



22 November 2013

**Independent Communications Authority of South Africa**

Attention: Mr Christian Mhlanga  
Per email: [cmhlanga@icasa.org.za](mailto:cmhlanga@icasa.org.za)

CC. The Chairperson [chairperson@icasa.org.za](mailto:chairperson@icasa.org.za)

Dear Sir

ISPA SUBMISSION ON THE DRAFT CALL TERMINATION REGULATIONS 2013

**Introduction**

1. ISPA refers to the Authority's invitation to comment on the Draft Call Termination Regulations 2013 published pursuant to Section 67(4) of the Electronic Communications Act 36 of 2005 in GG 36919 on 11 October 2013 ("the Draft Regulations") and sets out its submissions below.
2. ISPA supports the finalisation of the process relating to wholesale call termination rates as soon as possible but records its wish to be involved in public hearings or other procedural steps which the Authority deems necessary prior to the finalisation of a new wholesale call termination rate regime.
3. The Authority will appreciate that the publication of the Draft Regulations has created a degree of uncertainty into the market around future rates. It is important to ISPA members that the Draft Regulations are finalised within the shortest possible timeframe so as to allow certainty and facilitate planning.

**Competition in the fixed voice call market**

4. ISPA is concerned that the Draft Regulations and associated process indicate that the Authority has focused primarily on the mobile wholesale call termination rate at the expense of the fixed wholesale call termination rate.

---

**ISPA Management Committee:**

Ant Brooks\*, Graham Beneke, Marc Furman, Jenny King,  
Duncan Martin, Mohammad Patel, Mike Silber, Warrick Ward-Cox, Elaine Zinn\* (\*ex officio)

5. While ISPA appreciates the current pre-eminence of mobile networks as a terminators of voice calls in South Africa, the Authority cannot, with respect, simply ignore the stark lack of competition in the fixed voice call market on the basis that it lacks the regulatory powers and tools to do so. The truth is rather that it has failed to use or implement properly a number of measures which would be far more powerful than asymmetrical termination rates in promoting competition in this market. These include:
  - 5.1. Carrier Pre-Selection (CPS): the Authority is aware that the time and effort spent on CPS to date has been wasted due to the reluctance or inability of the Authority to even initiate a process for the regulation of origination rates. Notwithstanding this ISPA notes that the Authority in its presentation to the Portfolio Committee on Communications on its Annual Performance delivered on 15 October 2013 claims to have achieved the target of developing pro-competitive remedies in the form of CPS and implementing them.
  - 5.2. Non-Geographic Number Portability: this is a relatively simple regulatory intervention and ISPA has verified that the NPC is capable of implementing number portability of non-geographic numbers. Voice providers with a significant portion of their inbound revenue derived from ported numbers (currently all geographic) would be in a position to achieve higher termination revenue if non-geographic number portability had been implemented (i.e. the same effect as the proposed rates asymmetry but with arguably less complexity).
  - 5.3. Reform of the number portability framework: difficulties and delays with the number portability process have previously been notified to the Authority by ISPA but the Authority, while recognising the need for a review of the applicable framework, has deferred undertaking this.
6. Effective implementation of these three regulatory interventions alone would serve to promote competition by allowing new entrants to win market share rather than just subsidising the inefficiencies of their smaller market share.

#### **The cost of interconnecting in South Africa**

7. ISPA submits that there are a number of other measures which the Authority should be considering in order to reduce the actual cost of interconnecting in South Africa. For the most part these measures amount to enforcement of the Interconnection Regulations 2010. In particular ISPA notes

that there is still no clarity on the obligation on interconnection providers to offer interconnection services at points on their network where it is economically and technically feasible to do so.

8. While ISPA appreciates that it may not be possible for the Authority to bring clarity to the above within the context of the current process, it does fall within the general scope of reducing call termination costs to ensure that interconnection between licensees takes place as efficiently as possible.
9. INXs are specifically listed in Regulation 13(1)(f) of the Interconnection Regulations 2010 as locations for interconnection to be implemented while there has been rapid uptake of co-location services offered by vendor-neutral data centres in South Africa over the last 3 – 5 years. The majority of interconnection in South Africa takes place at INXs and in data centres.
10. Furthermore Regulation 13(2) of the Interconnection Regulations 2010 explicitly obliges interconnection providers to “offer interconnection services at any financially and technically feasible point upon request by an interconnection seeker”.
11. Notwithstanding the above, incumbent operators currently refuse to implement voice interconnection outside of locations specified by them. This dramatically increases the cost of the Point of Interconnection Link (POIL) for the interconnection seeker.
12. Telkom, for example, is able to sell its city-to-city international capacity directly from Teraco House in Isando to London (at no extra cost to the interconnection seeker for the link to Teraco). It cannot, however, offer voice termination from Isando: this requires the procurement of an ATM or Metro Ethernet POIL to the Digital Primary Switching Unit (DPSU) at the New Doornfontein exchange. Bluntly stated: Telkom appears to be able to provide the same service at either no cost or at a significant premium according to its own whim.
13. The future of voice services in South Africa is that such services will be IP-based and regarded properly as a low-bandwidth application charged for on the basis of data consumption. The current imposition of legacy voice-based technical restrictions is in conflict with principle of interoperability set out in the Interconnection Regulations 2010 and is preventing greater adoption of more affordable IP-based voice solutions by South African consumers.

## **The Proposed Glide Path**

14. ISPA supports the principle of reducing wholesale call termination rates through a glide path.

15. As regards fixed wholesale call termination rates:

15.1. ISPA has argued below for the immediate convergence of the Within ON Code (WON) and Beyond ON Code (BON).

15.2. ISPA submits that the fixed rate should converge with the mobile rate at the end of the glide path period.

16. As regards mobile wholesale call termination rates:

16.1. ISPA members are not providers of wholesale mobile termination services – although they have a clear and direct interest in wholesale mobile termination rates – and do therefore not have an evidence-based position of the proposed glide path for these services.

## **Proposed asymmetry in the fixed and mobile wholesale call termination markets**

17. ISPA members agree that a degree of asymmetry should be applied to the rates for wholesale call termination in the fixed market and that this is beneficial to competition and the promotion of SMMEs.

18. There is no broad consensus on the degree of asymmetry which provides the necessary spur to competition without creating additional arbitrage opportunities. The upper threshold in this regard is agreed to be 50%, but there are members who believe that a lower rate of 10% would be appropriate.

19. A number of members argue that a high degree of asymmetry only leads to international routing challenges where rates vary significantly between operators. Where there are fixed ranges or fixed rates, the current regime shows that the market will tolerate a 20% asymmetry and this could be extended as high as 50%. These members do not regard a 10% asymmetry as being effective in promoting competition.

20. An alternative view also notes that asymmetry has the potential to cause problems with the international market and for smaller operators, particularly in the context of number portability. Onward routing of internationally originated calls often does not happen (as competition exists to

offer the lowest blended termination rates) and call failures become more prevalent. These, unsurprisingly, happen mostly towards newer entrants to the market and smaller operators, and cause harm to them. The benefit of asymmetry starts getting offset by the lost termination revenue from calls not terminating and customers cancelling. The greater the degree of asymmetry, the worse the impact on the international market. The international market is relatively tolerant of the current 10% asymmetry but was not at all tolerant of the asymmetry that existed prior to the Call Termination Regulations 2010.

21. This argument continues that operators with the largest market will, by default, see the most commercial benefit to offering international termination, because their risk exposure is limited in respect of the calls terminating on their own network. If you have 90% of the market share, your risk of losses from termination fees onward payable is only 10%. This means that, without pro-competitive measures, incumbents will continue to control the market for international termination (and be inclined to break onward routing to new entrants to maintain their market share). Asymmetry aggravates this because the incumbents mark up those transit calls even more and call failures get blamed (both rightly and wrongly) on the foreign operator refusing to route towards the more expensive destinations.
22. ISPA notes that were the BON and WON rates to be converged as argued for below, this would enable the Authority to apply greater asymmetry in the fixed rate without increasing retail pricing.

#### **Application of asymmetry to incumbents & leveraging of asymmetry across markets**

23. It is not clear to ISPA why Vodacom or MTN should benefit from asymmetry within the fixed line space or Telkom within the mobile space.
  - 23.1. These are companies and networks that have had extended periods within which to establish their networks and market share.
  - 23.2. It is generally not the case that they are using different networks and different investments for the two markets. Rather they are using the same transmission networks, the same POIs (and therefore shared switching infrastructure) for fixed and for mobile and a review of their financials will demonstrate that they're funding their non-SMP services from profits generated from their SMP services.

24. ISPA submits that the Authority should take note of the potential for licensees enjoying a high degree of asymmetry in the mobile termination market to leverage this to gain market share in the fixed termination market. This is particularly the case given the blurring in the distinction between the fixed and mobile markets.

### **Convergence of Wholesale Call Termination Rates**

25. In its submission in respect of the process leading up to the Call Termination Regulations 2010, ISPA stated the following:

*38. There is a strong view amongst ISPA's members that the distinction drawn between fixed and mobile termination rates is artificial and that the Authority should be guiding industry towards a point in the short-to-medium-term at which this distinction is no longer relevant in determining termination rates.*

*39. ISPA is of the view that a convergence of fixed and mobile termination rates is a natural consequence of the multi-level convergence taking place in the industry and that the rationale for a convergence of rates will only become stronger over the period for which the Regulations are intended to apply.*

*40. ISPA understands all too well the historical underpinnings of the distinction and the rationale behind its use in the Regulations. Nevertheless, the consequence of the undue retention of the distinction is the continuing opportunities for arbitrage presented and the continuing scope for anti-competitive conduct on the part of the MNOs in particular.*

*41. Already there appears to be a general view that the fixed call termination rate will apply in respect of operators such as Telkom and that the mobile call termination rate will apply in respect of operators such as Vodacom. This completely overlooks the fact that the converged licensing regime of the ECA allows all holders of i-ECNS and i-ECS licenses to provide both fixed and mobile services as well as services that are neither fixed nor mobile (e.g. toll-free and value-added services).*

*42. ISPA accordingly calls on the Authority to issue a forward-looking statement which indicates its intention to engineer a convergence in fixed and mobile convergence rates during the first review of the Regulations. ISPA appreciates the need for the management of consumer protection issues and the implications of number portability in this process.*

26. ISPA retains this position.
27. As noted above many operators use the same facilities in the termination of fixed and mobile calls. The only remaining differentiating factor for cost as between the two markets is the last mile, but the emergence of LTE is likely to lead greater equivalence of costs in this regard.
28. ISPA further submits that the first step in reaching the required convergence is through the immediate collapsing of the distinction between BON and WON termination rates through appropriate provisions in the final version of the Draft Regulations.

### **The BON/WON distinction**

29. In the Explanatory Note accompanying the Draft Regulations the Authority states that after analysis of information collected it “sees no need to amend the definitions of markets as determined in 2010 because there is no technical change that changes the characteristics of termination to a mobile versus fixed location”.
30. ISPA does not agree with this statement and refers to its general submission set out above to the effect that it is more the case that the Authority has not paid sufficient attention to the fixed wholesale call termination market.
31. ISPA submits that this market is highly dynamic and that - given convergence and the growth of VoIP (including by Telkom) the BON/WON distinctions are no longer relevant and should be collapsed so that there is a single SMP rate for fixed wholesale call termination.
32. ISPA believes that there is widespread support for this position.
33. The principle rationale for the distinction is rooted in historical considerations which are simply no longer of any substantial application. In particular the argument that Telkom incurs additional costs through the provision of national transit services and that the cost of doing so is reflected in the differential between the two rates can be easily demonstrated to be fallacious.
  - 33.1. The market for the provision of international call transit services is both highly competitive and unregulated. In this market, for example, Telkom allows the origination of a call from any location in South Africa to Canada – across Telkom’s national and international backbones - at a cost of R0.028 per minute. A call on the same basis to France is charged at R0.041 per minute.

- 33.2. Taking into account the requirement to pay a termination fee to a third party provider and the reasonable assumption that the rate charged includes a profit to Telkom, it is immediately evident that the current BON/WON rate differential represents a substantial premium to the actual cost incurred by Telkom for the provision of national call transit services.
- 33.3. If the cost of termination in Canada is assumed for the sake of argument to be zero and it is further assumed that the cost to Telkom of its international transit of the call is likewise zero, it follows that Telkom is able to and does make a profit from carrying calls across its national backbone at a rate of 2.8 cents per minute. ISPA's belief is that the cost to Telkom is significantly lower than this.
- 33.4. The current 7 cents differential between BON and WON calls is accordingly inefficient and not justified within the context of the central aim of reducing termination rates towards cost.
- 33.5. ISPA notes that at a retail level Telkom has standardised its pricing for local and national rates at R0.40<sup>1</sup>.
34. ISPA submits that the distinction does not serve consumer interests. Rather it reduces pricing transparency as – with high level of geographic numbers ported – consumers do not have a clear appreciation of call charges to a particular number. Abandoning this distinction would immediately create greater clarity on fixed line pricing for consumers.
35. It is further the case that the BON/WON distinction introduces unnecessary complexity and implementation costs.
- 35.1. ISPA's members have indicated that Telkom is challenged in the implementation of the billing and technical implementations of the current model.
- 35.2. The current model does not represent efficient use of interconnection infrastructure and requires unnecessary implementation expenditure. Some operators refuse to do redundant routing via different parts of the country because of the cost implications of redundant routing being subject to BON rates. Interconnect partners are required to maintain points of interconnect (POIs) in five regions and are further required to make each of them redundant,

---

<sup>1</sup> Rates are expressed per minute ex VAT unless otherwise specified.



i.e. 10 POI's across the country. Telkom is the primary beneficiary, through facilities leasing charges (POILs), even with respect to interconnects with other operators.

36. Looking to the future, it is clear that IP interconnection is becoming the standard for interconnection. From a cost perspective, IP interconnection removes some of the cost differences between national, local and even international interconnection, further buttressing the argument for the convergence of the BON and WON rates.

#### **Determining a converged rate where there is no BON/WON distinction**

37. The consensus position amongst ISPA members is that this should be done using a simple average. This suggests a rate of R0.155.

38. This position is based on the following considerations:

38.1. The Call Termination Regulations 2010 proposed the use of a weighted average in order to arrive at a termination rate for calls to non-geographic numbers. This has largely been ignored by industry.

38.2. Current termination rates favour far-end handover while a blended rate favours near-end handover. Utilising current termination traffic patterns to determine future traffic termination patterns is illogical given that a converged rate will lead to a change in traffic flows as licensees re-route in accordance with the most commercially favourable routing.

38.3. It is therefore simpler to take an average.

39. An alternative view using a more nuanced average and based on analysis provided by an ISPA member, indicates that currently the vast majority of voice calls terminated by Telkom are handed over within ON area code due to the vast majority of calls in South Africa being mobile-originated. All of the MNOs have established or are at an advanced stage of establishing their own extensive national backbones and interconnecting with Telkom in the five area code regions. Call traffic statistics from member networks indicate that approximately 17% of Telkom's termination is to non-geographic numbers. This indicates a weighted average of R0.1319. If a national transit cost of R0.02 is added and it assumed that converged rate would tend towards an equal split between within and beyond ON code termination as the MNOs change their call routing, then an average SMP rate of R0.14 appears realistic.

### **Specific queries raised by the Authority in the one-on-one consultation**

40. Is ongoing asymmetry a useful and appropriate regulatory intervention?

40.1. There is strong view within ISPA that asymmetry promotes higher retail tariffs and that there is support for this conclusion in research conducted in European markets. This view holds that ongoing asymmetry does not promote competition as opposed to functioning as a potential subsidy awarded to new entrants.

41. Does a high degree of asymmetry promote arbitrage within a market?

41.1. Arbitrage happens wherever different termination rates apply to the same numbering prefixes. In South Africa there is already mobile number portability and number pooling which have led to rate differentiation.

41.2. High levels of asymmetry accordingly foster arbitrage and all licensees originating calls in South Africa are potential targets.

42. Is it possible and/or desirable for final regulations to provide that “no operator may differentiate pricing between calls to an SMP and a non-SMP operator”?

42.1. ISPA’s view is that this position would only be possible in an environment with symmetrical rates or low levels of asymmetry.

42.2. ISPA further submits that:

42.2.1. The Authority should engage with the Competition authorities so as to understand the scope and implications of any investigation they may have undertaken as regards on- and-off-net pricing differentials.

42.2.2. Consideration would need to be given as to whether such a provision would amount to price regulation in a market not covered by the current process, i.e. the retail market as opposed to the wholesale call termination market.

43. Is quality of service a determinant of consumer choice as regards the provision of voice services?

- 43.1. ISPA's view is that Quality of Service is very much a determinant of choice and is likely to continue to be so.
44. Should different kinds of fixed numbers be addressed? Can they explicitly state in these regulations that termination to a toll-free number must be zero?
- 44.1. ISPA's strongly-held view is that there is a direct link between numbering and termination rates in that termination rates are based on the class of number being called.
- 44.2. A failure to clarify the relationship between termination rates and the numbering plan results only in confusion for consumers and billing disputes.
- 44.3. ISPA submits that the dangers of a failure to make this relationship clear should already be evident to the Authority given the aftermath of the 2010 Regulations which resulted in the Authority having to issue a number of clarifying documents.
45. Should there be a single area code for Gauteng?
- 45.1. During the course of its consultation with the Authority on the Draft Regulations, ISPA was requested to comment on a proposal that the various area codes currently applied in the Gauteng Province should be consolidated into a single area code, perhaps 011.
- 45.2. ISPA notes that this is more properly an issue to be dealt with under the Numbering Plan Regulations as opposed to falling within the context of call termination.
- 45.3. ISPA appreciates that the convergence to IP of voice calls is rendering traditional geographical distinctions irrelevant but nevertheless is of the view that the proposed consolidation would be premature at this stage and would result in widespread confusion for consumers.
- 45.4. ISPA further submits that – in dealing with such a proposal under the heading of reforming the current numbering plan – it would make little sense to restrict such consolidation to the Gauteng Province but not to other areas.
46. Should market share be measured according to minutes or revenue? Can either of these be manipulated?

46.1. Minutes. Otherwise one would be determining that asymmetry should apply based on figures that have already been adjusted according to existing asymmetry.

47. Where does in-country roaming fit? Should the Mobile Termination Rate be set as equal to the Mobile Roaming Rate?

47.1. By way of illustration:

If caller A on network A calls called party B who subscribes to network B and is roaming on network C, then:

47.1.1. Network A must pay network B the regular MTR as network B is the terminating operator for the applicable number range and network A cannot be expected to have visibility of or be a party to the commercial arrangements between network B and network C.

47.1.2. Network B will have to, upon determining that the number is roaming, prepend a routing prefix and hand the call over to network C. They will have to pay network C's termination rate as well.

47.1.3. Note that nothing stops network C from charging a lower rate than the MTR - the MTR is a regulated maximum and does not, subject to the application of non-discrimination - preclude an MNO voluntarily adopting lower rates.

47.2. If the question to be answered is whether network C will be allowed to terminate roaming numbers at a lower rate than that offered to its own subscribers, then ISPA submits that this should be permissible on the basis that network C incurs a lower cost in respect of terminating the roaming number. Network C is not, for example, required to bear the cost of maintaining all of the caller's service profiles and line data, and it is a lot cheaper to maintain and operate a single bulk wholesale service profile than millions of individual service profiles.

47.3. The pricing of in-country roaming origination charges<sup>2</sup> is a function of the implementation of a regulatory regime for wholesale call termination. ISPA has previously called on the Authority to undertake this issue and to thereby deal with three issues which are critical to fostering competition in the provision of voice services in South Africa, viz.:

47.3.1. Carrier Pre-Selection (CPS);

47.3.2. Roaming; and

47.3.3. Calls to toll-free numbers.

48. ISPA has also previously expressed the view to the Authority that the origination of voice calls should be subject to the same rates regime applicable to the termination of voice calls.

48.1. ISPA submits that the manner of introduction of price regulation to call origination – in particular whether a glide path is required - is a function of the existing levels of wholesale origination.

48.2. For CPS and Toll-Free call origination, there is currently no existing revenue based on inflated rates, and it follows that a regulated origination rate can be introduced at the final target of the termination rate glide path (set at R0.10 in the Draft Regulations for wholesale mobile call termination). There is in these two cases no need to follow the prevailing termination rate which is accepted as being inflated.

48.3. In the case of roaming, however, it may need to glide from the current level towards the desired level.

49. Are ISPA members' net payers or net receivers of termination revenue?

49.1. Almost all ISPA members are net payers of termination revenue on the basis that the majority of calls are to mobile numbers and the MTR exceeds the FTR by such a large factor.

---

<sup>2</sup> Out-of-country roaming should be handled differently in that the call will be originated on the roaming network, not just pre-selected to route through the home network.

49.2. In a scenario where there was equivalence between the MTR and the FTR, there are members who would become net receivers (i.e. if the mobile/fixed classification is stripped out then such members terminate more minutes than they originate).

49.3. For the purposes of this submission and given the need to represent the interests a broad section of ISPA members, it has been assumed that traffic volume is split equally between origination and termination.

## **Conclusion**

50. ISPA extends its appreciation to the Authority for the undertaking of this process and looks forward to its finalisation.

51. ISPA requests that the Authority publish a Reasons Document contemporaneously with its publication of the final regulations and that such document constitute in part a response to the submissions raised above but not adopted in such final regulations.

Regards

Dominic Cull  
ISPA Regulatory Advisor