



## **MOBILE NUMBER PORTABILITY**

### **Public consultation on the Proposed Business Rules for Mobile Number Portability – Phase 2**

*Issued on 29<sup>th</sup> April 2024*

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## **1. Introduction**

This 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 20<sup>th</sup> 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 wishes to consult with interested parties on the technical feasibility and functional MNP features which are 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 this consultation is 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.

### **1.1 Consultation**

NICTA invites interested parties (“Respondents”) to provide their input and comments (the “Reply Responses”) with respect to the issues raised in this Phase 2 Consultation Document, including the Proposal and/or any other issues of relevance to the introduction of MNP into the PNG market. In section 3 of this document the Initial Responses to the 19 questions raised in the Phase 1 document are summarised and, where appropriate, NICTA has added further comment/feedback/guidance. In section 4 of this document Respondents are asked to provide their comments on five new questions.

As part of the public consultation process, NICTA and/or its Consultants may meet with Respondents that have submitted Reply Responses to review and discuss their Reply Responses in greater detail.

At the conclusion of this consultation process, NICTA will draft its report for the Minister outlining its assessment of the technical and market feasibility of the proposed MNP service and where appropriate detailing the framework, functional requirements and timeframe for the implementation and operation of a potential PNG MNP service. In reaching its decision, NICTA shall take Respondents' input and comments into account.

### **1.2 Consultation Process**

This Phase 2 Consultation Document, along with all referenced Government and NICTA documents, is available on NICTA’s website at <https://www.nicta.gov.pg>

Respondents who wish to express opinions on this Phase 2 Consultation Document are invited to submit their Reply Responses in electronic form to NICTA to facilitate further distribution and posting on NICTA’s website.

The Consultation Process is structured in two phases. In the first phase, Respondents submitted their Initial Responses on the Consultation Document. In this second phase, Respondents may submit Reply Responses to comment on the Initial Responses of other Respondents in whole or part.

The filing deadline for Reply Responses is no later than COB local time on **May 27, 2024**.

Responses filed in relation to this Phase 2 Consultation Document may be submitted to the following E-mail address: [consultationsubmission@nicta.gov.pg](mailto:consultationsubmission@nicta.gov.pg).

NICTA welcomes all Responses on the Phase 2 Consultation Document. NICTA invites Respondents to provide responses to the specific numbered questions set out in this Consultation Document (the "Consultation Questions") and any other issues Respondents consider relevant.

NICTA encourages Respondents to support all Responses with relevant data, analysis, benchmarking studies and information based on the national situation or on the experience of other countries to support their comments. NICTA may give greater weight to Responses supported by appropriate evidence. In providing their comments, Respondents are requested to indicate the number of the Consultation Question(s) to which each comment relates. Respondents are not required to comment on all Consultation Questions. NICTA is under no obligation to adopt the comments of any Respondent.

Copies of all comments submitted by Respondents in relation to this Phase 2 Consultation Document will be published on NICTA's Public Register consistent with the requirements on NICTA under subsection 229(3) of the NICTA Act. Additional procedural information is set out in the *Guidelines on the submission of written comments to public consultations and public inquiries*, which are available on NICTA's Public Register. With a view to having as open a public consultation process as practical, NICTA encourages Respondents to structure their Responses not to include any confidential information.

If necessary, Respondents may submit Responses that include claimed confidential information in the form of two Responses:

- Redacted Response - In this document any claimed confidential information would be excluded. The other comments and information, not claimed as confidential, would be included in this version. This is the public version document that would be posted on NICTA's website;
- Confidential Response – This document would be identical to the Redacted Response, except that this version would also include the claimed confidential information for the use of NICTA. This document would not be posted on NICTA's website.

Claims of confidentiality will be determined by NICTA on a case-by-case basis, and in compliance with the requirements set out in Section 44 of the Act and the Determination regarding the Disclosure of Confidentiality Information (No 1 of 2011).

### 1.3 Overall Timeline

The table below summarizes the timeline for the remainder of this consultation process and the subsequent decision-making and implementation process.

Event	Date
NICTA issues Phase 2 Consultation Document	<b>April 29, 2024</b>
Reply Responses from Respondents	<b>May 27, 2024</b>
NICTA Assessment of Reply Responses	<b>July 8, 2024</b>
NICTA Report to the Minister	<b>August 8, 2024 (estimate)</b>

## **2. Initial Responses to Phase 1**

### **2.1 Stakeholder Responses Received**

By the Phase 1 submission deadline on 29<sup>th</sup> December 2023, NICTA received four written stakeholder responses, as follows:

Date	Name	Type	Submission
3 November	S. Pacific Int. Academy	School	1 page
23 November	Digitec Communications	Mobile operator	1 page
28 December	Digicel PNG	Mobile operator	7 pages
28 December	Telikom	Fixed & Mobile operator	8 pages

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

### **2.2 Initial Responses**

Telikom was the only Respondent that provided specific feedback to all 19 questions in the Phase 1 Consultation document as well as a cover letter.

Digicel, as well as submitting a cover letter, provided general feedback to several areas within the Phase 1 Consultation document but did not make specific reference to a question(s); in Section 3 of this document NICTA has therefore had to use judgment when allocating Digicel's comments against the 19 questions.

Vodafone only delivered a one page letter; NICTA has therefore had to use judgment when extracting text from the letter and allocating it against the 19 questions.

South Pacific International Academy (SPIA) submitted a short email in response to the Phase 1 Consultation document; NICTA has used judgment when extracting text from the email and allocating it against the 19 questions.

### 3. Initial 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?

**Telikom** response: "Recipient-led MNP process appears to be the standard industry best practice... Telikom prefers Recipient-led MNP process and agrees with the reasons stated in the discussion paper."

**Digicel** response: "Consistent with industry practice in other jurisdictions, Digicel considers a 'Recipient Led' approach to number portability is likely to be appropriate in Papua New Guinea."

**NICTA** comment: NICTA notes the industry's 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.

**Telikom** response: "Telikom anticipates the set-up cost is relatively higher than alternate methods or configurations such as Peer-to-peer/Decentralized solutions. Telikom prefers MNP to be managed and operated in PNG through a centralised MNP system. Furthermore, Telikom prefers that NICTA consider public funds to help meet the high set-up costs."

**Digicel** response: "Digicel considers a centralised clearing house approach to number portability administration with the clearing house located inside Papua New Guinea is likely to be appropriate. In our view, such an approach is likely to provide the most competitively neutral outcomes and is likely to be relatively straightforward to implement."

**NICTA** comment: NICTA notes the industry's preference for a centralised MNP clearinghouse solution in PNG and Telikom's suggestion to use public funds to help offset high set-up costs. In most markets globally, Regulators consider supporting and funding NP as a regulated obligation on licensed operators, similar to paying spectrum, numbering and licence fees. Consequently, in most markets, Regulators mandate that NPC set-up and operating costs are funded by the licensed operators and not from public funds.

### 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.

**Telikom** response: "Telikom prefers licensing the NPC provider under an arrangement where the NPC provider can under an appropriate contractor arrangement with the mobile operator(s). 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."

**Digicel** response: "Digicel does not agree that, under the National ICT Act, a central clearing house provider is required to be licensed by NICTA and that any contractual arrangements are made directly between the central clearing house provider and relevant licensees."

**NICTA** comment: NICTA notes the industry's preference for the provider of the NPC to contract directly with the licensed PNG operators.

With regard to NPC licensing, NICTA understands that in some markets Regulators do license NPC providers but in other markets licensing is not pursued. Licensing of the NPC can enable Regulators to align the regulation of both the NPC provider and licensed operators to optimise the oversight of the NP service. In other markets, NPC licensing is either not permitted or not considered necessary. NICTA is open-minded on the question of NPC licensing and would welcome further thoughts from all stakeholders in this regard.

### 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.

**Telikom** response: "Telikom prefers that the best arrangement that attracts the minimum costs to operators, in particular to the smaller operators. Telikom also prefers that if hosted overseas, data security needs to be adequately guaranteed."

**Digicel** response: "Digicel considers a centralised clearing house approach to number portability administration with the clearing house located inside Papua New Guinea is likely to be appropriate."

**NICTA** comment: Telikom's preference is a solution hosted overseas, if data security concerns are addressed, because it is cheaper whereas Digicel's preference is a locally hosted solution. NICTA would welcome Vodafone's thoughts on this point.

### 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.

**Telikom** response: "Telikom considers that direct routing should be the preferred best option in the recipient led MNP process as 'it eliminates the reliance on the donor service provider and the associated headaches that can come from routing inefficiency, costs and management.' Telikom however notes that ACQ is a relatively costlier option to start up and operate."

**Digicel** response: "Consistent with the approach that has been adopted in many other jurisdictions in the region and for the reasons articulated in the Consultation Document, Digicel considers an "All Call Query" approach to traffic routing is likely to be appropriate in Papua New Guinea."

**NICTA** comment: NICTA notes the industry's preference for using the All Call Query (ACQ) approach to call routing when MNP is implemented in PNG; Telikom's concern about cost is also recognised.

### 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.

**Telikom** response: "Telikom agrees that MNP provides for the opportunity for improvement in competition and choice in the telecommunications market. How MNP is actually set up and implemented needs to be carefully planned/designed and carried out so that the opposite effect is avoided."

**Vodafone** response: "As Mobile Number Portability emerges as a pivotal factor in this dynamic environment, offering customers the freedom to change providers without the inconvenience of altering their phone numbers is a key and essential move to guarantee customer satisfaction. The implementation of MNP also contributes to economic growth by fostering a more dynamic and efficient telecommunications sector. Increased competition often leads to reduced prices, improved service quality, and greater investment in network infrastructure, benefiting both consumers and the broader economy."

**SPIA** response: "a) Companies that find themselves being forced to pay extra fees at random can select a different provider. The case in point is last month's overnight price doubling by Telikom/Bmobile in their monthly plan for K32/month to K75/month. There was no warning to consumers; however in an instantaneous moment, our school was forced to re-write our

phone budget. If MNP was in effect, we could have changed providers without having a massive change in our documentation, both public and private. b) MNP increases competition within the market. The monopoly was broken in 2006 with the introduction of Digicel; however MNP continues to hold customers to one provider or another out of fear of losing their contacts. c) Businesses will be able to operate their phones more effectively. Many published phone numbers are no longer in effect due to the company having to change their numbers quickly.”

**NICTA** comment: NICTA notes the industry’s varied responses which all agree with the premise that introducing MNP in PNG is likely to enhance competition and consumer choice in the telecommunications market.

### 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.

**Telikom** response: “Telikom notes the MNP set-up investment cost estimates that NICTA consultants produced in 2017 which amounted to USD 7 million for both Bmobile and Citifon for that time under the then corporate arrangements. Telikom considers these estimates as a guide for the time being while detailed estimates are yet to be finalised.”

**Digicel** response: “Digicel considers the following approach for cost allocation mechanism is likely to be appropriate in Papua New Guinea: a) each operator covers its own set up costs in relation to the implementation and launch costs of number portability and any operational costs associated with inbound porting of numbers; b) operational costs of outbound porting may be recovered by the donor network from the recipient network through an approved 'porting charge'; and c) central clearing house provider charges (both set up and ongoing operational charges) are shared equally by all operators (including any new entrants) regardless of the number of ports.

In Digicel's submission, such an approach is likely to strike a fair balance between ensuring: a) incentives for cost minimisation are maximised; b) all market participants, including new entrants, pay their fair share of the costs of establishing and operating common number portability systems; c) donor operators are able to cover the reasonable costs of customers porting out of their networks; and d) competitive neutrality is maintained.”

**Vodafone** response: “Vodafone is willing to bear the cost of MNP deployment and implementation required on the Vodafone PNG network infrastructure.”

**NICTA** comment: NICTA notes that all three mobile operators are either supportive or silent on the suggestion that each is responsible for its own MNP set-up costs. NICTA would welcome

each operator's estimate on their set-up costs to prepare for MNP. In response to Telikom's reference to the USD 7 million estimate in the 2017 consultation, NICTA notes that Telikom now has a newer single mobile core network and therefore, it is to be hoped, Telikom's MNP set-up costs will be lower.

Digicel suggests that the set-up costs for the NPC operator be shared equally among the mobile operators. Please see section 4.2 for a discussion on this.

### 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.

**Telikom** response: "Telikom recommends that NICTA being the regulatory body should be the determiner of Porting Charges to avoid price discrimination behaviour by mobile network operators. Telikom also notes that 'not permitting donor operators to charge customers for porting out' is already a regulatory bias and in favour of the recipient network operator. This is considering the fact that competition is still currently in favour of the dominant market player, Digicel, already leaving the Telikom and Vodafone at a losing advantage. Telikom prefers that the donor operator apply a charge on the recipient operator at a reasonable rate determined by NICTA."

**Digicel** response: "Digicel also considers that the donor network operator should not be able to charge customers directly for porting their number out of the network. However, recipient network operators should be permitted (should they wish to do so) to charge customers for porting their number into the recipient's network."

**NICTA** comment: NICTA notes that Digicel believes the recipient operator should be allowed to charge the customer for porting in; NICTA would welcome Telikom's and Vodafone's views on this.

### 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.

**Telikom** response: "Telikom supports the proposal that donor operators be permitted to charge recipient operators for reasonable costs attributed to efficient processing of porting requests. Telikom understands that NICTA will share details of costs and methods to

determine maximum limit to donor porting charges with the operators for their input before making the final determination.”

**NICTA** comment: NICTA notes the industry’s preference for having a donor porting charge which is payable by the recipient operator; Telikom covers this point above and Digicel makes reference to it in answer to Question 7.

### 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.

**Telikom** response: “Telikom prefers that in principle all operators must thoroughly prepare [including acquiring of funding] for the implementation. Telikom therefore considers that a minimum of 24 months is preferred after the conclusion of the consultation before implementation of MNP. For avoidance of doubt, Telikom prefers that the conclusion of the consultation refers to the date the Minister makes a response to NICTA’s report.”

**Digicel** response: “Based on our understanding of experiences in other jurisdictions, we are of the view that at least two years would be required to implement number portability in Papua New Guinea. We are also of the view that any implementation timing must commence from the time a decision is made by the Minister to accept a recommendation from NICTA to introduce number portability, and not from the ‘conclusion of consultation’ as has been proposed in the Consultation Paper.”

**NICTA** comment: NICTA notes the same response from both Telikom and Digicel on the proposed implementation timing, i.e. 24 months from the Ministerial decision. Based on experience in other markets this is not unreasonable though NICTA may want to look at ways to get closer to the 20 months mark during 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.

**Telikom** response: “Telikom agrees in principle that there needs to be MNP working group (MNPWG) that among other functions is to oversee the actual implementation and launch of MNP. Telikom requests that the terms of reference of the MNPWG be disclosed to stakeholders and agreed by each stakeholder formally. Key MNP processes and functional details and implementation timelines must first be agreed formally by stakeholders before NICTA formally directs them into effect.”

**NICTA** comment: NICTA notes there are no industry objections to the creation of the cross stakeholder MNPWG to oversee the MNP implementation. The MNPWG terms of reference, process and functional details as well as implementation timeframe etc will be shared with the operators and discussed but the final decision will be NICTAs.

### 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** response: "Telikom prefers that 24 hours can be the minimum length of time to complete a porting request. Telikom understands that depending on the number of porting requests being processed at one time a request may take longer than 24 hours.

Customers should be encouraged to make a porting request ahead of a maximum period of time before the go-live date/time. For the avoidance of confusion, this does not imply that a porting request is made and accepted by the recipient operator after which the customer requests the recipient operator to actually implement the request later. It is preferable that a customer gives the notice within a reasonable time in advance."

**NICTA** comment: Telikom's preference for 24 hours to be the minimum porting time runs contrary to international best practice and NICTAs proposal for all porting requests to be completed within one working day. Once a fully automated system is operational at all mobile operators, there is no reason why NICTAs target cannot be met, even exceeded in many cases. NICTA would welcome Digicel's and Vodafone's thoughts on this point.

Furthermore, NICTA does not understand the second paragraph in Telikom's response and would welcome further discussion on this in order to ensure Telikom's views are considered.

### 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.

**Telikom** response: "Telikom considers the security of confidential customer data is very important and that very minimum amount of such data be exchanged for porting information verification and validation purposes. Telikom supports the customer data transfer for verification/validation purposes between donor and recipient operator must be minimised to

MSISD, Customer confirmation via SMS/Email and Donor operator's name. Telikom supports the use of secondary customer validation mechanism such as SMS and email.”

**NICTA** comment: NICTA notes there are no industry objections to the transfer of minimal data between the donor and recipient operator during the porting process.

NICTA is not inclined to include email as a secondary customer validation mechanism because it should not be necessary since all porting subscribers have an active mobile account. Most markets internationally do not use email during the porting process since email validation does not demonstrate the person requesting mobile porting is in possession of the number to be ported, unlike validation by SMS. This is a key security feature of successful best practice NP services.

### 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.

**Telikom** response: “Telikom supports simple and secure MNP process. Telikom understands that all operators through the MNP Working Group will have a say in what should be a legitimate reason for a donor operator rejecting a porting request.”

**NICTA** comment: All valid reasons for a donor operator rejecting a porting request will be discussed in the MNPWG, approved by NICTA and then formalised in the Business Rules.

To be clear, the process, as outlined in the Phase 1 consultation document, means that the customer cannot cancel the port once their validated porting request has been passed to their donor operator by the NPC.

### 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.

**Telikom** response: “Telikom prefers that post-pay customers address their debt situation before their port out requests are accepted. Telikom also prefers that MNP should not be used as a way of avoiding the payment of debts by customers.

**NICTA** comment: There will always be a time delay between the port request and completion of the port. This is why it is suggested that for post-paid customers, as long as there is no credit risk at the time of the port request (deposit is greater than billed and unbilled usage and no overdue bills at the time the port is initiated) then the port be allowed to proceed. If the customer does not settle any valid outstanding post-paid bill(s) after the port, then the donor operator is allowed to chase the customer for payment.

NICTA agrees with Telikom's comment that MNP should not be used as a way of avoiding payment of debt.

### **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.

**Telikom** response: "Telikom expects the possibility of win-back and supports a win-back prohibition period of 60 days."

**NICTA** comment: NICTA notes the industry's support for a 60 calendar day win-back protection period for newly ported customers.

### **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.

**Telikom** response: "Telikom supports a 60 day porting restriction on customers who's porting requests have been successfully processed."

**NICTA** comment: NICTA notes the industry's support for a 60 calendar day onward porting restriction period for newly ported customers.

### 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.

**Telikom** response: "Telikom supports real-time porting in principle."

**NICTA** comment: NICTA notes the industry's support for only 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.

**Telikom** response: "Telikom supports multiple number porting from a single request and same customer account held by donor operator however in the manner and form that requires no complex processing and introduction of extended timeframes to process."

**NICTA** comment: NICTA notes the industry's support for porting multiple customer numbers within a single porting request.

## **4. Additional Areas of the Proposal**

Further to the feedback received during Phase 1, NICTA would like to discuss and receive stakeholder feedback on new areas of the Proposal to help in formulating the recommendations to be made to the Minister with regards to number portability in PNG.

### **4.1 Fixed Number Portability**

Digicel has suggested that PNG implement Fixed Number Portability (FNP) in parallel with MNP, saying "Digicel is of the strong view that, consistent with what has been able to be achieved in other markets, both mobile number portability and fixed number portability should be introduced at the same time. Any proposed implementation of number portability should include both fixed and mobile number portability to ensure the Act's requirements for technological neutrality and non-discrimination are adhered to. This is especially the case given recent developments in other jurisdictions where concurrent implementations of fixed and mobile portability have become the norm."

Since the emergence of national number portability services in the late 1990's, the initial service launches in Southeast Asia (Hong Kong/ Singapore) and Europe were focused on FNP since the mobile networks and mobile service usage were still emerging and developing. Thus, in these early markets, regulators viewed that the greatest competitive and consumer benefits from NP applied to fixed services.

As the global and national mobile service usage rapidly expanded in the 2000's, so did the expansion of NP services, specifically across emerging markets in Africa, Middle East, South America and Southeast Asia (India/ Pakistan). By now the greatest consumer demand in these countries was being driven by mobile services and thus the majority of new NP implementations were focused solely on mobile NP since this would deliver the greatest competitive and consumer benefits.

NICTA notes that some countries have indeed implemented MNP and FNP in parallel. Almost always this means that a fixed number can be ported to another fixed service offered by another operator and a mobile number can be ported to another mobile service offered by another operator, but it does not allow for a fixed number to be ported to a mobile service and vice versa.

As can be seen in Figure 1, below, when number portability was launched in the larger Asia Pacific markets some years ago, it was normal for MNP and FNP to be implemented at different times in markets where FNP was launched.

Figure 1 – number portability launches in key Asia Pacific countries.

Country	MNP Launched	FNP Launched
Australia	Yes, 2001	Yes, 2000
India	Yes, 2011	No
Japan	Yes, 2006	Yes, 2001
Malaysia	Yes, 2008	No
New Zealand	Yes, 2007	Yes, 2007
Pakistan	Yes, 2005	No
Singapore	Yes, 1997	Yes, 2000
S. Korea	Yes, 2004	Yes, 2003
Taiwan	Yes, 2005	No
Thailand	Yes, 2010	No

However, as can be seen in Figure 2, below, more recent number portability launches, or forthcoming planned launches, globally have seen some countries implement MNP and FNP simultaneously; though it is not the norm as suggested by Digicel.

Figure 2 – number portability launches since 2014.

Country	MNP Launched	FNP Launched
Antigua & Caicos	Planned - 2025	Planned - 2025
Turks & Caicos	Planned - 2025	Planned - 2025
Guyana	Planned - 2024	Planned - 2024
Barbados	Yes, 2021	Yes, 2021
Uruguay	Yes, 2021	No
Philippines	Yes, 2021	No
ECTEL	Yes, 2019	Planned - 2024
China	Yes, 2019	No
Vietnam	Yes, 2018	No
Bangladesh	Yes, 2018	No
Bolivia	Yes, 2018	No
Kazakhstan	Yes, 2016	No
Trinidad & Tobago	Yes, 2016	No

Maldives	Yes, 2016	No
Jamaica	Yes, 2015	Yes, 2015
El Salvador	Yes, 2015	No
Honduras	Yes, 2014	No
Bahamas	Yes, 2017	Yes, 2013

Where recent markets have launched MNP and FNP simultaneously, these markets are typified by duopolistic competition in both mobile and fixed sectors, with one operator being more dominant in the mobile sector and the other dominant or monopolistic in the fixed sector. The profiles of these markets are not dissimilar to the current market landscape in Papua New Guinea.

#### **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.

## **4.2 Paying for the NPC Provider's Costs**

In its Initial Response, Digicel suggested "central clearing house provider charges (both set up and ongoing operational charges) are shared equally by all operators (including any new entrants) regardless of the number of ports."

NICTA notes that in markets where a third party is contracted to provide a centralised MNP clearinghouse platform, it is most common for the initial set-up costs to be shared equally among the mobile network operators. Assuming PNG continues to have three mobile network operators, this would mean that one third of the set-up costs would be paid by each of the country's mobile operators.

#### **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.

In other countries ongoing operational costs by the NPC provider are typically either invoiced based on actual usage (number of ports processed by each recipient operator) or shared equally amongst the mobile network operators. The former approach can be argued to be fairer, but it is more complex to invoice and settle bills.

**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.

### 4.3 Cost Benefit Analysis

In its Initial Response, Digicel commented “number portability 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 will arise from it” and suggests that a new cost benefit analysis (CBA) be undertaken because “any costs and benefits that were assessed at that time, must now be considered to be stale and of little relevance to the current proceeding.”

Whilst NICTA understands why a licensed operator may make this comment, the reality is 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.

That being said, there have been structural changes to the PNG mobile network operator sector and since the NICTA Act specifies that a CBA be undertaken prior to the Minister recommending the introduction of MNP, NICTA is minded to update the CBA exercise already undertaken in 2017.

**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.