

Response to Comments Report

30th October, 2024

Contents

1. I	introduction				
2. F	Responses to Phase 24				
2.1	Stakeholder responses received4				
2.2	Overview of the Responses4				
3. F	5. Follow-up Responses to the nineteen Phase 1 questions				
3.1	Question 1 – recipient or donor led				
3.2	Question 2 – centralised or decentralised porting				
3.3	Question 3 – licensing the NPC6				
3.4	Question 4 – NPC location				
3.5	Question 5 – Iirect or indirect Routed				
3.6	Question 6 – Market Impact				
3.7	Question 7 – set up costs				
3.8	Question 8 – customer porting charges10				
3.9	Question 9 – donor porting charge				
3.10	Question 10 – implementation timing11				
3.11	Question 11 – MNP Working Group12				
3.12	Question 12 – porting times				
3.13	Question 13 – validation of porting requests				
3.14	Question 14 – porting process				
3.15	Question 15 – post-paid consumers14				
3.16	Question 16 – win back protection				
3.17	Question 17 – onward porting restrictions16				
3.18	Question 18 – real time porting16				
3.19	Question 19 – multiple customer number ports				
4. N	New Phase 2 Questions				
4.1	Question 20 - Fixed Number Portability				
4.2	Question 21 - Paying for the NPC provider's set-up costs				
4.3	Question 22 – Paying for the NPC provider's ongoing costs				
4.4	Question 23 – Cost Benefit Analysis				
5. Sı	1mmary25				

1. Introduction

The Phase 2 Consultation Document is a follow up to the "Public consultation on the Proposed Business Rules for Mobile Number Portability" document issued by NICTA on 20th October 2023 as the first part of a feasibility study for introducing Mobile Number Portability (MNP) in Papua New Guinea under Section 189 of the NICTA Act, 2009.

NICTA wished to consult with interested parties on the technical feasibility and functional MNP features which could be appropriate for the specific context of the PNG telecommunications market with a view to proceed with the implementation and introduction of MNP services into the PNG telecommunications market.

The purpose of the consultation was to set out the broad parameters, functional requirements and proposed timeframe that NICTA believes could guide the potential development, implementation and launch of the MNP service into the PNG telecommunications market.

Phase 1 of the public consultation comprised 19 questions. Of the 4 responses received only 1 respondent provided answers to all questions. The Phase 2 document was therefore published to request more specific feedback to the 19 questions as well as feedback to 4 additional questions which came out of the Phase 1 responses.

2. Responses to Phase 2

2.1 Stakeholder responses received

By the Phase 2 submission deadline on 31st May 2024, NICTA received four written stakeholder responses, as follows:

Date	Name	Туре	Submission
28 May	Digitec Communications (Vodafone)	Mobile operator	4 pages
30 May	ICCC	Regulator	7 pages
31 May	Digicel PNG	Mobile operator	8 pages
31 May	Telikom	Fixed & Mobile operator	5 pages

Copies of these documents can be found on NICTAs website at <u>https://www.nicta.gov.pg.</u>

2.2 Overview of the Responses

Telikom provided specific feedback to all 19 questions in its Phase 1 response and therefore its Phase 2 response focused on feedback to the four new questions (as well as clarifying a point made in its initial answer to question 12).

Vodafone on the other hand provided feedback to all 23 questions in the Phase 2 document because its initial Phase 1 response had only been high level, with little specific feedback to the questions posed.

Digicel's response to the Phase 2 Consultation included feedback to specific questions, both from the initial set of 19 questions and the new set of 4 questions, as well as an overview of its position and concerns.

The Independent Consumer and Competition Commission (ICCC) submitted a single written response which covered all 23 questions in the Phase 2 consultation document.

South Pacific International Academy (SPIA), who submitted a short email in response to the Phase 1 Consultation document, did not respond to the Phase 2 consultation.

3. Follow-up Responses to the nineteen Phase 1 questions

3.1 Question 1 – recipient or donor led

The MNP process of moving a customer's number from one provider to another can be achieved by either recipient led (the customer requests porting through the new recipient operator) or donor led (the customer porting approaches their current operator to seek permission to leave). Please state your preference and outline your reasoning?

Vodafone's comment: "Agree with NICTA comment."

ICCC's comment: "Consistent with its previous view, the ICCC supports recipient led porting which is the widely accepted practice. The ICCC is also of the view that this is pro-competitive and minimizes any potential concerns around possibility of unnecessary or intentional delays from the donor operator when customers make request for porting network."

NICTA's response to comments: We note the universal industry preference for a recipient led porting process in PNG, which is in line with international best practice.

3.2 Question 2 – centralised or decentralised porting

It is proposed that MNP is to be managed and operated in PNG through a centralised MNP system which will track all PNG mobile numbers, manage the porting process between recipient and donor operators and provides some ancillary administration functionality. This approach enables a standardised porting process to be operated across all PNG providers. Please provide your comments and views regarding this proposed approach.

Vodafone's response: "Agree with NICTA comment."

ICCC's response: "The ICCC is of the view that this is something for industry players to provide their opinion as they are better placed to know the challenges that a subscriber might potentially face in the process of switching network. The ICCC's view is that the industry should chose the option that would be less costly and efficiently provide MNP service to end-users because any associated costs are likely to be passed down the supply chain."

NICTA's comment: We note the industry's feedback on the core aspect of this question, namely whether a centralised or decentralised porting solution is preferred, is universal – a centralised solution is preferred since it offers an efficient and consistent consumer porting experience. Operator feedback on funding the NPC is covered later in the document.

3.3 Question 3 – licensing the NPC

By proposing to adopt the centralised driven MNP approach, it is proposed that the successful provider of the NPC will be licenced by NICTA to provide MNP services and will be required to contract directly with the licenced PNG operators. Please provide your comments and views regarding this proposed approach.

Digicel's comment: "a. As noted in its initial submission, Digicel does not agree that, under the Act, a central clearing house provider is required to be licensed by NICTA.

b. Part III of the Act sets out the operator licensing framework. It provides that a licence is required by a person in order to: i. exercise a facility right; ii. supply any facilities access service; iii. supply any network service; iv. supply an applications service; or v. supply a content service.

c. The terms "facilities right" and each of the other services are defined under section 4 of the Act.

d. Importantly, however, the provision of a clearing house service does not fit within the ambit of any of those definitions and, as such, a licence is not required for a person to provide such a service.

e. Digicel further notes that the clearing house provider would not provide services to or have any direct interaction with members of the public and is involved solely in the provision of services to persons who themselves would hold a valid licence.

f. In such circumstances, Digicel considers it would be beyond the power of NICTA to require a clearing house provider to obtain a licence in order to provide its services to other licensees, and would impose unnecessary costs and complexities on the industry and, ultimately, consumers."

Vodafone's comment: "As with NICTA's comment, Vodafone notes that the key element is whether there is likely to be a common interest and alignment between the NPC and licensed operators, rather than whether the NPC should be licensed. In principle, it would seem that contractual provisions should be sufficient to govern relationships between the NPC and licensed operators but NICTA may need to undertake some coordination functions."

ICCC's comment: "The ICCC appreciates that this would create a new market and business opportunity. However, it is mindful that into the future, the volume might not be sufficient and eventually, we have a single player who can control this space. Furthermore, one NPC should be allowed and required to provide clearing services for any network operator."

NICTA's response to comment: The additional feedback to this question is helpful. In summary, two of the three mobile network operators prefer the provider of the NPC not to be licensed and for contractual terms to manage the relationship with the licensees. Notwithstanding the consensus operator views on NPC licencing, we should clarify the Digicel statement that the NPC does not directly interact with members of the public is not strictly correct since where subscriber SMS validation is used in the MNP process, the subscriber will

send a validation SMS to the NPC and will receive progress update SMS messages from the NPC, delivered via the Donor network.

3.4 Question 4 – NPC location

It is proposed that the NPC may be either operated from PNG or hosted overseas. Please provide your comments and views regarding your preferred approach.

Digicel's comment: "a. Digicel is of the respectful view that NICTA's "summary" of Telikom's response to this question in its submission on the Initial Consultation Paper appears to be at odds with the content of the Telikom submission itself, which stated: "Telikom is also equally concerned about customer data security in the MNP space whether the porting center is physically located locally or overseas. Telikom's preference is for a local porting center in order for appropriate licensing by NICTA of the porting services operator however mindful of higher costs to operators relative to that of a foreign hosted porting centre." and "Telikom prefers MNP to be managed and operated in PNG through a centralized MNP system." and "A regional NPC hosted in PNG is supported for security of data considering there would be more PNG customer data to handle and risk in the process."

b. While Telikom did express concerns about minimising costs, it also appeared to place primacy on data security and local control. Telikom also proposed that public funds could be used to help meet set-up costs. This is something that Digicel would also support.

c. In any event, Digicel remains of the view that a centralised clearing house approach to number portability administration with the clearing house located inside Papua New Guinea would be likely to be appropriate."

Vodafone's comment: "Vodafone would be interested to further understand the likely tradeoff between the cost of a locally-hosted solution compared with a solution hosted overseas. If the cost is not very different, then it would seem preferable for a local solution."

ICCC's comment: "The ICCC's view would be that the arrangement that is more efficient and less costly to all parties should be accepted. This is to minimise increase in costs which can be passed on to end-users."

NICTA's response to comments: Digicel's comment about Telikom does not align with the published Phase 2 consultation document; NICTA/Cenerva did not provide a "summary" and instead copied Telikom's Phase 1 answer to Question 4 verbatim in the Phase 2 consultation.

Digicel reiterated its preference for an NPC located in PNG. Vodafone would be open to an overseas NPC if the cost saving is material which is a similar stance to ICCC and Telikom in its Phase 1 response. Our experience from a wide range of similar markets around the World suggests remote/ cloud hosted NPC solutions are significantly less expensive and can be configured to optimise porting data integrity and security. We will be pleased to provide benchmark costing data to NICTA to support NICTA's deliberations.

3.5 Question 5 – Direct or Indirect Routed

It is proposed that all fixed and mobile traffic to ported and non-ported numbers originated and terminated in PNG will be directly routed by the originating network to the terminating network using the All Call Query approach. All Call Query direct routing is widely used in MNP implementations across the world and is considered to be the most operationally efficient and reliable form of routing in MNP jurisdictions. Please provide your comments and views regarding this proposed approach.

Vodafone's comment: "Agree with NICTA comment."

ICCC comment: "Our view would be similar to the view expressed under 4 above that whatever model accepted must be the one that minimizes costs to the industry, especially the network operators. This is to achieve a 'level playing field' for the operators and affordable communication services rates for consumers."

NICTA's response to comments: Mobile operator recognition of the benefits of using the All Call Query (ACQ) routing methodology aligns with NICTAs proposal. However, cost is a concern brought up by Telikom and also flagged by ICCC.

3.6 Question 6 – Market Impact

Introducing MNP is likely to enhance competition and choice in the PNG telecommunications market. Please provide your comments about this statement.

Vodafone's comment: "Agree with NICTA comment."

ICCC's comment: "The ICCC maintains its previous comments that MNP was proven to enhance competition and benefit consumers and its introduction in PNG might not be any different. MNP would provide PNG consumers with freedom of choice of their mobile service provider and the convenience of having the same number when switching network providers. MNP would substantially eliminate the concerns around subscriber locking to network. It also would lower the costs of changing service providers and as a result gives consumers greater choice of products, services and pricing packages from a range of different providers.

If consumers are not satisfied with the services of their existing network provider, they do not have to stay just to keep their number but they are given the flexibility to switch networks anytime. They also do not have to buy a new SIM card and phone to change their network provider, they only need to port. It also eliminates other potentially anti-competitive conduct such as SIM card swapping conduct.

With MNP, competition would be enhanced because network operators would now have to compete more aggressively by offering better products, new, innovative services and packages in order to retain existing customers as well as attracting new customers. It keeps

everyone on their toes to perform and offer better services and packages (in terms of subscription plans). It is the ICCC's view that MNP is an enabler for competition. It removes barriers of customer choice and flexibility. The model accepted must be the one that does not unnecessarily hinder the customer flexibility to switch."

NICTA's response to comments: The comments received during the Phase 2 consultation support those provided during the earlier Phase 1 consultation, namely that MNP, if implemented properly, can lead to enhanced competition in the market. Importantly this is also endorsed by ICCC.

We note ICCCs comment that porting does not need a new SIM to change network provider; this is incorrect – a new SIM from the new recipient operator will be provided during the porting process. This highlights the importance of education and public awareness ahead of the commercial MNP launch.

3.7 Question 7 – set up costs

It is proposed that each operator and the successful provider of the NPC will be responsible for their set-up costs to prepare for the implementation and launch of MNP in PNG and that such set-up costs shall not be recoverable from consumers or other stakeholders. Please provide a cost estimate of set-up investment your organisation is likely to incur in preparing for the possible introduction of MNP into PNG, and your comments and views regarding this proposed approach.

Digicel's comment: "Digicel notes that Telikom's submission proposed set-up costs be met by public funding and was not "silent" on the issue as was suggested in the Second Consultation Paper. Digicel suggests that such an approach be given further consideration."

Vodafone's comment: "Vodafone has for some time looking into MNP, at the request of many customers and subscribers. From our own assessment, Vodafone is willing to pick up its own cost to facilitate MNP, as this is in the best interest of the country, the industry and its people."

ICCC's comment: "The ICCC notes the proposal that set-up costs shall not be recoverable from customers or other stakeholders. Whilst this is good for end-users as costs may not be passed on, small operators would be disadvantaged if significant set-up cost is needed. This might contribute to delay in implementing the MNP as all operators might not be ready within the required timeframe due to difficulty in meeting the set-up costs. In the normal business sense, every cost should be recovered, whether fully or partially.

Given NICTA's good intention to introduce MNP to realise the benefits of competition and removing the final barrier of consumer choice in the long term, it is fitting if the government through NICTA subsidise or fully fund the introduction and implementation of MNP.

Despite making the above comments, we understand this question is for the operators in the industry to provide their comments and their cost estimates."

NICTA's response to comments: Digicel's comment about Telikom does not align with the published Phase 2 consultation document; NICTA copied Telikom's Phase 1 answer to Question 7 verbatim in the Phase 2 consultation. Further, Telikom's comment in response to Question 2 stated "Telikom prefers MNP to be managed and operated in PNG through a centralized MNP system. Furthermore, Telikom prefers that NICTA consider public funds to help meet the high set-up costs". In other words, Telikom is asking for public funds to pay for the NPC set-up costs and not each of the mobile operator's separate MNP set-up / configuration costs. NPC set-up costs are discussed in the new Question 21 in the Phase 2 consultation.

We note that none of the mobile operators have provided a cost estimate, as requested. This will make a new cost benefit analysis more difficult.

We also note the ICCCs suggestion that government might financially support the operators with their MNP costs. This is a topic to be discussed with NICTA and then the sector Ministry and the Ministry of Finance.

3.8 Question 8 – customer porting charges

It is proposed that recipient operators will NOT be allowed to charge customers for porting their numbers at the discretion of each recipient operator. Donor operators are not permitted to charge customers for porting out numbers from their network. Please provide your comments and views regarding this proposed approach.

Vodafone's comment: "Vodafone agrees that a minimum charge can be levied so there is no abuse of this service by customers and subscribers. If the cost is high, it will defeat the purpose of this whole exercise. Vodafone may even waive these charges initially to give customers and subscribers the freedom to choose."

ICCC's comment: "Whilst recipient network might incur costs (such as administrative cost) to facilitate the switch, we believe it is in their interest to add another new subscriber. Therefore, they should not charge their potential subscribers. For the donor operator, it would be a reduction in their subscriber base; and they would not want that to happen. However, if a charge is necessary to provide seamless switch, the regulator may intervene (as proposed in the next question for donor porting charge).

Nevertheless, the overall cost to consumers for switching should not be too excessive as it can scare customers for porting anytime."

NICTA's response to comments: We note that ICCC agrees with NICTAs proposed position not to allow the recipient operator to charge the customer for porting in. Vodafone's response aligns with Digicel's Phase 1 response; both mobile operators say the recipient operator should have the ability to charge the porting customer. Telikom did not provide further input to this discussion in its Phase 2 response.

3.9 Question 9 – donor porting charge

It is proposed that donor operators shall be permitted to charge recipient operators for reasonable costs which are directly attributable to the actual efficient processing of porting requests. NICTA reserves the right to set a maximum limit to donor porting charges. Please provide your comments and views regarding this proposed approach.

Vodafone's comment: "Agree with NICTA comment."

ICCC's comment: "As noted above, the overall cost to the consumers who are switching should not be excessive to make it unattractive. If necessary, the regulator should intervene as the donor operator may excessively charge the recipient operator with the intention to increase the latter's costs. Additionally, such charge would force the donor operator to up its game to minimize not only the migration of its subscribers but also the cost of processing the migration."

NICTA's response to comment: ICCC expressed a concern that the donor operator may try to charge too high a cost to the recipient; this concern is covered in NICTAs description since it would have the ability to set a maximum charge.

With Vodafone's feedback supporting the idea of the donor porting charge, we note that all 3 mobile operators are in favour.

3.10 Question 10 – implementation timing

It is proposed that MNP will be implemented and launched to the PNG public within 20 months of the date of this consultation. Please provide your comments and views regarding this proposed approach.

Digicel's comment: "a. Digicel notes NICTA's comment that "Based on experience in other markets [24 months] is not unreasonable though NICTA may want to look at ways to get closer to the 20 months mark during the implementation."

Vodafone's comment: "Whilst Vodafone agrees that a shorter period is preferred. Our own initial assessment shows that this is possible within 6 months from the date of the Minister's decision."

ICCC's comment: "The ICCC believes the timeframe proposed should be reasonable to all parties and start from the time the final determination is made by the Minister responsible; and such time frame should not be unnecessarily delayed. The ICCC also suggests that there should be a determination (in this exercise) that any operator who is unreasonably causing the delay of the launching and implementation of MNP should be held accountable."

NICTA's response to comments: Vodafone's response that they think MNP can be implemented and launched in 6 months is too optimistic and does not align with experience

in other markets. It is good to see that the operator is keen to get through the implementation phase, but we feel that the 20 to 24-month timeline is more reasonable.

We note ICCCs comment that any operator unreasonably causing delay during the implementation phase should be held accountable; in the MNP Regulations NICTA should have the power to fine and otherwise punish any stakeholder delaying the implementation.

3.11 Question **11** – MNP Working Group

It is proposed that the implementation and preparations for the launch of MNP in PNG will be managed by a cross stakeholder working group reporting to NICTA, but NICTA shall be responsible for setting the key MNP process and functional details and implementation timeframes etc. Please provide your comments and views regarding this proposed approach.

Digicel's comment: "a. While Digicel does not object to the establishment of an industry working group to oversee the implementation of number portability should a decision be made to proceed, Digicel is concerned that NICTA is already signalling a dictatorial approach will be taken with respect to such a working group's "terms of reference, process and functional details as well as implementation timeframe etc." In Digicel's respectful view, such working groups work best when a collaborative approach is adopted.

b. Digicel further notes that the Objectives that are enshrined in section 2 of the Act requires "encouraging, facilitating and promoting industry self-regulation in the ICT industry in Papua New Guinea".

c. Digicel urges NICTA to adopt such an approach in this case and that, to the greatest extent possible, NICTA adopt a consensus-based approach towards the establishment and operation of any working group."

Vodafone's comment: "Agree with NICTA comment."

ICCC's comment: "The ICCC supports NICTA to take on this responsibility as a neutral body and regulator."

NICTA's response to comment: Digicel's comments are noted; they are correct to say that a collaborative approach to operating the Working Group is to be strived for but at the end of the day during the implementation process there will be instances where the stakeholders do not agree and NICTA may be called upon to make a final decision. Therefore, whilst the running of the Working Group will not be "dictatorial", NICTA, as guardian of consumer interests, will have authority to drive the progress of the Working Group and intervene where necessary in the case of stakeholder disputes or challenges.

3.12 Question 12 – porting times

It is proposed that all customer MNP porting requests will be completed within one working day from the date of the customer's validated and signed porting request. Please provide your comments and views regarding this proposed approach.

Telikom's response: "The Discussion Paper refers to a paragraph (number 2) of Telikom's response with regards to porting times. The comment in that paragraph was on the assumption that porting time may be allowed for certain periods of time within which the porting is to be affected; i.e. minimum and maximum time period limits. The comment is simply suggesting that customers could be encouraged to make advanced porting requests ahead of this 'maximum' time period if they need to."

Vodafone's comment: "Vodafone agrees with NICTA that there is little reason for porting times of more than 24 hours. PNG should be no different as globally this is possible well below 24 hours."

ICCC's comment: "The industry players and regulator are better placed to make a fair judgement on how long such request can be facilitated. The ICCC's view is that longer timeframes (or longer it takes to complete the porting process) can discourage switching. There should be strict timeframe with penalties for failing to comply to encourage faster and seamless switch."

NICTA's response to comments: Telikom's clarification on its Phase 1 response is appreciated; customers 'booking' a future porting time is unusual and often not allowed in other overseas markets with MNP. We would not recommend advanced "booking" of future ports since this unnecessarily complicates the porting process and may result in disruption to the consumer porting experience if their eligibility changes between the port booking and execution times.

We note that the industry is aligned with NICTA on having a speedy porting process which can be completed within one working day.

3.13 Question 13 – validation of porting requests

It is proposed that data transfer during the porting process between the recipient and donor operators is minimised to ensure an efficient and robust consumer porting experience with minimal unnecessary porting failures or rejections. It is proposed that porting data transfer will be restricted to MSISDN/ number being ported and donor operator name. Porting process security and integrity will be provided by independent customer validation for each porting request by SMS. Please provide your comments and views regarding this proposed approach.

Digicel response: "a. Digicel agrees with NICTA that the use of email is not appropriate as a validation mechanism for porting requests."

Vodafone response: "Agree with NICTA comment."

ICCC response: "The ICCC concurs that general porting process to be fast and efficient to ensure the customer is not waiting for a longer period. Furthermore, there should be less requirements and secondary validation means should be the one that everyone can do. Email validation is good but not all subscribers have email accounts.

Also, while waiting for the porting to complete, the customer should continue to use communication services on the current network. This is to minimize any discouragement to switch for fear that the longer it takes, they would be unable to have access to the services, especially calls and SMS."

NICTA comment: We note that the responses received during Phase 2 align with NICTAs position, including to only use SMS for validating each porting request. We also note the ICCCs comment about using the current network service until the port completes – this is known as 'make before break' and Cenerva endorses this approach (the alternate is 'break before make').

3.14 Question 14 – porting process

It is proposed that once a customer's porting request has been authorised by the customer, validated by the NPC and passed to the donor operator for approval, the porting request must proceed to completion unless legitimately rejected by the donor operator in compliance with the rejection reasons determined by NICTA. Once a validated porting request has been passed to the donor operator by the NPC it cannot be amended or cancelled by any party. Please provide your comments and views regarding this proposed approach.

Vodafone's comment: "Agree with NICTA comment."

ICCC comment: "The ICCC agrees with this and reiterates any network operator is found to be causing the delay unnecessarily should be held accountable. Again, all these steps should not scare customers."

NICTA's response to comment: We note that all respondents are in favour of NICTAs proposal.

3.15 Question 15 – post-paid consumers

It is proposed that post-paid consumers can port their number if the total billed and unbilled account balance is less than the deposit held by their current operator, provided their service is not barred or suspended from making outbound calls at the time the consumer's porting request is processed by the recipient operator. It is proposed that debt cannot be used to prevent pre-paid consumers porting their number. Please provide your comments and views regarding this proposed approach.

Vodafone's comment: "Agree with NICTA comment."

ICCC's comment: "The ICCC concurs that this should not be a reason for donor operator to hold back any request for porting. There are other means available to recoup genuine bills."

NICTA's response to comment: We believe the industry now understand and agree with the suggested approach to handle post-paid ports.

3.16 Question 16 – win back protection

It is proposed that once the customer's validated porting request has been passed to the donor operator by the NPC, the donor operator will not be permitted to contact the customer during the period the porting request is being processed. Once the porting request has been successfully completed, for a period of 60 calendar days the donor operator will only be permitted to contact the customer for the sole purpose of recovering any outstanding payment or debt and will under no circumstances contact the customer during this period with the purpose of soliciting the customer to return to the donor operator's network. Please provide your comments and views regarding this proposed approach.

Digicel's comment: "a. Contrary to the statements in the Second Consultation Paper, Digicel notes that there was no indication in parties' submissions on the Initial Consultation Paper that could reasonably be construed to be "industry support" in respect of NICTA's proposed approaches that were expressed in these questions.

b. Digicel further notes its position that the consideration of this level of detail be deferred until such time as a decision is made on whether or not to proceed with the implementation of number portability in Papua New Guinea and can sensibly be covered in any discussion around potential "business rules"."

Vodafone's comment: "Agree with NICTA comment."

ICCC's comment: "The ICCC is of the view that the decision to switch must left to customers at all times; and not being influenced by any network operator."

NICTA's response to comments: We are surprised by Digicel's comment that there is no indication of industry support for win-back protection; Telikom expressed its support and neither Digicel nor Vodafone expressed a concern. Therefore, we believe that saying there is industry support is perfectly valid. Digicel now say they want to discuss the matter during the Business Rules discussions as part of the implementation phase.

We note that the new responses from Vodafone and ICCC support NICTAs proposed win-back protection.

3.17 Question 17 – onward porting restrictions

It is proposed that customers will not be permitted to port their number to another operator within 60 calendar days of their previous successful porting request. Please provide your comments and views regarding this proposed approach.

Digicel's comment: "a. Contrary to the statements in the Second Consultation Paper, Digicel notes that there was no indication in parties' submissions on the Initial Consultation Paper that could reasonably be construed to be "industry support" in respect of NICTA's proposed approaches that were expressed in these questions.

b. Digicel further notes its position that the consideration of this level of detail be deferred until such time as a decision is made on whether or not to proceed with the implementation of number portability in Papua New Guinea and can sensibly be covered in any discussion around potential "business rules"."

Vodafone's comment: "Agree with NICTA comment."

ICCC's comment: "The ICCC concurs. Another way to treat this is, any request from the same number before the expiry of such period as determined should not be processed by either operator."

NICTA's response to comments: We are surprised by Digicel's comment that there is no indication of industry support for onward porting restrictions; Telikom expressed its support and neither Digicel nor Vodafone expressed a concern. Therefore, we believe that saying there is industry support is perfectly valid. Digicel now say they want to discuss the matter during the Business Rules discussions as part of the implementation phase.

We note that the new responses from Vodafone and ICCC support NICTAs proposed onward porting restrictions. Picking up on ICCCs feedback, in practice the NPC will be configured so that any ported number that applies to re-port within the 60 day timeframe will be rejected when the initial porting request is made and before the porting request is passed to the donor.

3.18 Question 18 – real time porting

It is proposed that only real-time porting of customer numbers will be allowed and customers will not be able to defer or delay porting requests to later dates. Please provide your comments and views regarding this proposed approach.

Digicel's comment: "a. Contrary to the statements in the Second Consultation Paper, Digicel notes that there was no indication in parties' submissions on the Initial Consultation Paper that could reasonably be construed to be "industry support" in respect of NICTA's proposed approaches that were expressed in these questions.

b. Digicel further notes its position that the consideration of this level of detail be deferred until such time as a decision is made on whether or not to proceed with the implementation of number portability in Papua New Guinea and can sensibly be covered in any discussion around potential "business rules"."

Vodafone's comment: "Agree with NICTA comment."

ICCC's comment: "The ICCC concurs with this. The main aim of MNP is to encourage effective competition; hence porting should be real-time to ensure this is achieved."

NICTA's response to comments: We are surprised by Digicel's comment that there is no indication of industry support for real time porting; Telikom expressed its support and neither Digicel nor Vodafone expressed a concern. Therefore, we believe that saying there is industry support is perfectly valid. Digicel now say they want to discuss the matter during the Business Rules discussions as part of the implementation phase.

We note that the new responses from Vodafone and ICCC support NICTAs proposal for real time porting.

3.19 Question 19 – multiple customer number ports

It is proposed that the porting process will allow the porting of multiple customer numbers within a single porting request (where "multiple number" is defined as two or more numbers belonging to the same customer account), both contiguous and non-contiguous number ranges, to support the efficient porting of multiple number blocks. Please provide your comments and views regarding this proposed approach.

Digicel's comment: "a. Contrary to the statements in the Second Consultation Paper, Digicel notes that there was no indication in parties' submissions on the Initial Consultation Paper that could reasonably be construed to be "industry support" in respect of NICTA's proposed approaches that were expressed in these questions.

b. Digicel further notes its position that the consideration of this level of detail be deferred until such time as a decision is made on whether or not to proceed with the implementation of number portability in Papua New Guinea and can sensibly be covered in any discussion around potential "business rules"."

Vodafone's comment: "Agree with NICTA comment."

ICCC's comment: "The ICCC supports this proposal based it its view that separate request and porting process for each number, particularly for corporate customers, would be costly and time consuming, which can hinder them from switching. As stated elsewhere, the porting process should be efficient for processing request for one customer regardless of the number of phone numbers." **NICTA's** response to comments: We are surprised by Digicel's comment that there is no indication of industry support for multiple customer number ports; Telikom expressed its support and neither Digicel nor Vodafone expressed a concern. Therefore, we believe that saying there is industry support is perfectly valid. Digicel now say they want to discuss the matter during the Business Rules discussions as part of the implementation phase.

We note that the new responses from Vodafone and ICCC support NICTAs proposal for multiple customer number ports.

4. New Phase 2 Questions

Further to the feedback received during Phase 1, NICTA added four new questions to the Phase 2 consultation. All four stakeholder responses provided feedback on the new questions (though Digicel only discussed the NPC set-up costs).

4.1 Question 20 - Fixed Number Portability

Question 20

Are you in favour of introducing Fixed Number Portability (FNP) in PNG and if you are would you prefer it be implemented in parallel with MNP or separately? Please provide your comments and views regarding your preferred approach.

Digicel's comment: "a. Digicel is concerned that the question asked is whether respondents are "in favour of introducing Fixed Number Portability (FNP) in PNG and if you are would you prefer it be implemented in parallel with MNP or separately.

b. By posing the question in such a way, it appears that NICTA is putting the question of fixed number portability to a popular vote rather than considering it objectively in the context of the criteria specified in the Act, including an analysis of the costs and benefits of its implementation.

c. In Digicel's submission, a technology neutral approach to the consideration of the introduction of number portability would require the inclusion of both fixed and mobile number portability. Similarly, any cost-benefit take into account the significant synergies and consumer benefits that arise from introducing fixed number portability at the same time as mobile number portability.

d. Digicel also stands behind its statement in its submission on the Initial Consultation Paper that "recent implementation experience in the Caribbean indicates that the introduction of both fixed and mobile number portability at the same time is becoming the norm". This is evidenced by the information contained in Figure 2 of the Second Consultation Paper that shows the four most recent implementations of number portability in the Caribbean to include both fixed and mobile numbers. It is disappointing that NICTA has chosen to quote and rely upon a "precis" statement in the conclusion of Digicel's submission rather than the substantive submission on the issue that was contained in the body of the document.

e. Digicel further notes that the countries mentioned in Figures 1 and 2 of the Second Consultation Paper reflect only a relatively small subset of the countries that have introduced number portability. For example, in Europe, the vast majority of countries have implemented mobile number portability and in every one of those cases, fixed number portability has also been implemented.

f. Finally, Digicel submits that the question of whether fixed number portability should be introduced in Papua New Guinea should be determined on the basis of the statutory criteria and whether the net benefits of introducing it at the same time as mobile number portability would be greater than the net benefits of either introducing it at a later date or not introducing it at all."

Telikom's comment: "The discussion paper tabulated countries that have not yet deployed FNP after having launched MNP for several years already; i.e. 61% in non-Asia Pacific countries as tabulated. No Pacific Islands nations have yet to introduce MNP in their markets. There are also several countries that have launched FNP some time after MNP was launched in their markets and that some countries have simultaneously launched both MNP and FNP. The NICTA discussion paper seems to highlight the view which strongly supports the proposition to launch both MNP and FNP simultaneously citing those countries that did. It would be useful if the reasons why those countries that did not allow FNP to be launched in their respective markets are also provided.

Telikom considers, the argument implied, that because there exists a duopoly of sorts in a few countries that launched FNP and MNP simultaneously so this can be done in PNG, seems insufficient to support the proposition. Fixed line telephony infrastructure hence number utilization in some of the countries mentioned (eg Telecom Malaysia) are greater compared to number utilization in PNG. It should also be noted that there is also some competition in the fixed line telephony market whereas in PNG, Telikom is the only provider of fixed telephony services using geographic numbers nationwide; and taking into consideration the large differences in number utilization compared to mobile telephony service hence any regulatory intervention should be applied with caution such that the fixed line telephony market is not affected adversely. In comparison, the case for MNP in this regard is now asserted hence the mobile telephony service market is deemed ready for MNP to be implemented. Telikom therefore considers that the funds that may be used for a desired FNP service, should be used on the fixed telephony service/infrastructure; and that regulatory attention should be levelled more at mobile and broadband services.

In conclusion Telikom appreciates that customer preferences in switching of operators hence mobile and fixed portability services is a way of enhancing and improving the level of competition which could also work in favor of the providers of fixed line telephony service providers. However, Telikom prefers that FNP should be delayed by at least 5 years from the launch of MNP to allow the implementation of MNP provide the experience for all stakeholders to prepare for FNP and to avoid any detriments to the fixed service market and players."

Vodafone's comment: "In principle, Vodafone notes that fixed number portability would be desirable for similar reasons as for mobile number portability. However, given the limited number of fixed geographic numbers actually in use in PNG, the limited utility of fixed geographic numbers (noting that most lines are used to provide broadband services) and the possibility of additional costs, Vodafone recommends that this be further investigated as part of the update of the cost-benefit analysis (see response below)."

ICCC's comment: "Whilst industry regulator and players would be in a better position to comment on any technical challenges and benefits of FNP, the ICCC's view is that general telephony market has already been exposed to competition; hence all aspect of the market should be opened up for number portability. This would put competitive pressure on everyone

to improve service quality with the aim to minimize their customers porting to another network; and also attract new subscribers/customers.

Nevertheless, the ICCC is also mindful of the likelihood of increasing cost to the industry of running them parallel compared to running MNP first. If they are not implemented in parallel, there would be benefit to take any lessons learnt into FNP as this is the first time to implement number portability in PNG."

NICTA's response to comments: We are disappointed with Digicel's comment that "It is disappointing that NICTA has chosen to quote and rely upon a "precis" statement in the conclusion of Digicel's submission rather than the substantive submission on the issue that was contained in the body of the document." The precis statement is all that is needed to introduce the new question and, as Digicel is fully aware, other stakeholders can read all the Phase 1 responses in full on NICTAs website. The question 20 text was drafted in a neutral manner and there is no justification for the Digicel assertion that NICTA has put the FNP issue to a "popular vote" or attempted to steer respondent responses. The question clearly requests respondents to provide their views on the clear options that could be considered.

Further, Digicel complains that "the countries mentioned in Figures 1 and 2 of the Second Consultation Paper reflect only a relatively small subset of the countries that have introduced number portability." We believe the approach taken, namely to provide both regional benchmarks and recent NP launches globally, is more than adequate to indicate trends overseas for the reader.

Despite a long response to this question, frustratingly Digicel did not provide its feedback on whether FNP might be launched in parallel or separately to MNP.

We note Telikom's concerns about launching FNP and the suitability of international benchmarks; if FNP is going to be launched in PNG, waiting for 5 years after the launch of MNP seems, on the face of it, too long. That being said, Telikom argues that PNG is not ready for FNP today and there would be limited consumer benefit – we tend to agree with this. In many recent implementations of number portability across developing markets, Regulators have opted to progress with mobile number portability alone due to the potential stronger immediate market and consumer benefits.

Vodafone raises possible cost concerns around an FNP service due to limited numbers in service.

We note ICCCs preference for MNP to be launched first and lessons learnt to be used to improve a subsequent FNP implementation.

In summary there appears to be little explicit support for implementing MNP and FNP simultaneously.

4.2 Question 21 - Paying for the NPC provider's set-up costs

Question 21

It is proposed that the initial set-up costs incurred by the centralised MNP clearinghouse platform provider are simply shared equally amongst the licensed mobile network operators at that time. Please provide your comments and views regarding this proposed approach.

Digicel's comment: "a. Subject to further investigation of Telikom's proposal that public funds could be used to help meet set-up costs, Digicel remains of the view that central clearing house provider charges (both set up and ongoing operational charges) should be shared equally by all operators (including any new entrants) regardless of the number of ports.

b. Digicel further notes its expectation that central clearing house provider charges are unlikely to be material in the context of overall costs faced by each operator and that the cost of managing any "usage" based cost allocation is likely to outweigh any benefits of perceived fairness which would be uncertain in any event."

Telikom's comment: "Telikom supports in principle the idea that the initial set-up costs of MNP Clearing House platform should be shared."

Vodafone's comment: "Vodafone notes the proposal of Digicel that each party bear an equal share of the fixed setup costs of the portability service provider. Digicel's argument is that cost recovery should proceed on the basis of cost causation (i.e. as each mobile network operator has accused the cost to be incurred, each network should share the cost equally).

Vodafone's view is that in determining reasonable cost recovery, it is also relevant to consider the beneficiaries of MNP and the concept of 'beneficiary pays'. In that light, while Vodafone and its customers are likely to be a beneficiary of the introduction of MNP, it is also evident that the increase in competition resulting from MNP will benefit all customers, regardless of network and regardless of whether they actually switch and use MNP. Furthermore, and as argued by Buehler, Dewenter & Haucap, there are other benefits:

* to all customers (including those of Digicel) who place calls to ported numbers, as without MNP these customers would have to bear additional costs when calling switching customers (e.g. updating address books), and

 \ast to all customers that value the stronger property rights that MNO affords their favoured mobile number.

In that light, Vodafone notes that a beneficiary pays approach would suggest that a more reasonable approach to the allocation of NPC costs would also consider the number of subscribers served by each mobile network. That would better reflect the significant benefits that Digicel's customers are likely to enjoy from the introduction of MNP, even if they do not switch. Moreover, such a cost allocation approach would also be more equitable to Vodafone, which has a far smaller base of subscribers over which to spread the fixed NPC costs. Also, with beneficiary pay approach, it's up to the network operators if they would levy this or not. Vodafone may waiver this at least initially to give the customers and subscribers freedom of choice."

ICCC's response: "The ICCC is of the view that its response to Q7 also applies here; i.e. NICTA should assist in the set-up cost as delay in funding from operator's part can affect the implementation of MNP."

NICTA's response to comments: As discussed elsewhere, there are comments about whether the Government should provide financial assistance; if we put that to one side, the industry is split on how to apportion the NPC set-up costs. Digicel and Telikom are in favour of a simple equal sharing of the costs whereas Vodafone supports splitting costs by mobile market share. The Vodafone rationale for splitting NPC costs by market share may have misinterpreted the objective of this question which purely relates the allocation of the NPC set-up costs and not the on-going post launch NPC operating costs which is addressed by question 22.

We suggest NICTA finalises the extent to which Government might cover some / all the costs before having further dialogue on this question.

4.3 Question 22 – Paying for the NPC provider's ongoing costs

Question 22

Would you prefer that ongoing operational costs incurred by the NPC provider are invoiced based on actual usage, shared equally or some other basis (please specify)? Please provide your comments and views regarding your preferred approach.

Telikom's comment: "Telikom suggests that the ongoing costs incurred by the NPC could be based on "actual usage"."

ICCC's comment: "The industry participants can provide technical comments on this question. The ICCC's general view is to accept the option that has a dimension to put competitive pressure on the network operators. Consistent with this view, the ICCC believes the actual usage approach as this is likely to put pressure on the potential donor operator to game up to minimize migration; hence minimizing its costs and charges.

NICTA's response to comments: As Digicel responded to Question 21, it supports equally sharing the NPCs ongoing costs among the 3 mobile operators. Telikom and ICCC in contrast support apportioning ongoing costs based on actual usage; Vodafone did not provide a response to this question. As noted in our assessment of respondent responses to question 21, we believe that Vodafone may have addressed the allocation of on-going post launch NPC operating costs in its response.

We suggest NICTA finalises the extent to which Government might cover some / all the costs before having further dialogue on this question.

4.4 Question 23 – Cost Benefit Analysis

Question 23

Are you in favour of NICTA updating the cost benefit analysis undertaken during the initial consultation process in 2017? Please provide your comments and views regarding your preferred approach.

Digicel's comments: "a. As Digicel stated in its submission on the Initial Consultation Paper, cost benefit analysis is a statutory requirement in Papua New Guinea and is clearly set out in section 189 of the Act which governs the process NICTA must follow when seeking to introduce any form of number portability.

b. Digicel therefore welcomes NICTA's apparent intention to undertake a cost benefit analysis as part of the current proceeding and, subject to it being expanded to include the costs and benefits of fixed number portability, has no objection to the cost benefit analysis that was undertaken in 2017 being used as a starting point for it."

Telikom's comment: "Telikom prefers that NICTA updates the CBA undertaken in 2017. The obvious reason for Telikom is that Telikom has restructured since then and the costs identified then have changed."

Vodafone's comment: "Vodafone largely agrees with the position of NICTA that:

* in the period since the original CBA was undertaken, the economics of implementing and operating an MNP clearinghouse have materially changed which should only make a new CBA more supportive for number portability.

* there have been structural changes to the PNG mobile network operator sector and NICTA is minded to update the CBA exercise already undertaken in 2017.

Vodafone also considers the adoption of a joint mobile-fixed portability solution should be considered as part of the CBA process, as Vodafone understands that centralised solutions can handle portability for both kinds of numbers."

ICCC's comment: "The ICCC leaves this to the regulator and industry players to agree on a way forward. The ICCC's general view is that introduction of MNP is pro-competitive; and that in itself is already a huge benefit. If the aim of conducting CBA would be to determine that if cost outweighs benefit, there would be no implementation of MNP. The ICCC believes this consultation would be a waste of everyone's time. Consistent with this, the ICCC believes the revision of the CBA should have been done before this consultation."

NICTA's response to comments: Digicel wants the cost benefit analysis (CBA) to include both MNP and FNP. The core topic of the public consultation, as per Section 189 of the NICTA Act, is MNP and any new CBA is required to focus on MNP. Vodafone suggests a joint mobile-fixed portability solution be considered which has some merit; since a new CBA could highlight the NPC costs for both a standalone MNP service and a joint MNP/FNP service.

Overall, all 3 mobile operators are in favour of a new CBA. ICCC comments that the CBA should have been redone prior to this consultation process.

5. Summary

The "Response to Comments Report" for Mobile Number Portability (MNP) in Papua New Guinea summarizes stakeholder feedback from the two phases of public consultations held by NICTA. The document captures viewpoints from key telecom operators (Digicel, Telikom, Vodafone) and ICCC, on various aspects of MNP's potential implementation, addressing technical feasibility, cost considerations, and operational frameworks.

Key Points and Stakeholder Positions:

- 1. **Centralized Recipient-Led Porting**: Stakeholders generally supported a centralized, recipient-led model for porting, which aligns with international standards for MNP, aiming for an efficient and streamlined process.
- 2. **NPC Licensing and Location**: Opinions varied on whether the NPC (centralized porting center) should be licensed by NICTA. While some preferred a local setup for better control and data security, others were open to overseas hosting if it reduced costs.
- 3. **Cost Allocation**: There were divergent views on financing the NPC setup and ongoing operational costs. Digicel and Telikom suggested equal cost-sharing among operators, whereas Vodafone advocated a market-share-based approach, citing equity due to its smaller subscriber base. Some stakeholders also raised the potential for government assistance to offset setup expenses.
- 4. **Fixed Number Portability (FNP)**: While stakeholders acknowledged FNP's potential benefits, there was limited support for introducing it alongside MNP. Most preferred a phased approach, prioritizing MNP implementation first.
- 5. **Updated Cost-Benefit Analysis (CBA)**: All stakeholders agreed on the need to update the 2017 CBA to reflect current market conditions, especially given structural changes in the telecom sector. Suggestions included examining the benefits of implementing both MNP and FNP to support long-term competition and consumer choice.
- 6. **Implementation Timeline**: Vodafone was optimistic about a six-month timeline, while other stakeholders and NICTA proposed a more realistic 20-24 months based on international experience.

The public consultation for MNP Implementation phase I and II responses from all stakeholders, reflects a broad consensus on MNP's potential to enhance consumer choice and competition in PNG, though the comments came with varied opinions on its operational details, cost distribution, and timeline. Stakeholders largely support NICTA's phased and collaborative approach, recommending government consideration for partial funding, especially for setup costs, to ensure a smoother transition.