

10 May 2024

**ICASA**

**Attention:** The Chairperson (Call Termination Review).

Per email: [CTR2021@icasa.org.za](mailto:CTR2021@icasa.org.za)

Dear Chairperson

**SUPPLEMENTARY SUBMISSIONS: DRAFT CALL TERMINATION AMENDMENT REGULATIONS 2024**

1. The Internet Service Providers' Association of South Africa (ISPA) sets out below written responses to queries raised by the Authority's panel during the course of the oral hearings on the Draft Call Termination Amendment Regulations 2024 ("**the Draft Regulations**") held on 13 June 2024.

Question:

*ISPA's concerns around the effectiveness around the CTR regulation process as a whole. I think you touched on Annexure A being irrelevant. Can you please clarify other specific aspects of the draft regulations that you believe would be ineffective in promoting competition and reducing communication costs. I know you also touched on the voice versus data, so aside from that as well, can you suggest how these might be addressed?*

2. Fundamentally, a greater market review of the data market should be conducted with similar outcomes to the voice market to regulate the cost of wholesale mobile data and bring about open access to mobile data (as already exists extensively with fixed data networks) to facilitate service-based competition to enable reductions in retail rates to subscribers through greater choice.
3. In the context of the regulation of voice call termination:
  - 3.1. Most mobile calls are no more than VoIP calls usually carried over 4G and 5G data bearers but also, with modern handsets, often carried over Wi-Fi enabled fixed data networks. The number of calls handled in this manner will increase as a process commences for mobile network operators to shut down their 2G and 3G networks
  - 3.2. The vast majority of voice call termination across both markets therefore consists of VoIP over multi-data bearers.
  - 3.3. It follows that a review of the data bearer market is essential to align call termination rates, price modelling and remedies to what exists in 2024 (as well as bringing about effective competition in data).
  - 3.4. The submissions raised below regarding convergence of fixed and mobile services are also relevant to this point.

4. As it is currently formulated, ISPA position is that the draft regulations as a whole will not act to promote competition or reduce the cost to communicate in respect of the fixed voice call termination market.

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Question:

*Your written submission also discusses the impact of the proposed termination reductions on SMEs. Could you provide insights on how these reductions will specifically impact SMME voice providers and their ability to compete in the market. What rate reductions would aid these providers in their ability to compete?*

5. ISPA has over the past decade consistently highlighted the ongoing trend of fixed-to-mobile migration among consumers, and this remains relevant with specific reference to SMME voice providers.
6. The current core and future growth market for fixed and VoIP services is business-to-consumer (B2C) communication. This is a practical outcome of fixed/VoIP services being far more suited to business use - allowing functionality such as the ability to transfer calls, automated attendants, call recording and transcription, CRM integration and call centre services functionality – than mobile services, which are themselves better suited to personal communications than fixed services.
7. Notwithstanding which, there remains a market for home fixed lines (particularly in residential estates, complexes and clusters where telephony is used to facilitate access control between security booms and homes) and a growing market for converged services using VoIP over mobile data to reduce the cost of mobile calls and bring sophisticated business and multi-user team functionality to the mobile handset.
8. Having provided this context, ISPA's submissions is that the pricing model proposed by the Authority in the Draft Regulations will further accelerate fixed-to-mobile migration among consumers and small businesses. This is because the model artificially dictates to licensees the pricing structure of the very services that they provide.
  - 8.1. The proposed fixed termination rate (FTR) has been modelled on the obsolete notion of a copper access network and the fixed subscriber carrying the full costs of their subscriber line, with cost recovery of incoming calls only being applied to the core network.
  - 8.2. By comparison, the mobile model allows for recovery of the incoming calls across both the core network and access portions. A mobile provider can apply a zero fixed subscription fee to its subscribers and recover 100% of the sunk costs of keeping the subscriber active on their network through an inflated MTR.
  - 8.3. In reality:
    - 8.3.1. Modern VoIP-based fixed networks do not follow the traditional fixed model that Telkom alone adopts and are far more similar to mobile networks. These networks currently serve approximately 38.7% of the market for 'fixed' minutes).
    - 8.3.2. While ISPA obviously does not have exact figures, it appears extremely unlikely that more than 50% of the approximately 61.3% of the market for 'fixed' minutes that Telkom carries, remains on their traditional copper network. The retirement of this network is part of the

public record, while ISPA also notes the discontinuation of ISDN. primary rate services and the migration of most such large-volume corporate customers to Telkom's own VoIP network.

9. As set out in our primary submission in respect of the Draft Regulations, the Authority acknowledges "some level of convergence between fixed and mobile services" in its Findings Document. ISPA's consistent position has been that convergence is a reality and to call for this to be reflected in regulated termination rates.

10. There is, however, no reflection of convergence at all in fixed and mobile rates since 2016.

10.1. From 1 October 2016 to 1 July 2025, the costing models employed have consistently resulted in the exact same R0.03 per minute variance between fixed and mobile rates.

10.2. **It surely cannot be denied that there has been "a degree of convergence" between October 2016 and July 2025 and that the extent of convergence now is greater than it was in 2016?**

11. SMME providers are prejudiced by a model which assumes that all providers in the fixed space are competing with Telkom, when in reality they are competing more and more with the mobile providers.

12. In ISPA's view this approach stifles market entry, innovation and convergence itself. As expressed by one ISPA member:

*ICASA's adherence to a dogma that new entrants within the 'fixed' space are competing solely with Telkom and not with the mobile operators, is hampering new entrants by dictating that the very nature of the services they provide should be limited in scope and that the pricing models that they adopt should be modelled around a 'fixed' model imposed on them by the Authority.*

13. ISPA's members note that SMME voice providers are adopting new pricing structures to remain competitive in the face of having to compete with mobile providers with higher regulated rates.

13.1. These pricing structures typically involve flat-rate services with multi-network endpoint capability. For example: the same land-line number will ring both on a home land-line phone and through a mobile softphone application simultaneously.

13.2. As a result there is a shift from "fixed" versus "mobile" to "multi-access".

13.3. The SMME provider then models revenue using statistics and averages across call types in order to price services in a manner that renders their services competitive with both fixed and mobile offerings, noting the potential for fraud and abuse.

13.4. This space is also being closed down, as the mobile providers have started offering flat-rate services. Vodacom and MTN have lower costs than SMME fixed providers as a result of a significantly higher number of subscriber calls as "on-network" calls as well as being effectively subsidised by SMME fixed providers through a higher regulated rate.

13.5. In a member's words:

*What only adds insult to injury is that a large portion of those calls are no longer terminated over the mobile bearer, as they terminate the calls using Voice over Wi-Fi (VoIP technology using a Wi-Fi extended land-line network) whenever within a Wi-Fi zone. In essence, their service is no*

*more mobile and no less converged than our own, roaming between fixed and mobile access automatically.*

14. ISPA's position in respect of this question is that **the only regulatory rate mechanism that would assist SMME voice providers would be to converge the fixed and mobile rates.**
15. Finally in this regard, ISPA submits that it is open to the Authority to apply asymmetrical rates in the fixed market (as previously done) should it reach a conclusion that Telkom is not engaging in the same level of convergence as SMME voice providers.
16. **Setting the asymmetrical rate at the prevailing mobile termination rate would then properly reflect convergence as it is being experienced by SMME voice providers.**
17. ISPA believes that it would be appropriate to apply this asymmetry without regard to the date on which the SMME voice provider entered the market given historical subsidising of mobile providers within a converging market.

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Question:

*Can you also elaborate on the lack of clarity in the proposed CTR's and how this could lead to unintended consequences of fraud. In doing so can you give us the specific mechanisms which you propose to address these challenges?*

18. ISPA has been clear that the massively increased incidence of fraud in local markets is a direct result of the decision to amend the regulatory framework in 2017 to exclude termination of internationally-originated voice calls. ISPA raised a complaint and submissions pointing towards this outcome in the process leading up to the 2017 amendment, but more powerful voices held sway.
19. It is important for the Authority to appreciate that:
  - 19.1. The reasons for the increase in fraud is easy to understand.
  - 19.2. The increased incidence of fraud was not unintended, it was completely foreseeable to licensees in 2017.
  - 19.3. The lobbying to exclude internationally-originated calls started precisely when the MNOs realised that regulated rates were dropping below those of international peers (approximately R0.40 at the time). Current rates charged by the MNOs are massively hiked.
  - 19.4. There are measures to mitigate fraud or even to reduce it substantially, although the latter is unlikely as it relies on local providers reducing their rates.
  - 19.5. Fraud is never a victimless crime. A disproportionate risk and burden is borne by SMME voice providers.
20. The fundamental reasons for the bypass fraud are:
  - 20.1. discriminatory pricing; and
  - 20.2. a level of discrimination in pricing so egregious that some wholesale markets are expected to pay in excess of other retail markets; and

- 20.3. the reality that voice minutes are a commodity, easily traded.
21. These three factors combine to make it hugely profitable and extremely easy for entities to acquire services in the retail market, and resell them into the wholesale market, operating outside of our jurisdiction and feeding demand for an international market that has no interest in hundreds of different national regulations and that simply sees one route as 25 times more expensive than another.
22. **The only way to stop or substantially reduce bypass fraud is to make it unprofitable for the entities engaging in it.**
- 22.1. The key parties engaging in bypass fraud are unlicensed entities, because they have nothing to lose and can trade from outside of South Africa.
- 22.2. Members indicated that the evidence backs up this conclusion. The bulk of ITR bypass test calls indicate that the calls are originating from a variety of mobile SIM cards loaded into central SIM-bank devices with remote radios used to vary the location and distribution of calls to evade traditional detection techniques.
- 22.3. Large Licensees charging lower wholesale termination rates for internationally-originated calls than the cost of their lowest in-country retail tariffs (less handset subsidies, bulk discounts, etc.) would make it unprofitable for those entities to continue trading.
- 22.4. ISPA recognises that this will not happen, and that the Authority will also not itself act to impose any direct pricing cap. Based on this recognition, ISPA advocated for the application of the reciprocity principle.
- 22.5. The draft CTR's make no attempt to deal with the fraud issue, because they don't impose any cap on the termination rates in respect of internationally-originated calls.
23. The imposition of the reciprocity principle, if implemented effectively, will have the consequence of reducing the extent of bypass fraud insofar as it will be more cost-effective for international operators in the applicable jurisdictions to make use of legitimate routes. It will not, however, reduce the extent of bypass fraud in respect of calls originating from countries where reciprocity does not apply.
24. The reciprocity clause within the draft regulation is entirely ineffective as it is unenforceable and licensee-specific rather than country-specific. For an international reciprocity clause to be effective and enforceable it needs to impose reciprocity in respect of all calls originating from jurisdictions that have regulations enforcing reciprocity.
25. Any South African licensee not receiving the benefit can enforce their right through complaint to the foreign regulator just as any foreign operator not receiving the benefit from the South African licensee can enforce their right through complaint to the Authority.
26. As per the relevant EU regulation:
- The rates set out in this Regulation apply to calls originated from and terminated to a Union-number, that is to say a number included in national numbering plans corresponding to E.164 country codes for geographic areas belonging to the territory of the Union. The rates do not apply to calls originated from third country-numbers (numbers other than Union-numbers) unless those calls are originated (i) by a third-country provider of termination services which applies for calls originated from Union-numbers*

and terminated in its network termination rates equal or below the maximum (mobile and/or fixed) termination rates set out in the Delegated Act, or (ii) from a number from the national numbering plan of a third country, listed in the Annex to this Regulation, where the termination rates are set based on cost model principles that are equivalent to those set out in Article 75 and Annex III of the Code.

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Question

*I just had the same question about impact. I think you've quietly answered that. I was just trying to understand your submission. I think that what you were trying to say is that your position is that FTR regulation has had very little to do with competition previously and I wondered in that vane if moving towards pure LRIC for fixed termination would not have the same benefits among fixed service providers as it's had among mobile service providers, in other words, pure LRIC would normally result in a lower termination rate and wouldn't that support competition among fixed service providers.*

27. Please refer to the answer to question 2 above.
28. In ISPA's view the use of pure LRIC is (or any other methodology) is dependent on:
- 28.1. Making the correct the findings with respect to the markets and extent of convergence; and
  - 28.2. Applying up-to-date models based on the technology and types of services of all licensees within a market (not just the incumbent).

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Question

*My question is on slide 8 of your presentation. Without opening a discussion on the authority's findings on asymmetry, is ISPA proposing new entrants be afforded an opportunity to charge asymmetric rates for a period of 10 years. Lastly, is ISPA of the opinion that the market circumstances faced by Cell C and Telkom are similar to the market circumstances faced by new entrants?*

29. New entrants and other participants in the fixed market have not benefited from asymmetry for an extended period, equivalent to that afforded to Telkom Mobile and Cell C. This includes licensees within the 'fixed' market that are offering converged services in competition to mobile operators.
30. ISPA anticipates that in future there will be more licensees operating in the 'mobile' market, whether through arrangements such as roaming and MVNO agreements or facilities leasing agreements for virtual RAN's or deploying their own network infrastructure.
31. ISPA's view is that new entrants In both markets should be afforded the same duration of asymmetry as Cell C and Telkom Mobile have enjoyed in the past.

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Question:

*The issue that relates to under-recovery by rates: Can you ask ISPA to provide us with evidence of actual costs faced by SMMEs so that we can analyse the impact of that under recovery with regard to termination.*

32. By way of a practical example:

- 32.1. An ISPA member offers its most entry-level fixed/VoIP service with a monthly subscription fee of R42.61 (excluding VAT) per month. Through wholesale channels (where it is not directly responsible for the customer-care costs) this reduces to R27.70 (excluding VAT) per month.
- 32.2. An average termination volume of 360 minutes per month at R0.06 recovers an additional R21.60, which at R49.30 is only just sufficient to cover idle network bandwidth costs (for both mobile and fixed endpoints), soft-phone application licensing fees, monitoring systems license fees, bank service fees for debit orders or card processing fees on prepaid top-ups. With the CTR dropping to R0.01, the recovery drops to R3.60 and the R18.00 shortfall would need to be recovered through an increase in service fees.
- 32.3. By comparison, a mobile network operator offering a similar converged service roaming between fixed (VoWifi) and mobile (VoLTE/5G) would receive an additional R10.80 towards their subscriber's termination fees which they would not have to recover in the form of fixed monthly subscription fees.
- 32.4. While the mobile network may carry spectrum licensing fees, it would not carry soft-phone licensing fees and the vast majority of idle bandwidth would be offloaded to the fixed network using VoWifi when the subscriber was in range of their own home or office (a significant majority of the time).

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**Question:**

*I see that ISPA has drawn some links between our proposed ITR and then the issue of fraud. So if we look at the current proposed regulation, to what extent can that be changed so that we can deal with that.*

33. See question 3 above and the excerpt from a member submission below.

*In essence, the most effective intervention would be to cap the MTR and FTR alike for internationally-originated calls to below market retail rates less bulk discounts. In practice, a cap of at most R0.40 on the MTR and R0.20 on the FTR would materially undermine the business case for illicit grey-market operators.*

*In fact these amounts are not far off from what licensees settled long-term disputes pertaining to toll-free origination rates at (R0.38 for mobile and R0.17 for fixed), indicating precedent that the market has an understanding that that was the threshold beyond which destruction of the value of the underlying service was a certainty and markets would opt for alternatives.*

*The question that ICASA must also ask is why, if it's that simple, are the SMP operators not simply self-capping their rates to the levels set out above? The answer is that they benefit from the anti-competitive effects of the existence of illicit grey-market operators. What the illicit market does for them, is it completely destroys the commercial case for any licensed non-SMP operator to offer international wholesale transit services in terms of their licenses.*

*There is no technical intervention that will ever resolve what is, at its nature, a commercial problem. If you sell person A apples for R1 and person B the same apples for R25, you'll never be able to stop person A buying your apples from you and reselling them to person B for R10, undermining your own sales to*

*person B, enriching person A, and leaving person B aggrieved that they're still getting a raw deal (but at least comforted by a sense that you've got what was coming to you for discriminating against them).*

*Having comprehensively examined the implementation of STIR/SHAKEN in the USA as well as some European countries to try and provide a level of attestation and assurance of the accuracy of Caller ID, these technical measures, even if they were implemented by all South African licensees, would still not prevent the grey market buying retail-offer SIM cards from thousands of stores country-wide that sell them for ~R1.00 each, inserting them into SIMbank devices, and disposing of (and replacing) them as quickly as they're identified as being associated with bypass activity.*

*Technical interventions such as STIR/SHAKEN may help mitigate cross-jurisdiction CLI-spoofing by legitimate licensed operators licensed within jurisdictions that have embraced this technology. There is, however, limited evidence to suggest that legitimate operators are wilfully engaging in CLI-spoofing and, accordingly, we'd suggest that any technical intervention be considered as part of a larger engagement with industry on Caller ID, but only commercial (rate) interventions be considered for inclusion within the Call Termination Regulation process.*

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## **Conclusion**

34. ISPA trusts that the above is helpful to the Authority and wishes it strength in concluding its deliberations.

Regards

ISPA