follows:

"The Authority declares that each I-ECNS and I-ECS licensee that offers wholesale voice call termination services is dominant and has

[14] See page 9 of the Explanatory Note to the Draft Regulations.
[15] Vodacom submission p 6; Explanatory Note to the Draft Regulations p 17.

SMP in its own market <u>for wholesale voice call termination</u>."[16]

5.2 <u>Authority's Decision</u>

The Authority agreed with Vodacom's submission and amended the regulation accordingly. In the Authority's view, this amendment also more accurately reflects the fact that it is every *individual* ECS and ECNS licensee, not every *class* licensee, which has market power in the relevant market, being the market for wholesale voice call termination.

## 6. Pro-Competitive Terms and Conditions

6.1 <u>Submissions received</u>

6.1.1 ISPA submitted that it remains difficult for certain licensees to interconnect and gain access to the wholesale termination services of larger licensees.[17]

6.1.2 ISPA suggested that the Final Regulations should explicitly impose an additional pro-competitive obligation for licensees to "*offer interconnection services at any financially and technically feasible point upon request by an interconnection seeker*".[18]

6.1.3 ISPA argued that pricing remedies alone are insufficient to remedy the high degree of market concentration in the fixed voice market and therefore, in addition to the obligation outlined in paragraph 6.1.2 above, it proposed further pro-competitive remedies:

6.1.3.1 reform of the number-portability framework;

6.1.3.2 the implementation of carrier select and preselect; and

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[16] Vodacom submission p 8.
[17] ISPA submission p 3.
[18] ISPA submission p 6.

6.1.3.3 effective wholesale open-access regulation.[19]

6.2 Authority's decision

6.2.1 The Authority is of the view that ISPA's submissions are adequately addressed by Chapters 7 and 8 of the ECA. In addition, the Authority is of the view that the supplementary pro-competitive remedies suggested by ISPA cannot be imposed through this process and should be addressed through a separate process.

6.2.2 The Authority also effected the following changes in the Final Regulations:

6.2.2.1 inserted the qualifying date of 31 December 2013 in regulation 7(3) in order to standardise the period in which relevant data was collected from all submitting licensees.

6.2.2.2 changed the periods in table 1 in order to afford licensees a six month adjustment period in respect of the new rates. This was designed to prevent shocks to business systems.

## 7. Publication of a Reference Interconnection Offer

7.1 Submissions received

7.1.1 Vodacom submitted that the requirement for a Reference Interconnect Offer ("RIO") should apply to all SMP licensees to ensure that—

7.1.1.1 sufficient information in relation to the interconnection provider and its interconnection requirements are

[19] ISPA submission p 3.

available to plan for interconnection;

7.1.1.2 interconnection negotiations will start from an informed position, thereby expediting the conclusion of interconnection agreements; and

7.1.1.3 terms and conditions are offered on a transparent and non-discriminatory basis.[20]

7.1.2 Vodacom indicated the need for clarity on whether licensees identified in regulation 7(4) would be required to resubmit a new RIO agreement. If so, it was submitted that the Authority should provide guidance on how existing interconnection agreements concluded on the basis of the 2010 Regulations could be made compliant with the Final Regulations.[21]

7.1.3 The 2010 Regulations provided that if the Authority did not make a decision in relation to a RIO within 30 days of having received it, it would be deemed to have been approved by the Authority. Vodacom argued that the absence of this provision in the Draft Regulations would likely result in a regulatory lacuna. Vodacom proposed that this provision be reinstated to create certainty and to set clear timelines for the approval of a RIO. [22]

7.1.4 Vodacom also argued that the 15-day period within which a RIO must be concluded by an operator is technically and operationally not feasible. Vodacom suggested that the period be increased to 60 days. This is due to the fact that the connectivity, call functionality, billing integrity tests, and other interoperability matters need to be completed prior to conclusion of a new interconnection agreement.[23]

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[20] Vodacom submission pp 9 - 10.
[21] Ibid p 10.
[22] Ibid.
[23] Ibid pp 10 - 11.

7.2 Authority's decision

7.2.1 The Authority decided to delete the deeming provision (in terms of which RIOs would be deemed to be approved where the Authority did not make a decision within 30 days of submission) in order to allow time for the Authority to engage with licensees where there could be issues arising.

7.2.2 The Authority has changed the period for conclusion of a RIO to 30 days which period the Authority views as being adequate for review.

7.2.3 The Authority changed the period in new regulation 7(5)(v) (previously regulation 7(5)(vi)) from fifteen to thirty days to allow adequate time for commercial negotiations between licensees to be concluded.

## 8. Schedule for review or revision of markets

8.1 Submissions received

Vodacom submitted that a review should take place within at least three years after the regulations come into effect.[24]

8.2 Authority decision

The Authority introduced a two-year restriction on the conducting of a further market review to ensure adequate time to assess the impact of the Regulations after their implementation.

## 9. Contraventions and Penalties

9.1 Submissions received

Vodacom submitted that the fines proposed for non-compliance

[24] Ibid p 16.

(which increased from a maximum of R500 000 in the 2010 Regulations to a maximum of the greater of R5 000 000 or 10% of turnover for every day of non-compliance under the Draft Regulations) are excessive and disproportionate, particularly having regard to the offence to be punished or conduct to be deterred (i.e. the failure to adhere to the prescribed pro-competitive terms and conditions).[25]

9.2 Authority's Decision:

The Authority is of the view that the penalty imposed for contravention is proportionate because there needed to be a significant consequence for failure to comply given the importance of the pro-competitive obligations in increasing competition and levelling the playing field.

The penalty stipulated in regulation 9 of the Draft and Final Regulations is for a *maximum* of the greater of R5 000 000 or 10% of turnover. As such, it is possible that no penalty would be imposed. In any given case, the penalty imposed would be informed by the merits of the case (including the licencee's reasons for non-compliance) and would thus be proportionate to the particular contravention.

## 10. ANNEXURE A

10.1 The Authority decided to change the qualifying criterion for asymmetry from 25% (as provided for in the 2010 Regulations) to 20% of total minutes terminated in the mobile and wholesale voice call termination markets. This is on the basis that, while the Authority's view is that asymmetry remains appropriate for the current regulatory period, an indefinite asymmetry provision

[25] Vodacom submission p 16.

potentially also holds the danger that smaller and late entrants would have less of an incentive to become efficient operators. In addition, once termination rates for larger well-established operators are regulated at marginal cost, this would reduce the negative externalities faced by smaller operators and late entrants.

10.2 The Authority also changed the period of asymmetry. Although the Authority has previously adopted a three-year glide path, the Authority decided that the current glide path ought to be three and a half years. Since the implementation of the glide path in 2010, each step in the glide path has endured for a period of 12 months, except for the court-imposed period during which the initial rates in the February Regulations applied (which were applicable for six months). To ensure regulatory certainty, especially due to the short time for implementation, the Authority decided that the current base rate (i.e. the initial rate set in the February Regulations) should be maintained for a further six-months, with the asymmetry rate moving to a cost-based rate that is justifiable.

## 11. Issues in relation to Asymmetry

11.1 Increase in asymmetry:

11.1.1 MTN submitted that there was a "significant shift in the Authority's approach to termination-rate settings since its 2010 determination [in terms of which] asymmetry in the mobile termination market will increase by 150% (from 4c to 10c)." [26]

11.1.2 Cell C was of the view that "proposed rates in the draft regulations would perpetuate market failure because the proposed asymmetry is even lower than the asymmetry that applied in 2010, which did not achieve its purpose."[27]

[26] MTN submission p 5.
[27] Cell C submission pp 5 – 6.

11.1.3 Vodacom submitted that the level of asymmetry proposed for termination rates was too high to assist with a smooth transition towards the next charge-control period (i.e. upon the expiry of the regulated termination rates).[28]

11.2 Authority's decision:

11.2.1 With regard to MTN's submission, the Authority is of the view that MTN's percentage calculation is misleading. First, the comparison should not be between the mobile termination rates at the start of the Draft Regulations and the mobile termination rates at the end of the 2010 Regulations. It should be between the prevailing mobile termination rates at the inception of the Final Regulations (in other words, the termination rates under the February Regulations - an asymmetric termination rate of 44c over a base rate of 20c, a difference of 24c and a percentage asymmetry of 120%) and the mobile termination rates under the Draft Regulations (an asymmetric termination rate of 30c over a base rate of 20c – a difference of 10c and a percentage asymmetry of 50%). Under this calculation, both absolute and relative asymmetry would have decreased under the Draft Regulations. Second, even if a comparison is made between the end of the 2010 Regulations and the beginning of the Draft Regulations, relying on percentage alone is misleading. While it is true that, under this comparison, asymmetry would increase by 150%, the change is less drastic than the percentage implies. Asymmetry only increases by 6c from an original asymmetry of 4c. Further, the absolute asymmetric rate does not increase – it decreases from 44c to 30c. The increase in the asymmetry percentage comes from the larger, 20c decrease in the base rate.

11.2.2 It should also be noted that the mobile asymmetric rates in

[28] Vodacom submission p 20.

the 2010 Regulations were based primarily on the COA/CAM models of the larger licensees. The asymmetry imposed in the 2010 Regulations was not based on actual cost data from the smaller licensees, as this was not available given that they were not obliged to submit COA/CAM figures. The 2014 Review has involved a proper costing of the smaller networks and in the process the Authority determined that the cost differences between larger and smaller operators were substantially larger than the 4c applicable as from March 2013 under the 2010 Regulations. As the base rates and proposed asymmetry in the Draft and Final Regulations are based on actual costs, this required an increase in asymmetry to reflect the actual cost differences.

11.2.3 The Authority disagrees with the Cell C view that the asymmetry levels are inadequate and will perpetuate market failure.

11.2.3.1 International best practice is to provide asymmetry to new entrants for a very limited period only. The rationale for this is to achieve a balance between recognising cost differences and perpetuating cost inefficiencies amongst later entrants. The Authority has recognised historic market failures in its decision to grant asymmetry to Cell C in the first place despite it having been in the market for 13 years, a period far longer than that typically accepted by international jurisdictions.

11.2.3.2 International best practice is to set asymmetry levels based on cost differences between large and small operators only. The current regulations achieve this. Furthermore, the level of asymmetry is sufficient to ensure that smaller operators do not incur financial imbalances on termination charges.

11.2.3.3 The Authority disagrees with Cell C that the previous asymmetry regime has been ineffective in addressing market failures. In addition, the current regulations differ substantially from the historic regulations insofar as termination rates for larger operators are now set at LRIC whereas previously they were above LRIC. The move to LRIC based pricing for larger operators removes the market failure associated with above-cost pricing and itself provides considerable market assistance to the smaller operators.

11.2.3.4 The level of asymmetry afforded to smaller operators also increases from the levels at the end of the regulatory period of the 2010 Regulations in both absolute (from 4c to the new 11c level) and relative (10% asymmetry compared to 55% asymmetry) terms. This level of asymmetry in relative terms is at the high end of those levels in other jurisdictions.

11.3 <u>Use of December 2013 data instead of more recent data:</u>

11.3.1 Several licensees requested clarity on the use of 2013 data to calculate market shares in the relevant markets, which are then used to determine whether a licensee qualifies for asymmetry or not, rather than data from a more recent date. MTN submitted that according to its estimates, *"Cell C may well have already crossed, or will, within the next few months cross the proposed '20% share of termination traffic' threshold. Using December 2013 data and maintaining asymmetry throughout the regulatory period, regardless of market developments, is therefore wholly inappropriate."* MTN would have preferred the Authority to use more recent data.[29]

[29] MTN submission p 2

11.3.2 Vodacom also disagreed with the Authority's stance that eligibility for asymmetry should depend on data as at December 2013. Vodacom submitted that *"the criteria should be applied on a regular basis to ensure that actual market share tracks the BULRIC+ model assumptions which Vodacom understands is the primary basis for determining the level of asymmetry."*[30]

11.4 <u>Authority's decision:</u>

11.4.1 The Authority requested market information up to 31 December 2013, which was the information that was available to licensees as historical information when the Authority began the 2014 Review. The Authority's decision to use December 2013 as the point to measure share of terminating minutes is in part informed by the fact that recent changes in the market were partly due to the high asymmetry imposed by the February Regulations.

11.4.2 The Authority imposed the cut-off point for determinations of market share as December 2013 as the Authority has the relevant data for all licensees as at this date. In addition, the Authority performed a cross-check against MTN's estimations of market share as at May 2014 and found that there was no difference between market share at that date (May 2014) and the earlier date (December 2013). As such, the Authority did not agree that using later data would make any difference to which licensees qualified for asymmetry or not.

11.5 <u>Decision to maintain asymmetry throughout the regulatory period:</u>

MTN disagreed with the maintenance of asymmetry throughout the regulatory period, regardless of market developments.[31]

[30] Vodacom submission p 19.

[31] MTN submission pp 2, 3, and 12.

11.6 Authority's decision:

11.6.1 The Authority's rationale for maintaining asymmetry for the whole period that the Final Regulations will apply is that the BU-LRIC model for efficient small operators over the regulatory period already incorporates growth in the share of terminating minutes over time and the asymmetry level thus narrows significantly over the regulatory period. Furthermore, the base-rate set for larger licensees is based on a market share of terminating minutes that is significantly greater than the 20% threshold.

11.6.2 As such, not only is the Authority already adjusting the rate of asymmetry based on expected market developments, but it would be prejudicial to smaller licensees reaching the 20% threshold to then have a rate (the large-operator rate) imposed on them that is based on a market share that is significantly greater than the 20% threshold they may potentially breach during the course of the regulatory period. It is, therefore, incorrect to conclude that once an operator passes this threshold they no longer face scale disadvantages relative to the larger licensees. For these reasons, it is more appropriate to provide a time-based period for asymmetry which, as some licensees note, is international best practice.

11.7 Sunset clause:

11.7.1 MTN submitted that the Authority should specify a sunset clause for asymmetry, with a clear time limit set on the imposition of asymmetric rates. This is because, according to MTN, asymmetric rates are not a costless policy and they distort competition and efficiency.[32]

11.7.2 Vodacom agreed with the Authority's proposal to set asymmetric rates for a finite period, and that existing licensees

[32] Ibid p 12.

should not continue qualifying for asymmetry after this period.[33]

11.8 Authority's decision:

The Authority deleted Paragraph 2.2 of Annexure A of the Draft Regulations in the Final Regulations as this was not considered necessary, given that the decision whether to continue with asymmetry at the end of the regulated period provided for in the Final Regulations will be considered as part of the next review. It would be premature to decide now whether asymmetry will continue to be appropriate at the end of September 2017.

11.9 Time limit on asymmetry:

11.9.1 MTN submitted that "asymmetry should expire no later than one year after the commencement of the Regulations. MTN also notes that Cell C has been in operation for more than 13 years and has already achieved a subscriber market share of well above 20%".[34]

11.9.2 Cell C submitted that "increased rates of asymmetry should apply until such time as smaller operators achieve scale." This is regardless of the time that the operator has been in the market.[35]

11.9.3 Vodacom submitted that the level of asymmetry proposed for the charge-control end period is too high to assist with a smooth transition towards the next charge-control period.[36]

11.10 Authority's decision:

11.10.1 The Authority's view is that termination rates in South Africa were priced significantly above cost for a very significant

[33] Vodacom submission p 20.
[34] MTN submission para 3.3.5.
[35] Cell C submission p 4.
[36] Vodacom submission p 20.

period following the entry of the two smaller mobile licensees and remained well above cost even in the first regulatory period until March 2014. This created a distortionary competitive situation that hindered the growth of these smaller networks.

11.10.2 Furthermore, the regulatory period between 2010 and 2013 did not have cost-based asymmetry and the asymmetry afforded for most of that period was lower than actual cost differences. These market circumstances have informed the Authority's approach to asymmetry in the current regulatory period and, in the Authority's view, warrant a further regulatory period of asymmetry. These market circumstances are significantly different to those in other jurisdictions in Africa.

11.10.3 The Authority reiterates its position that *"an indefinite asymmetry provision potentially also holds the danger that smaller and late entrants would have less of an incentive to become efficient operators. In addition, once termination rates for larger well-established operators are regulated at marginal costs this would reduce the negative externalities faced by smaller operators and late entrants."*[37]

11.11 <u>Use of share of termination minutes:</u>

Cell C requested that the Authority clarify its decision to use share of termination minutes instead of retail revenues or subscriber numbers as the qualifying criterion for asymmetry.[38]

11.12 <u>Authority's decision:</u>

11.12.1 The Authority's view is that the actual cost of termination depends on the volume of terminating voice-call traffic, as this

[37] Briefing note on asymmetry in the mobile and fixed wholesale voice call termination above n 16.
[38] Cell C's submission p 14.

determines the unit cost of calls on a network.

11.12.2 In terms of that calculation, network costs are allocated based on the share of termination volumes relative to voice, data and other services. On a higher level, these costs are allocated and then divided by the volume of terminating minutes in order to determine the unit cost of termination.

11.12.3 It is further the Authority's view that the lower call volumes are, relative to the network requirements of providing national coverage, the higher per-unit call costs will be. It is therefore call volumes and not retail revenues or subscriber numbers that form the basis for determining unit costs.

11.13 Use of cost differences:

Cell C requested that the Authority explain why it used cost differences to determine the level and extent of asymmetry. Cell C argued that non-SMP licensees should not be restricted to charging mobile termination rates equivalent to their costs (and definitely not the costs of a hypothetical efficient operator) as this would not be a pro-competitive, proportionate or necessary remedy.[39]

11.14 Authority's Decision

The reasons for the use of cost differences to determine the level of mobile termination rates are that termination rates that are based on cost differences are both an objective and measurable basis for accurately determining the level of asymmetry. This receives wide support from regulators in other jurisdictions.

## 12. ANNEXURE B

12.1 Submissions received

12.1.1 ISPA indicated that its members continue to experience the following difficulties in interconnecting with certain

[39] Cell C submission p 4.

incumbents:

12.1.1.1 differing approaches to bank guarantee / security deposit requirements;

12.1.1.2 differing approaches to minimum monthly guarantees / floor volumes;

12.1.1.3 differing approaches to the service licences required for interconnection; and

12.1.1.4 the refusal to interconnect at financially and technically feasible points of interconnection.[40]

12.1.2 In order to resolve the above difficulties, ISPA requested that the Authority stipulate in Annexure B ("Minimum content of a [RIO]") that—

12.1.2.1 a bank guarantee or security deposit must be calculated against prior or projected traffic over a three-month period and that floor-volume commitments based on Rand values are prohibited as being neither fair nor reasonable; and

12.1.2.2 A RIO should specify that an individual ECS licence is sufficient to found a right to request interconnection under Chapter 7 of the ECA and a corresponding obligation on the part of the interconnection provider to provide interconnection.[41]

12.2 Authority's Decision

The Authority made no changes to Annexure B except to expand the section on availability and points of interconnection in point 1.5 to read as follows:

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[40] ISPA submission p 4.

[41] Ibid pp 5 - 6.

"Full details of the availability and location of points of interconnection which shall include public internet exchange points (IXPs) at which the licensee has a presence".

The Authority does not intend to be prescriptive in these Regulations regarding the content of the RIO. The RIO is intended to provide a structural framework upon which licensees can rely as they engage in substantive and detailed investigations.

## 13. Price Control: Cost-orientated Pricing

13.1 Wholesale voice call termination rates

13.1.1 As discussed above, the Authority based the termination rates in the Final Regulations on (a) the results of its TD-LRIC model, (b) the results of its BU-LRIC model and (c) principles informing asymmetry. The issues below were raised by various licensees and resulted in the Authority re-calibrating both the TD-LRIC and BU-LRIC models and in a change in the termination rates mandated in the Final Regulations. The starting point for the methodology used was that the current actual costs based on the TD-LRIC results and the ending point was the hypothetically efficient operator's costs using the BU-LRIC model. The Authority discusses each in turn:

13.2 Weighted Average Cost Of Capital ("WACC")

13.2.1 *Gearing: submissions*

Vodacom disagreed with the gearing ratio of 25% used by the Authority and proposed a lower gearing ratio, based on their actual gearing ratio.[42]

13.2.2 *Authority's decision*

The Authority retained a gearing ratio of 25%. It should be noted that this gearing ratio is still much lower than the actual

[42] Vodacom's letter dated 29 August 2014.

gearing ratio of South African licensees (based on the book value of equity and debt) and also much lower than the notional gearing ratios applied by other South African regulators.[43] This gearing ratio is also at the lower end of the range used by Ofcom (the British communications regulator).

13.2.3 *Debt margin: submissions*

Vodacom disagreed with the 1.5% debt margin used by the Authority and proposed a margin of 2.5% based on their actual debt margin.[44]

13.2.4 *Authority's decision*:

The Authority retained a 1.5% debt margin because A, AA and AAA-rated South African corporates had credit spreads (i.e. the difference between corporate bond yields and yields on risk-free securities) of around 150 basis points or below for most of the nine-year period from January 2003 to February 2012. These credit spreads were higher in the three years following June 2008 (i.e. during the global financial crisis) but returned to pre-crisis levels (i.e. 150 basis points or below) by February 2012. Further, this is aligned with Ofcom's 2011 Review.[45]

13.2.5 *Use of industry WACC for bottom-up modelling*: *submissions*

Cell C disagreed with the use of the same WACC for large and small licensees, claiming that it failed to reflect cost differences between them.[46]

13.2.6 *Authority's decision*:

It is common practice internationally to make use of an

[43] For example, the National Energy Regulator of South Africa ("NERSA") applied a 65% gearing ratio to Eskom's Multi-Year Price Determination ("MYPD").
[44] Vodacom's letter dated 29 August 2014.
[45] Ofcom mobile termination rates review 2011 table A8.9 of Annex 8.
[46] Meeting between ICASA and Cell C held on 16 September 2014.

industry WACC rather than one for a specific operator. This is especially the case for bottom-up models where it is a hypothetically efficient operator (as opposed to an actual operator) being modelled.

In such a case, the regulator will consider optimal gearing for both large and small licensees. The gearing level used by the Authority is at the bottom end of what has been used by regulators such as Ofcom in the UK and NERSA in South Africa. In addition, according to a PWC valuation methodology survey, firms with a market capitalisation of more than R2 billion do not attract a small-firm risk premium in addition to the industry risk premium in the South African market.[47] As such, there is no basis to consider an additional risk premium for smaller licensees with equity values beyond this threshold. Finally, the WACC used is a nominal WACC which is generous, given that regulators such as Ofcom make use of a real WACC (inflation-adjusted) only in their assessments.

*13.2.7* *Use of a beta of 0.72: submissions*

MTN submitted that a beta of 0.86 would be more appropriate than the 0.72 estimate derived by the Authority for the industry wide beta.[48]

13.2.8 *Authority's decision*:

It is common practice internationally to make use of an industry-average beta rather than that of a specific operator. This is also preferable in a context where an operator's beta is influenced by operations in markets other than South Africa, as is the case for some of the licensees. South Africa is a stable market with lower risks than some of the other markets in

[47] pwc 'An African perspective: Valuation methodology survey 2012' available at http://www.pwc.co.za/en_ZA/za/assets/pdf/valuation-methodology-survey-2012.pdf.
[48] MTN letter dated 3 September 2014.

Africa. The Authority elected to use the beta of Vodacom, which is less exposed to foreign, more high-risk markets as this provided a closer proxy to the beta of South Africa operations only.

13.2.9 *Different WACC for fixed and mobile*:

Telkom submitted that the WACC for fixed-line operators should be different to the WACC for mobile operators as fixed-line licensees face greater risks due to declining fixed-line subscriber numbers.[49]

13.2.10 *Authority's decision*:

The Authority notes that Telkom's actual equity beta (according to the Reuters) was, at the time of the publication of the Draft Regulations, 0.59 whereas the Authority used a beta of 0.72. The application of the licensee's specific beta would *reduce* Telkom's WACC. The reason the Authority did not use licensees' specific betas was that it was more likely to reflect the risks associated with non-termination services.

## 14. Top-Down Model Changes

14.1 <u>Access line deficit:</u>

Telkom argued that the access-line deficit it faces should be partially recovered through termination rates. It proposed that at least 20% of this deficit be recovered through termination rates. [50]

14.2 <u>Authority's decision:</u>

The Authority used the TD-LRIC model to determine the starting point for termination rates in the first year. The exclusion of the cost of access for fixed-line is in accordance with international best

[49] Telkom submission on draft regulations
[50] Telkom submission pp 7 – 8.

practice[51] as such costs can appropriately be recovered from monthly line-rental or subscription revenue.

14.3 Work-in-Progress:

MTN pointed out that work-in-progress had been left out of the TD-LRIC model formula and argued that it should have been included.[52]

14.4 Authority's decision:

Work-in-progress was left out intentionally as it represents assets under construction.

14.5 Depreciation method:

Telkom disagreed with the use of tilted annuity as opposed to other depreciation methodologies. It conceded, however, that tilted annuity is a common approach adopted in other jurisdictions.[53]

14.6 Authority's decision:

As a test, the Authority used other depreciation methodologies and these made little difference to the final calculation. The Authority, therefore, retained the use of tilted annuity on the basis that it is the closest approximation to economic depreciation, in addition to it being a globally accepted standard in cost modelling for termination services.

14.7 Working Capital:

All licensees required clarity on the working capital calculations.[54]

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[51] GSMA 'Comparison of fixed and mobile cost structures' available at http://www.gsma.com/publicpolicy/wp-content/uploads/2012/09/Tax-Comparison-of-fixed-and-mobile-cost-structures.pdf.
[52] MTN meeting with ICASA on 18 September 2014
[53] Telkom meeting with ICASA on 19 September 2014
[54] Meetings with Vodacom and MTN on 18 September 2014 and meetings with Telkom and Cell C on 19 September 2014

14.8 Authority's decision:

The Authority confirms that working capital is derived from the difference between receipts and payments for termination services only (termination balance, other words). Where a licensee is a net payer on 30-day terms, its working capital is usually negative.

14.9 Conversion factors:

Vodacom submitted that voice-prioritisation and 3G-handover factors had incorrectly been ignored in the conversion table in the BU-LRIC model.[55]

14.10 Authority's decision:

The Authority updated its models to take into account the conversion factors for voice-prioritisation and 3G-handover factors. The Authority further adjusted the minutes-to-megabytes conversion factor from 16 kilobytes per second ("kbps") to 12.2 kbps, as per licensee submissions. The Authority also changed the conversion rates in order to bring them in line with the conversion-table assumptions for all licensees. The Authority did so in order to ensure consistency in the assumptions adopted across all models for all licensees.

14.11 Parity between fixed and mobile termination rates:

14.11.1 Telkom submitted that removal of parity "is likely to harm competition and inhibit investment in the fixed line network infrastructure. Consequently, immediate parity between operators should be implemented."[56]

14.11.2 Telkom indicated further that parity "supports effective competition between operators and seeks to incentivise efficient levels of investment on a level playing field." In addition, Telkom stated that the lack of parity in the past had

[55] Letter from Vodacom 18 September 2014, page 4

[56] Telkom submission p 16.

led to several arbitrage opportunities in the market to the detriment of fixed-line operators.[57]

14.12 Authority's decision:

14.12.1 The methodology adopted by the Authority was to set termination rates based on LRIC. The TD-LRIC and BU-LRIC modelling of current and projected costs revealed substantial differences in the costs of mobile and fixed networks which indicated that cost convergence had not occurred and therefore parity was not warranted.

14.12.2 In considering the different cost structures of fixed and mobile operators, the Authority examined the differences in their network architecture. Both fixed and mobile operators incur costs to meet the demand for subscription, busy-hour calls, busy-hour traffic and the need to provide the required level of network coverage. However, there are some notable differences between the two types of network, including—

14.12.2.1 an increase in traffic in the fixed network will only result in an increase in core-switching and transmission costs, but not in the access network costs;

14.12.2.2 an increase in traffic in mobile networks will result in an increase in all network elements including the radio access network costs;

14.12.2.3 coverage-related costs in fixed networks are typically recovered from traffic services, as is the case with mobile networks; and

14.12.2.4 signalling and location activities are more material in mobile networks than in fixed-line networks.[58]

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[57] Ibid p 19.
[58] Ibid.

15. **Bottom-Up Modelling Changes**

15.1 Busy-hour Rate for Data:

The Authority used a busy-hour rate for data of 13.3% for the Random Access Network ("RAN") utilisation. Suggestions were made by MTN[59] and Cell C[60] to lower the proposed rate to be in line with their subscriber-usage data.

15.2 Authority's decision:

The Authority revised the rate to 8% after consultation with licensees. The revision was also in accordance with international benchmarking.[61] This change resulted in a significant change in the initial results of the BU-LRIC model.

15.3 Market share for hypothetical efficient network operator:

15.3.1 Cell C argued that the BU-LRIC model incorrectly assumes a market structure, in 2017, of two hypothetical efficient SMP licensees, each with a 44% market share, and a hypothetical efficient non-SMP operator with a 16% market share. Cell C submitted that the market structure should be 44-44-12 for termination traffic and 45.5-45.5-9 for origination traffic.[62]

15.3.2 MTN submitted that a significant change in the market had occurred since December 2013 and thus queried the market shares used in the BU-LRIC model.[63] MTN indicated that if Vodacom and MTN are considered to have a combined 87.2% share of termination traffic, this suggests a combined share for Cell C and Telkom Mobile of 12.8%. This is inconsistent

[59] BU-LRIC model consultation meeting between the Authority and MTN on 17 September 2014.
[60] BU-LRIC model consultation meeting between the Authority and Cell C on 16 September 2014.
[61] See, for example Deloitte & Touche 'MTR Model Specification Document for Ireland' available at www.comreg.ie/_fileupload/publications/ComReg1429a.pdf; Coleago Consulting 'Revised spectrum forecasts using the new spectrum model: Spectrum required for various mobile communications markets in 2020' available at http://www.gsma.com/spectrum/wp-content/uploads/2014/01/Coleago-Report-on-Spectrum-Demand-Model-Results.Pdf.
[62] Cell C's submission in response to the Draft Regulations ("Cell C submission") p 14.
[63] MTN's submission in response to the Draft Regulations ("MTN submission") p 7.

with the suggestion that the non-SMP MNO has 12% (or 24% across the two of them). This also does not reflect MTN's understanding of current traffic shares. MTN further submitted that if current traffic shares were used, the blended share of Vodacom and MTN would be substantially less than 43.6%.[64]

15.4 Authority's decision:

15.4.1 The Authority's BU-LRIC model assumes a single large hypothetical efficient mobile operator and a single small hypothetical efficient mobile operator. This assumption does not seek to model actual market shares. The rest of the market share is allocated to other operators which make up a blend of large and small operators. . This model seeks to understand costs of a large and small hypothetical efficient operator within the total market space and how they are affected individually. They are not based on actual operators but based on hypothetical operators with similar characteristics.

15.4.2 The Authority's position is that, by 2017, the large operator would have a market share of 43.6% and the small operator would have 16%. The growth in market share for the small operator is modelled to gain market share from other operators. An exact determination of market share losses per specific operator cannot be modelled. This is not based on actual market share but on hypothetical efficient operators.

15.4.3 The Authority's decision to use December 2013 as the point to measure share of terminating minutes is in part informed by the fact that developments in the market were largely due to the high asymmetry that resulted from the mobile termination rates that came into effect in April 2014, and not through any

[64] MTN submission p 17.

other market factors.

15.5 RAN:

The RAN was dimensioned at 20% extra head room. However, licensees requested a 5% increase as it would result in better quality of service.

15.6 Authority's decision:

The Authority implemented this proposed change. The model was adjusted and the asset utilization factor for RAN was increased from 20% to 25%. This allows operators to plan for future growth and provide better Quality of Service.

15.7 Price trends including change in FOREX:

Vodacom indicated that the BU-LRIC model "...assumes that the hypothetical Large MNO enters the market in 2013 and purchases its entire network in that year. In subsequent years, only incremental investments are made to capture service volume and coverage growth. The initial investment is made at Euro/Rand and US Dollar/Rand exchange rates of 12.82 and 9.65 respectively. The value of the Rand is expected to decline over time against the Euro and US dollar, resulting in exchange rates of 14.68 and 11.07 by 2017. However, in the model the decline in the value of the Rand is not reflected in the value of the assets purchased in 2013, but only on incremental investments made in the years between 2014 and 2017. This is incorrect, as the exchange rate should affect the replacement cost of all assets in each year as under the principle of current cost accounting the price of each asset should be updated each year in order to derive the appropriate current valuation." [65]

[65] Vodacom's letter to ICASA dated 18 September 2014 pp 4 - 5.

15.8 Authority's decision:

The Authority accepted Vodacom's submission. The price trend in the BU-LRIC model was accordingly adjusted to calculate the change in price when the nominal price trend was applied and then converted to the local South African currency.

15.9 Cost-Volume Relationship (CVR) Allocation:

MTN proposed a more granular allocation of voice and data, based on the network-dimensioning rules, because it was of the view that this would assist in understanding the actual and relative allocation of costs towards voice and data for the large and small licensees.[66]

15.10 Authority's decision:

The Authority agreed with MTN's proposal and adjusted the voice and data busy-hour volumes in line with the network-dimensioning rules. The unit used was minutes, for both voice and data traffic. A split was made between 2G voice, 3G voice, 2G data and 3G data. The allocation on the BTS and BSC was done based on the ratios between 2G voice and 2G data. The allocation to NodeB and RNC was done based on the ratios between 3G voice and 3G data. The transmission and mobile core was done on the overall voice vs data ratio as all items carry both 2G and 3G traffic. This provides for a more granular dimensioning of the network and a more accurate allocation of costs to each element.

15.11 2G and 3G voice and data traffic:

Vodacom raised a concern about "the calculation of the total network load split between voice and data" and stated that "this split is used to separate the cost of common homogeneous cost categories (HCC) between voice, data and SMS. The split is derived by combining both 2G and 3G voice and data traffic to calculate an overall proportion for the network and so does not differentiate by technology.

[66] MTN's letter to ICASA dated 29 August 2014.

However, the split is applied to the technology specific network components. . . this split is incorrect; it will lead to too little cost being allocated to voice in respect of 2G technology, and too much cost being allocated to voice in respect of 3G technology. Vodacom expect[s] that the impact will be to understate the costs of voice in the model, as total 2G costs are greater than 3G."[67]

15.12 Authority's decision:

The Authority considered this concern and re-calibrated using the cost volume relationship in combination with the routing factor table to ensure that cost allocations are based on the usage of network elements. Only similar units were added up for usage and were allocated to network elements and services. The allocations were based on new information received from licensees. Data services are allocated to data network elements while voice services are allocated to relevant voice network elements. Allocation of voice and data services are done proportionally based on the CVR and Routing Factor table to elements that offer both voice and data services in a single network element.

[67] Vodacom letter to ICASA, 18 September 2014, page 4