

PUBLIC VERSION

DIGICEL (PNG) LIMITED

Submission to NICTA

***Discussion Paper: To facilitate public consultation on
potential Retail Service Determination in
relation to On-net and Offnet Calls***

issued on 21 October 2022

30 November 2022

*This submission is provided to NICTA for the purpose of the current public inquiry only
and may not be used for any other purpose*

A. Executive Summary

1. On 21 October 2022, NICTA released a Discussion Paper ("**Discussion Paper**") in which it proposed to recommend to the Minister that he make a Retail Service Determination ("**RSD**") by which Digicel's retail prices would be regulated for the next three years. The proposed RSD was described in the following terms:

"5 Limit to price discrimination between On-net Calls and Off-net Calls

- (1) *Digicel shall not offer or charge prices for a Regulated Mobile Service that discriminate on the basis of the network that will terminate the call.*
 - (2) *Except as provided in subsection (3), any difference between the price of a Digicel Off-net Call and the price of a Digicel On-net Call made at the same time and under other relevant circumstances that are the same, shall be deemed to be discriminatory and subject to the probation in subsection (1).*
 - (3) *Digicel may differentiate between the price if On-net Calls and Off-net Calls only where it has prior written permission to do from NICTA based on NICTA's acceptance that there are cost differences that justify the differences in price."*¹
2. "Regulated Mobile Service" is defined in the Discussion Paper to mean "a prepaid mobile originated retail national voice call service; or a post-paid mobile originated retail national voice call service".
 3. No other operator, including Digicel's competitors, is proposed by NICTA to be subject to similar or any retail price regulation.
 4. Put simply, the proposed RSD would, for the next three years, prevent Digicel from providing any on-net price discounts for calls made by its customers regardless of whether or not its competitors chose to do so or whether such discounts would be to the benefit of Digicel's customers.
 5. The recommendation and imposition of an RSD is subject to the provisions of Part VII of the *National Information and Communication Technology Act 2009* ("**Act**").
 6. The Act provides *inter alia* that, before it may make a recommendation to the Minister to impose an RSD, NICTA must be satisfied that all of the retail regulation criteria specified in Section 158 of the Act ("**Retail Regulation Criteria**") will be met. Importantly, it is submitted that the Retail Regulation Criteria are not mere guidelines; they are mandatory statutory requirements that must **all** demonstrably be met before NICTA can make a recommendation to the Minister to impose a Retail Service Determination.

¹ Discussion Paper at page 15.

7. NICTA has failed to establish a reasoned basis for being satisfied that, by proposing the RSD on the terms set out in the Discussion Paper, **any** of the Retail Regulation Criteria will be met.
8. In particular, NICTA has failed to present evidence of any analysis or other cogent evidence that would support a conclusion that Digicel ***“has a substantial degree of power in the market within which the retail service is supplied”*** or that, ***“in the absence of the retail service determination for that period, that substantial degree of power is likely to ... persist in the market over that period ... and ...expose retail customers to a material risk of higher prices and/or reduced service where they acquire the retail service from that operator licensee during that period”*** (emphasis added), as is required by Section 158(b) of the Act.
9. NICTA has also not presented any cogent evidence or undertaken any empirical analysis to support its apparent belief that the aggregate likely benefits of the proposed RSD will outweigh any aggregate likely detriments as is required by Section 158(d) of the Act.
10. There must be a properly reasoned basis for any position that is taken by NICTA and, based on the papers, it is Digicel’s respectful submission that no such reasoned basis exists.
11. In short, NICTA has failed to demonstrate that the proposed RSD is justified or will have a material positive effect on competition in Papua New Guinea or result in net benefits.
12. NICTA’s failure in this regard is clear when *Retail Service Determination No. 1 of 2012 (“2012 RSD”)* is taken into account. That regulatory intervention did not result in any material change in Telikom’s market share during the term of the 2012 RSD. In Digicel’s submission, the reason is that Telikom’s failure to succeed had nothing to do with any differences between on-net and off-net retail prices. Rather, it was merely a reflection of its own commercial decisions, including to fail to invest in network facilities and services that customers wish to acquire.
13. Despite 10 years having now passed since the 2012 RSD, Telikom has continued to fail to invest in its network and services and, as far as Digicel is aware, have yet to meet the mandatory coverage obligations specified by NICTA in the *Standard and Special Conditions of Individual Licences Rule 2011*.
14. NICTA has erred in its analysis of the relevant market and Digicel’s dominance in it, and appears to have forgotten the historical context in which Digicel established its business in Papua New Guinea. Digicel has never been the “incumbent” mobile operator in Papua New Guinea, and when it entered the market in 2007 it was itself the new entrant with zero market share. Digicel grew its market share on the basis of extensive, risky private investment, world class management and operations, and a strong belief that the customer came first.
15. In fact, Digicel has always operated its business based on the belief and expectation that it would face an effective competitor at some point, either as a result of improvements in Telikom/bemobile or as the result of new entry.

16. That new competition now exists in reality, with Vodafone having established itself firmly in Papua New Guinea and claiming in comments made to the *The National* on 10 June 2022, “We have made over 650,000 connections within just a month of our launch and we are receiving positive sentiments from the business community as well and PNG DataCo’s confidence in our service is proof of that.”.
17. Moreover, the competition faced by Digicel from service providers within Papua New Guinea is only part of the story. Digicel also faces direct competition from over-the-top (“OTT”) internet-based ICT service providers who provide free calling through their messaging apps yet are not required to hold a licence in Papua New Guinea, pay any licence fees or taxes or contribute in any meaningful way to the costs of the networks that underpin their services.
18. There is no evidence of a competition problem in Papua New Guinea. Vodafone, a sophisticated regional operator, has entered the market knowingly and by its own account has been very successful. There is simply no evidence to support NICTA’s assertion that “Digicel has a substantial degree of power in the mobile call service market in Papua New Guinea” or that “the strong network effects created by it on-net/off-net price discrimination, which have been a significant barrier to market entry in the past, and are barriers to competitor market expansion at present [sic]”.
19. In Digicel’s submission, NICTA has not provided any reasoned or rational basis for its assertion that Digicel has a “substantial degree of market power” at the present time and its further assertion that the substantial degree of market power will be able to be sustained for a further three years is, at best, mere conjecture.
20. In making its proposed recommendation, NICTA has erred by taking into account irrelevant information and failing to take into account relevant information. For example, NICTA has never, with the benefit of the hindsight that is now possible, considered whether the 2012 RSD actually met the Retail Regulation Criteria. This is despite Digicel having made detailed submissions on that issue during NICTA’s 2017 Public Consultation into whether a further RSD should be made². Those submissions by Digicel, which remain relevant today, highlighted data (which had previously been supplied to NICTA under the terms of the 2012 RSD) showing that the 2012 RSD was completely ineffective as a tool to drive competition. No evidence has been provided by NICTA to indicate that the proposed RSD will be any better.
21. The terms of the proposed RSD are harsh, oppressive and unwarranted in the circumstances. In particular:
 - a. NICTA is proposing that Digicel be prevented from differentiating between the price of on-net and off-net calls in any way despite its competitors already doing so;
 - b. Digicel’s competitors have already been provided a substantial and discriminatory competitive advantage by NICTA. They are not required to provide the extensive coverage to regional and remote areas serviced by Digicel. As far as Digicel is aware,

² The Minister quite rightly chose not to accept NICTA’s recommendation to impose an RSD at that time.

Vodafone is not subject to any rollout obligations whatsoever, and so is able to “cherry pick” the higher-use and lower-cost customers while leaving Digicel to carry the cost and service burden of servicing rural communities;

- c. The proposed three-year term of the RSD is excessive, especially given the rapid competitive inroads that Vodafone has already made;
 - d. If NICTA’s recommendation to make the proposed RSD is accepted by the Minister, the prices customers pay will be inevitably higher and competition will be softened as Vodafone will not be required to compete as strongly to win new customers.
22. Finally, NICTA’s cost benefit assertions are simplistic and flawed and lack any actual analysis or evidence.
23. Contrary to NICTA’s assertions, there would be substantial net detriments for consumers arising from the proposed RSD. These detriments will arise from the higher prices customers will be forced to pay and the disincentive for continuing investment in new network facilities and services. For example, Digicel would not be able to continue to offer its “1Tok Prime Bundles” on their current terms with the welfare benefits they generate being lost to consumers.
24. It is particularly disappointing to Digicel that NICTA does not seem to have progressed its thinking from the time of the 2017 Public consultation mentioned above. NICTA appears to have abandoned any attempt at real analysis in favour of seeking to regulate solely on the basis of popular opinion and hearsay.
25. This is despite the weight of evidence that was provided by Digicel to NICTA during that proceeding and which remains highly relevant today.
26. At the time of the 2017 Public Consultation, Digicel commissioned an independent expert report from New Zealand economist, Dr Aaron Schiff, in which he commented on economic issues raised in the 2017 Discussion Paper. Dr Schiff, among other things, concluded:

*“The proposed RSD effectively replaces an earlier RSD from 2012 that also constrained Digicel’s ability to engage in on-net pricing (up to a 40% differential between on-net and off-net prepaid prices was permitted while postpaid prices were not regulated). Using network activity data from Digicel I find that **the earlier RSD appears to have had no impact on market outcomes such as market shares and the proportion of calls made by Digicel’s customers that are on-net.***

*In particular, the proportion of on-net calls made by Digicel’s postpaid customers has been consistently lower than the proportion of on-net calls made by Digicel’s prepaid customers, despite the fact that the 2012 RSD applied only to prepaid pricing. This suggests that **customer characteristics are more important than retail price regulation in determining the propensity to make on-net calls and another RSD will***

again have little or no impact on the calling patterns of Digicel's customers.

Similarly, while expiry of the 2012 RSD and subsequent pricing changes including the introduction of "unlimited" prepaid bundles have led to a large increase in on-net calling by Digicel customers, market shares have not yet changed, and inter-network traffic volumes are constant.

All of this evidence suggests that other factors such as coverage, network quality and reliability, and customer service, have been much more important than the 2012 RSD in determining consumers' choice of mobile network in PNG. Digicel has built around four times as many cell sites in PNG as either bmobile or Telikom and this coverage advantage likely explains much of Digicel's market share advantage. It also explains why Digicel has a higher proportion of on-net calls than its market share, as in many areas outside the main urban centres in PNG, Digicel is the only available network.

The Discussion Paper does not demonstrate how the proposed RSD will offset the difference in coverage and service quality caused by Digicel's greater investment in its mobile network compared to the other two networks. This raises doubts about whether the proposed RSD will be beneficial for competition and consumers in PNG. **Based on the historic effects of the 2012 RSD, and changes in market outcomes after its expiry, the proposed RSD runs the risk of reducing consumer welfare while having little or no impact on competition.**

The Discussion Paper also includes a high-level analysis of the benefits and detriments of the proposed RSD. **In my view, the Discussion Paper does not contain sufficient analysis for NICTA to be satisfied that the proposed RSD meets the criteria in section 158 of the Act.** Very little has been done to tie this analysis to the commercial realities of the mobile market in PNG. Among other issues, the benefits and detriments analysis:

- *misunderstands the general impacts of price discrimination on consumers and profits;*
- *lacks any quantification of benefits versus detriments;*
- *does not recognise that the proposed RSD creates risks for Digicel that will reduce its incentive to offer innovative pricing such as "unlimited" bundles; and*
- *does not recognise potential detriments to Digicel's customers of the proposed RSD arising from changes to bundles and promotions in order to increase the effective on-net price per minute to satisfy the conditions of the proposed RSD." (emphasis added)*

27. Dr Schiff's sentiments are echoed by well-respected Australian economist, Mr Jason Ockerby, who has found in relation to the current proceeding that:

"NICTA's proposal is backed by a mere 5-page assessment of the case for imposing the ban. In those pages, NICTA does little more than make assertions regarding Digicel's market power and the potential impact of on-net discounts on the potential entry by new mobile operators in PNG. NICTA provide no analytical or empirical support for its assertion that Digicel has market power nor analysis of the likely consequences of the ban.

*From my experience in advising on competition and regulatory matters in mobile markets in Australia, New Zealand and throughout the Asia Pacific, in Europe and South America, the NICTA assessment provides no reasonable basis for the proposed intervention."*³

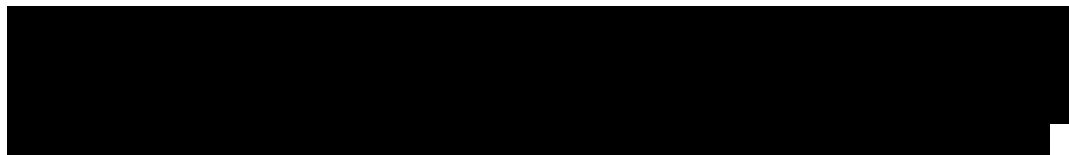
28. In summary, Digicel submits that NICTA's analysis and recommendations are deeply flawed and fall well-short of the legally required standards for the justification of retail market regulation.
29. If the proposed RSD was to be implemented it would cause unwarranted substantial harm to consumers and Digicel and to the competitive process.

³ Memorandum from CEG Asia Pacific's, Mr Jason Ockerby, to Digicel dated 28 November 2022, a copy of which is attached to this submission.

B. Introduction

30. The purpose of this submission is to respond to the issues raised by the National Information and Communication Technology Authority of Papua New Guinea (“NICTA”) in its Discussion Paper that was issued on 21 October 2021 titled *To facilitate public consultation on potential Retail Service Determination in relation to On-net and Off-net Calls* (“**Discussion Paper**”) that was prepared as a part of its *Public Inquiry into Potential Retail Service Determination in Relation to Voice and Data Services – On-Net/Off-Net Voice and Messaging Services* which commenced on 18 March 2022 (“**Public Inquiry**”).

31.



32. As noted above, the Discussion paper was prepared in the context of the Public Inquiry. As NICTA states in the Executive Summary of the Discussion Paper:

“NICTA has concluded that is appropriate not to recommend a general price control for these services to the Minister. However, NICTA has concluded that there is a case for prohibiting discrimination between the retail prices for on-net voices services and equivalent off-net voice services by the operator with substantial market power, Digicel PNG Limited (Digicel). The majority of the submissions received to the first consultation agreed with such an approach.”

33. NICTA, at section 2.1 of the Discussion Paper goes on to state:

“The purpose of this Discussion Paper is to summarise the case for a Retail Service Determination to eliminate discrimination between on-net and offnet voice calls and to publish a draft Retail Service Determination instrument. The case was initially made in the Consultation Paper published on 18 March 2022, but is repeated here with additional emphasis on the specific form that the proposed instrument will take, in order to enable all interested stakeholders to make such further comments as they might wish.”

34. Digicel takes issue with these statements in four respects:

- a. NICTA has stated that it *“has concluded that there is a case for prohibiting discrimination between the retail prices for on-net voices services and equivalent off-net voice services by the operator with substantial market power, Digicel PNG Limited (Digicel)”*. In Digicel’s view, reaching a concluded view prior to affected parties having a reasonable opportunity to make submissions and to be heard indicates that NICTA has already predetermined the matter. If that is the case, it is a very serious procedural failure on NICTA’s part and one that undermines the integrity of this proceeding.

- b. NICTA states, apparently in support of its “conclusion” that *“The majority of the submissions received to the first consultation agreed with such an approach”*. However, regulation of Digicel’s prices should not be imposed on the basis of its popularity with other parties. Instead, it should be carefully weighed against the mandatory criteria specified in the Act and NICTA’s broader duty to conduct itself in accordance with the Act’s objectives and regulatory principles.
 - c. NICTA claims that the *“case [for regulation] was initially made in the Consultation Paper published on 18 March 2022, but is repeated here with additional emphasis on the specific form that the proposed instrument will take”*. However, the 18 March Consultation Paper:
 - i. devoted only five paragraphs to the matter of “On-Net/Off Net Price Differentials”;
 - ii. did not contain any actual evidence or analysis and instead appeared to rely on a previous public consultation that took place four years ago that did not result in a retail service determination being made by the Minister and which occurred in an entirely different market context than that which exists today;
 - iii. did not consider the retail regulation criteria at all; and
 - iv. provided no properly reasoned basis for intervention.
 - d. NICTA’s statement that the purpose of the Discussion Paper *“is to summarise the case for a Retail Service Determination to eliminate discrimination between on-net and offnet voice calls and to publish a draft Retail Service Determination instrument”* is highly disingenuous given that has not yet made any case *“to summarise”* and that its predisposition toward regulation of Digicel’s retail prices is plain to see.
35. Had NICTA actually undertaken the analysis that is required under the Act, it is Digicel’s strong belief that NICTA would have found that none of the retail regulation criteria are satisfied by the proposed intervention and that, instead, NICTA should be relying on the market to continue to deliver excellent consumer outcomes.
36. Digicel therefore encourages NICTA to reach a conclusion that an RSD is not required and is likely to be harmful to both consumers and to Digicel and that it should instead focus its energies on the many other important issues that face the ICT industry in Papua New Guinea at this time.

C. Legal Framework

37. Any RSD must meet the Retail Regulation Criteria under Section 158 of the Act, which are:

“(a) that making a retail service determination for the retail service in respect of an operator licensee for a particular period will further

the achievement of the objective set out in Section 124 but disregarding Section 124(2); and

- (b) *specifically, in relation to the competition objective, that –*
 - (i) *that operator licensee has a substantial degree of power in the market within which the retail service is supplied; and*
 - (ii) *in the absence of the retail service determination for that period, that substantial degree of power is likely to –*
 - (A) *persist in the market over that period; and*
 - (B) *expose retail customers to a material risk of higher prices and/or reduced service where they acquire the retail service from that operator licensee during that period; and*
- (c) *specifically, in relation to the efficiency objective, that the operator licensee will not be prevented from achieving a return on assets during that period sufficient to sustain investment necessary to supply the retail service; and*
- (d) *the aggregate likely benefits of making that retail service determination outweigh any aggregate likely detriments.”⁴*

38. Importantly, NICTA is required, pursuant to Section 159(2) of the Act to be *“satisfied that **all of the retail regulation criteria would be met by subjecting, or continuing to subject, a retail service to a retail service determination in respect of a particular operator licensee”*** (emphasis added) before recommended to the Minister that an RSD be imposed.

39. In addition to meeting this specific obligation, NICTA must also ensure that any proposed RSD is consistent with the Objective of the Act, which is to *“ensure that the ICT industry contributes to the greatest extent possible to the long-term economic and social development of Papua New Guinea”*.

40. NICTA must also adhere to the Regulatory Principles enshrined in Section 3 of the Act which provides that regulatory measures should be:

*“(i) **proportionate and drafted to achieve results that are no more burdensome than necessary to achieve their stated regulatory objectives; and***

*(ii) **based on sound economic principles and, to the extent feasible, should be technology-neutral to reflect the potential for convergence of technologies; and***

⁴ Section 124(1) requires that the RSD must *“promote effective competition in markets for ICT services in Papua New Guinea ... subject to promoting the economically efficient use of, and the economically efficient investment in, the facilities by which ICT services may be supplied”*.

- (iii) *administered in a transparent manner and, to the extent appropriate, should be the subject of prior public consultation (in accordance with Section 229 of this Act), published explanations and public clarifying guidelines; and*
- (iv) ***implemented within reasonable timeframes that recognise the need for ICT licensees to respond to dynamically changing market forces and the potential consumer detriment from protracted delay; and***
- (v) *non-discriminatory in application such that, to the extent appropriate, similarly situated ICT licensees are treated on an equivalent basis subject to the recognition of legitimate differences; and*
- (vi) *the subject of consultation with other relevant regulatory authorities in Papua New Guinea, where appropriate, to facilitate the development of a consistent regulatory policy in the public interest.” (emphasis added)*

41. In Digicel’s submission, this requirement established a high standard of evidence and analysis that NICTA is supposed to undertake, and must satisfy, before any recommendation may be made. Unfortunately, in Digicel’s respectful submission, this standard has not been met. No stated objective for the proposed regulation has been specified by NICTA and, in Digicel’s view, the terms of the proposed RSD that are set out in the Discussion Paper will not only fail to meet the Retail Regulation Criteria but will also cause significant harm to both consumers and to Digicel.

D. Specific Issues

NICTA has erred in its analysis of the relevant market and Digicel’s dominance in it.

42. NICTA has erred in its analysis of the relevant market and Digicel’s power in that market. For example, although NICTA has recognised Vodafone’s recent entry into the market by stating *“The mobile market in Papua New Guinea is now being progressively contested by a competitor with financial and technical capacity and with experience in providing mobile services in the Region”*⁵, it then effectively dismissed them as being competitively relevant by reaching a conclusion that Digicel’s retail prices should be subject to an RSD for the next three years.
43. NICTA then reinforces its acceptance of a competitive market by using the existence of competition as the reason it believes there is only a *“small risk ... that Digicel may significantly increase its on-net prices”* and it is *“doubtful”* that *“the proposed determination may limit innovation in and development of certain types of price packaging”*⁶.

⁵ Discussion Paper at page 9

⁶ Ibid at page 10

44. NICTA's acknowledgement of competition and, in particular, the entry of Vodafone is supported by Vodafone's own public statements including, for example, in an article in The National on 10 June 2022 where Vodafone's head of corporate sales Bipin Solanki said:

"We are overwhelmed with the response that we have gotten from the consumer market.

We have made over 650,000 connections within just a month of our launch and we are receiving positive sentiments from the business community as well and PNG DataCo's confidence in our service is proof of that.

Vodafone PNG is honoured to officially onboard PNG DataCo Ltd as our business customer.

We hope to onboard more business customers over the coming months."

45. Importantly, this information was publicly available and should have been known to NICTA at the time it prepared the Discussion Paper.
46. In addition to the competition Digicel faces from service providers such as Telikom and Vodafone, OTT voice applications are making increasing inroads into traditional voice services.
47. As Operators increase data coverage nationally (2G to 4G) as Digicel has in the last two year taking 4G coverage from █████ to over █████ of the population the market dynamics for voice alter. Substitution is now available which makes "voice" numbers agnostic to consumers. An OTT call decrements the Data Bundle of the consumer and does not differentiate on the termination point of said "call" or "voice service".
48. As well as being an important competitive factor, as the move to Data services continues due to demand for more feature rich services than traditional voice services available on the 2G networks, over time it will decrease Digicel's ability to recover the cost of those 2G Network assets despite them continuing to be essential to provide to consumers due to the nature of the market.
49. Digicel's views are supported by Mr Jason Ockerby of CEG Asia Pacific, a highly experienced competition and regulatory economist who has advised numerous mobile operators in the region including Digicel, Optus, SingTel, Spark, Vodafone, TPG and Hong Kong Telecom as well as telecommunications regulators in Singapore, Australia, New Zealand and Malaysia. In a memorandum to Digicel dated 22 November 2022, Mr Ockerby states:

"18. Substantial market power exists when a firm is not constrained by the actions of actual and potential competitors. Digicel's size alone does not mean it is free of competitive constraints. What is needed to make a conclusion of substantial market power is

evidence of an absence of constraint on Digicel. One would expect this to include an analysis to determine whether economic profits are being sustained by Digicel, whether its pricing is responsive to competitors and, critically, whether there are any apparent barriers to market entry and expansion by competitors.

- 19. NICTA do not undertake a methodical assessment of the constraints faced by Digicel. Had it done so it would have had to reconcile its conclusion that Digicel has market power with the fact that Vodafone, a very well-resourced and accomplished regional operator entering the market and, by its own account, is making competitive inroads. It is counterintuitive to reach a conclusion about Digicel's market power when Vodafone is taking share from Digicel.*
- 20. Indeed, in the space of 3 months Vodafone has made substantial in-roads in the market reporting on-boarding 650,000 subscribers, which in a market of around 3.4 million subscribers is indicative of low barriers to expansion. Vodafone's entry in the market is backed by a K3 billion investment in network infrastructure and operations supported by an experienced parent entity with operations in Fiji, Vanuatu, Samoa, Cook Islands, Kiribati, American Samoa and now PNG. Vodafone no doubt recognises the opportunity to expand operations in PNG given the less than 40% mobile penetration rate there compared to the greater than 100% penetration rate in many of the countries it operates.*
- 21. The low mobile penetration rate in PNG creates opportunities for new entry through new growth. At the same time Vodafone brand is internationally recognised and is set on eroding the market share advantage held by Digicel.*
- 22. How, in the light of these material market events, [how] NICTA can reach a conclusion that Digicel not only has market power now but will continue to do so for the next three years is very difficult to reconcile.*
- 23. Even NICTA's own analysis is heavy on contradictions. On the one hand NICTA state that it believes that Digicel has substantial market power, but on the hand considers the risk of Digicel raising prices in response to the ban "is small given the recent entry of Vodafone into the market." This is NICTA itself stating that Digicel is constrained by Vodafone. If NICTA truly believe this, it cannot reasonably conclude that Digicel has substantial market power.*
- 24. There is little doubt that Vodafone would be grateful to NICTA for hobbling its biggest rival Digicel, by preventing it from offering discounts to its customers. Vodafone has entered with similar*

discounts for calls between its customers and NICTA do not propose to make the ban industry-wide.

25. *It is notable that Vodafone's entry has occurred despite the presence of Digicel's on-net call discounts. This evidence directly contradicts NICTA's assertions that such discounts are a barrier to expansion by new entrants or operating as a material switching cost for customers.*
 26. *This is not to say that careful analysis of the market in PNG is not appropriate. The presence of market power and barriers to effective competition should be analysed and potential regulatory intervention may be warranted when it is considered to be necessary to address market failures.*
 27. *The problem is that NICTA has not done this careful analysis. NICTA's proposal is back only by assertion and subjective assessment. For example, NICTA says its intervention is only warranted for 3 years rather than 5 years as it considers the market is being "progressively contested" by Vodafone. One might expect that such a conclusion would be supported by a careful analysis of the rate of growth of Vodafone's subscriber base, its investment program and its pricing offers. No such analysis is undertaken by NICTA."*
50. NICTA cannot have it both ways. Either Digicel has SMP and is unconstrained by competition, with such a conclusion being supported by proper evidence and analysis, or the first limb of the retail regulation criteria is not satisfied and a recommendation to the Minister to make an RSD cannot lawfully be made.
51. In Digicel's submission NICTA has not only a legal duty but a moral duty to ensure that it has undertaken cogent and careful analysis of the particular circumstances in Papua New Guinea before seeking to impose regulation on any party.

Customer choice is driven by coverage and service quality considerations

52. NICTA has focused solely on on-net price differences and has failed to take into account the significant difference between the networks and services provided by Digicel and its competitors. Digicel submits that these differences are more likely to drive customers' choice of network (and supplier) and consequent on-net/off-net call ratios than on-net/off-net pricing differentials.
53. For example, calls which originate and terminate in areas where only Digicel has coverage have to be on-net. No price control changes this. Further, in selecting a network, the "calling circle" or "club" effect are strongly driven by coverage considerations.
54. Further, someone who may occasionally move outside of an overlapping Digicel/Telikom/Vodafone coverage area to a Digicel-only coverage area might value this

occasional facility of service availability sufficiently highly for it to influence the choice of service provider.

55. The difference in coverage in between Digicel and Telikom/Vodafone continues to be substantial and is a reflection of the more than [REDACTED] that Digicel has invested in PNG since 2007.
56. That investment is ongoing and includes current work by Digicel to further upgrade and develop its network which, over the past three years has included modernizing and upgrading sites from 2G/3G to LTE. Digicel has invested well in excess of [REDACTED] in Papua New Guinea over this period, with LTE population coverage increasing from around [REDACTED] to more than [REDACTED] today. Around [REDACTED] of Digicel's sites have already been upgraded to LTE.
57. In the last 18 months, Digicel has also added [REDACTED] new rural sites bringing coverage to otherwise unserved areas.
58. Telstra Corporation Limited ("**Telstra**"), which completed its acquisition of Digicel Pacific Limited in July 2022, remains committed to continuing Digicel's ongoing investment in network, services and the people of Papua New Guinea. As a long-term investor in Digicel, Telstra's planning horizon for the Digicel network extends beyond current technology, to investment in continuing upgrades over time. In particular, Telstra has committed to completing the 4G upgrade of the Digicel network and then to progress to 5G across Papua New Guinea as demand builds for advanced services.
59. Digicel's continuing investment is a demonstration of its ongoing commitment to provide world class services and support the economic and social development of the people of PNG.
60. Importantly, Digicel is supporting the governments focus to deliver "digitization" to rural communities but this comes at increased cost despite low usage and uptake due to macro economic issues – power availability, literacy, education etc.
61. In contrast:
 - a. Telikom has never met the current obligations that were imposed on it by the *Standard and Special Conditions of Individual Licences Rule, 2011* and no enforcement action has been by NICTA to address Telikom's failure; and
 - b. Vodafone is not subject to any rollout obligations at all which has meant it has been free to "cherry pick" the least cost and most valuable parts of the country.
62. This means that Digicel has borne the sole responsibility and cost of delivery services to regional and rural customers in Papua New Guinea.
63. The summary impact of this is Digicel is investing in world leading network technology at the expense of cost recovery on legacy assets in the market. This may go in some part to explaining why Telikom has never made the required investment to meet its

own coverage rollout obligations. It does not explain why NICTA has never acted to enforce those obligations or has decided to permit Vodafone to enter the market without being subject to any rollout obligations whatsoever.

64. This places Digicel at a very significant cost disadvantage and effectively provides a regulatory subsidy to Digicel's competitors who are permitted to focus on the most profitable parts of the market without contributing fully or fairly to the delivery of services to rural and remote communities.
65. The difference in coverage is highly relevant to this proceeding for three reasons:
 - a. It is a key driver of the difference in market share between Digicel and Telikom/Vodafone as there are large parts of the country that are not covered by those service providers;
 - b. The superior coverage provided by Digicel means that consumers are more likely to form "calling circles" on the Digicel network than either Telikom or Vodafone. This is because it is more likely that all of the members of the calling circle will be able to access service on the Digicel than if they subscribed to those other service providers;
 - c. Any attempt by NICTA to regulate Digicel's on-net prices will have far reaching effects on the affordability of mobile telecommunications services in areas where consumers do not have any competitive choice over which service provider they subscribe to.
66. Importantly, retail prices must be considered in relation to all customers and not just those customers in areas where Telikom/bmobile has invested to provide competitive coverage and services.
67. At Section 4.3 of the Discussion Paper, NICTA cites Digicel's "*substantial network footprint and the resultant advantage of being first in in many areas*" as being a source of its alleged market power.
68. However, NICTA does not explain why having a more extensive network is a barrier to entry or, if it is, how it can reconcile that view with the recent entry and apparent success of Vodafone, a very well-resourced regional network operator.
69. Effectively, NICTA is proposing to give Telikom and Vodafone a competitive advantage through regulation of Digicel's retail prices for the next three years. If NICTA proceeds, that advantage will come at the expense of ordinary consumers who will be required to pay more for their services - even in areas where Telikom and Vodafone have no presence. This is because:
 - a. Due to the low penetration in rural PNG due to mentioned macro economic factors Digicel has [REDACTED] unprofitable sites in the market which do not cover the operational cost of providing service. The imposition of an RSD will make these sites more onerous to support and thus even more of a cost burden on the company. Consequently, such

a further lowering of economic return could hamper further network rollout or force Digicel to ONLY deploy 4G/5G services in future, thus leading to increased barriers to participation for consumers due to the cost differential of a 4G handset vs a simple 2G handset. Relevantly, Vodafone has chosen to enter the market without providing any 2G capability. This has the effect of lowering their network costs while increasing costs for consumers who are only able to afford a 2G handset.

- b. Digicel in rural areas subsidize both 2G and 4G handsets. In rural/new coverage areas Digicel are selling 2G handsets at PGK10 (USD\$2.80) which is the lowest cost handset available globally (without term contracts) despite having a cost (fully loaded) of [REDACTED]. Digicel has been doing this in remote underserved areas to ensure consumers have the ability to access the network and vital communication services. Digicel in these areas are also selling 4G handsets at PGK99 vs a cost of [REDACTED]. An increase in cost and lower profitability on said sites will lead Digicel to stop the subsidization of such handsets as cost recovery time increases and as such create a larger barrier to entry for rural consumers to enter the ICT market.
70. Digicel notes that the regulatory intervention currently proposed would act as a commercial support for Telikom and Vodafone. This would be incompatible with NICTA's obligations under Section 3 of the Act specifically that any such interventions are:

“(i) proportionate and drafted to achieve results that are no more burdensome than necessary to achieve their stated regulatory objectives; and

(ii) based on sound economic principles ...and

...

(v) non-discriminatory in application such that, to the extent appropriate, similarly situated ICT licensees are treated on an equivalent basis ...” (emphasis added)

71. The implicit assumption underpinning the justification for this proposed measure – that it would not be possible for an operator with limited coverage and small market share to rapidly expand both its coverage and its volume of customers – is not backed by evidence. In fact, the evidence demonstrates the opposite. In the case of Digicel, we have entered a number of markets (including Papua New Guinea) as the second operator behind a single incumbent which had 100% market share. In these markets we rapidly deployed our networks and grew our customer base in some cases to nearly 70% market share. This was achieved within relatively short periods of time without the support of a regulatory constraint on on-net/off-net pricing of our competitor. By its own statements, Vodafone is now looking to do the same in Papua New Guinea and without the competitive advantage being proposed by NICTA.

The terms of the proposed RSD are harsh, oppressive and unwarranted in the circumstances.

72. The proposed three-year term of the RSD is excessive – especially given the apparent success of Vodafone and the clear failure of the 2012 RSD to meet its stated objectives and accepted international practice.
73. The proposed RSD would also be harsh and oppressive for consumers who would be required to pay higher prices, including in areas where Telikom or Vodafone do not provide competing services. For example, Digicel would not be able to continue to offer its “1Tok+” bundled pricing that it was only able to implement once the 2012 RSD expired and has now been adopted by more than [REDACTED] customers.

NICTA’s cost benefit analysis is simplistic and flawed

74. NICTA’s cost benefit assertions are, with respect, simplistic and flawed and have been made without the benefit of any actual or proper analysis. On the contrary, there will be substantial net detriments for consumers arising from the proposed RSD. These detriments will arise from the higher prices customers may be forced to pay and the disincentive for Digicel to continue to invest in new network facilities and services.
75. Specific examples of possible negative impacts that Digicel anticipates will be felt by consumers as a result of the proposed RSD include:
 - a. An increase in effective prices to all consumers;
 - b. An increase in effective pricing that may be applied specifically to rural consumers (noting Digicel, while having a much higher cost to serve in rural communities has always employed a view and pricing policy that rural consumers should have the same access costs as urban consumers). This is while Digicel’s competitors appear to have completely forgotten or ignored provision of service to the underserved and have remained solely focused on easy to serve and lower cost deployments in major population bases;
 - c. Removal of or stopping the support of unprofitable towers;
 - d. A decrease in voluntary network rollout to rural populations beyond those areas that are required to be served in accordance with the regulatory framework;
 - e. Removing standard 2G voice services in new network deployments to lower cost to serve;
 - f. Implementing regional pricing for data services to improve cost recovery; and
 - g. Stopping or reducing the subsidization of handsets in new rollout areas.
76. All of these negative impacts will go against the Government’s objective to increase digital penetration and improve access to critical infrastructure in the market.

77. There may also be detriments arising from the continuing disincentive for Telikom and Vodafone to continue to invest in their own networks or to compete as vigorously as they would absent an RSD.
78. Importantly, the concerns highlighted by Digicel are well understood internationally. As Mr Ockerby notes:

“28. Nor is there any concrete analysis of the likely consequences of the ban on on-net discounting. International evidence strongly supports a conclusion that consumers will be harmed by a ban. In two countries where such bans have been implemented, Chile and Colombia, consumers have been harmed by higher prices. In the case of Chile, academics have undertaken a ex post assessment of the ban and found:

“In this particular case this regulatory intervention has (in the short-run) likely harmed consumers and benefited firms. Long-run competitive effects, such as changes in market structure, are neither captured by the model nor have yet been observed in this market.”

29. Similarly, in the case of Colombia, the academics report:

“results that suggest that Colombia's regulator decision in 2010 to impose several measures (among them a ban on the off-net/on-net price differential) on the dominant mobile operator increased the average price-per minute in the market and produced a sizable reduction in consumption.”

30. This should be sober reading for consumers in PNG.”

E. Proposed terms of the RSD

79. Even if an RSD was warranted, which Digicel denies, the terms proposed by NICTA are inappropriate in the circumstances.
80. In particular, NICTA's proposal to impose a complete ban on Digicel's ability to differentiate between the prices of on-net and off-net calls is unreasonable and irrational in circumstances where there are clearly cost differences between each type of call, particularly in rural and remote areas where Digicel is required to transport off-net calls to its points of interconnection in either Port Moresby or Lae so that Digicel's competitors can deliver them to their urban customers.

81. It is also unreasonable and irrational to impose such a ban when Digicel's competitors also differentiate between the prices of on-net and off-net calls yet will not be subject to the same ban.
82. Finally, the proposed three year term of the RSD is unreasonable and irrational in circumstances where Vodafone's competitive entry has already occurred and it was able to connect more than 650,000 customers in its first month of operation in Papua New Guinea. A fact that was or should have been known at the time NICTA prepared the Discussion Paper.

F. Conclusion

83. In conclusion, Digicel strongly submits that there is no justification for further regulation of Digicel's retail prices.
84. Moreover, NICTA has not undertaken a proper (or any) actual analysis to be able to reasonably satisfy itself that the Retail Regulation Criteria would be met by the proposed RSD.
85. As Mr Ockerby notes:

"6. NICTA's proposal is backed by a mere 5-page assessment of the case for imposing the ban. In those pages, NICTA does little more than make assertions regarding Digicel's market power and the potential impact of on-net discounts on the potential entry by new mobile operators in PNG. NICTA provide no analytical or empirical support for its assertion that Digicel has market power nor analysis of the likely consequences of the ban.

7. From my experience in advising on competition and regulatory matters in mobile markets in Australia, New Zealand and throughout the Asia Pacific, in Europe and South America, the NICTA assessment provides no reasonable basis for the proposed intervention."

86. Digicel submits that, if NICTA had undertaken that analysis, it would have found that the proposed intervention would not meet the mandatory requirements of the Act and would be inconsistent with the Retail Regulation Criteria.
87. If the proposed regulation was imposed on Digicel it would, in all likelihood, result in an increase in the prices consumers pay for their services and soften incentives for competition. It would also be out of step with international practice. International peer reviewed studies of similar regulatory approaches have empirically shown that the imposition of a ban on on-net calling discounts will lead to an increase in prices to consumers with no benefit to competition.
88. As Mr Ockerby further notes:

“In the rare cases where regulators have imposed bans on on-net calling discounts for mobile operators, Chile and Colombia being two cases, studies published in academic journals have shown that consumers have indeed faced higher prices with uncertain or no impact on the competitive landscape. It is unclear whether NICTA is aware of such studies as it provides little support for its proposed intervention.”

89. Digicel calls upon NICTA to conclude that a Retail Service Determination is not warranted at this time and that it should monitor market developments, including Vodafone’s competitive progress, to better understand the reasons for customers network preferences.



Memorandum

To: Digicel PNG
From: Jason Ockerby
Date: 28 November 2022
Subject: **Proposed regulation will harm consumers**
Status: Opinion piece

1. In what would be a radical intervention, NICTA is proposing to ban Digicel from offering lower prices to its customers when they make calls to other Digicel customers. If allowed to stand, this proposal will almost certainly mean higher prices for millions of calls for mobile customers in PNG as Digicel would withdraw to a single price for all calls made by its customers.
2. Telecommunications regulators around the world are typically very reluctant to say to operators “stop offering lower prices”. As they should be. Whilst in the rarest of cases, low prices can be bad for consumers if they prevent entry by new competitors in the long run, there is a trade-off. Consumers are certainly harmed by a ban on discounting through immediately higher prices with a prospect, but not a guarantee, of benefits in the long-term if there is greater competitive entry in the future.
3. In the rare cases where regulators have imposed bans on on-net calling discounts for mobile operators, Chile and Colombia being two cases, studies published in academic journals have shown that consumers have indeed faced higher prices with uncertain or no impact on the competitive landscape. It is unclear whether NICTA is aware of such studies as it provides little support for its proposed intervention.
4. Indeed, NICTA does not even reflect on its own past interventions in relation to Digicel’s on-net pricing in 2012, when it constrained the differential between on-net and off-net prices to 40% for prepaid services. An *ex post* assessment of that intervention by economist Aaron Schiff showed that this earlier intervention had no impact on calling patterns or entry in the market.
5. Importantly, Schiff’s assessment does show that following the removal of NICTA’s constraints on on-net pricing in 2017, Digicel introduced substantial discounts for on-net calls which resulted in a significant increase in call volumes, to the benefit of mobile users in PNG. One might reasonably expect a reversal of these benefits if NICTA intervenes again.

6. NICTA's proposal is backed by a mere 5-page assessment of the case for imposing the ban. In those pages, NICTA does little more than make assertions regarding Digicel's market power and the potential impact of on-net discounts on the potential entry by new mobile operators in PNG. NICTA provide no analytical or empirical support for its assertion that Digicel has market power nor analysis of the likely consequences of the ban.
7. From my experience in advising on competition and regulatory matters in mobile markets in Australia, New Zealand and throughout the Asia Pacific, in Europe and South America, the NICTA assessment provides no reasonable basis for the proposed intervention.
8. On-net discounting by mobile operators is, or has been, a feature of mobile pricing in almost every country in the world. So too is asymmetry in the size and coverage of mobile operators competing in each market. In most markets there is a single operator with near universal coverage who tends to attract the largest subscriber base and one or two smaller operators who have lesser coverage and smaller market shares focussed on providing high performance networks in more urban areas.
9. These two market features are far from unique to PNG and are characteristic of vibrant competition in the mobile sector in many markets.
10. Similarly far from unique, are claims, typically from the smallest operators, that on-net discounts are advantageous to the larger operators. Yet most regulators recognise that such discounts are a feature, not a bug, of competition between mobile operators seeking to make their respective networks attractive to the largest number of subscribers. Consumers benefit from the lower prices and the race to have the network which is has the coverage and performance that people desire.
11. On-net discounting is used by mobile operators as an effective competitive tool to enhance the attractiveness of networks. It is also a pricing tool in response to over-the-top (OTT) providers of voice services such as Skype and WhatsApp that use the data services to provide messaging and calling services at a zero price. The presence of OTT operators creates a dilemma for mobile operators as they seek to balance calling and data charges. If calling charges are set too high relative to data charges, some customers will switch to OTT providers for voice services. On-net discounts by Digicel may therefore likely be a response to competition rather than attempt to dampen it.
12. Central to NICTA's case for the ban of discounts for calls between Digicel's customers is that Digicel has substantial market power. NICTA says that Digicel's market power is evidenced by Digicel's high market share, its large coverage, the presences of on-net call discounts which it asserts is a barrier to other operators entering and expanding and the effect of on-net calls on customer switching costs. This is not evidence of substantial market power.

13. There is no question that Digicel has a high market share at above 90% historically and a wide population reach. However, the observation that a single operator has a large customer base, and a broad network coverage is as likely evidence of highly effective competition than evidence of substantial market power. These outcomes are what we desire from competition; investment in the network infrastructure that provides high-quality services that are attractive to a broad base of customers.
14. The cost structure of mobile network infrastructure means that mobile markets are highly contestable and predisposed to competition. Unlike fixed line services whose cost structure naturally lends itself to monopoly outcomes, mobile markets are typified by competition between two, three or four operators in markets around the world.
15. We should not however expect or be hoping for a market outcome with two or three identical operators, with equal shares and similar coverage. Unlike a boxing match requiring fighters to be matched by weight class, competition in mobile markets can be highly effective and deliver desirable outcomes when operators pursue different strategies.
16. Some customers are attracted to the network with the highest coverage and are willing to pay a premium to support the investment needed to achieve it. Whist other consumers might value performance in urban areas and enjoy prices that reflect the cost of supplying in those areas alone.
17. Like mobile operators competing in a nation-wide markets Digicel offers the same price for calls regardless of the location of its customer. There is not a higher price for calls made from Bougainville rather than from downtown Port Moresby. This means that the benefits of competition between Vodafone and Digicel in urban areas spreads to customers in more remote areas.
18. Substantial market power exists when a firm is not constrained by the actions of actual and potential competitors. Digicel's size alone does not mean it is free of competitive constraints. What is needed to make a conclusion of substantial market power is evidence of an absence of constraint on Digicel. One would expect this to include an analysis to determine whether economic profits are being sustained by Digicel, whether its pricing is responsive to competitors and, critically, whether there are any apparent barriers to market entry and expansion by competitors.
19. NICTA do not undertake a methodical assessment of the constraints faced by Digicel. Had it done so it would have had to reconcile its conclusion that Digicel has market power with the fact of Vodafone, a very well-resourced and accomplished regional operator entering the market and, by its own account, making competitive inroads. It is counterintuitive to reach a conclusion about Digicel's market power when Vodafone is taking share from Digicel.
20. Indeed, in the space of 3 months Vodafone has made substantial in-roads in the market reporting on-boarding 650,000 subscribers, which in a market of around 3.4

million subscribers is indicative of low barriers to expansion. Vodafone's entry in the market is backed by a K3 billion investment in network infrastructure and operations supported by an experienced parent entity with operations in Fiji, Vanuatu, Samoa, Cook Islands, Kiribati, American Samoa and now PNG. Vodafone no doubt recognises the opportunity to expand operations in PNG given the less than 40% mobile penetration rate there compared to the greater than 100% penetration rate in many of the countries it operates.

21. The low mobile penetration rate in PNG creates opportunities for new entry through new growth. At the same time Vodafone brand is internationally recognised and is set on eroding the market share advantage held by Digicel.
22. How, in the light of these material market events, NICTA can reach a conclusion that Digicel not only has market power now but will continue to do so for the next three years is very difficult to reconcile.
23. Even NICTA's own analysis is heavy on contradictions. On the one hand NICTA state that it believes that Digicel has substantial market power, but on the hand considers the risk of Digicel raising prices in response to the ban "is small given the recent entry of Vodafone into the market." This is NICTA itself stating that Digicel is constrained by Vodafone. If NICTA truly believe this, it cannot reasonably conclude that Digicel has substantial market power.
24. There is little doubt that Vodafone would be grateful to NICTA for hobbling its biggest rival Digicel, by preventing it from offering discounts to its customers. Vodafone has entered with similar discounts for calls between its customers and NICTA do not propose to make the ban industry-wide.
25. It is notable that Vodafone's entry has occurred despite the presence of Digicel's on-net call discounts. This evidence directly contradicts NICTA's assertions that such discounts are a barrier to expansion by new entrants or operating as a material switching cost for customers.
26. This is not to say that careful analysis of the market in PNG is not appropriate. The presence of market power and barriers to effective competition should be analysed and potential regulatory intervention may be warranted when it is considered to be necessary to address market failures.
27. The problem is that NICTA has not done this careful analysis. NICTA's proposal is back only by assertion and subjective assessment. For example, NICTA says its intervention is only warranted for 3 years rather than 5 years as it considers the market is being "progressively contested" by Vodafone. One might expect that such a conclusion would be supported by a careful analysis of the rate of growth of Vodafone's subscriber base, its investment program and its pricing offers. No such analysis is undertaken by NICTA.

28. Nor is there any concrete analysis of the likely consequences of the ban on on-net discounting. International evidence strongly supports a conclusion that consumers will be harmed by a ban. In two countries where such bans have been implemented, Chile and Colombia, consumers have been harmed by higher prices. In the case of Chile, academics have undertaken an ex post assessment of the ban and found:

“In this particular case this regulatory intervention has (in the short-run) likely harmed consumers and benefited firms. Long-run competitive effects, such as changes in market structure, are neither captured by the model nor have yet been observed in this market.”

29. Similarly, in the case of Colombia, the academics report:

“results that suggest that Colombia's regulator decision in 2010 to impose several measures (among them a ban on the off-net/on-net price differential) on the dominant mobile operator increased the average price-per minute in the market and produced a sizable reduction in consumption.”

30. This should be sober reading for consumers in PNG.
31. Jason Ockerby is a competition and regulatory economist based in Sydney. Jason has advised numerous mobile operators in the region including Digicel, SingTel Optus, Spark, Vodafone, TPG and Hong Kong Telecom as well as telecommunications regulators in Singapore, Australia, New Zealand and Malaysia.

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