



**Public consultation into whether a recommendation should be made to the Minister
for a retail service determination for voice and data services**

RESPONSE TO COMMENTS REPORT

Issued on 27 July 2022

Contents

1. Introduction 3

2. Submissions received 3

3. Next Steps..... 4

Annex A: Summary of Comments Received..... 5

1. Introduction

On 18th March 2022, NICTA issued a Discussion Paper to assess whether there is a need to make a recommendation to the Minister for Information and Communications Technology on whether or not retail voice and data services offered by Digicel should be subjected to a retail service determination (RSD).

Written submissions were received from the following stakeholders.

- Digicel PNG Ltd (“Digicel”),
- Telkom Limited (“Telikom”),
- Vodafone PNG (“Vodafone”),
- DataCo PNG (“DataCo”)
- Dr. Amada Watson et al, and
- John de Ridder

The key issues raised and considered are discussed in Annex A to this Response to Comments Report (this Report).

2. Submissions received

The comments received as submissions were mainly responses to questions asked in the discussion paper. The questions were set to stimulate discussion on specific issues and for the stakeholders to provide responses including evidence or information to support their views.

NICTA has commented on the main points raised in the submissions. These are set out in tabular form in Annex A to this Report.

After assessing all the submissions, the responses from the stakeholders on each of the main issues in the discussion paper are summarized as follows:

Proposal in Discussion Paper	Telikom	Digicel	DataCo	Vodafone	John de Ridder	Amanda Watson et al.
Not to Recommend to the Minister on Voice Services for a RSD	Agree	Agree	Disagree	Agree	Agree	Agree
Not to Recommend to the Minister a RSD for mobile data services	Agree	Agree	Disagree	Agree	Agree	Agree
Not to Recommend to the Minister a RSD for fixed data services	Agree	Agree	Agree	Agree	Agree	Agree
Not to Recommend to Minister a RSD prohibiting Price Discrimination on Lower Income Users	Agree	Agree	Agree	Agree	Agree	Disagree
Recommend to Minister to a RSD on subject On-Net/Off-	Agree	Disagree	Agree	Agree	Agree	Agree

Proposal Discussion Paper	in	Telikom	Digicel	DataCo	Vodafone	John de Ridder	Amanda Watson et al.
Net Price Discrimination							

All respondents, except Digicel, DataCo and Amanda Watson et al, agreed with some of the preliminary conclusions NICTA reached in the first column of the above table. Digicel disagreed that NICTA should proceed with recommending to the Minister a retail service determination prohibiting on-net/off-net price discrimination. Amanda Watson et al. argued that, although, voice and data services met all the retail regulation criteria to be subjected to a retail service determination, the determination should be deferred to allow market some time to react to Vodafone's entry. Watson et al. also argued that NICTA should reconsider its initial position to regulate price discrimination on lower income users. DataCo disagreed with NICTA's preliminary conclusion against recommending to the Minister a retail service determination for voice and data retail prices.

After consideration of the submissions, and of the evidence and comments submitted by the respondents, NICTA has confirmed its preliminary conclusions as set out in the discussion paper, that is, not to intervene with price regulation of retail voice and data services, with the exception of on-net/off-net price discrimination.

3. Next Steps

NICTA will prepare a draft Retail Service Determination regulating on-net / off-net price differentials and prohibiting discrimination. The draft will be subject to further consultation, and submissions will be invited from all stakeholders and the public.

NICTA will closely monitor retail voice and data price competition to determine the level of competitiveness in those markets over the next 12 months and will undertake a further review at that time.

Annex A: Summary of Comments Received

Ref	Issue/Subject	Submission	Summary of Content	Summary of NICTA Response
1	Effects of OTT	Digicel (p.2, p.)	Digicel asserts that OTTs are having “negative impact on network and service and affordability” and that NICTA has made “no attempt to estimate the degree to which OTT internet-based messaging and voice services now substitute for traditional voice services”	NICTA acknowledges that OTT services that can substitute for PSTN voice and text services are providing some degree of competitive pressure. However, there are no studies available to NICTA that have assessed the extent to which, and the circumstances under which, OTT services are substituting. Given the limited take-up of smartphone devices for OTT usage and the rapid growth of bundles as the basis of competitive offerings, it is reasonable to conclude that Digicel’s dominance remains in place where it continues to have a growth rate of national voice minutes of 12% annually for the 5 years to 2019,. Digicel has produced no evidence that would prove otherwise.
2	Significant Market Power (SMP)	Digicel (p.1)	“The Minister’s request to NICTA was made nearly two years ago and much has happened in the Papua New Guinean market in that time, not the least of which are the planned sale of Digicel Pacific Limited to Telstra Corporation and the entry of Vodafone PNG (Vodafone), an extremely well resourced, publicly listed, multi-national operator that has established a substantial network and launched its services to the public on 22 April 2022.”	Digicel continues at the present time to have power in the relevant retail markets, although NICTA recognises that the recent entry of Vodafone may result in a more competitive retail market in the long term.
3	Evidence Submission in Inquiry Process	Digicel (p.4)	“In Digicel’s submission, this apparent reversal of the burden of proof is inappropriate. The onus should be on NICTA to properly establish the nature of	The Act requires in any determination or rule making for NICTA to collect sufficient evidence and information to make evidence-based decision with a recommendation to the Minister. The public inquiry on

Ref	Issue/Subject	Submission	Summary of Content	Summary of NICTA Response
			the specific retail services that it proposes should be considered as candidates for a potential RSD, rather than seek to force operators to demonstrate why a particular service should not be regulated.”	the RSD is an investigative process where NICTA is required to request operator licensees and stakeholders’ proper evidence and information including relevant material that licensees may supply to support their arguments for NICTA to form its views and to take a decision. The specific questions included in the Discussion Paper is for that purpose. This is an essential part of the process where all parties are given fair and equal opportunity to make their case to NICTA.
4	Effects of OTT	Digicel (p.4)	“There is no doubt that substitution is having a material impact on both traditional voice and messaging services. We therefore submit that it is premature for NICTA to make any conclusions and that further independent analysis of customer preferences and usage is required.”	Refer to the response in Ref 1. Digicel has not supported its assertion that substitution is having a material impact, as opposed to some impact, on traditional voice and messaging services, or where the effect is occurring.
5	SMP	Digicel (p.5)	“NICTA has erred in its conclusion that Digicel currently has a substantial degree of power in any market in Papua New Guinea, and – as such – the retail regulation criteria cannot be considered to have been met in this regard.”	NICTA disagrees. There is no doubt that Digicel has enjoyed a substantial degree of market power for many years, and the only issue is whether the recent entry of Vodafone and the growth of OTT services will change the dynamics of the retail market. NICTA intends to monitor the retail market and review the competitiveness of the market in 12 months’ time.
6	Effects of Vodafone’s Entry on SMP	Digicel (p.6)	“Given NICTA’s uncertainty and the recent entry by Vodafone, Digicel submits that NICTA cannot reasonably be satisfied that Digicel’s alleged substantial degree of power is likely to persist in the market over the proposed period of the RSD, and	See the response to item 5 above.

Ref	Issue/Subject	Submission	Summary of Content	Summary of NICTA Response
			therefore the retail regulation criteria cannot be considered to have been met in this regard.”	
7	Meeting Retail Regulation Criteria	Digicel (p.6)	“NICTA has correctly concluded that, on the basis of the analysis that has been undertaken, it cannot be satisfied that the retail regulation criteria regarding a material likelihood of higher prices or reduced service will be met. In fact, all of the evidence available to NICTA points towards retail prices continuing to reduce and service levels continuing to increase. Accordingly, the retail regulation criteria cannot be considered to have been met in this regard.”	NICTA notes that Digicel has agreed with the conclusion reached by NICTA. However, Digicel has not reviewed or cited “all of the evidence” that it considers to point in this direction. NICTA’s conclusion is an on-balance one.
8	Evidence Submission in Inquiry Process	Digicel (p.6)	“Finally, NICTA does not provide any evidence, analysis or comment on whether it believes the remaining two retail regulation criteria specified in Sections 158(a) and 158(d) of the Act would be met by an RSD. Without any evidence or analysis, Digicel submits that NICTA cannot reasonably be satisfied that these retail regulation criteria can be considered to have been met.”	In the discussion paper, NICTA reached the tentative conclusion that regulation in relation to constraining overall price levels of retail services was not warranted at this time, based on the factors that are considered. The matters raised by Digicel do not change that conclusion, even though they could have been more explicitly addressed.
9	Meeting Retail Regulation Criteria	Digicel (p.6)	“For the same reasons, Digicel does not agree that it has a substantial degree of market power in the market for retail mobile data services or that the retail regulation	Refer to response to Ref 5.

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			criteria are otherwise met in respect of such services.”	
10	Wholesale International Bandwidth costs	Digicel (p.8)	“Relevantly, Papua New Guinea’s international capacity costs are still the highest in the region. This is despite the fact that the heavily subsidised CS2 cable has now been deployed and is available for use. For example, Digicel currently purchases bandwidth services (similar to CS2 cable) from some other cable operators in the region at rates up to 30 times cheaper than that provided by DataCo. For a purchase of capacity from Hurricane Electric from NZ/AU to USA the cost price for a 5Gbit/s link is \$1.50 USD per Mbit/s per month whereas the same amount of capacity on the CS2 cable is priced by DataCo at over \$50 USD per Mbit/s per month.”	NICTA notes Digicel’s point that international wholesale bandwidth via submarine cables in PNG is relatively expensive when compared to other regional providers. The supply and pricing of CS2 and other international submarine cables are subject to an access determination and the specific pricing principles. Digicel fails to mention that the wholesale prices are dependent not only on costs but on demand for capacity access services, a very critical factor in the PNG market.
11	Wholesale International Bandwidth costs	Digicel (p.8)	“It is therefore very disappointing that the Tariff Report uses an emotive assertion in “Question 6” at page 11 of the Tariff Report that “ <i>with CS2 now providing the operators with access to vastly increased international capacity at lower unit costs, the effective price per GB of data should now fall rapidly towards the Regional benchmark level</i> ”. A simple comparison of regional capacity prices would show that Papua New Guinea still suffers from very high international capacity pricing. In such circumstances it is unrealistic to expect that retail prices will be	In the overall supply chain of internet broadband, wholesale internet is a major cost factor, among other factors including internal operational cost structures of ISPs. NICTA’s position has always been to focus on the supply and pricing issues at the wholesale level so that pricing and supply of these wholesale services are efficient, of better standards and quality and non-discriminatory. The commissioning of the CS2 cable addressed the supply issue by providing significantly new capacities. NICTA intervened by setting the specific pricing principles and later accepted DataCo’s reference interconnection offer after satisfying itself that the pricing and supply of wholesale internet by

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			at the same level as countries such as Fiji that have entirely different cost structures.”	DataCo met the standards and pricing principles. After addressing these two important factors (pricing & supply) of wholesale internet, NICTA’s expectation and that of customers generally is that the benefits would flow through to the retail market. Question 6 was framed having this in mind and in part to gauge ISPs views on whether these reductions would have any material effect on the supply and pricing of internet services at the retail market.
12	NICTA’s Price Study		“The comparison between the various prices paid for service Bundles around the region also cannot be taken at face value as the service details vary country by country. Digicel cautions NICTA against using such simplistic analysis as a basis for reaching any conclusions or for recommending any proposed regulation. “	The regional tariff comparison in NICTA’s Price Study was to highlight PNG’s position on meeting the Affordability Target set by ITU/UNESCO Broadband Commission against four other countries in the region where Digicel operates. The study shows, on average, the retail cost of paying for 1 gigabyte by a user in PNG compared to other 4 countries in the pacific region. This is a standard method of accessing the affordability of internet services in any one particular country. NICTA agrees that care is needed in drawing conclusions from a comparison of this sort.
13	NICTA Preferential Treatment to Vodafone Claim	Digicel (p.8)	“Whether Vodafone’s investment plans are based on its own commercial assessment of market opportunities or simply reflect network coverage obligations imposed by NICTA is unclear as nothing has been published by NICTA in that regard. This is in itself concerning, especially if it reflects some sort of preferential treatment of Vodafone over existing operators. Nevertheless, NICTA must have been well aware of Vodafone’s plans, including the	Vodafone or any other new entrant for that matter operates under and are subjected to the same rules and requirements of supplying the services, such rules as the Licence Terms and Condition rules on coverage obligations. NICTA has not preferred Vodafone in any way, and the suggestion is baseless. The consultation was and remains necessary, irrespective of Vodafone’s plans and subsequent entry.

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			substantial network rollout that has occurred during the past year and it is surprising that, knowing its launch was imminent, NICTA proceeded anyway with the commencement of the consultation process six weeks ago.”	
14	Effects of Vodafone’s Entry on SMP	Digicel (p.8)	“In Digicel’s submission, NICTA should let Vodafone’s competitive entry play out and, in accordance with the Act’s objectives and regulatory principles, place primary reliance on commercial negotiations and the greatest practicable use of industry self-regulation, subject to minimum regulatory requirements consistent with the objective of this Act.”	NICTA’s preliminary conclusion is precisely the one that Digicel proposes, namely, to allow the market to set the price for retail voice and data services, and to monitor the impact of Vodafone’s entry with a review in a year’s time. This preliminary conclusion was made after assessing whether or not the determination on the particular services would meet the Retail Regulation Criteria of Section 158 of the Act. The entry of Vodafone into the market is another key factor supporting this conclusion.
15	On-net/Off-net Price Discrimination	Digicel (p.9)	“Digicel is concerned that NICTA is even considering “On-Net/Off-Net Price Differentials” when it has already reached a preliminary conclusion that an RSD would not meet the retail regulation criteria.”	The Preliminary conclusion reached in the Discussion paper is on the retail prices for the particular voice and broadband services. However, the on-net & off-net price differentials is a separate issue and will be the subject of a more detailed and specific consultation.
16	On-net/Off-net Price Discrimination	Digicel (p.9)	“Digicel further submits that it is inappropriate for NICTA to seek to rely on reasoning that it used in 2018 as a basis for intervention in 2022 when: i. market circumstances are entirely different now compared with the circumstances that prevailed four years ago;	Digicel has had and continues to have a substantial degree of market power for over a decade since the first determination was made in 2012 and that the market power has not eroded. Digicel has the benefits and experience of incumbency to assist it retaining that power.

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			<p>ii. NICTA's reasoning in 2018 was itself flawed and sought to rely on irrelevant information and outcomes from an RSD that was imposed in 2012, a decade ago."</p>	<p>NICTA's 2018 review of the 2012 RSD was made after it assessed that market conditions remained and the potential for Digicel to leverage its market power anti-competitively was significant.</p> <p>As noted earlier, the detailed instrument applicable to the circumstances of the market in 2022 and the argument for non-discrimination will be set out by NICTA in a further consultation paper.</p>
17	On-net/Off-net Price Discrimination	Digicel (p.9)	<p>"NICTA's apparent attempt at this shortcut towards regulation also ignores the current market realities whereby:</p> <p>i. Digicel continues to be the only operator to have met (and exceeded) its network rollout obligations mandated in the <i>Standard and Special Conditions of Individual Licences Rule, 2011</i> when it is clear that factors such as coverage, network quality and reliability and customer service, have been decisive in determining consumers' choice of mobile network in Papua New Guinea; and</p> <p>ii. Vodafone, as a new entrant that also appears to appreciate the importance of coverage as being a critical factor in its success, also chooses to discriminate between on-net and off-net call pricing for both its standard plans and its bundles yet would not be "caught" by any retail price</p>	<p>There is no attempt to adopt a shortcut to regulation, as the reference to a specific consultation in the response to items 13 and 14 above indicate.</p> <p>The Act (sec.158(b)) specifically allows the retail regulation or determination should apply only to the operator that has a substantial degree of market power. RSDs will only apply to operators with SMP, and as a new entrant Vodafone is not in that position. Vodafone's submission supports the approach that NICTA outlined on non-discrimination.</p>

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			regulation now being contemplated by NICTA.”	
18	Market Definition	Telikom (p.1)	<p>“Telikom disagrees with NICTA’s approach to consider retail voice as a single service. Fixed voice and mobile voice services should be considered different services because:</p> <ol style="list-style-type: none"> 1. They have different access network elements and costs structures. 2. These services are supplied to different customer segments or markets that have different customer base in terms of market share.” 	NICTA disagrees. Whether these voice services are in the same market for regulatory market assessment depends on whether customers regard them as substitutable to a significant degree. On that basis, Telikom’s first reason is irrelevant, and Telkom’s second reason is a matter of availability, not customer choice. The fixed network and mobile networks do not always overlap in practice to enable substitution to occur.
19	Market definition	Telikom (p.1)	“On the other hand, Telikom agrees with NICTA’s approach in considering retail mobile data and retail fixed data as separate services.”	Telikom’s response to NICTA’s initial conclusion that mobile and fixed data as separate markets is noted.
20	Meeting Retail Declaration Criteria	Telikom (p.2)	“Telikom also agrees with NICTA that it is unclear whether retail customers will be exposed to a material risk of higher prices and/or reduced service, in absence of a retail service determination because it seems that Digicel has reduced its prices for voice services over the years.”	Telikom’s standard fixed retail voice rates have reduced over the years. However, Digicel’s standard mobile voice minute call rates are still high and have shown little or no change. On the other end Digicel’s combo bundles have reduced. This tends to support the conclusion that the focus of competition is in terms of bundles.
21	SMP	Telikom (p.3)	“Telikom disagrees that Telikom has a substantial degree of power in the market for retail fixed data services by revenue because:	NICTA notes Telikom’s response that DataCo has now involved itself in the retail market and have taken a considerable share of fixed data revenue. Also given the dynamism in the market and advances in smart

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			<p>1. Telikom does not believe that it has the biggest market share by revenue. Telikom has lost many of its major customers to the Wholesaler, PNG DataCo in the recent years. DataCo has been operating in the retail space with its fixed infrastructure (fibre) at lower wholesale prices.</p> <p>2. The retail fixed data market is very competitive. Digicel is investing in its Fixed Data infrastructure and with the largest market share it currently has, it is already in a position to be perceived as having a substantial degree of market power.”</p>	<p>switches, mobile services have become increasingly converged to fixed services. Hence, there is some level of competitive pressure for fixed data services to reduce in price which may erode Telikom’s position of market strength in that market.</p> <p>The concern however remains that, as mentioned in the Price Report, there wasn’t any significant tariff changes that occurred in the last five years and no improvements in the price/value ratio on Telikom’s fixed bundle services. Hopefully given the circumstances mentioned above this position may change in the next few years.</p> <p>NICTA intends to monitor the situation and conduct a further review in a year’s time.</p>
22	Wholesale International Bandwidth costs	Telikom (p.4)	<p>“The costs for providing fixed and mobile services (Capex & Opex) should be considered in the Retail Service Determination and not the Wholesale component of costs ONLY because the wholesale component of Telikom’s fixed internet prices make up a small portion of the pricing components. Telikom has reduced its fixed data prices by 80% in 2019 and introduced best combos and cheaper satellite data in 2021 and continue to do so.”</p>	<p>The extent of the contribution of wholesale inputs costs to retail price levels was made in a number of submissions, and the point is accepted. Retail prices will be closely monitored and reviewed in a year’s time.</p>
23	Meeting Retail Regulation Criteria	Telikom (p.4)	<p>“Yes, Telikom agrees with NICTA’s preliminary conclusions that, in respect of price and quality terms and conditions of service, the retail regulation criteria in</p>	<p>NICTA notes that Telikom agrees with NICTA’s preliminary conclusion not to make a retail services determination on the mobile and fixed retail voice and data services.</p>

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			Section 158 of the Act are not met or are unlikely to be met for retail voice and data services because competition in the retail voice and data markets is seen to be improving with market forces in play and the evidence being the affordable prices of services for all types of customers.”	
24	Service Tariffs	Telikom (p.5)	“Telikom agrees with conclusions #2 – 7 except conclusion #1 because Telikom made considerable changes in 2019. 80% of Mobile & Fixed data prices were reduced. Fixed voice standard prices were also reduced in 2020.”	Based on NICTA’s records on pricing, it appears that the standard tariffs for voice and data services have remained unchanged and for some considerably longer since 2015. Telikom might have submitted evidence for the periods concerned to verify its claim.
25	Effects of Vodafone’s Entry on SMP	Telikom (p.5)	“A second internationally and privately owned Mobile Entrant may lead to an Oligopoly/Oligarchy which will see the aggregate majority of the Market Share being negotiated and shared between two Internationally Owned Telcos. There is already evidence of such practices in the Media Industry world-wide and such may occur, not just in PNG but in the Pacific.”	The new entrant, Vodafone, has the potential to compete well in the market and increase its market share. The same opportunities are open to any other player, including Telikom. It is the nature of all capital-intensive infrastructure-based markets to be oligopolistic, and telecommunications is often cited as a classic example. However, NICTA takes Telikom’s concerns to be that the market does not operate competitively under such circumstances. The approach outlined in the Act and administered by NICTA is the response and is intended to address adverse effects of oligopoly and market power.
26	On-net/Off-net Price Discrimination	Telikom (p.5)	“Therefore, Telikom agrees with NICTA’s statements in points 9.2-9.5 and considers that the retail regulation criteria in Section 158 of the Act are satisfied in relation to a	NICTA notes Telikom’s response that on-net/off-net price differential is an issue that must be addressed.

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			<p>Retail Service Determination to prohibit on-net/off-net price discrimination of retail voice calls, or, at least, retail mobile voice calls.</p> <p>“There has to be a price difference in On-net and Off-net calls because of the interconnect charges for off- net calls. This difference must not be substantial to prevent the consumer generating calls off-net.</p> <p>“Data is not ready. Telikom hopes to submit later.”</p>	<p>NICTA has not received the additional information mentioned in Telikom’s submission. As indicated earlier, this might very usefull when submitted in the course of the specific consultation that will be undertaken on on-net / offnet discrimination.</p>
27	Wholesale International Bandwidth costs	Telikom (p.6)	<p>“Telikom disagrees that with CS2 now providing the operators with access to vastly increased international capacity at much lower unit costs, the effective price per GB should fall rapidly towards the internationally agreed affordability target. This is because CS2 makes only a small portion of the cost components for Telikom retail mobile and fixed services that determine its prices. Operational Costs are the biggest cost components contributing to Retail Pricing.”</p>	<p>Refer to response to Ref 22. Telikom could have, but did not, provide some evidence or even submit estimation of the cost contribution of CS2 wholesale inputs.</p>
28	NICTA Preliminary Conclusion	Telikom (p.6)	<p>“Telikom agrees with NICTA’s proposal to adopt a “wait and see” regulatory approach in anticipation of a significant fall in voice and data tariffs now that CS2 is operational in the next 2-3 years.”</p>	<p>Subsequent to the consultation, NICTA has decided to reduce the period to 12 months and to undertake a further review at that time.</p>

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29	Retail Price Study	Telikom (p.7)	“The Retail Tariff pricing study revealed that the internationally agreed affordable target price per GB is K14.91. However, another study by the Cable.co.uk shows that PNG's cost of 1GB data is 44.5% (2.26 USD/K6.64) cheaper than the global average price of data for 1GB Plan which is 4.07 USD/K13.29. This should give an indication that retail mobile internet in PNG is affordable.”	From the data NICTA collected for years 2020/21, Telikom's effective price per GB is 2.5 times the affordability target, i.e., K38/GB per month, which is high. NICTA definitely prefers to rely on its own calculations rather than the other study cited. NICTA's preliminary conclusions was not to intervene at this time, however, to allow some time for the market forces to address.
30	On-net/Off-net Price Discrimination	Telikom (p.7)	Telikom highly recommend that NICTA only considers regulation on the differential between on-net and off-net mobile voice calls by Digicel as highlighted in the discussion paper.	NICTA notes Telikom's view that on-net/off-net should be regulated. Such regulation only applies in the circumstances where legislative criteria apply.
31	Retail Regulations	Telikom (p.7)	“Other services should be left to market forces to determine competition, considering the very high costs of operators regardless of the commissioning of the Coral Sea Cable because international capacity makes only a small portion of the costing elements. In addition, now that a new entrant has entered the market, there is possibility that competition will further improve in both fixed and mobile services markets. Regulation may distort the market competition.”	As noted above, NICTA will monitor the situation and conduct a further review in a year's time. Reliance on market forces should only apply until the market fails, and until those forces cease to deliver outcomes in the long-term interest of end users.

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32	Effects of Vodafone's Entry on SMP	Vodafone (p.2)	<p>“Competition should be treated as a dynamic process. While there are entrenched firms with high market shares, we agree with NICTA that this is an inadequate indicator, by itself, of the effectiveness of the future competitive process. This is particularly so given substitution between fixed and mobile services is high in PNG.</p> <p>“As an example of the benefits of more competition, Vodafone PNG notes that it has already offered significant reductions in data rates in the market across all the data plans and propositions introduced after the network launch. Vodafone PNG now offers up to 400% more data compared with competitor plans at similar price points and offers high value data plans at significant lower prices than existing competitors.”</p>	Vodafone's initial offers on entering the PNG market are noted. It will be important to see how the competition progresses in the near to medium term.
33	NICTA Preliminary Conclusion	Vodafone (p.2)	“Vodafone PNG recognises that the pace of change in PNG can appear slow. However, we do agree that the “wait and see” approach to allow time for market forces to reflect the lower costs of CS2 being commissioned and going into commercial operation is appropriate.”	NICTA notes Vodafone's agreement with NICTA's preliminary conclusion on the retail voice and data services to give some time for the market to adjust structural changes to new market entry as well as new and increased international capacity offered by CS2.
34	On-net/Off-net Price Discrimination	Vodafone (p.3)	“Vodafone PNG agrees with NICTA's analysis of on-net/off-net price differentials. Vodafone PNG recognises that regulation should generally apply at the wholesale level. However, it is clear that a strong incumbent with high market share can price	This is an important comment from an operator with substantial experience in a range of country it markets.

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			strategically to disadvantage rivals through relatively low-priced on-net offers. Such prices will encourage consumers to stay with the incumbent to increase their probability of cheaper on-net calls and reduce the probability of more expensive off-net calls. While other operators can make similar offers, with a small market share the probability of a call being off net (i.e., to the incumbent) is much higher and so the offers cannot be as attractive.”	
35.	Market definition	John de Ridder (p.1)	“In the short term, NICTA should consider voice as a separate market because it is a material part of communications revenues and is still a source of anti-competitive behaviour.”	John de Ridder’s concurrence with NICTA’s definition of separate markets for voice and data, is noted.
36	2012 RSD	John de Ridder (p.3)	“This was established in the first Retail Service Determination (RSD) for Digicel in 2012. That Determination was upheld on appeal, and nothing has changed. In fact, it has got worse. “In 2012 NICTA imposed a 40% limit on the difference between off-net and on-net prepaid voice pricing by Digicel. That RSD lapsed five years later and today that differential is 100%...”.	The RSD in 2012 was made to address the huge price differentials between on-net/off-net calls that Digicel operated at that time. Digicel’s substantial market power exposed retail customers material risk of higher off-net call rates and that in the absence of a retail determination, the tendency for Digicel to continue this anticompetitive practise was imminent. The data provided by John de Ridder further supports the case that on-net/off-net price differential issues have not improved materially since the last determination of 2012. Hence, the preliminary conclusion is to focus on the on-net/off-net price differential issue and to see how the market dynamics have changed for other retail

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				rates play out following Vodafone's entry into the market.
37	SMP	John Ridder (p.3)	de "Digicel is the only operator with significant market power in the market for retail voice services. Other operators should not be subject to ex-ante retail voice pricing constraints."	This is the arrangement that is supported by the retail regulation criteria for retail service determinations in the Act (sec. 158).
38	Wholesale International Bandwidth costs	John Ridder (p. 4)	de "NICTA could encourage DataCo to follow the Solomon Islands in offering wholesale international 'traffic pricing' because this would help promote competition."	The comment is noted, but that matter relates to wholesale service access pricing and is separate from the current public inquiry.
39	Service tariffs	John Ridder (p.4)	de "I think Telikom is more likely to be a price taker than a price maker. Although Telikom has a monopoly of fixed data services, this is probably a small part of the total market and fixed and mobile data services. Telikom's fixed broadband services appear to be copper based as they do not seem to have the advantage over mobile broadband services that one might expect: the fastest speed is 50Mbps (<i>Velocity Xtreme</i>) which is what can, I think, be achieved on 4G and the largest monthly data allowance is 500GB (<i>Velocity Xtreme</i>) for K2,250 versus Vodafone's prepaid 500GB for K500 over 30 days."	Whether platform competition from mobile data services is constraining the prices of Telikom's fixed data offerings at this stage is unclear. Telikom's 4G data services are not yet ubiquitous and the take-up of smartphone and other devices by consumers may not yet be at a level to act as a material constraint. We do know, however, that fixed data services are largely confined to business, government and institutional market segments. Some of these factors are changing and will be monitored closely over the next year.

Ref	Issue/Subject	Submission	Summary of Content	Summary of NICTA Response
40	Retail Regulations	John de Ridder (p.6)	“Retail price caps are a last resort in the absence of competition. They have limitations.”	NICTA agrees with the points John de Ridder mentions, referring to the limitations on retail price cap regulation. The entry of Vodafone is anticipated to improve competition in the market, as in the case of their pricing where it has already offered competitive rates. NICTA anticipates to see whether Vodafone will be able to maintain its initial level of competition in the market and to deliver improvements and innovation in the supply of its services, offer better service quality that is distinguishable, and make its network accessible to the wider population in PNG.
41	NICTA’s Preliminary Conclusion	John de Ridder (p.8)	“Yes. As noted by NICTA and above in answer to Q1, price discrimination is still a major issue. An operator with significant market power should not be allowed to discriminate between the price of on-net and off-net calls. Including only on-net calls in bundles should not be allowed under an RSD.”	NICTA notes that John de Ridder views agree with NICTA’s preliminary conclusion to make a determination on on-net/off-net price differentials. Digicel has recently offered similar on-net and off-net minutes in some bundles. However, this is a commercial choice by Digicel rather than a regulated obligation, and can easily be reversed as occurred in the past when market circumstances change.
42	Retail Price Study	John de Ridder (p.9)	“Yes. But we know from the analysis in answer to Question 7 above that Digicel is not price competitive. Frequent changes in bundles and promotions may be only creating the illusion of competitiveness. It is interesting to note that the number of Digicel’s tariff changes in Figure 2.1 is similar to the number of tariffs withdrawn.”	John de Ridder makes the important point that in the absence of continuing effective competition or effective regulation, market players can and do readily change their offerings to take advantage of changing circumstances, and this may be contrary to the interests of end users. Frequent changes can suggest competition and competitiveness.
43	Retail Price Study	John de Ridder (p.9)	“The ITU’s baskets are not universal standards – each country is different. We do not know how many customers see	NICTA has received a number of consumer complaints on billing/pricing of voice and data services, sometimes indirectly via social media that these

Ref	Issue/Subject	Submission	Summary of Content	Summary of NICTA Response
			affordability as an issue. And we do not know what basic level of service would be essential in PNG; only how it might be measured as affordable. If we did know these things and no retail operator was providing a suitable service, NICTA could explore whether this could be addressed by way of an RSD or through a licence condition imposed on any or all retail providers.”	services are relatively expensive to use. This basically stems from the fact that the vast majority of PNG’s population are engaged in informal activities or in subsistence living (then formal employment). The huge disparity in income levels and wealth distribution constrains the ability especially of the less affluent population to afford voice and data services. Voice and data services have become an essential service to consumers that enable users to make their lives better by connecting to other people or using the tools to improve their daily livelihood. The point about requiring entry or low-income service offerings will be considered further in the review in 12 months’ time.
44	Retail Price Study	John de Ridder (p.10)	“It is a pity that the study did not include information on changes to the wholesale price of international capacity. But note that if, say, the international connectivity is 25% of input costs then a 40% reduction in the wholesale cost of international connectivity could only be expected to reduce retail prices 10%.”	This point has been made in a number of submissions. Nevertheless, it is important to discuss the expectations for retail prices that accompanied the commissioning of the CS2 cable network, and how they have played out in the meantime, and this public inquiry is the opportunity to do that.
45	Market definition	Amanda Watson et al (p.2)	“NICTA indicates here that it is treating voice and data separately, but later it discusses the use of ‘combo bundles’ that offer more than one service – for instance, a pricing package that offers a certain amount and type of voice calls and a set amount of data. We understand the logic for treating voice and data separately in the discussion paper, but note the complexities	Voice and data services are not yet considered to be a single service, notwithstanding that competition is increasingly being transacted via bundled offerings. NICTA agrees that the tendency towards bundle competition does add considerable complexity for traditional market assessment methodologies.

Ref	Issue/Subject	Submission	Summary of Content	Summary of NICTA Response
			in price offerings, catalysed by the convergence of technology.”	
46	Market definition	Amanda Watson et al (p.2)	“NICTA indicates here that it is treating voice calls as one, irrespective of whether they commence or terminate on mobile telephones or fixed (landline) telephones. Given the likelihood that Telikom dominates the fixed line market for voice calls, we note that the combination of the two types of voice call technology in the discussion paper limits NICTA’s ability to make a retail service determination in relation to fixed voice services.”	The bigger the market definition, and the greater its coverage of services, the greater the chance of competition being effective and constraining the abuse of market power. That is in the nature of the analysis. However, NICTA must assess the extent of material substitution when defining market boundaries, and not be concerned whether the result helps or hinders its subsequent ability to make an RSD.
47	Service Tariffs	Amanda Watson et al (p.2)	“NICTA indicates in section 6.3 that voice prices have reduced over the past three years, which does bring into question the need for a determination on voice services. Nonetheless, if voice prices remain above regional averages, then the criteria do seem to be met. Although this is not the focus of our research, based on our experience and impressions, we have not noticed any change in the retail voice pricing provided by Digicel, which has been a major market player in the mobile telephone sector in PNG since it commenced operations on 1 July 2007.”	NICTA’s preliminary conclusion was to give some time for the market forces to play out after the entry of a new operator, Vodafone, among other developments in the markets. It should be noted, however, that voice prices remaining above, or below regional averages is at best an indicator of the outcome of market forces (or lack of them) in PNG and is not a criterion for retail price regulation under the Act.
48	SMP	Amanda Watson et al	“We agree that Digicel has a substantial degree of power in the market for retail	Noted.

Ref	Issue/Subject	Submission	Summary of Content	Summary of NICTA Response
		(p.2)	mobile data services... We consider that the other retail regulation criteria in Section 158 of the Act are satisfied in respect of retail mobile data services.”	
49	SMP	Amanda Watson et al (p.3)	“Our understanding is that Telikom and DataCo have a substantial share of the fixed infrastructure in the country. As DataCo is not mentioned in the discussion paper, we are not sure whether it is being included here in this question.”	Digicel and Telikom are mainly involved in supplying retail voice and data services at the retail market whereas DataCo has been supplying wholesale national and international broadband services to retail ISPs. In cases where DataCo supplies retail broadband services, any retail regulation on the pricing and supply terms also applies to them. The comment is a good reminder that DataCo needs to be considered in its capacity as a retail service provider when retail market assessments are being made.
50	NICTA’s Preliminary Conclusion	Amanda Watson et al (p.2)	“We disagree with NICTA’s preliminary conclusions that, in respect of price and quality terms and conditions of service, the retail regulation criteria in Section 158 of the Act are not met or are unlikely to be met for retail voice and data services.”	NICTA has reached its preliminary conclusion on the basis that not “all” retail regulation criteria of section 158 were met to make a retail services determination on voice and data services taking into consideration the recent entry of an operator and investments by other operators.
51	Service Tariffs	Amanda Watson et al (p.4)	“We disagree with the fourth point with regard to data only bundles (also referred to in the discussion paper as single-service data bundles). Starting from the first week of 2020, we have been undertaking research to monitor the internet prices that are offered to mobile telephone users in PNG.”	NICTA’s analysis and conclusions are based on historical tariff rates and bundle prices from 2018 to 2021.

Ref	Issue/Subject	Submission	Summary of Content	Summary of NICTA Response
52	NICTA's Preliminary Conclusion	Amanda Watson et al (p.4)	"Our view is that a determination should be held off for a set period of time (for example, one or two years) in order to ascertain whether the three changes to the market make any difference. This approach seems particularly pertinent, given that the Act stipulates that leaving the situation to market forces is the preferred option."	This is exactly what NICTA proposes to do, with a further review in a years' time.
53	Retail Regulation Criteria	Amanda Watson et al (p.4)	"We agree that the retail regulation criteria in Section 158 of the Act are satisfied in relation to a retail service determination to prohibit on-net/off-net price discrimination of retail voice calls, or, at least, retail mobile voice calls."	Noted.
54	Lower Income Users	Amanda Watson et al (p.5)	"We disagree. We maintain that discrimination against low-income users is evident in pricing structures. Our research focuses on the single-service bundles offered by mobile network operators in PNG. As can be seen in the figure below, the bundles that we monitor offer better value to those users who can afford to outlay greater amounts of money."	Amanda Watson et al's analysis and discussion is noted and appreciated. There is a valid argument that the unit price for Digicel's broadband services for shorter periods (1, 3 & 7 days) is relatively expensive than longer periods (30 days). Assuming that lower income earners can afford plans for short periods with less initial cash outlays they turn to pay more in terms of per unit costs of internet (per megabyte). NICTA's analysis was based on retail prices of bundled services overtime against the standard rates, using the standard rates as a measure to gauge relative improvement. The value of bundled services has significantly improved over time when assessed in this way. These benefits in price reductions are enjoyed by both low and high-income earners in equitable ways. As mentioned in NICTA's analysis, the value/price ratio for internet offerings by Digicel and Telikom has not

Ref	Issue/Subject	Submission	Summary of Content	Summary of NICTA Response
				materially increased for higher usage bundles relative to lower usage bundles.
55	Lower Income Users	Amanda Watson et al (p.5)	“People living in such places experience occasional mobile network outages and often have only very limited access to electricity. Therefore, we feel that it is worth giving further thought and attention to customers in such circumstances before the decision to take no action is settled upon.”	NICTA has determined to take no further action for now, and this matter will be on the agenda again with the further review in a years’ time.
56	Exclusion of SMS	Amanda Watson et al (p.6)	“We note that SMS was not discussed in any detail in the discussion paper and may warrant further attention.”	Refer to response to item 1.
57	Market Definition	DataCo (p.1)	DataCo’s Position is that Fixed Voice and Mobile Voice Services should be treated as different services.	DataCo has introduced no arguments that have not already been addressed above. The criteria for market definition and market boundaries are based on the limits of substitution. Customer behaviour has, over time, changed to the point where substitution is well entrenched, supported by changes in the prices and packaging of mobile services.
58	Retail Regulation Criteria	DataCo (p.2)	“DataCo agrees that the retail regulation criteria of section 158 are satisfactory in the case of retail voice service.”	NICTA interprets DataCo to mean that it considers the criteria in Section 158 to be satisfied in the case of retail voice services. If so, then it does not agree with NICTA.
59	Retail regulation Criteria	DataCo (p.3)	“It is also clear that other retail regulation criteria of section 158 are satisfactory in	No evidence is provided By DataCo to support its assertions in response to points (2) and (3). However, based on evidence provided in the NICTA price study

Ref	Issue/Subject	Submission	Summary of Content	Summary of NICTA Response
			<p>respect of retail mobile data services, in particular, ...</p> <p>(2). Prices of mobile data services in PNG are one of the highest in the world</p> <p>(3) Digicel, in DataCo's views, have been receiving oversized returns on investment."</p>	<p>report and reports by other world bodies such as the ITU, NICTA concurs that prices for data services in PNG are relatively high in regional/world terms.</p>
60	SMP	DataCo (p.3)	<p>"DataCo does not consider that Telikom has a substantial degree of market power in the market for fixed data services. This is due to the fact that there are many ISPs that are providing fixed data services through cable and wireless systems in PNG."</p>	<p>Noted. NICTA's preliminary conclusion was not to subject fixed data services to a retail service determination based on the reasons spelled in the inquiry report and in this response report. The issues that DataCo has raised will be re-examined on the light of circumstances in 12 months' time when the matter is next reviewed.</p>
61	Retail Regulation Criteria	DataCo (p.4)	<p>"DataCo does not agree that the retail regulation criteria have not been met. In DataCo's view, the retail regulation in section 158 of the Act has and are being met – and most specifically for mobile data services.</p> <p>... (3) retail customers have been exposed to higher prices due to the lack of effective and strong competition as well as regulations over this period..."</p>	<p>Noted. The reason why NICTA's preliminary conclusion is not to consider a price determination now is that not all the retail regulation criteria have been met, in particular on whether in the absence of a retail service determination on data and voice services, Digicel's SMP would continue to persist and expose customers to a material risk of higher prices. NICTA agrees with DataCo's argument that retail customers have been exposed to higher prices in the past. The question remains, however, whether that trend will continue, especially now that the market has changed with the entry of Vodafone and the commissioning of the submarine cable systems where there has been slight reduction in prices. It is unclear for now. When</p>

Ref	Issue/Subject	Submission	Summary of Content	Summary of NICTA Response
				considering all these factors together, NICTA considers it is more practical to allow the market to accommodate all these recent changes and to review the situation in 12 months' time.
62	Regulatory Intervention	DataCo (p.5)	"NICTA as a regulator should be taking a pro-active role in regulation of the telecom market. This means that regulation should be developed from the perspective of consumer protection primarily and secondary consideration should be given to the telecom companies, their profits and returns on investment."	NICTA operates in accordance with the policies legislated in the Act. The Act reflects the policy of the industry development where consumer welfare is allowed to be delivered by market competition where possible.
63	Regulatory Intervention	DataCo (p.5)	"NICTA has for over a decade taken an approach of 'wait and see' which has resulted in some of the highest retail prices in the regulation and creation of a one of the strongest telecom monopoly companies in the world."	NICTA disagrees strongly this assertion.
64	Effects of Vodafone's entry	DataCo (p.7)	"Any new market entry to PNG retail telecom market is a positive outcome. It will create more price competition and improve services for customers."	Noted.
65	Regulatory Intervention	DataCo (p.7)	"The opportunity for NICTA to intervene now and institute some regulations on the dominant market player in the retail market	This comment appears to relate to the recent bid by Telstra Australia to acquire Digicel. , The suggestion by DataCo that changing ownership or renewal of

Ref	Issue/Subject	Submission	Summary of Content	Summary of NICTA Response
			was through the change of ownership or license or even at the renewal of licenses it holds. Unfortunately, we understand that this window has already lapsed and is no longer valid at the time of drafting this response.”	Digicel’s license in this Telstra-Digicel acquisition proposal is an opportunity to impose price controls via an RSD on Digicel is ill-conceived. The Act makes it very clear the procedures that must be followed and the criteria that must be applied.
66	Regulatory Intervention	DataCo (p.7/8)	“There are however tools, other than retail price regulation, at the disposal of NICTA. One for example is the introduction of differentiated interconnection rates, forcing operators with SMP to offer drastically lower interconnection rates than those of operators with smaller market shares and new entrants to the market.”	This suggestion is also ill-conceived. Firstly, interconnections charges do not apply to data services and therefore would have no regulatory effect on prices. Secondly, interconnection charges relate to wholesale access services and not to retail services. Thirdly, even if interconnection rates were relevant in some way, the best practice is that they should be symmetrical except perhaps, in some jurisdictions, where lower rates have sometimes been allowed for the new entrants for short periods.
67	Standard/Bundle Value Ratio	DataCo (p.13)	“The definition of value as the price difference between an operator’s various plans/bundles and their standard tariffs is flawed. Why not just use price per product unit?”	Value is not defined in the way suggested. Standard tariffs are a measure of the improvement or otherwise that has been offered through bundles. The problem with the measure that DataCo prefers is that the utilisation of bundles varies over time and across offerings, so the product unit is variable. If the bundle is mixed, there is a further issue in that two or more product units are involved.