REDACTED VERSION

DIGICEL (PNG) LIMITED

Submission to NICTA

Public inquiry into the need for a Retail Services Determination (RSD) regarding certain mobile telephony services supplied by Digicel

Friday, 9 February 2018

A. Executive Summary

1. On 20 November 2017, NICTA released a Discussion Paper in which it proposed that the Minister make a Retail Service Determination ("**RSD**") by which Digicel's retail prices would be regulated for the next five years. The terms of the proposed RSD would:

   > "• *apply to Digicel's supply of mobile originated retail national voice calls and SMS (both prepaid and post-paid);*
   >
   > • *establish a pricing principle preventing any differentiation in Digicel's average retail prices based on whether the call (or SMS) is to terminate on-net or off-net; and*
   >
   > • *establish a second pricing principle preventing Digicel's average retail prices for on-net calls (or SMS) being below the applicable mobile termination rate; and*
   >
   > • *ensure that on-net and off-net voice calls and SMS are charged and billed on a consistent basis (i.e. without discrimination in the use of per second or per minute charging).*"[1]

2. No other operator, including Digicel's competitors, is proposed by NICTA to be subject to similar or any retail price regulation.

3. The recommendation and imposition of a RSD is subject to the provisions of Part VII of the National Information and Communication Technology Act 2009 which provides, *inter alia*, that before it may make a recommendation to the Minister to impose a RSD, NICTA must be satisfied that all of the retail regulation criteria specified in section 158 of the Act will be met. Importantly, the Retail Regulation Criteria are not mere guidelines but 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.

4. However, 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, the Retail Regulation Criteria will be met.

5. In particular, NICTA has failed to present any cogent evidence or analysis that would support a conclusion 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)(ii) of the Act.

6. NICTA has also not presented any cogent evidence or undertaken any empirical analysis to support its conclusions regarding the net benefits of its proposed intervention. While the standard of proof that is required by the Act may not be "beyond reasonable doubt", as is required in a criminal proceeding, there must nevertheless be a properly reasoned basis for any position that is taken by NICTA.

[1] Discussion Paper at section 1

7. In short, NICTA has failed to demonstrate that any proposed RSD will have a material positive effect on competition in PNG or result in net benefits.

8. NICTA's failure in this regard is clear when the 2012 RSD is taken into account. That regulatory intervention did not result in any material change in Telikom/bmobile's market share during the term of the 2012 RSD. In Digicel's submission, the reason for that is that Telikom/bmobile's failure to succeed had nothing to do with any differences between on-net and off-net retail prices and was merely a reflection of its own commercial decisions, including to fail to invest in network facilities and services that customers wish to acquire.

9. Despite being given five years grace (by virtue of the 2102 RSD) in which to do so, Telikom/bmobile have continued to fail to invest in their networks and services and, as far as Digicel is aware, have yet to meet the mandatory coverage obligations specified by NICTA in its Standard and Special Conditions of Individual Licences Rule, 2011. Proposing a further five years of even more intrusive regulation will further soften investment incentives and result in significant harm to the consumers whose interests NICTA is expected to protect.

10. 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 PNG. Digicel has never been the "incumbent" mobile operator in PNG and, when it entered the market in 2007, 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.

11. The fact that Digicel was successful in growing its business and now has a significantly higher market share than Telikom/bmobile is a reflection of that investment, superior customer service and world class business practices and has nothing to do with any unassailable advantage as has been suggested by NICTA. On the contrary, Telikom/bmobile had and still have an equal opportunity to invest and run their business efficiently. Should they choose to do so, it could reasonably be expected that they would also be able to rapidly expand their business(es).

12. In fact, Digicel operates its business based on the belief and expectation that Telikom/bmobile will do so at some point and is effectively constrained in its conduct because of that.

13. NICTA, in making its proposed recommendation has erred by taking into account irrelevant information and failing to take into account relevant information. For example:

    a. NICTA has sought to rely extensively upon the purported decision of the ICT Appeals Panel that was made on 18 December 2012. However, the purported decision of the ICT Appeals Panel contained a number of errors, both in law and in substance. It was also not relied upon or given any effect by either the Minister or NICTA. Furthermore, the ICT Appeals Panel's purported decision was made more than five years ago and cannot reasonably be considered to be relevant to the current proceeding.

b. NICTA has not, with the benefit of the hindsight that is now possible, considered whether the 2012 RSD actually met the Retail Regulation Criteria. However, the available data (which has previously been supplied to NICTA under the terms of the 2012 RSD) shows that the 2012 RSD was completely ineffective as a tool to drive competition. This is highlighted by a comparison between on-net and off-net ratios of prepaid calls with postpaid calls. Ironically, the proportion of off-net, postpaid calls which were left unregulated is higher than for the regulated prepaid calls. No evidence has been provided by NICTA to indicate that the proposed RSD will be any better;

c. The theoretical models from the academic literature that have been relied upon by NICTA are simplified and, in many cases, rely on market assumptions that are simply not relevant to PNG;

d. NICTA has also been selective in its choice of academic literature to support its arguments and appears to have ignored any studies that do not accord with its preferred view of the world;

e. NICTA has underestimated the impact of OTT operators – especially with respect to messaging services. The rapid and ongoing growth of OTT services means that messaging is already subject to strong competitive forces and regulatory intervention with respect to Digicel's retail pricing is unwarranted;

f. NICTA has sought to rely on financial information taken from a 2015 document to support its argument that Digicel "*keeps it profits persistently and significantly above the competitive level*". However, NICTA makes no attempt to define what it means by "competitive level" and relying on selective financial data from a single point in time cannot reasonably be used as a basis to determine whether market conduct or outcomes are "persistent";

14. Customers' choice of network and service supplier is driven more by coverage and service quality than on-net/off-net pricing differentials. Calls which originate and terminate in areas where only Digicel has coverage have to be on-net. Retail price regulation cannot change this. Further, in selecting a network, the "calling circle" or "club" effect could be driven by coverage considerations. Someone who may occasionally move outside of the overlapping Digicel/bmobile 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.

15. This means that the ratio of on-net calls to off-net calls will be driven by considerations other than price.

16. bmobile and Telikom's failure to gain traction and market share is solely a result of their own incompetence and failure to invest and may well also be attributable to the 2012 RSD which reduced their incentives to compete with Digicel on an equal footing. NICTA also glosses over the capital constraints it asserts are faced by bmobile and Telikom and does not explain why they could not expand their coverage to substantially match Digicel's and have not already done so. A failed execution of a business plan on the part of one market participant does not imply the dominance of other players. If Digicel is indeed making the

excess profits claimed by NICTA then there is a clear business case for Telikom/bmobile to expand their coverage to address Digicel's. Price regulation is not the answer.

17. The terms of the proposed RSD are harsh, oppressive and unwarranted in the circumstances. In particular, the proposed five-year term of the RSD is excessive – especially given the failure of the 2012 RSD to meet its stated objectives and accepted international practice.

18. Finally, NICTA's cost benefit analysis is simplistic and flawed and, contrary to NICTA's assertions, 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 continuing investment in new network facilities and 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 and generates welfare benefits of around PGK[REDACTED] million per day.

19. Digicel has also commissioned an independent expert report from New Zealand Economist, Dr Aaron Schiff in which he comments on economic issues raised in the Discussion Paper. Dr Schiff has, 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 cellsites 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)

20. 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.

B. Introduction

21. The purpose of this submission is to respond to the issues raised by the National Information and Communication Technology Authority ("**NICTA**") in its Discussion Paper that was issued on 20 November 2017 ("**Discussion Paper**") in relation to its Public Inquiry into a potential Retail Service Determination regarding certain mobile telephony services supplied by Digicel ("**Public Inquiry**").

22. This submission contains Digicel's proprietary information that is confidential and commercially sensitive. Its disclosure would cause Digicel substantial harm. Accordingly, this submission should not be copied or distributed without Digicel's written approval. A redacted, non-confidential version of the submission will be made available on request.

23. At page 1 of the Discussion Paper, NICTA states:

> "*NICTA staff have undertaken a fresh assessment of the retail mobile services market to determine whether or not the circumstances of the market warrant a recommendation being made to the Minister for a new retail service determination similar to the 2012 determination.*"

24. While NICTA does not specifically state it to be the case, it is implied by the content and context of the Discussion Paper that the Public Inquiry is being undertaken pursuant to and in accordance with sections 157 and 230 of the National Information and Communication Technology Act 2009 ("**Act**").

25. Digicel understands from the Discussion Paper that the Public Inquiry is being undertaken by NICTA entirely on its own initiative and that it is not being undertaken as a result of "a written request from any person asking NICTA to hold such a public inquiry" pursuant to section 157(2)(b) of the Act or as a result of a request from the Ministerial pursuant to section 157(4) of the Act.

26. As will be apparent from this submission, it is Digicel's view that the recommendation of a RSD by NICTA is inappropriate at this time. This is because an RSD of the type that has been contemplated is unsupported by the facts and analysis that has been undertaken by NICTA to date and would be a misuse of NICTA's powers under the Act. Digicel is concerned that proceeding with a RSD would do nothing to promote competition, undermine incentives for the investment that continues to be required and result in worse outcomes for the people of PNG.

27. This is especially the case given that a similar proceeding that commenced in November 2011 which resulted in a RSD being imposed on Digicel on 25 September 2012 ("**2012 RSD**"). In Digicel's submission it is clear in retrospect that the 2012 RSD did not meet the requirements of the Retail Regulation Criteria, softened incentives for investment and effectively delayed the introduction of new retail pricing initiatives that would have substantially reduced consumers costs of making calls. However, despite having five years

of market data available to it, NICTA has not undertaken any meaningful analysis to seek to understand why the 2012 RSD failed or how to avoid a similar failure in this instance.

28. The 2012 RSD limited the extent to which Digicel could discriminate between the prices of on-net and off-net prepaid calls so that the price for an off-net call could be no more than 40% higher than an on-net call. Post-paid calls and SMS were not regulated. Those restrictions expired 24 October 2017.

29. It is implied in the Discussion Paper that the latest RSD proposal may have arisen, at least in part, due to Digicel changing its retail pricing (both in terms of pricing structure and the difference between on-net and off-net call rates) on or about the date of expiry of the 2012 RSD. However, it should be no surprise that once it was no longer restricted by regulation that Digicel would seek to amend its retail prices in order to stimulate usage and provide better value to its customers and to consider retail pricing approaches that have been adopted in other competitive markets around the region and around the world but which were not permissible under the 2012 RSD.

30. Importantly, and as is noted in the Discussion Paper, Digicel has tested a number of different propositions, some of which have resulted in lower prices for off-net calls and some of which have resulted in higher prices for off-net calls. Digicel has also tested a number of "bundled" service offerings by which a customer is able to pay a fixed fee for a "bundle" of on-net calls, SMS and data services.

31. While it is still early days, one thing has become clear. That is, while the number of calls to Telikom/bmobile has remained very consistent, the number of on-net calls has proven to be highly sensitive to the nature of the various retail propositions. This can be seen from the substantial rise in on-net call volumes and is discussed further below. Customers are clearly benefitting from the expiry of the 2012 RSD. In Digicel's submission, that alone provides good reason why NICTA should be slow to seek to impose further regulation in this area.

32. In addition to the material presented in this submission, Digicel has also commissioned an independent expert report from New Zealand Economist, Dr. Aaron Schiff in which he comments on economic issues raised in the Discussion Paper ("**Schiff Report**"). A confidential version of the Schiff Report is attached to this submission. A redacted, non-confidential version of the Schiff Report will be made available on request.

33. The Discussion Paper is the first step in the Public Inquiry process that, once complete, will result in NICTA recommending to the Minister whether or not to impose an RSD on particular terms proposed by NICTA. The Minister will then make a decision as to whether or not to accept NICTA's recommendation.

34. Digicel encourages NICTA to reach a conclusion that a RSD is not required, is likely to be harmful to consumers and to instead focus its energies on the many other important issues that face the ICT industry in PNG at this time.

C. Legal Framework

35. 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."*[2]

36. 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.

37. In addition to meeting this specific obligation, NICTA must also ensure that any proposed RSD is be 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*".

38. NICTA must also adhere to the Regulatory Principles enshrined in section 3 of the Act which, provide 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*

[2] 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*".

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

(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)

39. In Digicel's submission, this requirement established a high standard of evidence and analysis that NICTA 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.

40. NICTA has erred in its analysis of the relevant market and Digicel's dominance in it. For example, although NICTA has recognized the importance of the impact of OTT services on traditional voice and messaging services,[3] it has effectively ignored them when reaching a conclusion of whether Digicel's retail prices should be subject to a RSD.

41. This is most obvious in relation to messaging services where NICTA acknowledges the "*deteriorating position of SMS in the messaging market, given the growth of alternatives such as free messaging associated with social media and OTT services*".

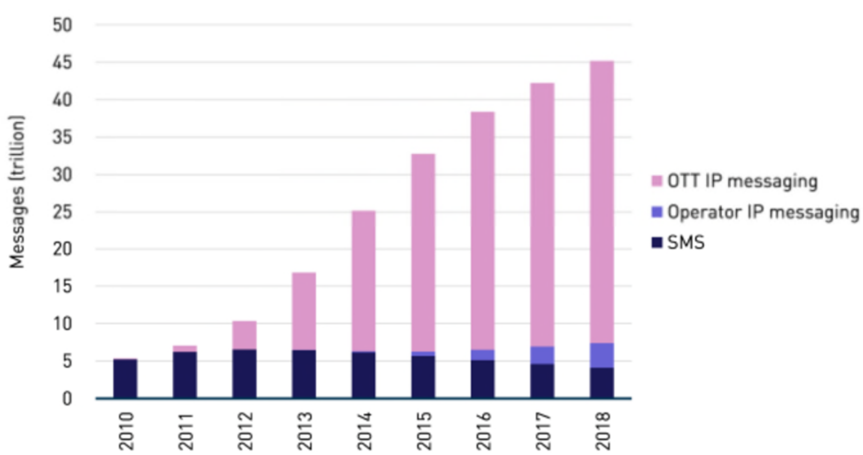
[3] Discussion Paper at section 3.1.4.

42. While Digicel does not have access to specific data on the growth of OTT messaging in PNG, it is clear from the graph below that Digicel's SMS volumes are being affected and the available data does not support a proposition that Digicel's SMS services should be regulated.

[REDACTED]

43. The above graph is consistent with worldwide trends as can be seen from the research undertaken by Analysys Mason which is captured in the graph below.

Messages sent via mobile handsets, worldwide, 2010–2018



Source: Analysys Mason 2014

44. However, despite NICTA acknowledging that "*NICTA does not have data on the volume of OTT call minutes in PNG*"[4], rather than undertake any specific analysis in relation to the impact of OTT services in PNG, NICTA seems to prefer to press on with regulation of

[4] *ibid*

Digicel's retail prices for voice calls regardless and also to propose the regulation of SMS prices, apparently for regulatory neatness[5].

45. Digicel considers this approach to be wrong both in principle and in law. In Digicel's submission NICTA has a duty to ensure that it has undertaken cogent and careful analysis of the particular circumstances in PNG before seeking to impose regulation on any party.

The 2012 RSD.

46. While NICTA describes the 2012 RSD in the Discussion Paper, it makes two serious errors.

47. Firstly, NICTA appears to rely heavily on the purported decision of the ICT Appeals Panel that was made on 18 December 2012[6]. However, the purported decision of the ICT Appeals Panel contained a number of errors, both in law and in substance. It was also not relied upon or given any effect by either the Minister or NICTA. Furthermore, the ICT Appeals Panel's purported decision was made more than five years ago and cannot reasonably be considered to be relevant to the current proceeding.

48. Section 261(1) of the NICT Act provides that the ICT Appeals Panel may:

> *"(a) affirm or vary the original decision or any part thereof; or*
>
> *(b) set aside the original decision and return the matter to NICTA with such directions as the ICT Appeals Panel considers appropriate."*

49. However, the purported decision of the ICT Appeals Panel in relation to NICTA's recommendation in respect of the 2012 RSD did none of these things and perhaps explains why neither NICTA nor the Minister sought to act on the purported decision.

50. Moreover, even in circumstances where it was accepted that the purported decision of the ICT Appeals Panel was improperly made, either NICTA or the Minister was still at liberty to use their powers under section 157 of the Act to hold a further public inquiry into whether the 2012 RSD should be varied to take into account the terms of the purported decision of the ICT Appeals Panel. Neither did so.

51. Nor did either Telikom of bmobile seek to have the purported decision of the ICT Appeals Panel enforced in any way.

52. In such circumstances, Digicel submits that it is highly improper for NICTA to now seek to rely on the purported decision of the ICT Appeals Panel in this proceeding.

53. Secondly, NICTA does not attempt in the Discussion Paper to analyse the outcomes of the 2012 RSD or whether or not the 2012 RSD was effective in addressing the on-net/off-net traffic "problem" that NICTA perceived to exist at the time it recommended the Minister impose the 2012 RSD.

[5] Discussion Paper at section 5.1.6.
[6] Discussion Paper at sections 2.23 – 2.25, 3.1.5, 5.1.8 and 5.2.6

54. In Digicel's submission it was not. The 2012 RSD was completely ineffective as a tool to drive competition and customer on-net and off-net calling behavior did not appear to change materially during the five-year term of the previous RSD.

55. This was despite other changes having occurred in the market which, on NICTA's 2011 analysis, were important facilitators of competition. For example:

    a. The mobile termination rate fell from 26 toea (peak) and 22 toea (off-peak) at the commencement of the term of the 2012 RSD to its current level of 8 toea per minute today;

    b. Global interest rates have fallen significantly from their 2012 levels which means that the cost of financing new infrastructure investment has fallen substantially; and

    c. The cost of infrastructure itself has fallen globally.

56. All of these things suggest that the regulation of price differences between on-net and off-net calls and messages was not effective in addressing any perceived competition problems.

57. Ironically, for postpaid calls which were not regulated under the 2012 RSD, a materially greater and growing percentage of Digicel's outgoing call traffic was "off-net. This data, which was available to NICTA through the reporting regime imposed under the 2012 RSD, is clearly reflected in the graph below.

[REDACTED]

58. The failure of the 2012 RSD is discussed in detail in the Schiff Report, which concludes:

> "*Overall, in my view, there is no clear evidence that the 2012 RSD was effective at changing the nature of competition in the PNG mobile market. Furthermore, unlimited "1Tok+" pricing has generated significant welfare benefits that may be at risk under the proposed new RSD. 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 welfare while having little or no impact on competition.*"[7]

NICTA has incorrectly relied upon price changes following the expiry of the 2012 RSD

59. NICTA has also sought to rely on the fact that Digicel has changes some of its retail prices around the time the 2012 RSD expired and has sought to imply that some sort of Machiavellian intent on Digicel's part in doing so.

60. However, if that is correct, then NICTA has made a further error by relying on such information to form a view that further regulation is necessary.

61. It should not be surprising that Digicel has experimented with a number of new pricing offers once the strict price regulation under the 2012 RSD expired. Such experimentation included the development of bundled[8] offers and is a common feature of unregulated competitive markets where commercially driven operators seek to find ways to stimulate demand for services for the mutual benefit of the operator and their customers. This is exactly what has happened in PNG.

62. Moreover, as NICTA appears to have acknowledged, the various pricing changes have included situations where the price of on-net and off-net calls has both decreased and increased. Again, this should be expected as regulation is withdrawn and no inference regarding future pricing intentions can or should be drawn from that.

63. What is clear from network usage data is that Digicel's price experimentation is having a profoundly beneficial effect on Digicel's customers and the value that they are gaining from the services provided by Digicel. For example, the Schiff Report reviewed Digicel's 1Tok+ pricing offer and found:

> "*…"1Tok+" stimulated approximately an* [REDACTED]*% increase in the daily number of on-net call minutes originated by Digicel prepaid customers. In the last seven days of September 2017, prior to the introduction of "1Tok+", Digicel prepaid customers made an average of just under 5 million minutes per day of on-net calls. In the last*

[7] Schiff Report at page 24

[8] A common feature of bundled offers is that customers pay a fixed price for a bundle of services, including a specific amount voice calls, messaging and data. Separate prices per minute, message or MB are usually charged for "out of bundle" voice messaging or data services.

seven days of December 2017, this had increased to an average of just over [REDACTED] *million minutes per day.*

It is clear that "1Tok+" generated significant welfare benefits. For example, if we assume that on average these additional on-net calling minutes are valued by consumers at 30T/minute, i.e. half of the standard on-net price, the additional [REDACTED] *million minutes per day of on-net calling stimulated by "1Tok+" are associated with welfare of around* [REDACTED] *million per day.*"[9]

NICTA has erred in its reliance on the academic papers and economic theory it has referenced in the Discussion Paper

64. The theoretical models from the academic literature that have been relied upon are simplified and assume rational behaviour of firms and in many cases symmetry between networks (i.e. identical coverage and quality). However, this is not the case in PNG where local market conditions are quite different.

65. NICTA has also been selective in its choice of academic literature to support its arguments and appears to have ignored any studies that do not accord with its preferred view of the world.

66. NICTA has not sought to consider the academic literature in the light of any empirical analysis of the PNG market.

67. These shortcomings are discussed extensively by Dr Schiff. As he notes:

> "*The Discussion Paper justifies the proposed RSD largely on theoretical grounds, referring to the economic literature. Overall, this literature offers mixed results about whether on-net pricing is beneficial, neutral, or harmful for competition and consumers. It is difficult to draw conclusions from the literature that can directly support retail price regulation to restrict on-net pricing.*
>
> *While the theoretical literature is a guide to the possible effects of on-net pricing, in my view the proposed RSD must be carefully analysed in the local market context in PNG, taking account of other factors aside from pricing that may affect the intensity of competition among mobile networks and other market outcomes.*
>
> *The Discussion Paper focusses on certain theoretical results showing that on-net pricing can be harmful, while dismissing other results showing that on-net pricing can be beneficial or neutral, on the basis of the assumptions used to generate the results. All economic models use assumptions and selecting results on the basis of assumptions alone is generally not helpful. Instead it is important to consider the*

[9] Schiff Report at page 18

overall contribution of each research paper to our understanding of the economics of on-net pricing.

…

Given the mixed results from the theoretical literature on on-net pricing, it is important to consider empirical evidence. Unfortunately, the empirical literature is much more limited, but what is available does not support the case for retail price regulation. One study that directly addresses the issue estimates that a ban on on-net pricing implemented in Chile in 2012 was harmful for consumers. Other empirical results question the real-world importance of "tariff-mediated network effects" (i.e. network effects induced by on-net pricing) in consumers' choice of mobile network, which calls into question the justification for regulating on-net pricing."[10]

Customer choice is driven by coverage and service quality considerations

68. 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 rations than on-net/off-net pricing differentials.

69. 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.

70. Further, someone who may occasionally move outside of an overlapping Digicel/bmobile 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;

71. The difference in coverage in between Digicel and Telikom/bmobile is substantial. The graphics below demonstrates that Digicel has established around four times as many cellsites as either Telikom or bmobile and is a reflection of the more than PGK2 Billion that Digicel has invested in PNG since 2007.

[10] Schiff Report at page 3

[REDACTED]

72. This difference in coverage is important for four reasons:

a. The difference in coverage is highly relevant in explaining the difference in market share between Digicel and Telikom/bmobile as there are large parts of the country that are not covered by Telikom/bmobile;

b. The graphic shows clearly that, despite retail prices having already been regulated for five years, Telikom/bmobile have failed to establish competitive networks and infrastructure;

c. The superior coverage provided by Digicel means that consumers are more likely to form "calling circles" on the Digicel network than either Telikom or bmobile. 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 Telikom/bmobile;

d. 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.

73. 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.

74. As well as continuously improving coverage, Digicel has also continued to invest to improve service quality and upgrade its network to keep pace with global industry standards. This can be seen from the chart below which describes Digicel's technology evolution in PNG.

[REDACTED]

REDACTED

75. That investment is ongoing and includes current work by Digicel to further upgrade and develop its network which includes plans to invest a further PGK150 million this year alone in network upgrades to increase the footprint of existing 4G/LTE coverage and improve 3G coverage.

76. In Digicel's submission, the ongoing failure of bmobile and Telikom PNG to gain traction and market share has arisen solely a result of their own commercial decisions and failure to invest over an extended period of time. This is despite the 2012 RSD and the "regulatory leeway" that NICTA has consistently afforded bemobile and Telikom.

77. At section 3.2.5 NICTA states:

> "*Digicel has significantly greater mobile network footprint than the other competing mobile networks, as shown in Figure 2, equivalent to approximately 89% of the population in terms of 2G (3G is equivalent to about* [REDACTED]*%). Digicel's coverage superiority means that in many areas in PNG it is effectively the only service provider. bmobile and Telikom have expanded their respective networks in recent years*

and are continuing to do so (potentially under some form of consolidation). ***However, both companies continue to face significant capital constraints that are not likely to disappear in the near and medium term****. Even if/when their network operations and capital programs are consolidated under the Government's Kumul Consolidation Agenda, it is highly unlikely that Digicel's network coverage with be substantially matched by its competitors within the next five years.*" (emphasis added)

78. However, NICTA does not explain:

    a. what it means by "*capital constraints*";

    b. why Telikom or bmobile have not already taken advantage of the retail regulation that has been in place for the past five years to catch up with Digicel or;

    c. why they could not expand their coverage to substantially match Digicel within the next five years.

79. Importantly, a failed execution of a business plan on the part of a market participant does not imply the dominance of other players. If Digicel is indeed making the excess profits claimed by NICTA then there is a clear business case for Telikom/bmobile to expand their coverage to address Digicel's.

80. Effectively, NICTA is proposing to give Telikom/bmobile a competitive "leg up" through regulation of Digicel's retail prices for a period of (at least) 10 years. If NICTA proceeds, that "leg up" will come at the expense of ordinary consumers who will be required to pay more for their services – even in areas where Telikom/bmobile have no presence.

81. The purported market failure that the RSD is apparently intended to correct is the failure of bmobile and Telikom to expand their market share. However, the Discussion Paper fails to examine reasons other than the issue of on-net/off-net pricing when other considerations may better fit the actuality of the PNG market. These include, material differences in coverage and service quality, more sophisticated marketing on the part of Digicel, higher Digicel brand loyalty and brand perception and attractiveness. It also fails to examine whether bmobile and Telikom have adopted best in class propositions and pricing options to encourage market share growth. These omissions represent a serious procedural deficiency in the consultation process.

82. The failure of Digicel's competitors to effectively execute a business plan is not a market failure but a failure of management. Commercial inefficiencies within individual market participants should not be rewarded by regulatory supports which mask this inefficiency. Such regulatory interventions reduce competitive dynamics in the market reducing incentives towards efficiency and competitive intensity.

83. Digicel notes that the regulatory intervention currently proposed would act as a commercial support for bmobile and Telikom. 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)

84. 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 PNG) 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 based 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.

85. This evidence demonstrates that the poor market share growth of bmobile and Telikom is more likely to be a result of their own commercial decisions rather than as a result of any structural problem in the market.

86. Clearly, a proposed intervention which provides a regulatory shield for operators who make poor commercial decisions while penalizing the success of those who make good commercial decisions cannot meet the requirement, as set out at paragraph 37of this submission, that the proposed obligation can only be lawfully imposed if it acts to "*ensure that the ICT industry contributes to the greatest extent possible to the long-term economic and social development of Papua New Guinea".*

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

87. In particular, the proposed five-year term of the RSD is excessive – especially given the failure of the previous RSD to meet its stated objectives and accepted international practice.
88. As the Schiff Report notes:

> "*It is also surprising that NICTA proposes a duration of five years for the RSD. As noted above, the 2012 RSD applied for five years and there is no evidence that it was effective at changing outcomes in the mobile market in PNG during that time. Given that the effects of the proposed RSD are, at best, highly uncertain, in my view a shorter duration would be prudent. If the proposed RSD is effective at changing the*

competitive dynamics of the PNG mobile market, this should be clearly observable within two years. Similarly, a shorter duration would limit the exposure of consumers to the potential detriments of the RSD discussed above."

89. Relevantly, Digicel notes that the 2012 RSD included a statement that it would be subject to a review after two years. However, that promised review did not occur.

90. The proposed RSD would also be harsh and oppressive for consumers who would be required to pay higher prices, including in areas where Telikom/bmobile 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 and generates welfare benefits of around [REDACTED] million per day.

NICTA's cost benefit analysis is simplistic and flawed

91. NICTA's cost benefit analysis is simplistic and flawed and, contrary to NICTA's assertions, 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.

92. There may also be detriments arising from the continuing disincentive for Telikom/bmobile to continue to invest in their own networks.

93. As the Schiff Report notes:

> "*The analysis in this section of the Discussion Paper also makes several claims that are either wrong on theoretical grounds or need to be quantified before they can be included in an assessment of benefits and detriments to reach the conclusions quoted above.*
>
> *In particular, I note the following:*
>
> - *The Discussion Paper asserts that "Without the draft determination, Digicel's on-net/off-net price discrimination will result in a deadweight loss, preventing pricing from being efficient as an allocator of resources to their most valued uses" (paragraph 5.2.6). As a general point, it is not always the case that price discrimination reduces welfare. In many cases, price discrimination can increase welfare by reducing prices to some consumers in the market, increasing the quantity consumed, and increasing welfare. This is one of the effects at work with on-net pricing, i.e. lower prices for on-net calling increase the volume of such calls and that increased volume is valuable to consumers. As was demonstrated above in the case of Digicel's "1Tok+" pricing, such welfare gains can be considerable.*

- *It is also claimed that the proposed RSD will be the determinative factor between a less competitive and highly competitive mobile market in PNG (paragraphs 5.2.7 and 5.2.8). As has been demonstrated above, the 2012 RSD does not seem to have had a significant impact on the market, and outcomes are much more likely to have been driven by differences between Digicel and other networks in terms of their investment levels, coverage, and service quality. It is unclear how the proposed RSD will succeed where the previous RSD has failed. It is also not clear how the proposed RSD will overcome the significant disadvantages caused by bmobile and Telikom's lack of coverage.*

- *Digicel's returns are claimed to be unaffected by the proposed RSD because it "does not set or impose any price but instead only regulates the relationship between on-net and off-net prices" (paragraph 5.2.9 (a) and a similar claim is made at paragraph 5.2.10 (c)). This does not appear to be correct given that the proposed RSD prevents Digicel from implementing any pricing such that the effective on-net price per minute is less than the interconnection charge (paragraph 6 of the draft RSD). This is a direct constraint on the effective on-net price per minute irrespective of the relationship between the effective on-net and off-net prices.*

- *In addition, the Discussion paper claims that "preventing price discrimination does not in itself reduce profitability" (paragraph 5.2.9 (b)). In general, this is not correct. The essential feature of price discrimination is that it enables firms to charge relatively low prices to consumers with low willingness to pay while maintaining higher prices to other consumers with higher willingness to pay. Compared to uniform pricing, this increases profits as it allows firms to capture some value from consumers with low willingness to pay that would otherwise be priced out of the market, while maintaining the prices charged to other consumers with higher willingness to pay.*

- *Reductions in "switching costs" and "lock-in" are listed as separate benefits (paragraphs 5.2.10 (d) and (e)) when these refer to the same thing. No attempt is made to quantify these benefits relative to the potential detriments arising from, for example, changes to Digicel's effective onnet price via changes to bundles or promotions.*

- *A claimed benefit of the proposed RSD is "Potential for a Digicel review of its pricing structure to stimulate increased competition in the retail mobile services market …" (paragraph 5.2.10(f)). It is unclear why Digicel, as a rational profit-maximising business,* *would review its prices in a way that cause it to face additional competition.*

- *The Discussion paper notes the risk that "Digicel may significantly increase its on-net prices to comply with the draft determination" (paragraph 5.2.11 (a)). As discussed above, such an increase may not take the form of a simple increase in the on-net price per minute, but it could take the form of changes to bundles or promotions to increase the effective on-net price per minute, to the detriment of consumers. The Discussion Paper dismisses such concerns as "it would risk investigation as a potential anti-competitive exercise of market power" (paragraph 5.2.11 (a)). It is unclear how such anti-competitive conduct could be attributed to changes to Digicel's bundles or promotions. For example, it seems highly unlikely that changes to the "1Tok+" bundles that increase the effective on-net price per minute could be classified as anticompetitive conduct. It is also inconsistent to claim that low on-net prices are anticompetitive while also claiming that increasing on-net prices would be anti-competitive.*

- *The Discussion paper notes that the proposed RSD "may limit innovation in and development of certain types of price packaging" but dismisses this as "doubtful given that the constraint is expressed in terms of effective average prices" (paragraph 5.2.11 (b)). In my view, it is likely that the proposed RSD will limit such innovation, by increasing the risk that Digicel faces from certain types of pricing. For example, under "unlimited" pricing such as "1Tok+", the volume of calls, and hence the effective average price per minute, is difficult to predict and control. This type of pricing exposes Digicel to the risk that the effective average price per minute for on-net calls will fall below either the effective average price per minute for off-net calls or the mobile termination rate. This risk will weaken Digicel's incentive to adopt new and innovative types of pricing where it cannot accurately predict and control usage levels the effective average on-net price per minute.*"[11]

Other Issues

94. NICTA has sought to rely on financial information taken from a 2015 document to support its argument that Digicel "*keeps it profits persistently and significantly above the competitive level*".[12] However, NICTA makes no attempt to define what it means by "competitive level" and relying on selective financial data from a single point in time is highly misleading and cannot reasonably be used as a basis to determine whether market conduct or outcomes are "persistent". For example, Digicel PNG's [REDACTED]

[11] Schiff Report at page 25
[12] Discussion Paper at section 3.2.10.

[REDACTED] between March 2015 and March 2017. As such, any reliance by NICTA on the 2015 data it has cited would be misguided and wrong.

95. NICTA's reliance on such selective information also brings into question whether or not NICTA has approached this Public Inquiry with an open mind.

96. Digicel further notes NICTA's estimate that approximately 10% of prepaid subscribers have a subscription with more than one network.[13] NICTA asserts this is so that they may take advantage of "the cheaper pricing of on-net calls". Whatever the reason, Digicel submits that the existence of dual subscriptions should have been taken into account by NICTA when considering the extent to which the market is competitive.

97. NICTA has also failed to undertake any enquiries to ascertain the reasons why customers prefer Digicel and appears to have simply assumed that market preference is driven solely by differences in on-net and off-net prices. This is a critical omission in Digicel's view.

E. Proposed terms of the RSD

98. Even if a RSD was warranted, which Digicel denies, the terms proposed by NICTA are inappropriate in the circumstances.

99. NICTA has proposed that an RSD be implemented on the following terms:

> ***"5 No price discrimination between on-net and off-net calls and SMS***
>
> *(1) Digicel shall not offer or charge prices for a Regulated Mobile Service that differ on the basis of the mobile network that will terminate the call.*
>
> *(2) NICTA shall determine Digicel's compliance with the pricing principle in subsection (1) by using the following formula:*
>
> $$A \geq B$$
>
> *where:*
>
> ***(a)*** *A is the effective price per On-Net Unit, calculated by dividing the revenue that is earned from the retail supply of all On-Net Units over a Measurement Period (excluding any fixed fee revenue from two part tariffs) by the number of On-Net Units supplied during the same Measurement Period;*
>
> ***(b)*** *B is the effective price per Off-Net Unit, calculated by dividing the revenue that is earned from the retail supply of all Off-Net Units over a Measurement Period (excluding any fixed fee revenue from two part tariffs) by the*

[13] Discussion Paper at section 3.2.8.

number Off-Net Units supplied during the same Measurement Period; and

(c) *each Regulated Mobile Service is considered separately.*

6 Prohibition on pricing below the interconnection charge

(1) In pricing a Regulated Mobile Service, Digicel shall not offer or charge an On-Net Unit price that is, or would be, less than the relevant Interconnection Charge.

(2) NICTA shall determine Digicel's compliance with the pricing principle in subsection (1) by using the following formula:

$$C \geq D$$

where:

(a) *C is the effective price per On-Net Unit, calculated by dividing the revenue that is earned from the retail supply of all On-Net Units over a Measurement Period (excluding any fixed fee revenue from two part tariffs) by the number of On-Net Units supplied during the same Measurement Period;*

(b) *D is the relevant Interconnection Charge per Unit that applied during the Measurement Period; and*

(c) *each Regulated Mobile Service is considered seperately.*

(3) For the avoidance of doubt, nothing in this section:

(a) means or implies that all pricing that is above the applicable Interconnection Charge is necessarily compliant with the Act or any other law; or

(b) prevents NICTA or any other person from making any finding or exercising any power provided for under law in relation to a price that is above or below the applicable Interconnection Charge.

7 Consistent basis for charging and billing

(1) Whether a Regulated Mobile Service is charged or billed per second or per minute shall not differ on the basis of the mobile network that will terminate the call."

100. The proposed term of the RSD is five years (the maximum permitted term under the Act) with the implementation date being the date the Minister notifies his decision to accept NICTA's recommendation by way of an announcement in the Gazette or such later date as may be specified in the RSD (no such later date is currently specified).

101. The practical effect of the proposed RSD is that, although Digicel will have some flexibility in terms of "intra month" pricing:

a. Digicel will not, on average over any particular month, be permitted to charge any more for an on-net call or SMS than for an off-net call or SMS;

b. the average price for an on-net call must not be below the current domestic interconnection rate;

c. on-net calls and off-net calls (and SMS) must be charged and billed on a consistent basis (i.e. without discrimination in the use of per second or per minute charging); and

d. as noted above, Digicel is the only party NICTA proposes to be regulated and Telikom/bmobile will be able to continue to set retail prices as they see fit.

102. The proposed RSD also establishes a reporting regime to test Digicel's compliance with the regulation.

103. Importantly, the proposed terms of the RSD, while providing some illusion of flexibility, will effectively prohibit bundled service offerings such as 1Tok+ and deny more than [REDACTED] of Digicel's customers access to pricing that has permitted their calling volumes to double. That is because such offers are based on a two-part tariff whereby a customer pays a fixed fee for which he or she receives a bundle of services. Since the proposed RSD specifies that "*any fixed fee revenue from two part tariffs"* are excluded from the average revenue per minute calculation, it will assume that the price charged for any bundled minutes is zero.

104. The impact of such a regulation would be profound with welfare losses measured in the millions of Kina per day.

F. Conclusion

105. In conclusion, Digicel strongly submits that there is no justification for further regulation of Digicel's retail prices.

106. In particular, the intervention proposed by NICTA does not meet the mandatory requirements of the Act and would be inconsistent with the Retail Regulation Criteria.

107. Digicel encourages NICTA to reach a conclusion that a Retail Service Determination is not warranted at this time and that it should monitor market developments to better understand the reasons for customers network preferences.