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Dear Sir/Madam

# SUBMISSION IN RESPECT OF THE DRAFT CALL TERMINATION REGULATIONS

Switch Telecom thanks ICASA for the opportunity to make a submission in respect of the draft call termination regulations.

# INTRODUCTION

Switch Telecom is the holder of i-ECNS and i-ECS licences. We operate a voice telephony network using a combination of TDM and VoIP technologies and provide fixed and fixed-wireless telephony services to business and residential subscribers along with various value added services. Switch Telecom has processed the third greatest number of geographic port requests towards its network (according to the CRDB) and is committed to delivering universal service as borne out by the fact that over 15% of our clients are in areas where Telkom is not willing or able to offer service.

# CONCERNS

Switch Telecom has numerous concerns with the draft call termination regulations which we outline below. In summary, these concerns relate to the following:

- Convergence of the identified markets
- Errors in assessment of market share
- Market distortion caused by high levels of asymmetry
- Misguided and inconsistent approach to promoting competition
- Lack of focus on consumer
- Sub-division of Market 2
- Technical and billing complications and routing stability



# CONVERGENCE OF THE IDENTIFIED MARKETS

In our June 2010 submission we pointed out the increasing levels of convergence between the fixed and mobile markets. Switch Telecom was not the only licensee to raise this; numerous submissions made to ICASA suggested that, during the course of the glide-path, it would be appropriate for the Fixed and Mobile Termination Rates to converge.

ICASA cannot keep ignoring the convergence of fixed and mobile technologies. One need only look at the largest existing licensees (i.e. Telkom, Vodacom and MTN) to observe that all of them:

- Have been allocated numbering for and terminate calls to both fixed and mobile destinations.
- Accept calls via the exact same Points of Interconnection (POI's) and switching equipment in respect of both fixed and mobile destinations.
- Use their same transmission networks for the provision of capacity between the switches that they use for fixed and mobile services.

Even if ICASA continues to identify two distinct markets for call termination, it is disingenuous to ignore the extent to which SMP in one market allows a licensee to derive economies of scale in the deployment of infrastructure that is used to deliver services in both markets.

The reality is that convergence is already at play not only on the network infrastructure used to deliver services, but also on the services themselves. Here are just a few examples:

- Telkom Convergence offerings (see <a href="http://www.telkom.co.za/convergence/">http://www.telkom.co.za/convergence/</a>)
  - Note Telkom's wording: "You have one number and can take calls on your landline or mobile."
- MTN UniPresence

(http://www.mtnbusiness.co.za/ProductsServices/CallingMessagingSolutions/Pages/MTN %20UniPresence.aspx)

- "An innovative offering from MTN Business that brings all your communication devices together under one number."
- "Pull active calls between fixed line and mobile phones seamlessly"
- Vodacom One Net Express

(http://www.vodacombusiness.co.za/smme/businesssolutions/onenetexpress)

"One Net Express links your landline telephone numbers and cellphones so you never miss another business call, wherever you are. All your employees who are users of the One Net Express service can be reached on their cellphone or landline telephone number using a single number."

Ignoring the convergence of service offerings will perpetuate an unfair advantages to those operators benefiting from the highest termination rates, be they mobile (present) or fixed (future).

It is also critical to understand that discrepancies in the levels of asymmetry granted in one market versus another may be hugely anti-competitive as service offerings converge even further.



# ERRORS IN THE ASSESSMENT OF MARKET SHARE

Accurate market share statistics are critical to understanding the level of competition in each of the identified markets.

It is apparent that ICASA has not done due diligence with respect to re-assessing "Market 2" (termination to a fixed location) and, even more so, the sub-markets thereof.

The Explanatory Note published by ICASA indicates only two licensees in Market 2 despite the fact that there are upwards of one hundred licensees. Furthermore, **Switch Telecom contends that ICASA's market share statistics are factually incorrect**. As an active operator in this market, we can see the call volumes to and from various licensees and our statistics for the month of September 2013 reflect that the market share is as follows:





Estimated Market Share (minutes)

We do NOT accept that "Licensee 2" (presumably in reference to Neotel) has anywhere near 6% of the market for termination to fixed destinations and we object to ICASA's discriminatory treatment against operators previously licensed as VANS.

ICASA seems to hold a false belief that there are essentially two active players in "Market 2." This is fundamentally wrong and shows an unacceptable level of prejudice within ICASA and a concerning lack of understanding of the market.

ICASA must acknowledge that (a) there are a number of operators in this market; (b) their contribution is important; and (c) their market share in terms of minutes terminated is both individually close to that of "Licensee 2" and collectively much greater than that of "Licensee 2."



# MARKET DISTORTION CAUSED BY HIGH LEVELS OF ASYMMETRY

When considering the use of asymmetry as a pro-competitive measure, one has to first understand the impact of asymmetry on the market and assess its success/failure in other jurisdictions. ICASA seems to have underestimated the impact that the proposed high level of asymmetry in "Market 1" (mobile) will have on all licensees, including those operating primarily in "Market 2" (fixed).

It is well established that a reduction in wholesale termination rates leads to competitive pressures resulting in a reduction in retail rates. This is the fundamental basis for reducing the wholesale termination rates. It therefore follows that there will be immense competitive pressure on licensees to reduce retail call tariffs to mobile destinations once the wholesale MTR is reduced further. By way of example, Switch Telecom has decreased its retail tariffs following each previous reduction of wholesale termination rates.

With the proposed high level of asymmetry in "Market 1" (mobile), however, licensees face the following challenge: If we maintain a single retail tariff to all mobile destinations, we have to make a decision between either (a) reducing retail tariffs below the asymmetric cost price and being exposed to arbitrage losses; or (b) not reducing tariffs at all.

History has demonstrated that, as soon as one offers retail service at below the wholesale termination rate, a grey market is opened for call termination and arbitrage will occur, particularly in respect of calls originating from the international market. This results in losses for operators, suspension of services, call routing failures and instability of the phone network. It is a recipe for market failure. Only two alternatives exist: (a) do NOT reduce retail tariffs; or (b) charge subscribers a higher retail rate when they call towards a destination with an asymmetric termination rate versus on with a symmetric rate.

ICASA need not take my word on this, however, as there is both research and empirical evidence to back up this claim. We draw your attention to the Econstor paper "Asymmetry of mobile termination rates and the waterbed effect" (attached hereto), page 20, section 5 ("Conclusions") which states:

# [...] we found that the asymmetry of mobile access prices and the retail price had a positive correlation. This suggests that the waterbed effect between asymmetry of MTRs and retail prices may occur, and that lessening access pricing asymmetry brings about reductions in retail prices, contributing to improvements in consumer welfare.

There is also empirical evidence in the local market:

- In Telkom's August 2011, when levels of asymmetry were 20%, Telkom applied a higher WorldCall retail rate for calls to 8ta and Cell C than for calls to MTN and Vodacom.
- In Telkom's August 2013 tariff filing, once the level of asymmetry had reduced a more reasonable 10%, Telkom standardised its WorldCall retail tariff to all other operators in "Market 1" (mobile).
- Note that, in respect of Conventional and PrepaidPhone customers, Telkom simply charged the **higher** of the two rates to all operators in "Market 1" (mobile).



# MARKET DISTORTION CAUSED BY HIGH LEVELS OF ASYMMETRY (continued)

Both the research and history prove that high levels of asymmetry result in either (a) higher overall retail tariffs; or (b) retail tariffs that are higher towards operators with asymmetric termination rates (where such practice is not prohibited either by the regulator or competition authorities).

Under the circumstances, one has to question what benefit of a high level of asymmetry provides to the market. If the argument is that it benefits new entrants, then this completely ignores the reality that any benefit will be counteracted by the anti-competitive effect of operators with SMP pricing retail tariffs for calls to non-SMP operators (or off-network calls generally) at a higher tariff than calls to SMP operators (and/or on-network calls). If one has any doubt as to the negative impacts that can have on competition, then observe Cell C's recent complaint to the Competition Commission in this respect.

Switch Telecom believes that the maximum level of asymmetry that the market can benefit from before it is forced to adjust and counteract against it, is 10%.

# MISGUIDED AND INCONSISTENT APPROACH TO PROMOTING COMPETITION AND LACK OF CONSUMER FOCUS

It is also important to understand that subscribers do NOT know which network a number terminates on when they call it. Effective 30 September 2013, there were over 1.79million ported mobile numbers. Even the sounding of port tone merely indicates to a calling party that the dialled number has been ported, not whether the result of such porting will cause the call to be cheaper or more expensive nor by what amount. In the absence of tariff transparency, consumers will gravitate towards operators with greatest market share in order to benefit from the greatest volume of reduced-cost on-network calls.

It is both a fundamental consumer-protection issue as well as a pro-competitive remedy to ensure that on-network and off-network calls as well as calls to SMP and non-SMP operators are as consistent in pricing as possible. If ICASA wants to promote competition and protect consumers, it should focus on differentiation between on-network and off-network rates and avoid applying asymmetry levels in respect of wholesale termination rates that are in excess of 10%.

Switch Telecom draws ICASA's attention to the European Regulators Group (ERG)'s common position on symmetry of fixed and mobile call termination rates (a copy of which is attached hereto). In particular, figure 15 demonstrates that ICASA's proposed levels of asymmetry are far in excess of those applied in most European countries even where the delay of entry to the market is comparable. We also quote the opening paragraph of section 3.1:

As stated in the introduction, in the long run <u>symmetric</u> mobile termination rates may contribute to enhancing static economic efficiency (limiting allocative and productive inefficiencies), investment, innovation, regulatory certainty, and, lastly, overall welfare.



# MISGUIDED AND INCONSISTENT APPROACH TO PROMOTING COMPETITION AND LACK OF CONSUMER FOCUS (continued)

We urge ICASA to look at who is asking for high levels of asymmetry and their motive. At present, it would appear that only one licensee (i.e. Cell C) is aggressively lobbying for it, notwithstanding that there are over a hundred licensees that are much newer entrants to the market (albeit not all in the mobile space).

Cell C have simultaneously lodged a complaint with the Competition Commission with regard to onnetwork versus off-network retail tariffs. This is curious because, for reasons previously explained, the market is forced to react to high levels of asymmetry by broadening the gap between the retail tariffs to operators that implement asymmetry versus those that do not.

Cell C's attempts to persuade ICASA and to over-engineer the market appear to be a desperate attempt to gain additional revenue at the cost of all other licensees (not just their direct "Market 1" competitors), without any investment in or benefit to their subscribers. If ICASA is serious about enabling licensees without SMP to compete while simultaneously bringing about reduced costs to consumers, then it should regulate that off-network tariffs may not exceed on-network tariffs (both in the Fixed and Mobile markets) as has been done in many other jurisdictions. From there on it is up to non-SMP operators to do our part, by being more competitive with retail pricing and by providing more innovative value propositions and better service, in order to win market share (and revenue) fairly.

ICASA researched and assessed asymmetry in 2010 and took a sound approach to it then with a fair and reasonable glide-path based on international precedent and economic studies of other markets. We urge ICASA to reconsider asymmetry as proposed in the draft 2013 regulation and not to underestimate the harm that the proposed level of asymmetry in "Market 1" will cause to hundreds of non-SMP licensees originating calls from Fixed line subscribers and, ultimately, the harm to consumers at large.

# SUB-DIVISION OF MARKET 2

With the development of the last set of Call Termination Regulations, it was clearly apparent that ICASA failed to properly analyse and consider "Market 2" (Fixed). ICASA initially disregarded Fixed non-geographic services and completely disregarded Value-Added Services (such as premium-rate and toll-free services).

The extent of the oversight was so great that an additional set of supplementary regulations (GG33698) had to be issued clarifying, among other things, the applicability of the Call Termination Regulations to fixed non-geographic services. Even then, clause 3.4 of GG33698 was vague and, to date, ICASA has never enforced it, allowing almost all licensees, and, in particular Telkom (being the SMP operator in that market) to charge the Between 0N rate in respect of non-geographic numbers with complete disregard for "traffic flow analysis and agreement between licensees."



# SUB-DIVISION OF MARKET 2 (continued)

ICASA seems to have underestimated the volume of calls to non-geographic destinations in "Market 2" (Fixed). To put this in perspective, during the month of September 2013, 17.2% of the call minutes originating on Switch Telecom's network and terminating on Telkom's network were to non-geographic numbers.

It's also astonishing the level of cost disparity that ICASA has – without explanation – determined exists between calls "Within 0N" versus "Between 0N" regions.

In its wholesale transit offering, Telkom SA will transit "Within 0N" at a cost of R0.05 plus the 3<sup>rd</sup> party licensee's termination rate whereas "Between 0N" they will transit at a cost of R0.09 plus the 3<sup>rd</sup> party licensee's termination rate. It stands to reason then, that Telkom can – at a profit – carry a call between regions at the difference, i.e. R0.04 per minute, and, more importantly, they do this voluntarily as a commercial offering. It is therefore curious that ICASA has set the "Between 0N" and "Within 0N" rates with a difference of R0.07 per minute between them (almost double what Telkom voluntarily and profitably charges for national carriage when transiting calls on a wholesale basis).

The differentiation of "Within 0N" versus "Between 0N" is a farce, for numerous reasons:

- The actual cost of national carriage is negligible (easily less then R0.01 per minute);
- Over 17% of traffic terminated towards fixed destinations is towards non-geographic numbers.
- ICASA is allowing termination towards non-geographic numbers to be charged at the maximum "Between 0N" rate and thereby encouraging licensees to push non-geographic services on customers so as to maximise termination revenue and defeat the "Within 0N" rate.
- The split between "Within 0N" and "Between 0N" forces licensees to interconnect in many more places than is technically or financially optimal, driving up costs and discouraging redundant routing (thereby reducing network stability).
- This split harms competition by effectively helping Telkom to replace (tariff regulated) call termination revenue with (tariff unregulated) facilities leasing revenue that it then derives from charging other licensees for extraneous POILs all over the country.
- Telkom offers termination of calls to its network from its overseas nodes to operators licensed in other jurisdictions at rates similar to the "Within 0N" rate. Why should it cost more to terminate a call from Cape Town to Johannesburg then from London to Johannesburg (which routes via a submarine cable system terminating in Cape Town)?
- The vast majority of international markets impose a single Fixed Termination Rate irrespective of the origin of the call.

The split of "Market 2" will, if not eliminated by ICASA, be eliminated by the market itself, as it moves to offer more and more services to customers using non-geographic numbering, placing extreme pressure on SA's non-geographic numbering resources. This is already happening, however, the extent of it will increase dramatically over the course of the next few years if the Within 0N/Between 0N split is retained for the foreseeable future.



# SUB-DIVISION OF MARKET 2 (continued)

Coupled with the growing trend towards convergence of services and delivery of converged services across multiple number types (see convergence section above), it is also likely that, if discrepancies between the Fixed Termination Rate and Mobile Termination Rate are sustained (particularly if such discrepancies are aggravated by high levels of asymmetry), the market will eventually move towards offering converged services using whatever numbering licensees can derive the most termination revenue from.

# TECHNICAL AND BILLING COMPLICATIONS AND ROUTING STABILITY

ICASA seems oblivious to the technical and billing complications and inefficiencies that have been introduced as a result of the current Call Termination Regulations and the extent to which these will be aggravated by the draft Call Termination Regulations.

One of the key problems with a high level of asymmetry is that, when coupled with Number Portability, it becomes an absolute necessity to have a view of the Number Portability database in order to bill calls accurately, however, not everyone has access to the CRDB. It is not practical for a consumer/subscriber to look up a number before each and every call and it is certainly not practical for thousands of foreign operators to all integrate with the proprietary South African CRDB.

From a retail perspective, this creates problems with confusion and billing disputes.

From a wholesale perspective, it creates huge problems, particularly for international termination. Keep in mind that Number Block Operators (licensees that have been allocated numbers by ICASA and that participate in Number Portability) have a regulated obligation to ensure that all calls passed to their network for their number ranges are, in the event of the number being ported, onward routed to the Recipient Operator. At the same time, foreign operators are not interested in Number Portability databases that are local to a single country and generally insist on a clearly defined termination rate towards a number block. That creates a situation where a licensee with SMP must 'blend' its termination rates and onward route calls to non-SMP licensees at below their cost. That, in turn, creates an arbitrage opportunity for those who do have access to the number portability database, leading to anomalies such as routing of calls from SA to overseas and back to SA. This sort of arbitrage leads to blocking of calls to ported numbers and general instability of routing across the phone network.

Even within the local market, the barrier to entry is greatly increased as new licensees have to not only pay for access to the CRDB but, more critically, go through the technical development involved in integrating with it and synchronising their routing to it. Failure to do so places them at a huge risk of arbitrage fraud, the potential for which increases exponentially as the level of asymmetry increases.



# TECHNICAL AND BILLING COMPLICATIONS AND ROUTING STABILITY (continued)

Even setting aside asymmetry, the current Within 0N and Between 0N rates has resulted in a situation where, if you review Telkom's wholesale national transit rate schedule, you will find over 10,000 different rates in the table, depending on where the call is handed over, where it terminates to and time of day. And that is just national transit. Retail rates are affected as well and international termination rates apply (in a multitude of foreign currencies). It would be naïve for ICASA to claim that this sort of complexity is just a cost of doing business. The reality is that, three years ago, Telkom's network used to be stable and billing errors were unusual. Over the past 18 months, numerous licensees have complained about frequent and erratic routing failures from Telkom's network (particularly in respect of ported numbers) and interconnect billing is becoming increasingly difficult to reconcile. This is, in a large part, a consequence of an overly complicated Call Termination Rate framework that has complex and artificial variances in call costs based on where a call is handed over, is vague in respect of non-geographic numbers and further diverges rates with varying levels of asymmetry. Complexity has had a demonstrable and harmful effect on routing stability.

Different Within 0N/Between 0N rates have also created a disincentive to licensees to implement redundant routing across their POILs in different regions. The additional (and grossly inflated) cost of handing a call over out of 0N region means that many licensees simply refuse to implement redundant routing. This reduces the overall stability of the phone network. Furthermore, it places unfair costs on new entrants to the market that, as a result, not only have to interconnect in five different locations countrywide, however, actually have to interconnect in ten different locations (redundant pairs in each 0N region) in order to ensure redundancy and stability of interconnection. The additional complexity of this multitude of excessively complex interconnection arrangements (each repeated for each and every bilateral interconnection agreement) leads to human error and delays in the implementation of routing and billing of interconnection and ultimately causes call failures, frustration to subscribers, loss of revenue to licensees and degradation of the phone network.

ICASA should take heed of the market for international call termination where, despite various national regulators imposing complex models, the market has demanded the <u>simplicity</u> of a single blended rate per number block at all times of the day and irrespective of handover point. This demand has arisen out of necessity: it is the only model that can scale. It is also a good indication that – where regulators try and over-complicate matters – the free/unregulated markets do their best to remove complexity and simplify.

ICASA should also consider the impact of the Call Termination Regulations on pending regulations such as the Toll-Free framework and Premium Rates Services framework. In the context of the Toll-Free framework, if origination rates are derived from termination rate and there are large variances in termination rates, it may obstruct the implementation of a Toll-Free framework, particularly since the origination source cannot be reliably determined by the terminating licensee.



# TECHNICAL AND BILLING COMPLICATIONS AND ROUTING STABILITY (continued)

At very least, the Call Termination Regulations must clarify that the termination rate towards Toll-Free numbers shall be zero irrespective of whether or not origination fees are payable in terms of a separate and further toll-free regulation. Without such clarity, there will be confusion and contradiction with the pending Toll-Free regulation once promulgated.

Ideally, the Call Termination Regulations should also **clarify the applicability of the termination rates in respect of Premium Rate Service numbers**. Switch Telecom encourages ICASA to specify that termination to Premium Rate Services numbers shall consist of two separate components: (a) termination charges; and (b) value-added services charges; and to further clarify that the Fixed non-geographic termination rates shall apply in respect of the termination component. This will enable consistency with the PRS regulation once promulgated and separation of Call Termination Rate disputes from PRS disputes.

More generally, ICASA should, within the Call Termination Regulations, define clear relationships between the markets and the Numbering Plan. Failure to do so in 2010 caused many disputes and ultimately necessitated supplementary regulations and guidance notes. It would be wise to avoid making the same mistake in 2013.

# CONCLUSION

The current draft of the Call Termination Regulations is fundamentally flawed and needs to be reviewed including a proper review of the market structure, the defined markets, acceptable levels of asymmetry and consistency of application of pro-competitive remedies between different markets.

Yours faithfully

**Gregory Massel**