

Friday, 17 February 2017

BY HAND / BY EMAIL

Mr. Charles Punaha
Chief Executive Officer
National Information and Communication Technology Authority
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Boroko
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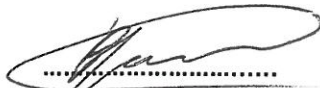
Dear Charles

Public Inquiry into Potential Implementation of Mobile Number Portability

Please find attached Digicel's redacted response ("**submission**") to the National Information and Communications Technology Authority's ("**NICTA**") Consultation Paper, *Mobile Number Portability for PNG: Discussion Paper on Costs and Benefits*, issued by NICTA on 07 October 2016 ("**Consultation Paper**") and the accompanying Discussion Paper of the same date ("**Discussion Paper**") prepared by Incyte Consulting and its associate, Laurasia (the "**NICTA Consultants**").

We look forward to NICTA's consideration of the submission and any further opportunity to discuss this matter with you.

Yours sincerely,



Brett Goschen
Chief Executive Officer
Digicel PNG Limited



Digicel

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PUBLIC VERSION

Digicel Submission on

NICTA's CONSULTATION PAPER:

Mobile Number Portability for PNG:

Discussion Paper on Costs and Benefits, Issued on 07 October 2016

3 February 2017

A. Introduction

1. This submission sets out Digicel's response ("**submission**") to the National Information and Communications Technology Authority's ("**NICTA**") Consultation Paper, *Mobile Number Portability for PNG: Discussion Paper on Costs and Benefits*, issued by NICTA on 07 October 2016 ("**Consultation Paper**") and the accompanying Discussion Paper of the same date ("**Discussion Paper**") prepared by Incyte Consulting and its associate, Laurasia (the "**NICTA Consultants**").
2. Digicel's submission follows a letter to NICTA dated 21 October 2016 by which Digicel raised concerns about NICTA's consultation process and requesting additional information that was not provided in the Consultation Paper Discussion Paper and which Digicel considered to be necessary in order to permit Digicel a fair opportunity to be able to participate fully in the consultation process. The additional information that was requested by Digicel included:
 - a. *Details of the cost benefit analysis model(s) that were employed to support the conclusions that were reached in the Discussion Paper;*
 - b. *Sources for the various cost and other assumptions and information that have been relied upon;*
 - c. *Details of the so-called NICTA MNP Consumer Awareness Study and why that study was only undertaken in August of this year [2016] and involved only 117 interviews from what the Discussion Paper describes as a "demographically restricted" group of people; and*
 - d. *How the proposed imposition of an MNP obligation that is only applied to Digicel is consistent with the non-discrimination requirements that are an integral part of PNG's regulatory framework.*

3. NICTA responded to Digicel's letter in a letter dated 14 December 2016, by which NICTA sought to dismiss Digicel's concerns and declined to provide any of the information that had been requested by Digicel.
4. Accordingly, this submission is provided on the basis that it is without prejudice to Digicel's position that it has not been accorded natural justice and procedural fairness in this matter and that it must reserve all of its rights in that regard.
5. Digicel does not object to MNP in principle and it is widely accepted that MNP removes a barrier for consumers to switch mobile networks. However, MNP is not costless and the economic benefits of removing that barrier need to be weighed carefully against the costs of implementation and the potential detriments that that will arise from it. A failure to undertake such an analysis risks dampening investment incentives for new infrastructure and services while decreasing service quality and increasing costs for consumers.
6. The implementation of MNP also changes incentives for network operators, as it is likely to alter the dynamic of competition, such that operators focus more on competing against each other for existing customers and less on growing the network into new areas. This is a very significant issue in PNG.
7. Digicel submits that Government and regulatory policy needs to remain firmly focused on encouraging operators to invest in coverage and capacity expansion. The introduction of MNP before the network build is complete or the market is ready for it will harm investment and delay the benefits that the people of PNG can expect from more widespread telecommunications services. That is perhaps why features that are common to other lower-middle and low income economies that have introduced MNP are a mature national mobile network and high levels of penetration. They are also countries where populations are more dense and networks are (relatively) cheaper to deploy.
8. This can be seen clearly in the table below, which compares PNG with other lower-middle and low income economies that have either implemented or plan to implement MNP. PNG has the lowest mobile penetration rate, lowest population density, 6th lowest population and 6th lowest GDP per capita of the countries in the group. PNG also has the 7th lowest literacy level, which is a useful proxy for understanding the challenges that will be faced with managing the porting process with customers.

Country	Mobile Penetration (%)	Population	Area (km ²)	Population Density (Pop/km ²)	GDP (Per capita PPP \$US)	Literacy (%)
Afghanistan	61.6	32006788	652230	49.1	1925.165	38.2
Armenia	115.9	2989467	29743	100.5	8418.728	99.7
Bangladesh	81.9	160411249	148460	1080.5	3339.589	61.5
Cameroon	71.8	23393129	475440	49.2	3115.279	75
Cape Verde	118.6	508315	4033	126.0	6556.495	87.6
Egypt	111.0	84705681	1001450	84.6	10913.43	73.8
El Salvador	145.3	6426002	21041	305.4	8700	88
Ghana	129.7	26984328	238533	113.1	4210.498	76.6
Haiti	68.8	10603731	27750	382.1	1757.436	60.7
Honduras	95.5	8423917	112090	75.2	5095.204	88.5
India	78.1	1282390303	3287263	390.1	6100.663	71.2
Kenya	80.7	46748617	580367	80.6	3088.794	78
Moldova	108.0	3436828	33851	101.5	5048.968	99.4
Morocco	126.9	33955157	446550	76.0	7841.484	68.5
Nigeria	82.2	183523432	923768	198.7	6003.89	59.6
Pakistan	66.9	188144040	796095	236.3	5010.814	57.9
Papua New Guinea	46.6	7631819	462840	16.5	2868.916	64.2
Rwanda	70.5	12428005	26338	471.9	1762.314	70.5
Senegal	99.9	14967446	196722	76.1	2420.795	57.7
Sri Lanka	110.6	21611842	65610	329.4	10700	92.6
Sudan	70.5	39613217	1861484	21.3	4387.896	75.9
Tanzania	75.9	52290796	947300	55.2	2672.509	70.6
Tunisia	129.9	11235248	163610	68.7	11467.07	81.8
Ukraine	144.0	42159931	603550	69.9	7939.614	99.8
Vietnam	130.6	93386630	331210	282.0	6034.26	94.5

Data Sources: *ITU World Telecommunication/ICT Indicators (WTI) database, 2016, World Bank and CIA World Factbook*

9. In short, PNG due to the unique combination of circumstances that exist, still lags behind other countries on all of these metrics and simply not ready for the imposition of MNP.
10. Changes in technology and consumer communication preferences (multiple subscriptions/social media/messaging/email/smart phones) and the use of network specific applications such as mobile money also means that number portability is becoming less relevant over time and the ensuing customer benefits less certain, especially in developing economies.
11. Digicel submits that insufficient attention has been given to these important issues or to the specific circumstances that exist in PNG. These circumstances include a very challenging operating environment, high cost of rolling out network infrastructure and services, difficulties associated with determining customer identities and low income and literacy levels. These challenges are illustrated by the cost and difficulty of implementing the SIM registration programme that is currently underway in PNG.

12. These issues, among others, have resulted in consumer demand for MNP being grossly overestimated by the NICTA Consultants and the costs of implementation are likely to far exceed the benefits. This is discussed further in the paragraphs below.

B. Demand for MNP in PNG has been overstated

13. The adoption of MNP in other countries has been overstated by the NICTA Consultants. Appendix A of the Discussion Paper identifies 106 countries that have implemented MNP as at the end of 2015 with a further 12 countries where MNP is “planned” to be implemented in 2016 and 2017¹. However, this is not a true representation of the situation as it affects PNG. When compared against the Income Groups² of the countries that have implemented or plan to implement MNP, more than 77.4% are characterised by either upper-middle or high income economies. The remaining 22.6% are either lower-middle income or low income economies.
14. Put another way, only 18% of countries with lower-middle or low income economies had implemented MNP by the end of 2015 while a further 11% “planned” to do so in 2016 or 2017. This is significantly different from the “*more than half of the world’s countries*” as described by the NICTA Consultants at page 11 of the Discussion Paper.
15. This means that, contrary to what has been implied in the Discussion Paper, NICTA and PNG would not be joining the mainstream of developing countries by pursuing the adoption of MNP. On the contrary, PNG would be joining a relative few countries that have only recently begun to implement MNP and where the outcomes of their endeavours are far from certain.
16. The likely level of demand for MNP has also been overestimated by the NICTA Consultants. That is partly because they have relied heavily on NICTA’s consumer awareness study of only 117 people from “*high value and public sector work market segments*”³ which is not only statistically unreliable in terms of numbers but both the type of respondents selected and the nature of the questions asked have clearly skewed the results towards favouring the introduction of MNP. For example, the consumer awareness study:
 - a. Did not ask respondents whether the existing lack of MNP had impacted on their decision of whether or not to switch mobile network provider;
 - b. Found that only 20% of respondents had “Dual Mobile Service” but did not consider the reasons for doing so and which are likely to be highly relevant to customers’ preference to retain their own number; and
 - c. While apparently establishing that the majority of respondents would pay to switch their mobile number, did not attempt to establish how much they would be willing to pay.

¹ Discussion Paper at Appendices A. and D.

² As described by the World Bank, <https://datahelpdesk.worldbank.org/knowledgebase/articles/906519>

³ Discussion Paper at Appendix F.

17. The number of customers with active mobile subscriptions has, at least in respect of customers of Digicel, been overestimated significantly. As at November 2016, Digicel had [REDACTED] active customers on its network. This is well short of the 3.7 million that has been estimated by the NICTA Consultants.
18. Similarly, the assumptions made by the NICTA Consultants in relation to porting rates appear to be unsupported by any empirical analysis and are significantly greater than the porting rates that Digicel understands have been achieved in other lower-middle income or low income countries. The table below sets out the porting rates as a percentage of mobile cellular subscriptions for 12 lower-middle income or low income countries identified in the Discussion Paper as having implemented MNP.

Mobile porting transactions expressed as a percentage of mobile cellular subscriptions					
	2011	2012	2013	2014	2015
Armenia				0.77	0.67
Cape Verde				1.77	1.11
Egypt	0.14	0.06	0.06	0.05	0.06
Ghana	0.83	2.17		6.21	6.80
Honduras				0.53	0.29
India	0.50	3.70	8.24	3.08	4.44
Kenya	0.14			0.01	0.01
Moldova			0.70	1.60	1.21
Morocco	0.10	0.17	0.27	0.35	0.49
Nigeria			0.12	0.21	0.29
Pakistan	4.30	4.76	2.61	3.69	0.67
Sudan					0.01
Median	1.00	2.17	2.00	1.66	1.34

Data Source: ITU World Telecommunication/ICT Indicators (WTI) database, 2016

19. Relevantly, the average reported porting rate for 2015 was only 1.3% of mobile cellular subscriptions and has been in decline for the past four years.
20. The prevalence of customers in PNG who have more than one subscription has also been ignored in the analysis. According to Digicel's own market research, [REDACTED]
[REDACTED]
[REDACTED].
21. SIM locking is also a common feature of all networks in PNG and the effect of this on customers' choice to switch networks or port their number has not been considered.

C. The benefits of implementing PNG have been overstated

22. The NICTA Consultants have provided no reasoned basis for their apparently arbitrary distribution of customers between the four customer types described in Figure 11.2 of the Discussion Paper. Nor have the NICTA Consultants provided any basis for the weightings that have been used in Figure 3 or any of the assumptions in Figure 11.4. As a result, this means that all of the subsequent analysis can have no more relevance than mere conjecture and certainly should not be used as a basis to impose regulation on Digicel that would cost it many millions of Kina.

23. As noted above, the NICTA Consultants do not seem to have considered the implications of customers who willingly choose to connect to both Digicel and Bmobile in the absence of MNP. [REDACTED]

This is consistent with the findings of the NICTA MNP Consumer Awareness Study which found that 77% of correspondents who were Bmobile customers also obtained service from Digicel.

24. Digicel is therefore surprised at the following statement from the NICTA Consultants:

"It is assumed that each subscriber has only one SIM, although some may have multiple SIMs, e.g. additional SIMs for data dongles or for keeping an emergency phone in the car. The numbers used with such SIMs may not be used much or at all and so there would be little demand for porting them. A few users may have a second SIM so that they can take advantage of on-net offers on both networks - such users would probably not be interested in porting their number and already have most of the benefits of number portability. Therefore the approach of assuming only one SIM per subscriber gives a slight over-estimate of the benefits. The model has not been amended to take account of multiple SIMs. Given the market dominance of Digicel and the lack of information on the number of subscribers with multiple SIMs there is little point in doing this." (emphasis added)

25. Digicel cannot understand how the NICTA Consultants could overlook the clear existence of multiple SIM ownership in PNG but agrees that, by ignoring it, they have over-estimated the benefits arising from MNP in PNG.

26. That is because most of the type 1A and type 3 benefits that the NICTA Consultants have estimated will not arise because most customers in this category will not actually save these costs if MNP is available. The key point is that, given the predominance of multiple SIMs in PNG, the over-estimate of the benefits is not "slight" as has been asserted by the NICTA Consultants.

27. Removing or substantially reducing the type 1A and type 3 benefits considerably reduces the benefit-cost ratio of all options that the NICTA Consultants analyse, and only cases 3a and 3b (where Digicel faces an obligation to port out numbers on request from a new entrant) would have benefit-cost ratios significantly greater than one.
28. The type 1B benefits estimated by the NICTA Consultants have also been overstated. If calculated correctly, even when all of the other NICTA Consultant's assumptions are retained, the average type 1B benefit per customer is 31 Kina. This is only 16% of the per-customer type 1B benefit estimated by the NICTA Consultants.
29. Type 1B benefits are estimated by the NICTA Consultants to make the biggest contribution to the benefit-cost ratios of MNP (see figure 11.7 of their report). Substantially reducing these benefits means that only case 3a has a benefit-cost ratio greater than one. This is for the following reasons:
- a. The analysis in the Discussion Paper assumes Type 1B benefits apply to 30% of portings and estimate these as 80% of the cost of maintaining basic connections to two mobile networks for two years (192 Kina). However, this method significantly over-estimates the benefits of this type.
 - b. The fact that such customers do not switch networks without MNP means that their costs of switching are greater than the gross benefits to them of switching⁴. The average costs that a customer bears to switch networks in the absence of MNP were estimated at 62 Kina, as part of the estimation of type 1A benefits by the NICTA Consultants. Customers who do not switch networks without MNP obtain a gross benefit from switching of at most 62 Kina, otherwise they would have switched voluntarily without MNP. Most such customers will have a gross benefit of switching of less than 62 Kina.
 - c. Assuming gross benefits are evenly distributed between zero and 62 Kina, the average type 1B benefit per customer is 31 Kina. This is only 16% of the per-customer type 1B benefit estimated by the NICTA Consultants. Even if all such customers have the maximum possible benefit (62 Kina), this is only 32% of the per-customer benefit that has been estimated.
 - d. Type 1B benefits are estimated by the NICTA Consultants to make the biggest contribution to the benefit-cost ratios of MNP (see figure 11.7 of the Discussion

⁴ Suppose a customer receives a gross benefit b from switching networks and incurs costs c to switch in the absence of MNP. Customers with $b > c$ will switch regardless of whether MNP is available (i.e. type 1A customers) and obtain a net benefit of $b - c$ if MNP is not available and b if MNP is available. The benefit to such customers of MNP is therefore $b - (b - c) = c$, and the NICTA Consultants have estimated $c = 62$ Kina. Customers with $b < c$ will only switch if MNP is available and the benefit to such customers of MNP is b , where $b < 62$ Kina.

Paper). Substantially reducing these benefits means that only case 3a has a benefit-cost ratio greater than one.

30. The assumptions lying behind the NICTA Consultant's estimate of type 2 benefits have not been disclosed. These benefits are based on a theory that, by lowering switching barriers, MNP will increase the intensity of competition among mobile networks, which will benefit all consumers even if they do not switch networks. Such benefits are theoretically plausible and are predicted by many economic models of competition. However, a key condition is that the market shares of the firms are not too un-equal. Otherwise, reducing switching barriers may 'tip' the market towards the largest firm and reduce competition. This seems to have been recognised by the NICTA Consultants⁵ but does not appear to have been reflected in the analysis that has been undertaken.
31. In particular, the forecast price reductions and changes to price structures are entirely speculative, as is the NICTA Consultants' conjecture that:

"Digicel through its market share advantage and strong nationwide network coverage is able to maintain strong price leadership in PNG, maintaining higher prices than would occur in a more competitive market".

32. Digicel objects strongly to this statement and considers that such unsubstantiated assertions are unhelpful and unnecessary in this proceeding.
33. The only cases where the NICTA Consultants have been able to show there are net benefits arising from MNP are where either Bmobile makes substantial new investment in infrastructure and becomes more competitive, or where a new entrant joins the market and does something similar. There is no substantiation of either hypothesis or whether the existence of MNP was a pre-requisite to such investment occurring. In either case, the benefits to PNG will arise mainly from the investment itself and any additional benefits arising from MNP are likely to be relatively small by comparison.
34. Most of the costs of MNP will be incurred up front, while the benefits accrue over time and depend on the volume of porting that occurs. Given that porting volumes depend on a new entrant or Bmobile gaining market share, the timing of these volumes is quite uncertain. A delay of just a few years would significantly reduce the benefits of MNP in present value terms, while the up-front costs would be unchanged. However, the NICTA Consultants do not appear to have considered the impact of delayed timing of porting volumes in its benefit calculations.

D. The costs of implementing PNG have been understated

35. Digicel has not undertaken a detailed cost study to estimate the costs of implementing MNP on its network in PNG. However, it does have experience of implementing MNP in other

⁵ See, for example, the Discussion Paper at page 11.

markets in which it operates. That experience indicates that the NICTA Consultants have substantially understated the cost of implementing MNP in PNG.

36. For example, Digicel recently implemented MNP in Trinidad & Tobago, a country that has about one fifth of the population of PNG and half the number of mobile subscribers. [REDACTED]
[REDACTED]
[REDACTED]. This suggests that the NICTA Consultants' cost estimates for PNG are significantly understated. This may be in part because the NICTA Consultants have assumed an overly simplistic view of the deployment of existing networks and that any internal staff are "local" and will be paid according to "*generic PNG salary benchmark data*".
37. Such an approach is unreasonable and does not take into account the highly technical nature of implementing MNP or the fact that there is currently limited capability "in country" to support its implementation.
38. The NICTA Consultants also have not considered the implications of capital constraints on mobile operators. For capital constrained operators, as is the case with any normal commercial enterprise, the capital costs for MNP will not be considered as additional to or separate from existing capital budgets, and thus will cause operators to reduce capital expenditure in other areas. That will lead to a reduction in investment and service quality to customers.
39. For example, the capital costs of MNP that have been estimated by the NICTA Consultants translate to [REDACTED]. Diverting capital to fund MNP will be a real issue in a country such as PNG where network coverage is very costly and networks are still being deployed. The benefits of expanded coverage that are lost or delayed due to MNP should be counted as detriments in the analysis but have not been.
40. The NICTA Consultants have also understated the likely MNP operating costs that are likely to be incurred in PNG. This is because the market is relatively undeveloped compared with other markets, even in developing countries. This can be seen from PNG's very low GDP per capita and relatively low levels of literacy. This in turn means that the assumptions in relation to retail distribution and the ability to automate porting processes are unlikely to hold true. The result is that the cost per port is likely to be higher and the number of ports is likely to be lower.
41. The Regulatory costs that have been estimated are also implausibly low. Digicel considers that it is simply not credible to expect only one person from NICTA will be required to be involved in the implementation of MNP and that, once implemented, it will be able to oversee the operation of MNP on a part time basis. The assumptions that have been made also ignore completely the considerable cost, both in terms of NICTA internal resources and external consultants, that have already been expended thus far.

42. The costs of Bmobile and/or Citifon have been ignored in the cost assessments for Cases 3a and 3b. This has been done on the basis that the participation of Bmobile or Citifon *"would be a voluntary commercial decision where presumably they would foresee increased profits that would outweigh their costs"*. This statement is entirely speculative and, as discussed below, ignores the real likelihood that Bmobile and Citifon will be compelled to participate in order to mitigate against the competitive losses that would otherwise occur.
43. Such an arbitrary approach towards an important source of costs is a clear error and, if rectified, would result in an outcome where the costs of implementation for Cases 3a and 3b would be no less than the costs incurred in Cases 1a, 1b or 2.
44. The results from the analysis that has been undertaken and reported via the Discussion Paper are ambiguous at best. There is no clear case for the introduction of MNP in PNG at this time.

E. User Right vs Competition Requirement ill-advised and unlawful

45. The Discussion Paper describes two forms of MNP, described as a "User Right Requirement" and a "Competition Requirement". The Discussion Paper considers both approaches and appears to favour the "Competition Requirement" approach whereby only Digicel would be obliged to offer MNP while other operators would be free to opt in at their own convenience.
46. The Discussion Paper states that the *"user right" form of requirement is the most common form* of MNP but omits to provide any examples at all where the "Competition Requirement" approach has been adopted. Digicel is not aware of any such examples.
47. Nor does the Discussion Paper provide any legal analysis to indicate that mandating the introduction of a "Competition Requirement" approach would be lawful in PNG. In Digicel's submission it would not. In particular, Digicel considers that the adoption of a "Competition Requirement" approach would be inherently discriminatory and at odds with the Regulatory Principles contained within the National Information and Communication Technology Act 2009 ("**Act**").
48. Even if such an approach was lawful, which Digicel denies, it would be wrong both in principle and practice for the following reasons:
 - a. The NICTA Consultants have mistakenly assumed that Telikom and Bmobile would be able to stand apart from the MNP process in the event that a new entrant established itself in the market and took up its option to avail itself of MNP from the Digicel network. In a competitive market they would not be able to do so as that would mean they were much less attractive from a customer perspective. That is because, all other things being equal, a customer would be very likely to switch services to the operator that permitted the customer to retain their own number.

- b. Similarly, Digicel would also be forced to provide “inbound” portability from the new entrant. Otherwise it would not be in a position to “win back” customers that it had lost to the new entrant and make it more difficult for Digicel to compete for any new customers.
 - c. Customers would become confused as different rules would apply depending on whether they wished to port to or from a network.
 - d. Call routing would be complex with bilateral interconnection arrangements being required to be made between network operators. Such arrangements may well be the source of dispute and uncertainty.
 - e. It is not clear whether Digicel would have to implement and make ready MNP in its network “in case” another network operator sought to avail itself of the service. If it was required to do so then the investment may be wasted in the event that no operator sought the service.
 - f. Even if Digicel was not required to implement MNP in advance of the arrival of the new entrant or any other request from its competitors, the uncertainty over when, or even whether, MNP would ever be implemented would still create significant costs for Digicel while imposing no such burden on any other operator. This is contrary to the claim by the NICTA Consultants that “no significant costs would be incurred until such a request is made”⁶. That is because, regardless of when or even whether a request for MNP is actually made, Digicel faces a potential liability for those costs given that a request could be made at any time. Thus, it faces an expectation of costs and this will constrain Digicel's business including future decisions made on allocation of capital to other productive investments such as expanding coverage and the introduction of new services. However, the NICTA Consultants do not appear to have taken this into account in any of its analysis.
 - g. The uncertainty would also be likely to delay timing of MNP in the event that it was requested as any implementation process would presumably only be expected to commence after a request had been made. Relevantly, Laurasia Associates in its 2014 Number Portability Overview⁷ presentation estimates that it would take between 50 and 80 man months to implement number portability.
49. Digicel further submits that Digicel should not be under a different or more onerous obligation than any other operator merely because, based on the NICTA Consultants’ simple capital intensity analysis, Digicel would be better able to “afford” the resulting costs. Such an

⁶ Discussion Paper at Page 5.

⁷ Available at

http://www.laurasiaassociates.co.uk/index.php?option=com_phocadownload&view=category&id=1&Itemid=140

approach is completely unprincipled and suggests that any investor, simply by making good business decisions and sound investments will be more susceptible to regulation than someone who has not.

50. If MNP is to be introduced in PNG then it must be on the basis of the "user right" approach that is described in the Discussion Paper. That is, all operators must be required to implement MNP at the same time and on the same terms.
51. The conclusion in the Discussion Paper that Digicel can "*afford the introduction of number portability both as a user right and as a measure to promote competition*" is wrong – both as a matter of principle and in practice.

F. Other Issues

52. Digicel submits that the approach taken by the NICTA Consultants to the estimation and comparison of costs and benefits is opaque and results in outcomes that are difficult to compare against each other. In particular, when there are multiple options to choose from with different costs, it is better to make comparisons based on the net benefit of each option in dollar terms rather than the benefit-cost ratios. This is because, for example, an option with a small cost could have a high benefit-cost ratio but deliver lower net benefits than an option with a larger cost but a lower benefit-cost ratio.

G. Conclusion

53. The NICTA Consultants make two recommendations in the Discussion Paper⁸:

- 1. That NICTA should only consider introducing MNP if and when there is sufficient further investment in an existing operator such as Bmobile to make it able to increase its market share significantly, or a New Entrant is licensed and has entered the PNG market;*
- 2. That both user right and competition requirements should be considered further by NICTA and the preferences of the industry and the public should be gauged."*

54. Digicel broadly agrees with the first recommendation. Based on the NICTA Consultants' own analysis there is no evidence that the benefits of MNP exceed the costs at present. In Digicel's submission, this conclusion is underscored by the fact that the costs that have been identified in the Discussion Paper have been under-estimated and the benefits have been overstated.

55. Moreover, and as the NICTA Consultants have recognised, a crucial condition for the benefits of MNP in PNG to exceed the costs is for a credible competitor to Digicel to emerge that can

⁸ Discussion Paper at page 9.

achieve significant market share, leading to a reasonable level of demand for porting numbers between operators. MNP will not be able to create that competitive change. It will require significant capital investment either in a new network or in Bmobile and, in Digicel's submission, the presence or absence of MNP will not be the deciding factor for such investment to occur.

56. Importantly, even if there is new entry by a substantial operator or further significant investment is made in Bmobile, it is not a given that MNP would be desirable in PNG. The benefits could still be less than the costs, and NICTA would need to revisit its analysis under the new market conditions. The NICTA Consultants' assumptions about the PNG mobile market after new entry or investment in Bmobile are very speculative and appear to be based on experiences in other countries rather than market conditions in PNG.
57. With respect to the second recommendation that has been made by the NICTA Consultants, Digicel submits that it is not consistent with its first. Given that there is no strong evidence in favour of introducing MNP in PNG, it does not make sense in Digicel's submission to continue to investigate it further now. It seems very unlikely that further consultation by NICTA on this issue will change the basic conclusions of analysis that has been undertaken. On the contrary, a more detailed analysis would find that MNP is even less desirable than the NICTA Consultants have estimated. Therefore, further consultation at this stage will only confirm or strengthen the preliminary conclusions, while creating costs for everyone involved.
58. In summary, Digicel submits that the only conclusion that can properly be drawn from the analysis undertaken to date is that there is no reasoned basis for the introduction of MNP in PNG at this time and any further consideration of the potential implementation of MNP should be deferred until a point in time which is the later of:
 - a. two years from now; or
 - b. when population coverage in excess of 90% is achieved by at least two operators; and penetration exceeds 75% of the population.