Vodacom's non confidential response

DISCUSSION DOCUMENT ON THE REVIEW OF THE PRO-COMPETITIVE CONDITIONS IMPOSED ON LICENSEES IN TERMS OF THE CALL TERMINATION REGULATIONS, 2014

This submission is structured as follows:

Executive summary

Vodacom welcomes the opportunity to comment on ICASA's Discussion Document on its market review of call termination services[1] ("**Discussion Document**"). Vodacom considers that there is a strong case for a number of ICASA's proposals. i.e. moving away from the current asymmetric Mobile Termination Rates ("**MTR**")("**aMTRs**") towards symmetric Mobile Termination Rates ("**sMTR**"), not regulating International Termination Rates ("**ITRs**"), and setting separate MTRs and Fixed Termination Rates ("**FTRs**") to reflect the different costs of termination on each type of network[2]. If ICASA does decide to make any material changes to these proposals, then it is important that ICASA explains its reasons for any such changes and that stakeholders are given the opportunity to comment on these changes. In this executive summary Vodacom highlights key aspects of its response. The remainder of this response then addresses, in turn, the questions raised by ICASA.

The move to sMTRs

In its Discussion Document, ICASA has proposed a welcome move away from aMTRs for established operators on the basis of their scale. Removing the ability for some established operators to charge higher aMTRs is long overdue and would bring ICASA's approach more in line with international best practice. For instance, the European Commission ("**EC**") now sets a maximum MTR that applies to all countries and operators within the European Union ("**EU**"), meaning there is no asymmetry under any circumstances[3]. And precedent from Africa also indicates that the majority of African countries now set sMTRs.

In its Discussion Document, ICASA still proposes to allow any "*new entrants*" to charge higher aMTRs for a period of up to three years upon entry. Vodacom is of the view that ICASA needs to reconsider this proposal. However, if ICASA persists with this proposal in its Findings, then it should at least clarify that none of the existing operators in the mobile market (i.e., Vodacom, MTN, Telkom, Cell-C, Rain nor Liquid) would be classified as "new entrants", given that they have all been offering mobile services for more than 3 years.

As set out in the accompanying expert report prepared by Frontier Economics Limited, ICASA should move to setting all MTRs at the same level. In particular, and as summarised by Vodacom in Section H.1 of this response:

- Economies of scale are not a valid justification for aMTRs in South Africa. In the past, ICASA has considered that operators should be allowed to charge aMTRs if they face higher unit costs for reasons outside the operators' control, or if they enjoyed lower economies of scale than other operators. The first reason was acknowledged by the EC historically in its 2009 Recommendation on termination rates, but it did not acknowledge the rationale relating to economies of scale.

- The only factor the EC considered to be outside of the operators' control was a lack of spectrum when a spectrum auction has not taken place and spectrum trading is not possible. Telkom and Cell-C already have significant spectrum holdings. In any case, there is an upcoming spectrum auction in which ICASA will provide significant support for operators other than Vodacom or MTN. As a result, operators in South Africa should not face higher unit costs for reasons outside of their control, especially on a forward-looking basis. Notwithstanding the irrelevance of economies of scale for MTR asymmetry, Vodacom notes that neither Telkom nor Cell-C suffers from a lack of economies of scale, as demonstrated by Telkom's growth and Cell-C's move to a capital-light business model. Rain and Liquid also make extensive use of infrastructure-sharing.

[1] "DISCUSSION DOCUMENT ON THE REVIEW OF THE PRO-COMPETITIVE CONDITIONS IMPOSED ON LICENSEES IN TERMS OF THE CALL TERMINATION REGULATIONS, 2014" (5 November 2021).
[2] While Vodacom acknowledges ICASA's analysis of competition in the markets for voice call termination services, it also considers that ICASA has understated the impact of OTT services on these markets
[3] Historically, the EC allowed aMTRs only for a period up to 4 years where there was ineffective competition at the retail-level. aMTRs were only permitted for a longer period than this where there were significant spectrum imbalances and where spectrum had not been assigned through a market-based mechanism.

- Continuing to allow aMTRs could result in economic inefficiencies. In particular, asymmetries may dampen smaller operators' incentives to become more productively efficient (reducing their costs), whilst also creating allocative inefficiency by distorting production and consumption decisions.

- Telkom and Cell-C have now been charging higher MTRs than Vodacom and MTN for 11 years, so going far beyond a transitional period (the EC has moved away from any asymmetry provisions by setting a single maximum MTR across the EU[4]; and as noted earlier it previously only recommended a transitional period for new entrants of up to 4 years, and even then only if there are barriers to entry and expansion in retail markets, which Vodacom does not consider to be the case in South Africa).

- Traffic imbalances[5] do not justify aMTRs since traffic imbalances will inevitably occur alongside market entry and expansion and as a result of operators having different commercial strategies. Intervention aimed at accounting for imbalances can even have the effect of reinforcing traffic imbalances, via aMTRs impacting on-net/off-net differentials.

- Historic market failures, which have previously been cited by ICASA as a rationale for intervention, do not provide a valid justification for aMTRs, since regulators should set MTRs based on a forward-looking assessment of markets and costs (and therefore historic market characteristics should not be taken into account).

- aMTRs are unlikely to significantly improve the position of smaller operators, which Vodacom understands may have been one of ICASA's objectives in proposing such a pricing structure. Voice services are declining in importance, given the rapid increases in data usage and revenues, which reduces the significance for competition of any cost disadvantages that an operator might face when providing voice services. The low current levels of termination rates have also reduced the relative importance of termination rates for operators' financial performance. In addition, the fact that Telkom and Cell-C have been charging the same aMTRs for several years whilst experiencing very different levels of success suggests that factors other than aMTRs are much more important in determining operators' ability to compete in the retail mobile market.

The treatment of international termination services

ICASA has proposed to continue not to regulate the prices charged by South African operators for terminating calls originated abroad. Vodacom strongly supports this. Even following deregulation, Vodacom South Africa's ITR is still below the average in those other countries with which Vodacom exchanges significant volumes of traffic. This means Vodacom still makes net outpayments for ITRs, which results in South African mobile users cross-subsidising telecom users in other countries. Regulating ITRs would increase the net outpayments made by South African operators, thereby increasing this cross-subsidy, while it would also be inconsistent with the market failures identified by ICASA in the Discussion Document. Whilst there may be some benefits from lowering ITRs across the SADC region, ICASA should not attempt to achieve this unilaterally.

Bypass should be tackled directly rather than by regulating ITRs

Vodacom agrees with Switchtel's observation that there are significant issues with bypass. However, Vodacom is of the view that this needs to be tackled directly, rather than via the re-introduction of price regulation on ITRs.

The impact of fixed and mobile convergence

[4] EC, "Commission delegated regulation of 18.12.2020 supplementing Directive (EU) 2018/1972 of the European Parliament and of the Council by setting a single maximum Union-wide mobile voice termination rate and a single maximum Union-wide fixed voice termination rate".
[5] A reason sometimes claimed by parties for having asymmetric rates

ICASA has proposed to define fixed and mobile termination services as separate product markets. Vodacom supports this finding. Vodacom also considers that there is a strong case for setting MTRs above FTRs, given the underlying cost differences between these services. In particular, for mobile networks, most of the costs of the access network are incremental to providing termination services, whereas this is not the case for fixed networks[6]. Trying to set MTRs and FTRs at the same level would, therefore, result in economic inefficiencies.

Next steps

Vodacom notes that ICASA has not addressed, in the Discussion Document, the cost standard it will use to determine the future path for termination rates. In this regard, Vodacom considers that there is a strong case for ICASA continuing to set termination rates using LRIC+ as the appropriate cost standard. This is because, among other reasons, moving to Pure LRIC (as ICASA has considered, but rejected, in previous market inquiries) could disproportionately harm poorer consumers. In particular, the reduction in termination revenues from such a shift would force operators to recover their fixed and common costs from elsewhere e.g. increasing retail prices, reducing handset subsidies and/or introducing minimum top-up requirements, with this particularly impacting poorer consumers, for whom call termination services make up a significantly greater proportion of mobile revenues. If this waterbed effect is incomplete, there is also a risk that moving to Pure LRIC could impact the ability of operators to expand and enhance coverage in the most rural areas. Vodacom includes in this response an expert report, also from Frontier Economics, on this matter.

As part of the next phase, Vodacom would also urge ICASA to use both top-down and bottom-up models (as it has previously done) when estimating the costs of MTRs and FTRs. It is important that ICASA follows a robust consultation process when developing these models.

A. Introduction

Vodacom welcomes the opportunity to comment on the Discussion Document. Vodacom agrees that ICASA is right to focus only on voice call termination services as part of this market review process, thereby excluding SMS termination services. It, therefore, does not comment further on SMS termination services as part of its response.

In this response Vodacom goes, in turn, through all the questions included in the Discussion Document. Vodacom also submits two separate expert reports setting out i) why ICASA should remove the existing asymmetries on MTRs and ii) why ICASA should continue to use LRIC+ as the appropriate cost standard for setting MTRs.

This response document is structured as follows:

- Section B sets out Vodacom's views on the appropriate product market definitions for mobile and fixed termination markets.
- Section C contains Vodacom's position regarding the geographic market definition, with a particular focus on the inappropriateness of regulating ITRs.
- Section D provides Vodacom's views on fixed-mobile convergence, and how this should be taken into consideration when setting termination rates.
- Section E summarises Vodacom's comments on the methodology employed by ICASA in coming to its conclusions.

[6] In the EU, for instance, 24 out of 25 countries currently have MTRs that are above FTRs, given the differences in costs.

- Section F sets out Vodacom's position on the effectiveness of competition in the defined markets, and the implications of this for the appropriate approach to setting termination rates.

- Section G explains Vodacom's view on ICASA's preliminary SMP findings, and the implications for the setting of termination rates.

- Section H contains Vodacom's comments on the pro-competitive terms and conditions proposed by ICASA with regard to termination markets.

B. Product market definition

Do you agree with the Authority's preliminary conclusion on the product market definition? Please explain the reasons for your answer and provide the relevant factual or other evidence supporting your views.

To define the relevant product market and assess the possibilities of demand-side and supply-side substitution, ICASA applies a Hypothetical Monopolist ("**HM**") test. Vodacom agrees with this approach for defining product markets, noting it is in line with best practice. Vodacom also agrees that ICASA is right to consider both direct and indirect substitution[7] when assessing the relevant product market definition.

In the following subsections, Vodacom comments on ICASA's:

- Proposed product market definition for mobile termination markets;

- Proposed product market definition for fixed termination markets; and

- Stance on common pricing constraints.

Furthermore, ICASA has stated that it has *"applied a HM test to review the definition of Mobile termination markets and Fixed termination markets"*. Vodacom agrees this is the appropriate approach. However, ICASA provides no/limited details of this test. Vodacom would urge ICASA to share the details of the HM test that it has conducted in line with its duty to provide stakeholders with transparency on and an opportunity to engage with this assessment.

Vodacom also notes that, in presenting its proposed market definitions in the Discussion Document, ICASA did not seek to distinguish between different technologies used to provide call termination services. Given this, Vodacom expects that, in line with international precedent, ICASA intends to define the markets for voice call termination in a technologically neutral manner for both mobile and fixed-line voice calls. This is the approach adopted by Ofcom[8] in the UK and the Commission for Communications Regulation (ComReg)[9] in the Republic of Ireland, which suggests that the market definition for voice call termination does not depend on the technology employed to terminate the call. Vodacom would support such an approach[10].

[7] For example, ICASA stated that *"Consideration of retail services is necessary, given that the demand for wholesale voice termination service is derived from and depends on the demand for retail services. Understanding the link between retail services and wholesale voice call termination services is important in order for the Authority to understand the extent of the indirect price constraint posed by retail services on wholesale voice call termination services"*

[8] Ofcom (2018): Mobile call termination market review 2018-2021. Available from: https://www.ofcom.org.uk/__data/assets/pdf_file/0021/112458/Final-Statement-Mobile-Call-Termination-Market-Review-2018-2021.pdf

[9] Commission for Communications Regulation (2020). Market Review – Fixed Voice Call Termination markets. Available from: https://www.comreg.ie/media/2020/10/ComReg-2095.pdf

[10] Technology neutrality should not be confused with defining separate markets for fixed and mobile call termination services. Fixed and mobile termination services are in separate markets because of underlying differences in the characteristics of fixed and mobile markets.

1. Mobile termination markets

Vodacom acknowledges ICASA's provisional conclusion that there is a separate product market for *"wholesale voice call termination services on the network of each licensee that offers termination to a mobile location within the Republic of South Africa"*. However, Vodacom would highlight that:

- OTT voice calls are increasingly imposing a competitive constraint on mobile voice call termination services.

- As ICASA has itself proposed, calls that have originated outside South Africa should not form part of the same product market as calls that have originated from within South Africa (see Section C.1).

In the rest of this subsection, Vodacom has focussed on the growing competitive constraint imposed by OTT voice services on mobile termination services.

ICASA has largely relied on international precedent and economic theory when assessing whether OTT services should be in the same product market as mobile call termination services. ICASA justified this approach on the basis that it received limited evidence from operators on the impact of OTT services. However, even if ICASA decides that OTT voice services should not be included in the same product market as mobile call termination services, it should still take into account the forward-looking impact of OTT voice services when assessing the effectiveness of competition.

Vodacom also considers that OTT services are relevant when:

- Assessing the case for keeping ITRs deregulated (see Section C); and

- Assessing the case for symmetric MTRs (see Section H.1).

Vodacom considers that OTT voice services do impose an increasingly relevant competitive constraint on mobile voice termination services. This is demonstrated by the growing popularity of OTT services and the rapidly decreasing barriers for using such services as an alternative to traditional mobile voice services. An analysis of Vodacom's customer data, along with independent reports on the South African market, suggests that the relevance of these perceived barriers is much lower in South Africa today than in the past. As a result of this any market power in mobile termination markets could potentially be reduced by the threat of customers switching from traditional voice services to OTT services.

Another factor that could make the take-up of OTT services more attractive is that they offer functionality which is unavailable on, or difficult to get from, traditional voice calls. These include features such as, among others, video calling and more accessible and streamlined multi-party calling. These features further reduce barriers to the take-up of OTT services, and incentivise users to make more OTT voice calls.

Vodacom believes that ICASA has understated the competitive constraint imposed by OTT voice services on mobile voice call termination. In preparing its Findings, ICASA should, therefore, update its assessment of the role played by OTT voice services. Importantly, ICASA's assessment of the impact of OTT voice services should be forward-looking. International precedent suggests a similar approach - for instance, in its 2020 Explanatory Note on relevant markets[11], the EC stated that though OTT services are not, in Europe, currently considered as direct substitutes to traditional services, they might play an important role in certain retail markets in the coming years, due to further technological developments and their continuous expansion. This would then subsequently mean that OTT services could exercise an indirect constraint on wholesale markets.

[11] European Commission (Dec 2020); Commission Recommendation on relevant product and service markets within the electronic communications sector. Available from: https://ec.europa.eu/newsroom/dae/document.cfm?doc_id=72437

1.1 The degree of substitution required to make a hypothetical SSNIP unprofitable

Vodacom notes ICASA appears to assess whether OTT voice and traditional voice services are *"perfect substitutes"*[12]. Vodacom is not entirely clear what ICASA means by "*perfect substitutes*". However, any suggestion that, for OTT voice and traditional voice to be in the same market, all customers must switch, in response to a small increase in MTRs, from traditional voice to OTT voice, is clearly not correct. Under a HM test for market definition, as conducted by ICASA, if a 5-10% increase in MTRs induces a sufficiently large number of customers (but not necessarily all customers) to substitute away, at the retail level, to OTT voice services, such that the MTR increase is unprofitable, the two are considered to be in the same relevant market. Below is a theoretical example demonstrating this test.

A service provider offering *q* quantity of service at price *p*[13] can make profits equal to:

$$\pi_0 = p \times q$$

If a 10% increase in the price (i.e. increasing price from *p* to *1.1p*) causes a large enough number of customers to substitute away (i.e. reducing *q*) such that profits fall below π_0, there is sufficient competitive constraint from an alternative service, and the relevant market must be expanded to include that alternative service (at least).

The profits under the hypothetical price increase are equal to:

$$\pi_1 = 1.1p \times (1-x).q$$

where *x* is the proportion of customers (volumes) who substitute away as a result of the price rise.

For the price rise to remain profitable (i.e. π_1 no less than π_0), the maximum value of x can be 0.091. In other words, as long as more than 9.1% of customers substitute all volumes away in response to a 10% increase in price, the price rise will be unprofitable. This is inconsistent with ICASA's suggestion of products needing to be "*perfect substitutes*" to be in the same market.

1.2 The take-up of OTT services is rapidly increasing

An increasing number of consumers worldwide have adopted the use of OTT services as a way of communicating. As per an Analysys Mason review in 2018[14], 80% of smartphone users worldwide used OTT apps in 2018, with OTT voice services forecasted to represent an important part of the worldwide market, generating up to 24% of total voice traffic by 2023. [redacted] This shows that OTT services offer a significant and growing degree of competitive constraint on traditional mobile call services, which Vodacom believes is driven primarily by diminishing barriers to their take-up in South Africa.

[12] When discussing OTT services, ICASA states that "*the Authority considers that the use of OTT voice calling services is not likely to be a perfect substitute for voice calls during the period under review…"*
[13] Assume zero cost for simplicity
[14] Available from https://www.analysysmason.com/globalassets/x_migrated-media/media/analysys_mason_communication_services_ssa_aug2016_sample_rdmv02.pdf

In the following subsections, Vodacom responds to a number of specific points made by ICASA on OTT services, which Vodacom disputes. In particular, Vodacom explains that:

- OTT and traditional voice services are substitutes rather than complements;
- Users increasingly have a reliable data connection, thereby reducing the barriers to using OTT voice services;
- OTT voice services can be significantly cheaper than traditional mobile voice calls;
- The pricing model for OTT voice services should have limited impact on their use;
- It is easy for users to switch from traditional voice services to OTT voice services; and
- Some users are likely to know the unit price of traditional mobile voice calls.

1.3 OTT and traditional voice services are substitutes rather than complements

ICASA has argued that OTT voice calling services are in many cases used as a complement to traditional voice calling services, and therefore do not present any substitutability. This is because the end-user's preference or choice for traditional voice calls over OTT voice calling is also driven by non-price factors, such as the quality of service, the lack of compatibility between OTT applications, access to data capable devices as well as access to a data connection over a mobile network or WiFi. To the extent that these non-price factors significantly affect the quality of service offered by OTT voice calls, ICASA argues that the constraint imposed on traditional voice calls would be restricted. Vodacom disagrees with this because:

<u>The importance of compatibility between applications should be diminishing</u>

The restriction on the caller and receiver to be on the same application (what ICASA refers to as *"compatibility between applications"*) is sometimes referred to as 'closed-user groups'. This could, in principle, limit the widespread take-up of OTT services if different segments of the market favour different OTT apps, leading to a potential co-ordination problem.

[redacted] Therefore, despite the presence of a large number of different OTT applications, there are services that have high

penetration rates (i.e., the market is not overly fragmented). This reduces the impact of different OTT voice services not being interoperable.

Additionally, these OTT applications are generally free to access and take limited time to download from an app store, so users can easily access new OTT voice services, even if they have a different preferred OTT application. [redacted]

OTT voice calls can offer a similar quality of service to traditional mobile voice calls

Since the quality of OTT voice calls depends on access to a data network, an unreliable and poor quality data network can reduce the quality of the service. However, the high 3G/4G coverage in South Africa today implies that the quality of OTT voice calls is likely to be comparable to traditional voice calls.

[redacted]

1.4 Users increasingly have a reliable data connection

ICASA has argued that OTT voice calling requires both the calling and receiving party to simultaneously have a stable data connection. However, ICASA states that this might not necessarily be possible at all times due to poor data coverage and connectivity, making it difficult for the calling party to setup calls with the receiving party. ICASA states that this potential barrier would be further exacerbated in case of an emergency or if the caller wants to make urgent contact. Vodacom acknowledges that, for OTT voice to continually provide high quality service, there is a need for a fast, reliable data connection over a mobile network or WiFi. However, in practice, data coverage has been rapidly expanding in South Africa. As per the latest data, MNOs in South Africa now have 3G coverage of 99.9% and 4G coverage 97.7%[15], compared to 98.6% and 77.6% respectively in 2017, when ICASA carried out its most recent voice termination market review. This implies that users will typically have access to a data connection that

[15] 1 Mbps (Outdoor) coverage. Indoor coverage is less important than outdoor coverage for OTT services, as some users will be able to use a WiFi network instead of a mobile data connection when indoors

is of sufficient quality for making and receiving OTT voice calls, given that 3G services (with 1Mbps throughput) should provide adequate quality for OTT voice calls.

With regards to the very specific example provided by ICASA of OTT voice calls potentially not being sufficiently reliable for emergency calls, Vodacom would point out that these are extreme events and would therefore have very limited impact on any HM test. In other words, individuals are unlikely to base their choice between using OTT voice or traditional voice for everyday purposes, based on their potential utility in low probability events. Just because users use OTT voice services for many of their calls, this does not preclude them from using traditional voice services for emergency calls. And, as explained above, for OTT voice and traditional voice to be in the same market, it is not necessary that all traditional voice calls would substitute to OTT voice services, following a SSNIP.

1.5 OTT voice services can be significantly cheaper than traditional mobile voice calls

ICASA is of the view that the price differential between OTT voice services and traditional voice services is not large enough to result in the substitution of traditional voice for OTT voice calling services. Vodacom disagrees with this position. Given the reliance of OTT services on data accessibility and usage, the cost of OTT services depends heavily on the price of data. The effective data prices offered by Vodacom have fallen significantly over time. Further, the incremental price faced by consumers for making OTT calls on a mobile device is often likely to be zero (for example, when customers are connected to WiFi or when some customers have not used all of their data allowance, meaning there is no additional cost from incremental data usage). As such, customers can often make OTT voice calls at little to no cost, implying that this is not a relevant barrier to the take-up of OTT services.

1.6 The pricing model for OTT voice services should have limited impact on their use

ICASA argues that OTT voice calling alters the pricing model from Calling Party Pays ("**CPP**") to a hybrid of CPP and Receiving Party Pays ("**RPP**"). It argues this might be undesirable to a certain segment of end-users.

While it is true, to some extent, that a user may pay (through data costs) to receive OTT calls, the use of Wi-Fi and of consumers buying large mobile broadband data bundles implies that any incremental cost is likely to be low to zero. Therefore, the majority of end-users are unlikely to face this pricing barrier. This is an important point because, as already discussed, for the product market to be expanded, an HM test does not require that all subscribers would switch to OTT voice services following a SSNIP for mobile call termination services. Therefore, even if there was *"a certain segment of end-users"* who were unwilling to switch to OTT voice services due to the different pricing models of the services, this does not necessarily mean that OTT voice services are not in the same product market as mobile termination services.

1.7 Switching from traditional voice services to OTT voice services is very accessible

ICASA states that even if subscribers are aware of the price of traditional voice services, they might not be able to switch immediately due to, among other reasons, high switching costs and customer stickiness. However, it is unclear what types of switching costs ICASA is referring to and what it means by *"customer stickiness"*. Given the nature of the product (i.e. voice calls), the HM test does not require a customer to stop completely using traditional mobile voice calls and switch entirely to OTT voice calls. Instead, they may continue to use traditional mobile services, but may reduce their consumption of retail voice calls by a sufficient amount with their existing provider, to render a SSNIP of MTRs unprofitable.

It is very straightforward for customers to download OTT voice calling apps, such as WhatsApp and Facebook if they don't already have them installed on their devices. They are easily available on most smartphones and data capable devices, and are generally free.

Further, ICASA seems to suggest that any switching would need to be immediate for OTT voice services to be in the same market[16]. However, such an outlook is not aligned with best practice. When conducting an HM test, substitution is generally considered over a longer period after the hypothetical increase in price.

Another potential barrier to OTT adoption cited by ICASA is the limited penetration, in South Africa, of those devices which are compatible with OTT services (i.e., smartphones or some other form of data capable device). As stated in ICASA's 2017 Findings document, the smartphone penetration rate in South Africa was approximately 33% at the time, which indicated that only a limited proportion of users had the ability to switch to OTT services, as a substitute for traditional voice calls.

However, as a result of the fall in the price of smartphones, and the increased data capabilities of lower-end devices, the number of users with access to data capable devices has been steadily increasing. [redacted] These steady increases in the penetration of devices capable of supporting OTT services indicate that over time, this particular barrier to the take-up of OTT services has been falling, and the trend indicates that it will continue to diminish. As a result, a larger base of users in South Africa will have the option of switching to OTT voice calls from traditional voice services.

[redacted]

1.8 Most users are likely to know the unit price of traditional mobile voice calls

ICASA has argued that many voice subscribers, especially post-paid and top-up subscribers who purchase a bundle of voice, SMS and data, might not be able to act on the retail voice price increase due to limited information on the unit price of voice calls. [redacted]

Additionally, even customers that are on integrated plans tend to go out-of-bundle at times, with extra usage then being charged at the unit price for mobile voice calls. [redacted] This suggests that even these customers would, to some

[16] When discussing OTT services, ICASA states that *"...even if subscribers are aware of the price of traditional voice services, they might not be able to switch immediately due to, among other reasons, high switching costs and customer stickiness."*

extent, be aware of changes in the price of traditional voice calls, and could therefore, theoretically, consider alternative services in the face of a SSNIP.

2. Fixed termination markets

Vodacom agrees that there is a separate product market(s), distinct from those for mobile voice call termination services, for *"wholesale voice call termination services on the network of each licensee that offers termination to a fixed location within the Republic of South Africa"*. This is because, as stated by ICASA, there is limited:

- Retail demand-side substitution;
- Retail supply-side substitution;
- Wholesale demand-side substitution; and
- Wholesale supply-side substitution

We assess each of the four potential sources of substitution below. Supply-side substitution (whether at *"retail"* or *"wholesale"*) is, however, not possible. This is because, given the technicalities of call termination, it is not possible for alternative operators to offer call termination services on an operator's network, in response to that operator's SSNIP. This is discussed in further detail below.

2.1 Retail demand-side substitution

An assessment of demand-side substitution at the retail level concerns a consumer switching from fixed-line voice call services on a licensee's network to fixed-line voice call termination services on another licensee's network or to mobile voice calls. However, given the nature of the product, any potential substitution is likely to be indirect, since end-users do not directly face termination rates. In particular, if a fixed-line network operator were to increase its FTRs, retail providers may pass on some or all of this increased termination rate to customers in the form of higher retail prices for calls to that fixed network. Faced with these higher prices, some customers may choose to substitute away from making calls to this particular fixed-line network and instead make calls to a different fixed-line network or to a mobile network. If sufficient customers make this switch, the fixed-line operator would make a net loss as a result of the increase in the termination rate (i.e., a SSNIP test would not be passed). For this to happen in practice, the following would need to be satisfied:

- **High cost pass-through**: For an increase in the FTRs to impact the end-users' decision to switch to make calls to another operator, all or part of this increase would need to be passed-through into higher retail prices for calling fixed lines from mobile or from other fixed lines. This is because the end-users do not directly observe termination rates, but only the retail prices set by their operator. If, for example, operators pass on none of the increased FTRs to customers as higher retail prices, there would be no effect on their decision-making and the SSNIP test would be passed. However, even if the increased FTRs are entirely passed through to customers as higher prices (i.e. a 100% cost pass-through), a 5-10% increase in FTRs will materialise as a less than 5-10% increase in retail prices. This is because FTRs only represent a certain percentage of the retail prices for calling fixed lines (with apportioned overheads and other variable costs, including the network costs of originating the call, making up the rest). For example, if FTRs make up 60% of retail prices, a 10% increase in FTRs will translate as only a 6% increase in retail prices, therefore dampening any potential effect on substitution at the retail-level.

- **Awareness of price increase**: For an increase in FTRs to have a tangible effect on consumers' decisions to switch to other fixed-line operators or mobile operators, they would need to be aware

of the price increase for calling fixed lines. Only if customers are aware will they potentially switch away to such an extent that it renders the 5-10% increase in FTRs unprofitable.

In line with ICASA's position, Vodacom does not consider that these conditions apply for any types of calls to fixed lines. This is discussed further below.

On-net fixed voice calls ("on-net F2F") as a substitute for mobile to fixed ("M2F") voice calls

Vodacom agrees with ICASA that on-net F2F voice calls are not a substitute for M2F voice calls. In other words, Vodacom does not believe that potential switching from M2F to F2F calling could provide a large enough constraint to make a hypothetical increase in fixed termination rates unprofitable.

Firstly, the number of callers that have access to fixed-line voice services in South Africa is relatively low, and has been decreasing steadily year-on-year. As per ICASA's State of the ICT Sector report 2021[17], the number of fixed line subscriptions has fallen from 3.85 million in 2015 to 1.83 million in 2020. Since switching from calling from mobile phones to calling from a fixed line requires users to have a fixed line, it is unlikely that, given the low penetration rates, a sufficiently large number of callers would switch from M2F calling to on-net F2F calling in response to an increase in fixed termination rates on M2F calls.

Further, calling from fixed locations significantly decreases the flexibility of the caller compared to calling from a mobile device. This convenience offered by mobile calling is likely to be another barrier that inhibits switching and dampens the constraint placed by on-net F2F calling on M2F calling.

Finally, as discussed above, due to the indirect nature of substitution in this market, a 5-10% increase in FTRs would likely translate as a smaller percentage increase in retail prices. As a result, users may not find that price increase substantial enough to encourage switching from M2F to on-net F2F voice calls.

Mobile to mobile (M2M) voice calls as a substitute for mobile to fixed (M2F) and off-net fixed to fixed (off-net F2F) voice calls

Vodacom agrees with ICASA that M2M voice calls are not a substitute for M2F and off-net F2F voice calls. Vodacom believes that in response to an increase in the FTRs, there would be insufficient switching to callers calling the desired party on their mobile phones, instead of their fixed line, for a SSNIP in FTRs to be unprofitable.

- A key reason for this is that the majority of calls to fixed lines are calls made to businesses, where there may not exist a mobile alternative, or it may be inappropriate given the nature of the call (for example, if the call is to a department, as opposed to a particular individual). As a result, voice calls to mobile numbers are unlikely to be a suitable substitute for the majority of callers who make calls to fixed lines.

- Secondly, the price of M2M calling is in general higher than M2F calling, since the underlying cost of fixed termination is cheaper than that of mobile termination. As such, even with a 5-10% increase in FTRs, calling a fixed-line may be cheaper than calling a mobile. This natural price differential may further serve to dampen the potential constraint imposed by M2M calling. Vodacom recognises that this constraint may be somewhat weaker for customers who buy voice bundles and are less sensitive to prices. However, as mentioned above, the majority of Vodacom's contract voice customers and all of Vodacom's prepaid customers do not purchase integrated plans and would, therefore, be directly affected by the higher retail price for mobile voice calls. Furthermore, due to the indirect nature of substitution in this market, a 5-10% increase in FTRs would likely translate as

[17] ICASA's State of the ICT Sector report 2021. Available from: https://www.icasa.org.za/uploads/files/State-of-the-ICT-Sector-Report-March-2021.pdf

a smaller percentage increase in retail prices. As a result, users may not find that price increase substantial enough to encourage switching to M2M voice calls.

- Thirdly, as mentioned above, there are likely to be differences in the characteristics of fixed and mobile calls. For example, BEREC[18] has concluded that any indirect constraints due to switching at the retail level are likely to be weak because of the different characteristics between fixed and mobile offers, including differences in price structures and mobility between the two, and different preferences between fixed and mobile service users [redacted] Therefore, users who highly value voice quality are likely to prefer the use of fixed-line voice services, and are unlikely to view mobile voice as a good substitute.

Fixed to mobile (F2M) voice calls as a substitute for fixed to fixed (F2F) voice calls

Vodacom agrees with ICASA that F2M voice calls are not a substitute for F2F voice calls. Vodacom believes that in response to an increase in FTRs, there would be insufficient switching to callers calling the desired party on their mobile phones, instead of their fixed line, for the increase in FTRs to be unprofitable.

As in the case of the potential switching from M2F calling to M2M calling, one key reason for this is that the majority of calls to fixed lines are calls made to businesses, where there may not exist a mobile alternative, or it may be inappropriate given the nature of the call (for example, if the call is to a department, as opposed to a particular individual). As a result, voice calls to mobile numbers are unlikely to be a suitable substitute for the majority of callers who make calls to fixed-lines. The voice quality difference between fixed and mobile services observed above may also be a contributing factor to callers' decision making.

OTT services

Vodacom agrees with ICASA that OTT voice calls are not a substitute for fixed voice calls. As discussed in Section B.1.1 above, ICASA should adopt a forward-looking perspective when assessing the impact of OTT voice services on the effectiveness of competition in the markets for call termination services. However, it is clear that the potential constraint imposed by OTT voice services on the market for fixed voice call termination services is likely to be weaker than it is for mobile voice call termination services. This is because:

- **Fixed voice users value sound quality and reliability**: As outlined earlier, some customers may value voice quality highly and prefer fixed voice services for that reason. This factor should be taken into consideration when assessing potential substitution patterns involving OTT services as well, since OTT applications are unavailable on most fixed-line devices (with the exception of PCs). Therefore, for a fixed-line user to switch to OTT calling, they would inherently have to switch to the use of mobile phones. However, because of the reasons discussed above, many fixed line users are unlikely to view mobile phones as substitutes, which serves to dampen the potential constraint placed by OTT voice services on fixed-line calling.

- **Chain of substitution**: ICASA has argued that OTT voice services are not a substitute for mobile voice services. Even though Vodacom believes that ICASA should employ a more forward-looking view on that assessment, ICASA's view suggests that OTT voice services are unable to be a substitute for fixed-line voice services either. This is because, as argued above, the structural differences between fixed and mobile voice calling suggest that fixed line voice and mobile voice services are not substitutes for each other. Therefore, if OTT voice is not a substitute for mobile

[18] BEREC Report impact of fixed-mobile substitution (FMS) in market definition (24 May 2012)
[19] Mean Opinion Score: a rating from 1 to 5 of the perceived quality of a voice call

voice, and mobile voice is not a substitute for fixed-line voice, that would suggest that OTT voice cannot be a substitute for fixed-line voice.

2.2 Retail supply-side substitution

Vodacom is not entirely clear what ICASA means by retail supply-side substitution. For supply-side substitution to be viable in the fixed call termination market, an alternative operator (this could be a mobile operator, a different fixed-line operator or an operator of other services like OTT) must be able to offer fixed-line call termination on a given operator's network, such that if this fixed-line operator is to raise FTRs on its network, customers would substitute to terminating calls via the alternative operator, making the increase in FTRs unprofitable. However, given that only the host operator can offer termination on a given network, such substitution is not technically possible. Therefore, Vodacom agrees with ICASA that any potential retail supply-side substitution for calls to fixed lines is not possible.

2.3 Wholesale demand-side substitution

Vodacom agrees with ICASA that there is no wholesale demand-side substitution for calls to individual fixed line networks. For such substitution to be viable, operators must be able to switch to purchasing call termination on a different operator's network (in response to the fixed-line operator to whose network the customer has made a call, increasing its call termination rate). However, given the nature of call termination (i.e., a given phone number is associated with a particular operator), the originating operator cannot demand that a call is terminated on a different network to that of the operator that the customer has called. Purchasing call termination on an alternative network is not an option for the originating operator as a response to changes in wholesale prices (i.e. termination rates) and there is therefore no scope for direct wholesale demand-side substitution.

2.4 Wholesale supply-side substitution

Vodacom agrees with ICASA that there is no scope for wholesale supply-side substitution for calls to fixed lines. As mentioned in the discussion of retail supply-side substitution above, for such substitution to be feasible, in response to an increase in the call termination rates, an alternative operator has to be able to provide termination services on the network of the operator that the customer has placed a call to. As discussed above, this alternative operator cannot demand that a call is terminated on a different network to that of the operator that the customer has called. However, since only the host operator can charge for termination on its network, there is no scope for alternative operators to provide termination services.

3. Common pricing constraint

ICASA has stated that its *"preliminary view is that there are no common pricing constraint linking the wholesale voice call termination rates set by different licensees".*

Vodacom is not entirely clear on what ICASA means by this. Vodacom assumes that ICASA means that the termination rate charged by one licensee will not constrain the termination rate charged by another licensee. If this is what is meant by ICASA, then Vodacom agrees with this given that the termination services offered by each network are in different product markets. In particular, an increase in the termination rate charged by operator A on its network will have no direct bearing on the termination rate charged by operator B on its separate network.

Vodacom would, however, highlight that licensees do not price discriminate between termination charges for calls made to different subscribers on their networks (which is more typically considered as the *"common pricing constraint"*). It is this *"common pricing constraint"* which means the relevant market should relate to call termination charged to all subscribers on a particular network and, when taken a step further, as proposed in ICASA's product market definition, *"wholesale voice call*

termination services ***on the network of each licensee*** *that offers termination to a mobile or fixed location within the Republic of South Africa".* [Emphasis added]

C. Geographic market definition

"Do you agree with the Authority's preliminary conclusion on the geographic market definition? Please explain the reasons for your answer and provide the relevant factual or other evidence supporting your views."

Vodacom agrees with ICASA that the geographic market for call termination services is national in scope. Vodacom also agrees that internationally originated traffic should be excluded from the defined markets. This is because:

- Keeping ITRs deregulated would be consistent with the market failures identified by ICASA;
- Even following deregulation, Vodacom South Africa's ITR is still below the average in other countries to (from) which Vodacom sends (receives) traffic;
- ICASA has no control over the termination rates set by operators in other countries;
- Regulating ITRs would worsen the cross-subsidy already being provided by South African consumers to telecommunications users in other countries; and
- OTT services also provide a viable alternative for international calls.

Furthermore, Vodacom also notes that:

- Having ITRs above domestic termination rates is not discriminatory; and
- Bypass should be tackled directly rather than by regulating ITRs.

Vodacom also notes from the Discussion Document that Switchtel made a number of points on this matter in its response to ICASA's questionnaire. Throughout this section of its response, Vodacom therefore also responds to these points, while in Section C.8 we respond to Switchtel's specific proposals for how ITRs should be regulated.

1. Keeping ITRs deregulated would be consistent with the market failures identified by ICASA

In its 2010 market review[20], ICASA identified inefficient pricing as a market failure that could adversely impact:

- The ability of new entrants and smaller players to compete with more established firms; and
- The level of retail prices for F2F, F2M, M2F and M2M off net calls faced by end users.

Importantly, this market failure (which ICASA believes still applies today, as set out in this latest Discussion Document) is focussed on local calls. Specifically, absent the regulation of termination charges for domestic calls, ICASA is concerned about South African end users, and the ability of South African new entrants and smaller players to compete. Therefore, it follows that any remedies should be focussed on termination services provided for calls that originate from within South Africa. If ICASA

[20] Explanatory note for the Draft Call Termination Regulations (Section 3.3.2).

were to extend remedies beyond these calls, its regulations would be inconsistent with the market failures that it has identified. ICASA has itself stated that it needs to ensure that *"specific obligations imposed must be based on the nature of the problem identified, and must be proportionate and justified"*[21].

Switchtel has argued that the increase in ITRs by South African operators was *"unfair and unreasonable"*. However, the reality is that Vodacom and other operators in South Africa are subject, on average, to very high ITRs when terminating calls to popular destinations, with Vodacom South Africa's ITR being below the average ITR charged by operators in the ten most popular destinations for calls originating in South Africa. Therefore, contrary to the claims made by Switchtel, the higher ITRs (vs MTRs) charged by South African operators are fair and reasonable when attempting to minimise or mitigate the exploitation of SMP by licensees in other jurisdictions.

Switchtel has also argued that the deregulation of ITRs has had an adverse impact on competition, commenting that large operators in South Africa have the *"ability and incentive to set excessively high international termination rates"*. In practice, the opposite is true, as having deregulated ITRs has arguably had pro-competitive, beneficial effects for consumers in South Africa. This is because the increase in the average revenue per customer for incoming calls would be expected to lead to mobile operators competing more strongly to serve those customers, using the proceeds from incoming international calls to offer more attractive offers to customers.

2. Even following deregulation, Vodacom South Africa's ITR is still below the average in other countries

Even following deregulation, Vodacom South Africa's ITR is still below the average in many other countries with which Vodacom exchanges significant volumes of traffic. Prior to 2017, ITRs in South Africa were included in the same defined market as wholesale domestic termination services, with the prices for both services regulated at the same cost-based rate. As a result, operators, including Vodacom, were operating at a disadvantage compared to many of their international counterparts, who typically charged significantly higher rates to terminate outgoing international calls from South Africa than Vodacom was able to charge to terminate incoming international calls to South Africa. [redacted]

In October 2017, as part of ICASA's 2018 Call Termination Rate review process, ICASA amended the 2014 wholesale voice call termination market definition by excluding internationally originated voice traffic terminating in South Africa. This change provided South African operators with the ability to increase ITRs and so reduce some of this imbalance. Following this change, Vodacom increased its ITR from 0.01 USD/min to 0.12 USD/min. Vodacom's current rate stands at 0.13 USD/min.

[21] ICASA (2010) - Draft Call Termination Regulations Page 73 of GG 33121

[redacted]

3. ICASA has no control over the termination rates set by operators in other countries

Importantly, as ICASA itself acknowledges, it only has jurisdiction over the ITRs set by South African operators; it does not have jurisdiction over the ITRs set by operators in other countries. Given this, whilst ICASA has the power to set lower ITRs in South Africa, it cannot reduce the ITRs set by operators (or regulators) in other countries.

Ideally, balanced ITRs (in terms of per-minute rates) would be achieved by operators in all countries, including South Africa, setting ITRs based on the costs of providing the service (inclusive of a reasonable rate of return). However, where this is not the case and ITRs charged by international counterparts are high, operators in South Africa must have the ability to avoid large net outpayments by amending their own ITRs. In this, Vodacom considers it useful to distinguish between two scenarios:

- For countries where ITRs are not regulated, the ITR will be set based on commercial negotiations. The outcome of these commercial negotiations will depend on the relative bargaining power between the operators in question. If ITRs are regulated in South Africa, but not other countries, then this can create a large imbalance in the relative bargaining power. This is because South African operators would not be able to threaten to retaliate if operators in the country with no ITR regulation decide to set high ITRs.

- There are a number of countries, especially in Africa, where regulators have set minimum ITRs which apply in their respective countries (i.e. a price floor rather than a price cap), but at a level that

is far above the cost of providing the service. For example, in several African countries, the regulated ITR is far above the domestic MTR.

Under both of these scenarios, South African operators would face large net outpayments for ITRs if ICASA were to re-introduce regulation of ITRs.

4. Regulating ITRs would worsen the cross-subsidy already being provided by South African consumers to telecom users in other countries

[redacted]

Regulating ITRs in South Africa would significantly reduce the revenue that South African operators receive from ITRs. Conversely, ICASA regulating ITRs is likely to have limited impact on the ITRs (and therefore the payments) that South African operators have to pay to operators abroad. [redacted]

If ICASA were to regulate ITRs, Vodacom understands ICASA would do so by setting cost-based termination ITRs or otherwise constraining operators' abilities to set prices. [redacted]

5. Having ITRs above domestic termination rates is not discriminatory

ICASA has summarised, in its Discussion Document, Switchtel's view on the ITR proposals as follows:

> *"Switchtel argued that the increase in ITRs following amendment of definitions of regulated markets to exclude calls originating outside of South Africa was unfair and unreasonable, and also that licensees didn't discriminate against international termination rates before the regulation of wholesale voice call termination markets in 2010."*

Vodacom considers Switchtel's reference to discrimination between rates to be misleading. In Vodacom's view, for differentials between MTRs and ITRs to be considered discriminatory, the services to which ITRs and MTRs relate must be comparable and applied in similar circumstances. However, the services underlying ITRs and MTRs are clearly not comparable, while ITRs and MTRs are also not applied in similar circumstances. This is because:

- As already noted, ICASA only has jurisdiction over the ITRs charged by South African operators, and not the ITRs charged by operators abroad. This can result in significant value transfers between operators and countries. In contrast, ICASA has jurisdiction over all of the domestic termination rates set by South African operators. These latter rates are regulated at the cost of providing the service, which means there are no value transfers between operators[23].

[redacted]

[23] Excluding any transfers as a result of ICASA historically allowing smaller operators to charge higher MTRs

- The ITRs charged by South African operators will mainly impact telecom users abroad. In contrast, the domestic termination rates charged by South African operators will impact on South African telecommunications users. As explained in Section C.1, ICASA is concerned with addressing market failure in relation to local calls, not international calls, and so it is not appropriate in any case to regulate the level of ITRs within this process.

As such, it is not discriminatory for ICASA to allow operators to charge ITRs which are higher than domestic MTRs. Rather, as explained in other parts of this section, it is inappropriate to regulate ITRs and certainly inappropriate to suggest that operators should set ITRs at the same level as (domestic) MTRs.

6. Bypass should be tackled directly rather than by regulating ITRs

Bypass occurs when, amongst others, a call is routed via "illicit" VoIP gateways in another country, through the internet to an "illicit" GSM gateway in South Africa where it is "re-originated" to make it look like it was a call originated in South Africa. Bypass is typically engineered in such a way that it is presented as an on-net call and so does not even attract the local termination charge.

Given the prevalence of this practice, this fraudulent use of the South African operators" services results in significant lost revenues, and lost tax revenue for the South African government. Furthermore, it can also have detrimental impacts on the South African mobile market via a number of other channels, including by reducing the quality of service experienced by subscribers (e.g. dropped calls and long waiting times to set up calls). Privacy and security over bypass networks is also minimal or non-existent, contrary to the services offered by genuine service providers.

Vodacom agrees that this is a significant issue which must be tackled. However, regulating ITRs as a way to reduce bypass is not appropriate.

6.1 Switchtel's proposal to address bypass is flawed

Switchtel has argued that the deregulation of ITRs has resulted in bypass:

> *"Switchtel argued that the significant increase in international termination rates which are significantly higher than the national retail voice tariffs created market for bypass fraud by non-licensees who use SIM-boxed (including hacking of subscriber systems) to re-route international voice traffic as local traffic in SA. Switchtel attribute the increase in bypass fraud to the 2017 amendment, as bypass fraud was less prevalent before 2017. Switchtel contend that unless the differential between international termination rates and national retail voice tariffs is addressed, the illicit grey market will persist. Switchtel is therefore, of the view that the Authority should regulate international termination rates in order to address, among others, bypass fraud."*

Vodacom agrees that bypass fraud is a significant issue[24], and one of the reasons why South African consumers are likely still subsidising telecommunications users abroad (i.e. some countries do not suffer from bypass fraud, therefore bypass fraud suffered in South Africa results in an increase in net termination charges paid by South African operators – which is passed on to consumers via retail prices). However, it is important that bypass is tackled head-on via specific regulatory or legal measures rather than trying to achieve reductions in bypass as an indirect impact of reintroducing the regulation of ITRs, as proposed by Switchtel.

Switchtel's argument appears to be based on the assumption that the *"grey market"* exists as a result of the differential between national retail voice prices and ITRs. Although the basis for this comparison is unclear, Switchtel seems to be implying that the charges for making international calls to South

[24] In its RFP, ICASA has itself recognised that bypass is an important issue

Africans (as measured by comparison to domestic retail rates in South Africa) have led to sufficient demand for illicit bypass services to create a market. In reality, as long as ITRs remain above the prices illicit operators are able to offer, this *"grey market"* is likely to persist, with changes in the level of ITRs only serving to impact the level of demand for those services indirectly. Regulating ITRs is therefore only likely to reduce the level of bypass, at best, rather than to eradicate the practice completely.

6.2 Bypass should be addressed separately to this process

Vodacom notes that there are indications that ICASA is looking at means to address illegal bypass[25]. In addressing the issue of bypass, Vodacom recommends that ICASA considers the options below, while also consulting with the industry on its proposals:

- Undertaking a section 4B inquiry with the aim of explicitly declaring illegal bypass as unlawful by effecting an amendment to the relevant regulations such as the Numbering Plan Regulations ("**NPR**"). The amendments could also include a prohibition on calling line identification ("**CLI**") manipulation for purposes of illegal bypass. The current provisions in the NPR do not address the issue, more specifically in the instance of bypassing the point of interconnection for terminating calls onto Vodacom's network.

- The responsibility for detecting bypass traffic should remain with operators using the fraud detection tools currently available to them. Operators would then have to inform ICASA of any mischief detected for ICASA to take appropriate action against offenders.

- Alternatively ICASA should, use its powers under section 4 of the ECA, to develop new regulations dealing specifically with illegal bypass.

Vodacom proposes that ICASA impose harsh penalties on licensees who are found to engage in illegal bypass to deter these unlawful activities. Some of the remedies could include the confiscation of the devices used for bypass in addition to monetary penalties. The sanctions should be proportional to the harm caused by illegal bypass.

Vodacom is aware that one method used by authorities in other jurisdictions to discourage or reduce bypass has been to ban SIM boxing (one of the main forms of bypass). Countries such as Tanzania, Ghana, Uganda, Kenya, Mozambique, Jordan and India have declared SIM boxing illegal – and Lesotho is in the process of doing so. However, without stringent enforcement and severe financial and/or criminal penalties to deter the practice, simply outlawing the practice alone may be unlikely to be effective. ICASA and the South African government should therefore consider a broader range of options, such as those listed above, which may be more effective in tackling bypass. ICASA must, however, be careful that any measures it considers do not risk compromising the integrity of operators' networks.

7. OTT services also provide a viable alternative for international calls

ICASA has stated that the prevalence of OTT services should disincentivise licensees from charging high ITRs. Vodacom agrees that OTT services provide a viable alternative (a clear substitute) for international calls. The constraint imposed by OTT services on international calls (as opposed to domestic calls) is particularly strong because:

- International calls tend to be of a longer duration (see Figure 5 below), which provides users with a greater incentive to plan ahead to help ensure that they are in a location where they have adequate data coverage if they wanted to use an OTT service.

[25] https://www.icasa.org.za/tenders/icasa-37-2020-development-of-a-multi-modular-compliance-monitoring-system

[redacted]

- In general, international calls tend to have higher effective retail prices than domestic calls, which means that the potential costs savings from switching to OTT voice services (from the user's perspective) are even higher for international calls than for domestic calls. In addition, relative to domestic calls, a greater proportion of international calls are likely to be out-of-bundle for which a higher retail rate applies. As a result, consumers are more likely to face an incremental cost for making international calls, which may provide them with a stronger incentive to switch to OTT services, than for domestic calls.

[redacted]

8. Specific comments on proposals by Switchtel

Based on ICASA's summary in the Discussion Document, Vodacom understands that Switchtel has come up with a set of proposals for how ICASA should regulate ITRs:

> *"National Rates: Specify the maximum rates in respect of nationally originated calls.*
>
> *Reciprocity: In respect of calls originating from countries that reciprocate with termination rates lower than or equal to the rates set out in 1 above, licensees must charge rates no greater than those in 1 above.*
>
> *Recognition: In respect of calls originating from any country that the Authority has an agreement with the country's regulator with respect to the application of non-discriminatory rates, licensees must charge rates no greater than those in 1 above. The Authority should publish, from time-to-time, an amended list of such countries and should, in particular, engage with regulators with which it already has MoU's and/or through regional regulators in the mutual interests of reducing the cost-to-communicate for citizens of both countries. In particular, they would strongly encourage the Authority to engage CRASA members in this regard for the interest of the SADC region.*
>
> *International rates: Specify maximum rates in respect of internationally originated calls that do not meet the criteria set out in 2 and 3 above. In order to mitigate against an illicit grey market, these rates should not exceed retail call originated rates and should not exceed double the rates set out in 1 above."*

Vodacom would welcome lower ITRs within the SADC region, as Vodacom currently charges lower ITRs than many operators in the region. However, the *"recognition"* approach applied by Switchtel would only be an appropriate approach if all countries in the SADC region were to lower ITRs to the same level (or at least based on the same costing methodology). Until such time, it would be damaging for ICASA to unilaterally lower ITRs in South Africa, as this would create large net outpayments for South African operators. For example, the Government of Lesotho has recently significantly increased the minimum ITRs that operators in Lesotho must charge, despite pressure from SADC/CRASA to lower ITRs. Vodacom also notes that ICASA does not currently have an MoU with any countries and there are no agreements through regional regulators.

Finally, Switchtel's proposals for *"international rates"* (i.e. at most double the domestic MTRs and not exceeding retail rates) is entirely arbitrary. At present, operators in many other countries charge ITRs that far exceed double the domestic South African MTR and indeed retail rates, so there is extensive precedent which contradicts Switchtel's proposals. Imposing such a restriction on operators in South Africa would require a significant reduction in ITRs and would increase the cross-subsidy provided by South African mobile subscribers to telecom users in other countries.

D. Fixed-mobile convergence

"Do you agree with the Authority's preliminary conclusion on fixed and mobile convergence? Please explain the reasons for your answer and provide the relevant factual or other evidence supporting yours views"

ICASA has stated that fixed and mobile voice services are complementary and are in separate product markets. As already explained above in response to Question 1, Vodacom agrees with ICASA's view that mobile voice and fixed voice services are not provided in the same market. ICASA, in Section 2.1.3 of the Discussion Document, also states that the cost of terminating a mobile voice call is *"slightly higher"* than the cost of terminating a fixed voice call. Vodacom notes that determining the costs of call termination services does not form part of the current enquiry. It does, however, agree that the efficient costs of providing fixed and mobile termination are different. Given all these reasons and as further explained below, Vodacom considers that there is a strong case for setting MTRs above FTRs.

1. Vodacom agrees that fixed and mobile voice services should be in separate product markets

Vodacom agrees that fixed and mobile voice services are complementary (or at the very least they are not substitutes)[26]. There are certain fundamental differences between fixed and mobile voice calls that imply that they are generally used under different contexts. As such, for the majority of fixed-line users, mobile voice is unlikely to represent a viable substitute, and vice versa.

These differences include the mobility and flexibility offered by mobile voice services, compared to the higher sound quality and reliability offered by fixed-line voice services. These differences may naturally lead to different subscribers preferring one over the other. For example, business or enterprise users may attach higher value to consistent sound quality and the lack of dropped calls than consumers do. As a result, any indirect constraint due to switching from fixed to mobile voice calls or vice versa at the retail level is likely to be weak. In other words, a 5-10% increase in mobile or fixed-line call termination rates is unlikely to encourage sufficient substitution to fixed-line or mobile voice calls respectively, to make the increase in the termination rates unprofitable. The likely complementarity between fixed-line

[26] Even if fixed and mobile services were not complements, this does not necessarily mean that they should be in the same product market. For services to be in the same product, they have to be sufficiently close substitutes. Some services could be neither substitutes nor complements

and mobile voice may also explain why these services are sometimes offered as a bundle, for use under different contexts[27].

2. Mobile and fixed networks have different cost structures

According to the Discussion Document, Switchtel and Cell-C have argued that mobile and fixed networks have virtually the same core network (and implicitly, therefore, similar cost structures). However, this ignores the fact that the access networks are very different and have different cost drivers. A study undertaken by the GSMA[28] analyses a number of different factors and concludes that there are significant differences between the cost structures of mobile and fixed operators – with the biggest difference stemming from how the costs of the access network are driven and therefore how they should be recovered.

- For a fixed service, the cost of the access network is almost entirely driven by the number of subscribers rather than driven by traffic. Once the infrastructure has been installed, any increases in traffic would not require further investment in the access network. In other words, the costs have a very large fixed cost component, and an insubstantial traffic-related cost component. As such, the costs of the access network are primarily recovered from a subscription service (i.e. comprising an access charge), as opposed to a usage cost (i.e. termination rates).

- On the other hand, the access network for mobile services is not dedicated to individual subscribers, and so an increase in traffic requires further investment in the network, the costs of which are then appropriately recovered from traffic services (rather than from subscription-based fees). Put another way, compared to fixed networks, the costs of the mobile access network have a much larger traffic-related cost component.

Therefore, for mobile networks, the costs of the access network would be lower if (voice) termination services were not provided. In contrast, for fixed networks, removing termination services would have no impact on the cost of the access network. Because in percentage terms, the access network represents a considerable share of the total network costs associated with providing mobile services, the costs of mobile termination services are likely to be greater than those for fixed termination services.

Switchtel has also argued that the market for fixed services no longer exists due to the decline in traditional copper fixed lines. However, this is misleading because there are still a material number of copper fixed-lines in South Africa, with 1.3 million customers relying on copper as of March 2021. This implies that there are still customers who rely on these legacy networks and the prices faced by them must be cost-reflective. Further, operators are rolling out fibre networks to replace the existing copper networks, with fibre networks offering both voice and data services. This investment would not have been undertaken if the 'market for fixed services no longer exists'.

2.1 In percentage terms, the costs of terminating a mobile voice call are considerably higher than the costs of terminating a fixed voice call

ICASA has stated that the cost of terminating a mobile voice call is *"slightly higher"* than the cost of terminating a fixed voice call. However, as shown by the analysis undertaken by the GSMA, an increase in traffic requires further investment in the access network for mobile services, whereas it requires no further investment in the access network for fixed-line services. As a result, the incremental cost of terminating a mobile voice call is much higher than the incremental cost of terminating a fixed voice call, in proportionate terms. This is demonstrated below.

[27] Even if fixed and mobile voice termination services were in the same market (which Vodacom strongly disagrees with), this still wouldn't necessarily mean that FTRs should be set equal to MTRs. This is because regulators often set different regulated prices for products within the same market to reflect cost differences

[28] GSMA. Comparison of fixed and mobile cost structures. Available from : https://www.gsma.com/publicpolicy/wp-content/uploads/2012/09/Tax-Comparison-of-fixed-and-mobile-cost-structures.pdf

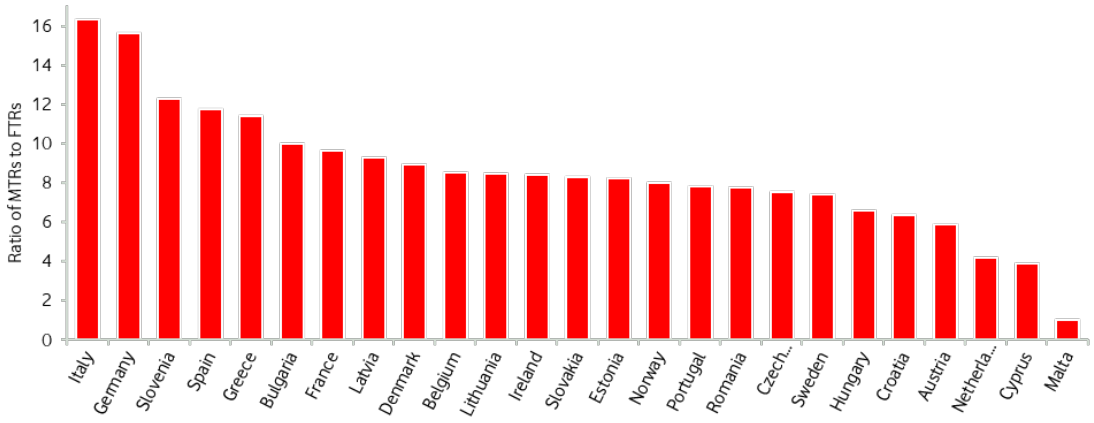
ICASA's BU-LRIC models

ICASA's BU-LRIC models developed as part of the previous inquiry estimate, for 2019-20, the costs of fixed voice termination to be 3c per minute, and the costs of mobile voice call termination (for the large operator) to be 9c per minute i.e., three times as high. This difference is clearly more than the costs of terminating a mobile voice call being only *"slightly higher"* than the costs of terminating a fixed voice call.

The differential between mobile and fixed termination costs in EU countries

Evidence from other countries also suggests that the cost of terminating calls on mobile networks is higher than that on fixed line networks. As Figure 7 below shows, MTRs are higher than FTRs in 24 out of 25 EU/EEA countries. Given that termination rates are set based on costs in the EU/EEA, this demonstrates that the cost of terminating calls on mobile networks is higher than that on fixed line networks.

Figure 7: The ratio between MTRs and FTRs across a number of EU and EEA markets



Source: BEREC(2021): Termination rates at the European level
Notes: MTRs and FTRs are equal in Malta

Current FTRs in South Africa are set above cost

In ICASA's 2018 Reasons Document[29], ICASA states that, in order to inform the proposed termination rates for fixed-line services, it looked beyond the scope of the cost modelling results to consider a range of other contributing factors including the supposed prejudice of asymmetric FTRs and MTRs against small fixed operators who would have to make payments to mobile operators in excess of those they receive. In other words, ICASA deviated from using the underlying cost of terminating services on fixed-line networks when setting the FTRs and decided to set the current level of FTRs above cost. It would, therefore, be misleading to infer there is little difference in costs between fixed and mobile voice termination based on the current differences in the FTRs and MTRs. Given the available evidence, Vodacom disagrees with ICASA's view that the cost of mobile voice call termination is only *"slightly"* higher than the cost of fixed voice call termination, while also disagreeing with ICASA's previous approach of setting FTRs above cost.

2.2 5G services are likely to have limited impact over the upcoming market review period

ICASA has stated that the difference in costs between terminating a mobile voice call and a fixed voice call is likely to diminish over time due to the lower incremental cost of terminating a voice call on a

[29] ICASA (2018): Reasons document to the amendment of the call termination regulations, 2014

mobile network under 5G technology. [redacted]

Users have only just started to use 4G voice services ("**VoLTE**") in South Africa. This migration took a considerable amount of time, which was in large part down to a considerable technology 'standardisation' lag. It was only once the technology for VoLTE had been standardised that handset manufacturers started developing compatible handsets and rolling out feature support. [redacted]

Indeed, the cost of termination on mobile networks remains traffic sensitive regardless of the technology used, whereas termination on fixed networks remains insensitive to traffic. The cost dynamics of call termination will, therefore, continue to differ between fixed and mobile networks regardless of the extent to which 5G services become relevant over the upcoming market review period.

Further, regardless of the extent to which 5G services are relevant over the upcoming market review period, the impact of such services on unit costs is something that should be considered by ICASA when it develops its cost models, rather than at this stage of the process. It would be inappropriate for ICASA to make any decisions about the difference between MTRs and FTRs based on speculation.

International precedent

In the UK, as part of its mobile call termination market review for 2018-21, Ofcom considered the cost of termination on 2G, 3G, and 4G technologies only for its cost modelling. As part of the market review, Ofcom states that it does not 'believe that in the next three to four years that any investments in 5G will have a significant effect on the market to an extent that would cause us to need to incorporate this technology in our analysis'[30].

3. Most countries have higher MTRs than FTRs

As shown in Figure 7 above, most BEREC member states have set mobile termination rates above fixed termination rates. This relativity between termination rates for the different services is in line with the differences in the underlying cost of termination.

In its response to ICASA's questionnaire and as summarised in the Discussion Document, Telkom provides some examples of countries, (Brazil, Nigeria, Namibia, Kenya and Botswana), where FTRs and MTRs have been set at the same level. However, Vodacom believes that Telkom has cherry-picked these countries and the prevailing consensus is that the MTRs must be set above the FTRs, to reflect the typical cost differences between providing fixed and mobile voice termination services discussed in Section D.2 above.

Of course, this should not preclude a regulator from setting rates at the same level, if it genuinely finds no difference in the underlying costs of terminating mobile and fixed-line calls. However, a regulator

[30] Ofcom (2017). Mobile call termination market review 2018-2021. Available from: https://www.ofcom.org.uk/__data/assets/pdf_file/0021/112458/Final-Statement-Mobile-Call-Termination-Market-Review-2018-2021.pdf

must undertake a detailed, consultative and transparent inquiry into network costs before reaching such a conclusion. Vodacom notes that in ICASA's previous inquiries, the bottom-up models it has developed have shown there to be a clear and material difference in the costs of fixed and mobile termination. For the reasons set out above, Vodacom would expect strongly that this would still be the case today, in which case it would continue to be appropriate for ICASA to set FTRs and MTRs at different levels.

4. Having MTRs equal to FTRs could distort competition

Telkom has claimed that having MTRs above FTRs would distort competition to the detriment of the consumers. Vodacom disagrees with this, as setting MTRs and FTRs based on costs would simply be allowing operators to recover their costs (which has been the rationale behind the recommendations and approaches supported by the EC and ICASA historically). In fact, having MTRs set equal to FTRs would likely distort competition since it would mean that MTRs and/or FTRs would not be set at cost. As discussed above, the cost of terminating calls on a mobile network is very likely to be materially higher than that on a fixed-line network.

Therefore, if MTRs are artificially decreased to set them in line with FTRs, mobile operators may not be able to recover their costs fully. This would restrict entry into the market, reduce mobile operators' ability to compete effectively, and to undertake investments to offer a higher quality of service.

Similarly, if FTRs were artificially raised, mobile operators would face increased costs of terminating mobile-to-fixed voice calls. This would again reduce profitability for mobile operators, restricting entry and reducing their ability to compete effectively. It is worth noting that the mobile sector has made a far larger contribution to South African consumer welfare than the fixed sector. Mobile operators have continuously invested in their networks to ensure that they offer high quality services with widespread coverage. Artificially transferring money from the mobile sector to the fixed sector (e.g. by setting FTRs above the level justified by the underlying cost) would risk undermining the significant contribution made by the mobile sector.

5. Having symmetric FTRs and MTRs would lead to economic inefficiencies

As mentioned above, the cost of incremental traffic is very likely to be materially greater on a mobile network than on a fixed wired network. This implies that setting rates to be equal (by artificially raising FTRs, or artificially lowering MTRs), would lead to economic inefficiencies in either one or both of these markets.

5.1 Allocative inefficiency

Allocative efficiency refers to the optimal distribution of a service among the customers in the market. It refers to a situation where the market price is such that customers who value a service at a level greater than the cost of producing it are given access to the service. Put another way, neither too little nor too much of the service is being provided. Artificially increasing the FTR or decreasing the MTR to bring them to a similar level would create allocative inefficiency. Allocative efficiency is important since it maximises the total welfare across all the agents in a market by optimally distributing resources.

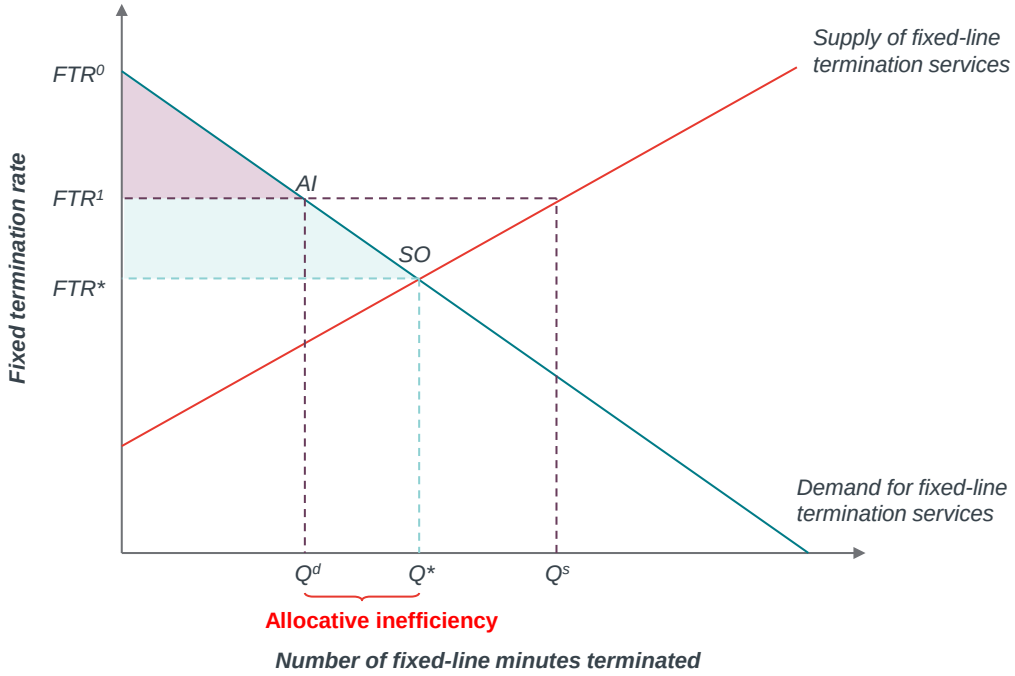
For example, if the FTR was artificially increased above cost to be equal to the cost-oriented level of the MTR – an increase which would be many times greater than a "SSNIP", the artificial price increase (assuming there is some degree of pass-on to retail prices, even if small) may lead to some customers reducing their calls to fixed networks, meaning that the total amount of the service being provided is less than the social optimum.

Figure 8 provides a graphical representation of allocative inefficiency. At FTR* (and associated retail prices), the fixed-line voice call market achieves a socially efficient number of fixed-line voice calls at Q*. This is the point where the number of minutes demanded, based on consumer preferences and

price sensitivities is equal to the number of minutes supplied, based on the cost of terminating fixed calls. At this FTR, the consumer welfare, as measured by the consumer surplus is depicted by the triangle formed by the points FTR*, FTR0, and SO below.

If the FTR is artificially increased to a level FTR1, in an attempt to align it with the MTR, the demand for fixed-line calls at this higher rate (assuming again, some level of pass through) contracts to Qd, since consumers between Qd and Q* on the demand curve are no longer willing to make fixed-line voice calls. As a result, the market for fixed voice calls contracts below the social optimum, giving rise to allocative inefficiency. This increase in the FTR also leaves consumers worse off, as shown by the fall in consumer welfare (as measured by the consumer surplus). The consumer surplus at FTR1 is depicted by the triangle formed by the points FTR1, FTR0, and AI below. The blue shaded area (the area between FTR1, FTR*, AI, and SO) therefore represents the fall in consumer surplus as a result of this increase in the fixed-line termination rate above the social optimum.

Figure 8: Stylistic representation of allocative inefficiency[31] [32]



5.2 Productive inefficiency

Productive efficiency refers to the production of goods and services at the lowest cost. If fixed operators are allowed to set FTRs above cost, then this may promote inefficient entry/usage.

[31] FTR0 is the level of FTR where there is no demand for fixed-line voice. SO is the point of intersection of supply and demand under the socially optimal FTR
[32] AI is the point of intersection of supply and demand under FTR1 which gives rise to allocative inefficiency

E. Methodology used

"Do you agree with the Authority's preliminary conclusion on the methodology used? Please explain the reasons for your answer."

ICASA has applied the following methodology:

> *"a) The identification of relevant markets and their definition according to the principles of the Hypothetical Monopolist Test, taking into account the non-transitory (structural, legal, or regulatory), entry barriers to the relevant markets and the dynamic character and functioning of the relevant markets;*
> *b) The assessment of licensees' market shares in the relevant markets; and*
> *c) The assessment on a forward-looking basis of the level of competition and market power in the relevant markets."*

Vodacom agrees with the above methodology used by ICASA, although does not fully agree with how ICASA has implemented this methodology (see Sections B.1 and F).

F. Effectiveness of competition

"Do you agree with the Authority's preliminary conclusion on the assessment of effectiveness of competition? Please explain the reason for your answer and provide the relevant factual evidence supporting your views."

ICASA considers that a number of market failures continue to exist for call termination services, citing:

- Lack of provision of access;
- Potential for discrimination between licensees offering similar services;
- Lack of transparency; and
- Inefficient pricing[33]

Vodacom notes ICASA's preliminary conclusion regarding the effectiveness of competition and the potential market failures in termination markets. However, Vodacom notes that ICASA's Interconnection Regulations are explicitly designed to cover the market failures cited by ICASA in the first three bullets above[34]. That is, these Regulations prevent any licensed operator from refusing to provide services, discriminating between service providers requesting access, or failing to provide sufficiently transparent terms. In light of those conditions being imposed within the Interconnection Regulations in South Africa, Vodacom does not consider it appropriate or necessary for ICASA to then introduce further remedies, in this process, to also resolve these.

In its analysis, ICASA:

- Considers that each licensee has 100% market share for terminating voice calls on its network;
- Presents data on market shares and HHI[35] for downstream retail markets to support its argument;

[33] "DISCUSSION DOCUMENT ON THE REVIEW OF THE PRO-COMPETITIVE CONDITIONS IMPOSED ON LICENSEES IN TERMS OF THE CALL TERMINATION REGULATIONS, 2014" (5 November 2021), page 35
[34] ICASA (2010) - Interconnection Regulations , Sections 3, 10 and 11
[35] Herfindahl-Hirschman Index, a measure of market concentration

- States that economies of scale and scope are not relevant when assessing the effectiveness of competition, but may be relevant when determining the appropriate remedies; and

- Has only considered the role of OTT services when assessing the appropriate product market definition, but not when assessing the effectiveness of competition.

Vodacom has the following comments on ICASA's analysis:

- Vodacom disagrees with both ICASA's analysis of downstream retail markets and the relevance of this analysis to assessing the effectiveness of competition in relation to wholesale termination services.

- Vodacom disagrees with the relevance of ICASA's use of market share data for terminating minutes.

- Vodacom notes that economies of scale and scope are irrelevant for ICASA's assessment.

- Vodacom believes that OTT services are likely to impose some competitive constraint on mobile call termination services even if they do not form part of the same market, and this constraint should be taken into account by ICASA.

Vodacom's expands on these points in the following subsections.

1. Vodacom disagrees with ICASA's analysis of downstream retail markets and the relevance of this

ICASA has presented, in the course of its assessment, a series of graphs setting out the following market share metrics in relation to downstream retail markets:

- Mobile voice subscribers;

- Mobile voice revenues;

- Fixed-line subscribers; and

- Fixed-line revenues.

It is unclear to Vodacom why these graphs pertaining to retail markets are at all relevant to ICASA's analysis of the effectiveness of competition and SMP in wholesale call termination markets. Indeed, in its Discussion Document, ICASA itself states that *"The Authority, however, acknowledges that downstream retail markets may not be relevant to the assessment of the wholesale voice call termination markets"*[36].

Notwithstanding the irrelevance of downstream retail markets to an assessment of wholesale call termination markets, Vodacom also notes that as part of the MBSI process, ICASA has defined a broad retail market for mobile services, which includes data and messaging services together with voice services. This further brings into question why ICASA deems it relevant to present market share data for voice services alone to support its assessment in this Discussion Document, rather than examining together the services it considers to belong in a single retail market.

[36] "DISCUSSION DOCUMENT ON THE REVIEW OF THE PRO-COMPETITIVE CONDITIONS IMPOSED ON LICENSEES IN TERMS OF THE CALL TERMINATION REGULATIONS, 2014" (5 November 2021), Section 2.3.4.

Vodacom also has some specific concerns about the accuracy of ICASA's market share data for voice services (as presented in ICASA's Figure 1 in its Discussion Document), as ICASA's information request on the underlying data was subject to interpretation. In particular, Sections 4.6, 4.9 and 4.12 of ICASA's clarification document dated 28 June 2021 provided inconsistent responses to questions raised by various parties regarding the appropriate methodology to be used to measure subscriber numbers[37]. This lack of clarity in the initial data requests, and further confusion caused in ICASA's 'clarification' document, is likely to have meant that operators have interpreted ICASA's requests in different ways and therefore provided data which are incomparable. As a result, ICASA's analysis based on responses to its data requests may be inaccurate. Indeed, ICASA itself recognises that its market share analysis may be inaccurate as a result of incomplete data[38].

2. Vodacom disagrees with the relevance of ICASA's market share data for terminating minutes

The Discussion Document included graphs comparing market shares of termination minutes on fixed and mobile networks, as well as graphs illustrating the HHI for termination minutes. However, this is inconsistent with ICASA's own product market definitions, given that it has defined termination services on each licensee's network as a separate market (and therefore each licensee has a market share of 100%). Indeed, the EC has treated wholesale call termination in this way since 2003, when its first list of relevant markets was published.

There is, therefore, an identical level of market power, or effectiveness of competition, within each of these wholesale call termination markets[39]. The implication of this for any remedies proposed by ICASA is discussed in Section H.4.

3. Economies of scale and scope are not relevant

ICASA has stated that:

> *"The Authority's preliminary view is that economies of scale and scope are not relevant in the assessment of the effectiveness of competition in the relevant market since each licensee controls 100% of its own termination market. However, the Authority is of the view that economies of scale and scope might be relevant when considering appropriate pro-competitive remedies."*

Vodacom agrees that economies of scale and scope are not relevant for the assessment of the effectiveness of competition for mobile call termination services. However, it disagrees with ICASA's view that that economies of scale and scope might be relevant when considering the appropriate remedies. Vodacom elaborates upon this point in Section H.1 of this response document and the expert report on symmetric MTRs.

4. OTT voice services are likely to impose some competitive constraint

As already discussed in Section B.1.1, OTT voice services are likely to impose a competitive constraint on mobile call termination services. Given this, ICASA should reconsider, on a forward-looking basis, whether there is likely to be any 'inefficient pricing' market failure. This is because, on a forward looking basis, OTT services will place an increasingly competitive constraint on the pricing of mobile voice termination services.

[37] ICASA appeared to give conflicting responses to questions around how licensees should treat subscribers using both voice and data services.
[38] "DISCUSSION DOCUMENT ON THE REVIEW OF THE PRO-COMPETITIVE CONDITIONS IMPOSED ON LICENSEES IN TERMS OF THE CALL TERMINATION REGULATIONS, 2014" (5 November 2021), Footnote 22.
[39] Vodacom notes the effectiveness of competition may be different between fixed and mobile call termination markets, since the extent of competitive constraints that results from the role of OTT providers will differ between fixed and mobile markets.

G. Significant market power ("SMP")

"Do you agree with the Authority's preliminary conclusion on SMP in the Mobile termination markets and Fixed termination markets? Please explain the reason for your answer and provide the relevant factual evidence supporting your views."

ICASA considers that each licensee has SMP in its own market for wholesale voice call termination. Vodacom acknowledges ICASA's position, but would refer ICASA to Vodacom's comments on the competitive constraint imposed by OTT voice services on mobile call termination services in Section B.1.

Importantly, the extent to which each licensee has SMP in its own market is the same, given that the termination service on each network is a separate product market. For the avoidance of doubt, this also extends to class licensees with non-national networks. Any licensee which offers call termination has SMP regardless of the size or geographic footprint of its network, given the "bottleneck" nature of a call termination service. Therefore, all licensees, including class licensees, should face the same remedies, as discussed in Section H.

H. Pro-competitive terms and conditions

"Do you agree with the Authority's preliminary conclusion on pro-competitive terms and conditions? Please explain the reason for your answer and provide the relevant factual evidence supporting your views."

ICASA has proposed that all operators should face a price control on wholesale call termination services, which would require them to charge *"cost-based"* termination rates. ICASA has proposed that established operators should no longer be allowed to charge aMTRs. However, ICASA is still proposing that new entrants should be allowed to charge higher termination rates for a limited period of up to three years following entry, in order to account for cost differences, if any, between new entrants and the incumbents.

Under ICASA's proposals, Vodacom, MTN and Telkom will be required to publish a Reference Interconnection Offer ("**RIO**") on their websites, following approval by ICASA. Judging by ICASA's assessment of market shares, Vodacom presumes that this requirement would relate to Vodacom and MTN for mobile call termination only, and Telkom for fixed call termination only. In the event that ICASA maintains this remedy (which Vodacom does not believe it should), this should be clarified.

In this section, Vodacom explains that:

- ICASA should set MTRs on a symmetric basis;
- ICASA should continue to use a LRIC+ cost standard;
- ICASA should use both top-down and bottom-up modelling to determine the appropriate costs; and
- It is illogical for only Vodacom and MTN to have to provide RIOs for mobile termination services.

1. ICASA should set MTRs on a symmetric basis

Vodacom agrees with ICASA's move away from asymmetric termination rates for existing operators and considers that there is a strong case for no longer allowing Telkom and Cell-C to charge aMTRs for a number of reasons. International precedent from both Europe and Africa shows that the majority of

countries now set sMTRs. As noted in Section H.2.4, the EC no longer provides any scope for national regulators to set aMTRs, as the EC has set MTRs that apply for all mobile operators regardless of size and recency of market entry.

While ICASA has proposed a welcome move away from asymmetry for more established operators, it continues to support proposals for asymmetry provisions in favour of new entrants for up to 3 years upon entry. This approach ignores the ability of these challenger operators to quickly become an established competitive force against the incumbents. Given this, Vodacom would recommend that aMTRs are removed for all operators, including any new entrants. However, if ICASA persists with its proposals in its Findings, then it should at least clarify that none of the existing operators in the mobile market (i.e., Vodacom, MTN, Telkom, Cell-C, Rain nor Liquid) would be classified as "new entrants", given that they have all been offering mobile services for more than 3 years.

Vodacom has commissioned an expert report by Frontier Economics on the merits of symmetric MTRs. The key conclusions from this report are summarised below.

1.1 Higher unit costs do not provide a valid justification for asymmetric MTRs

In its 2018 market review on call termination services[40], ICASA seemed to consider that operators should be allowed to charge asymmetric MTRs if they faced higher unit costs for two reasons:

- Exogenous factors outside the control of these operators; or
- Lower economies of scale.

However, such an approach is out-of-line with international precedent. Under the EC's 2009 Recommendation on termination rates[41], regulators could only allow smaller operators to charge aMTRs if they face higher unit costs for reasons outside of the operators' control (i.e. the 1st reason provided by ICASA). However, under the 2009 Recommendation, operators cannot charge aMTRs because of lower economies of scale (i.e. the 2nd reason provided by ICASA). This is to ensure that operators face appropriate incentives for minimising their costs and to make sure that operators are not rewarded for any inefficiencies.

The only factor that the EC considered to be outside of operators' control was a lack of spectrum, in cases where there hasn't been a spectrum auction and there isn't spectrum trading [redacted]

Notwithstanding the point that a lack of economies of scale do not provide a valid justification for permitting aMTRs, recent market developments suggest that neither Telkom nor Cell-C are in fact suffering from a lack of economies of scale. [redacted]

[40] BRIEFING NOTE ON ASYMMETRY IN MOBILE AND FIXED WHOLESALE VOICE CALL TERMINATION. ICASA, June 2018. Paragraphs 2.1-2.6.
[41] European Commission (2009): Regulatory Treatment of Fixed and Mobile Termination Rates in the EU

[redacted]

1.2 Asymmetric MTRs have already been applied for far longer than a transitional period in South Africa

Under the EC's 2009 Recommendation on termination rates[42], aMTRs could historically be applied for a transitional period of up to 4 years, if there are barriers to entry and expansion in retail markets. However, asymmetric MTRs have already been applied for 11 years in South Africa, which extends far beyond a transitional period.

1.3 Traffic imbalances do not justify asymmetric MTRs

ICASA has previously stated that network effects (in instances where call termination rates are above cost) may justifying asymmetric MTRs[43]. However, traffic imbalances do not provide a valid reason for imposing aMTRs because:

- aMTRs can lead to on-net/off-net differentials and reinforce traffic imbalances; and
- MTRs are set in line with costs in South Africa.

Traffic imbalances will inevitably occur from time-to-time due to entry and expansion in the retail mobile market, as operators compete for subscribers and traffic.

1.4 Historic market failures do not provide a reason for having aMTRs

In ICASA's 2014 Reasons Document, it used *"historic market failures"* as one of the justifications for aMTRs. The *"historic market failures"* that ICASA referred to appears to be the fact that MTRs had been set above costs prior to 2014[44]. However, in practice, regulators set MTRs based on forward-looking costs, which means that historic market failures should have no impact on the appropriate level of MTRs.

1.5 In any case, aMTRs are unlikely to significantly improve the position of smaller operators

Voice services are declining in importance relative to data services, whilst OTT voice services are also becoming more popular. Therefore, even if ICASA did have valid reasons for assisting new entrants (which it does not), permitting aMTRs would be unlikely to have a significant impact on the position of such operators. Indeed, even though Telkom and Cell-C have been charging exactly the same MTRs for many years, Telkom has grown at an impressive rate, whereas Cell-C has faced financial difficulties. This suggests that other factors – not aMTRs – are likely to determine the success of smaller operators.

1.6 aMTRs risk undermining economic efficiency

[42] European Commission (2009): Regulatory Treatment of Fixed and Mobile Termination Rates in the EU
[43] ICASA (2018) Reasons Document
[44] *"The Authority's view is that termination rates in South Africa were priced significantly above cost for a very significant 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. 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."* (ICASA's 2014 Reasons Document)

Setting aMTRs will likely result in MTRs being above the level of a hypothetical efficient operator. This could result in economic inefficiencies because:

- It will reduce smaller operators' incentives to become more efficient and reduce their costs i.e., it could result in productive inefficiency; and

- It will distort production and consumption decisions (if higher MTRs result in higher retail prices for voice calls), and thereby create allocative inefficiency.

2. ICASA should continue to use a LRIC+ cost standard

Given that ICASA's preliminary view is that it is not necessary to make material changes to its existing remedies, Vodacom assumes that ICASA plans to continue using LRIC+ as the relevant cost standard for setting termination rates. Vodacom considers that this is an appropriate approach because:

- LRIC+ allows for some recovery of joint and common costs;

- Moving away from LRIC+ could disproportionately impact low income consumers; and

- There are limited relevant examples of regulators using Pure LRIC to set termination rates. The decision in the EU to move to Pure LRIC was based on very different circumstances to those found today in South Africa, whilst in any case, going forwards termination rates will actually be set above Pure LRIC in many EU countries (the main "benchmark" for using Pure LRIC).

As already discussed in Section D, ICASA should set separate MTRs and FTRs to reflect the differences in the underlying costs of providing such services. This means that ICASA will need to develop separate cost models to estimate the underlying costs of a hypothetical efficient mobile and fixed operator respectively.

2.1 LRIC+ allows for some recovery of joint and common costs

The LRIC+ cost standard allows operators to recover, through termination rates, a portion of joint and common costs incurred in the provision of wholesale voice call termination services. In contrast, Pure LRIC does not. Instead, pure LRIC represents an extreme approach towards regulatory pricing. Applying this approach will mean operators will either:

- Seek to recover joint and common costs from other (e.g., retail) services via higher prices, which can negatively impact end-user access and volumes (both subscriber numbers and call volumes, depending on pricing decisions); or

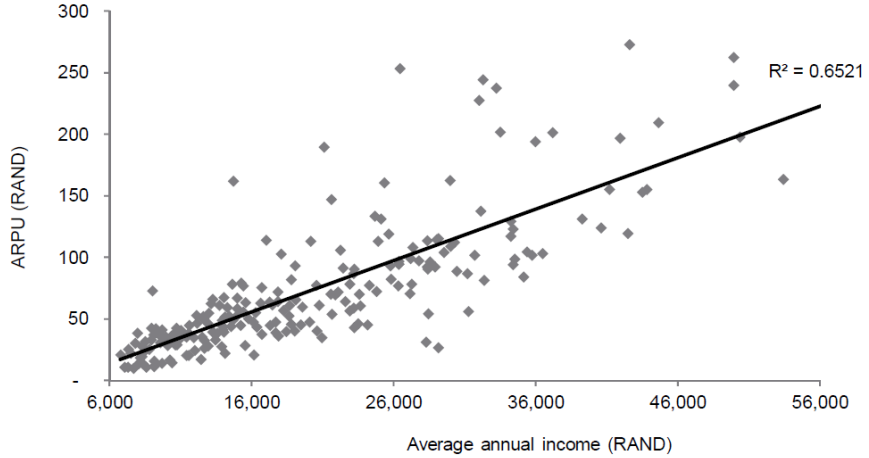
- Face lower profits, which reduces incentives to invest in network rollout.

If all services were priced based on Pure LRIC, then operators would not be financially viable, as they would be unable to recover any joint or common costs. Furthermore, as the Pure LRIC standard excludes the costs associated with providing network coverage, it tends to disadvantage operators in countries that are large and sparsely populated, such as South Africa. This is due to the higher proportion of total network costs that relate to the provision of population coverage in such countries compared to countries with higher population densities. For more densely populated countries such as those in Europe, where the EC has adopted (at least to some extent) a Pure LRIC approach, the difference between Pure LRIC and LRIC+ is therefore not as significant as in South Africa.

2.2 Moving away from LRIC+ could disproportionately impact low income consumers

[redacted]

Figure 10: Relationship between income and ARPU



Source: Vodacom's response to ICASA's 2017 MTR proposals (Annexure A)

2.3 In practice, there are limited relevant examples of regulators using Pure LRIC to set termination rates

As set out in the accompanying expert report, there are very few regulators who have moved to using a Pure LRIC standard to set MTRs. In 2009, the European Commission did advocate, for EU Member States, the use of a Pure LRIC approach. However, this was at a much earlier stage of development in mobile markets and as such, is not at all comparable to the situation in South Africa today.[45] For instance, at the time of the EC's recommendation, MTR voice revenues were still a significant share of total mobile revenues, with voice services also being the main driver of competition, whereas data services have now become far more important.

Indeed, the EC now sets a maximum MTR (and FTR) that applies to all EU countries. However, in practice, the maximum MTR is above Pure LRIC for most EU countries, and even above LRIC+ for some[46]. Indeed, at the time the EC made the recommendation, by design, only operators in France faced a Pure LRIC rate, whilst operators in other Member States faced rates above their own Pure LRIC. This is because the EC estimates the Pure LRIC for each EU country, but then takes the country with the highest Pure LRIC (France) and applies this rate (rounded up) across all EU countries.

The EC justified such an approach on the basis of the relative risks associated with setting MTRs too low relative to setting them too high. That is, the EC stated that its approach:

> *"[I]is also consistent with economic theory as generally, there is an asymmetric risk of setting prices too high or too low with the risks of setting the prices too low being greater than the risk of setting prices too high (i.e. in case of doubt it is preferable to risk setting the prices too high rather than too low). This is because the problem of under- investment (if the MTRs are set too low) is considered to be of greater importance to consumer welfare, including both quality and long-term prices for consumers, than the problems derived from over-investment (if the MTRs are set too high). This is important when approaching the setting of wholesale caps based on projections of either costs or prices, which will be subject to uncertainties regarding the accuracy of such projections, in particular further into the future."*[47]

This further highlights the higher regulatory risk for South Africa involved in a Pure LRIC approach, relative to a LRIC+ approach. ICASA would not be able, if it chose to use Pure LRIC to set MTRs, to take the highest Pure LRIC across a number of countries, as it is only setting MTRs for a single country (South Africa). This means it would expose the South African market to the risks of setting termination rates below an appropriate level.

Given the continued need for more investment in the South Africa mobile sector, this risk is arguably greater than it might be elsewhere. Indeed, given the low level of fixed penetration in South Africa, it is vital that mobile networks are able to continue to provide near-universal coverage. If a consumer is unable to access mobile services (either for reasons of affordability or availability), they are very unlikely to have access to fixed services.

[45] The EC advocated the use of pPure LRIC in its 2009 Recommendation for termination services (COMMISSION RECOMMENDATION on the Regulatory Treatment of Fixed and Mobile Termination Rates in the EU (2009))
[46] A number of countries which had previously adopted LRAIC+ approaches would have seen an increase, or no change, in the regulated MTR when adopting the EC's recommendation, since their LRAIC+ estimates would have been at or below the EC's Pure LRIC estimate for France
[47] COMMISSION STAFF WORKING DOCUMENT accompanying the document COMMISSION DELEGATED REGULATION (EU) …/…supplementing Directive (EU) 2018/1972 of the European Parliament and of the Council by setting a single maximum Union-wide mobile voice termination rate and a single maximum Union-wide fixed voice termination rate.

3. ICASA should use both top-down and bottom-up modelling to determine the appropriate costs

In determining the appropriate levels for FTRs and MTRs, Vodacom supports the use of a combination of top-down financial cost models and a transparent bottom-up network engineering model. Both of these should be the products of proper consultation processes.

It is important to employ a combination of top-down and bottom-up models because:

- Bottom-up models allow for the modelling of efficient networks under various sets of assumptions, with prices being set on a forward-looking basis.

- A top-down element is important in order to reconcile the bottom-up models to reality by ensuring that a modelled hypothetical network aligns with various parameters which can be observed in operators' actual networks today, and therefore ensure that rates are not set on the basis of unrealistic efficiency expectations.

The benefits of a thorough, transparent and inclusive consultation process are clear and well understood by ICASA. However, Vodacom considers that it is particularly important to emphasise this in a process whereby ICASA is using information supplied by the individual operators in order to set prices designed to allow efficient cost recovery.

4. There is no need for a remedy to provide reference offers as this is already required under the Interconnection Regulations

ICASA appears to be proposing that only Vodacom and MTN should have to provide reference offers for mobile termination services.

Practically, it is important that all operators provide sufficient information and requirements, in order to allow the interconnection seeker to plan for interconnection and be in an informed position to start interconnection negotiations. Such provisions expedite the conclusion of agreements. However, Vodacom notes that the Interconnection Regulations already meet the majority of the requirements of a reference offer, for example setting out how the principles of transparency and requirements that should be applied. Vodacom therefore considers that there is no need for ICASA to impose on licensees an obligation to provide reference offers. This is because this would result in duplication of conditions already set out in the Interconnection Regulations and be unduly burdensome on the operators.

Nonetheless, if ICASA does decide to impose a reference offer remedy, then this should be applied symmetrically across all operators. In other words, any obligations on operators to produce reference offers should be identical across all operators. This would be consistent with ICASA's finding that all operators have 100% market share for wholesale mobile call termination services on their respective networks.

If ICASA is of the view that the Interconnection Regulations are insufficient, then only imposing a reference offer requirement on Vodacom and MTN could adversely impact the WOAN. The WOAN is a new entrant which will need to interconnect with all existing mobile operators. Therefore, if ICASA is concerned that the Interconnection Regulations are inadequate, it would therefore be imperative that all mobile operators have reference offers in place – not only Vodacom and MTN.