



**Commission Assessment & Summary of Stakeholder  
Responses to the Number Portability Consultation  
Document issued by the Turks & Caicos Islands  
Telecommunications Commission on December 08, 2021**

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## 1. Background and Purpose

The Telecommunications Commission (the “Commission”) was formed following the enactment of the Telecommunications Ordinance in 2004 which is now superseded by the Telecommunications Ordinance 2018 (the “Ordinance”), based on the Government’s liberalization agenda pursuant to its Telecommunications Policy published in 2003 (the “Policy”). All reference to the Ordinance is based on the 2018 version thereof.

Under Part II, section 4 of the Ordinance, the defined functions of the Commission include: -

*(d) to facilitate, maintain and promote effective and sustainable competition in telecommunications;*

*(e) to set standards for the quality of telecommunications services to be delivered to the public;*

*(f) to promote the interests of consumers and to encourage licensees to operate efficiently;*

Despite issuance of additional telephone operator licences and the subsequent establishment of competition, the inability for consumers to retain their number when moving to a new telecommunications provider is seen as a disincentive to switch providers and thus a constraint to progressing competition in the TCI telecommunications market.

Regulation 14 of the Telecommunications Numbering Regulations 2005 (“Numbering Regulations”) outline the provisions and process the Commission should consider to assess the feasibility of introducing Number Portability (“NP”) into the TCI market.

The Commission consulted the TCI market stakeholders in 2012 and 2016 on the proposed introduction of NP into the TCI telecommunications market but decided not to proceed since the Commission concluded that the regulatory priorities and market dynamics were not appropriate at the time.

The Commission have subsequently determined that strategic direction and operational/ technology developments and consolidation between service providers across the Caribbean region have radically changed market competitive dynamics. The Commission believes that the TCI telecommunications market could benefit from the introduction of NP across both mobile and fixed sectors since the freedom provided to TCI consumers to move their service to the service provider which best meets their needs could act as positive catalyst to change competitive dynamics and enhance value to TCI consumers.

On the 08 December 2021, the Commission initiated the current consultation with interested parties on the technical feasibility and functional NP features which are appropriate for the specific context of the TCI telecommunications market with a view to proceed with the implementation and introduction of mobile and fixed NP services into the TCI telecommunications market.

The purpose of this consultation was to set out the broad parameters, functional requirements and proposed timeframe that the Commission believes could guide the

potential development, implementation and launch of the mobile and fixed NP service into the TCI telecommunications market.

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

The Commission received Initial Responses to the Consultation Document from Digicel and Flow. The Commission has reviewed both responses from Digicel and Flow and this document provides a summary of each operator's response along with the Commission's corresponding views.

The Commission would like to thank both Digicel and Flow for their positive and comprehensive initial responses.

## 1.1 Consultation Process

Pursuant to the Ordinance and Numbering Regulations, the Commission is initiating the present consultation process to assess the appropriateness and feasibility of introducing NP into the TCI market.

The Commission's proposal is to introduce NP into the TCI telecommunications market to enable consumers to retain their mobile or fixed telephone number when they change to a new service provider, (the "Proposal"), the details of which are set out in Chapter 4.

In line with the provisions of regulation 14 of the Numbering Regulations, this Consultation Document identifies the issues and aspects to assess the appropriateness and feasibility of introducing NP into the TCI market, as outlined below.

*If the Commission intends to introduce number portability, it shall initiate a proceeding to consult with service providers and the public to determine the technical feasibility, timing, costs, and market impacts of introducing various options for number portability.*

*Any consultation initiated pursuant to subregulation (1) shall address, among others, the following issues:*

- *the most appropriate technical and service arrangements for providing number portability by various types of service providers;*
- *the costs associated with introducing and maintaining number portability, and how such costs should be recovered;*
- *how quickly service providers can introduce both interim and permanent number portability;*
- *whether portability should be required between mobile and fixed services, or only between fixed-to-fixed and mobile-to-mobile services, and the technical and economic questions raised by these options;*

- *the anticipated market impact, in terms of competitive opportunity, customer choice, pricing, and other considerations, of various portability options;*
- *what adjustments, if any, should be made to the National Numbering Plan and/or to these Regulations to accommodate the requirements of number portability; and*
- *any other issues that the Commission or interested parties deem important to consider in devising a national policy and regulations on number portability.*

The Commission notes that it has engaged the services of consultants to assist it with the consultation process and the design and formulation of the Proposal.

The Commission invites interested parties (“Respondents”) to provide their input and comments (the “Responses”) with respect to the issues raised in this Consultation Document, including the Proposal and/or any other issues of relevance to the introduction of NP into the TCI market. As part of the public consultation process, the Commission and/or its consultants may meet with Respondents that have submitted Responses to review and discuss their Responses in greater detail.

At the conclusion of this consultation process, the Commission will issue a decision outlining its assessment of the technical and market feasibility of the proposed NP service and where appropriate detailing the framework, functional requirements and timeframe for the implementation and operation of a potential TCI fixed and mobile NP service. In reaching its decision, the Commission shall take Respondents' input and comments into account. The decision would direct the operators to amend their existing or new interconnection agreements and file same for approval with the Commission.

<b>Event</b>	<b>Date</b>
Commission issues Consultation Document	<b>December 03, 2021</b>
Initial Responses from Respondents	<b>February 02, 2022</b>
Commission Assessment of Responses	<b>August 04, 2022</b>
Reply Responses from Respondents	<b>August 26, 2022</b>
Commission Decision	<b>September 09, 2022 (estimated)</b>

## 2. Summary of Stakeholder Responses to the Commission’s Consultation Questions

Consultation Question Number	Consultation Subject Area/ LNP Service Function	Respondent (Digicel & Flow) Response
1	Service Porting Type – Fixed – Fixed/ Mobile – Mobile	Supported
2	Recipient Led Porting Process	Supported
3	Centrally Managed LNP Service	Supported
4	Central NP Service Contracting & Licencing Approach	Supported
5	Central NP System Location	Supported
6	ACQ Direct Routing	Supported
7	LNP Enhances Competition	Supported
8	Operator LNP set-up & implementation costs	Supported
9	Customer charging by Recipient Operators	Supported
10	Recipient Operator charging by Donor Operators	Supported
13	NP Implementation programme managed by cross-stakeholder LNPWG	Supported
14	Porting Timeframes – Mobile – 1 working day/ Fixed – 5 working days	Supported
15	Consumer data transfer during the porting process	Supported
16	Porting process validation & cancellation	Supported
17	Treatment of debt	Supported
18	Winback prohibition	Supported
19	Onward porting restriction	Supported
20	Real-time porting	Supported
21	Multiple number porting	Supported

Question 11 – Synchronised launch of Fixed and Mobile Number Portability - The Commission notes that Digicel and Flow had differing views on whether fixed and mobile NP should be implemented and launched at the same time or launched in a phased manner.

Digicel favoured a coordinated launch of both fixed and mobile NP at the same time. Whereas Flow believed a phase approach whereby mobile NP would be launch first.

In the interests of competitive fairness and customer choice, the Commission’s preferred approach is for the mobile and fixed NP services to be launched at the same time.

The Commission notes that both mobile and fixed NP services were launched successfully at same time in Jamaica and the Cayman Islands and that this is the approach being adopted in Barbados.

Question 12 – LNP service implementation and launch time frame - The Commission notes views from both Digicel and Flow that the proposed 18-month NP service implementation and launch timeframe may be insufficient.

Based on experience from other markets, the Commission believes the proposed NP implementation and launch timeframe is not unreasonable, but the Commission will prioritise the review and discussion of the NP implementation and launch timeframes through the initial deliberations of the LNPWG.

The Commission notes Digicel's comments regarding the requirement for the Commission to undertake a cost/ benefit analysis for the introduction of the LNP service. The Commission has undertaken the appropriate NP cost vs benefit analysis of introducing the NP service as required by Article 13 of the Telecommunications Regulations 2005. The analysis is provided in schedule A of this document which demonstrates that introducing the LNP service could generate net benefits of between \$4.7 million and \$6.5 million to TCI consumers and the economy over the 5 years following LNP Service Launch.

### 3. Commission Assessment of Stakeholder Responses to the Commission's Consultation Questions

<b>TCI Telecommission NP Consultation Question</b>	<b>Digicel Consultation Response</b>	<b>Flow Consultation Response</b>	<b>Suggested Turks &amp; Caicos Telecommission Response</b>
<p><b>Question 1.</b> <i>NP should be restricted to service provider number portability, specifically porting between mobile to mobile and fixed to fixed numbers only. It is not proposed to offer hybrid fixed to mobile and mobile to fixed NP in TCI. In the case of fixed NP, it is intended to allow porting of fixed numbers within the same local exchange and local call areas only. Please provide your comments and views regarding this proposed approach.</i></p>	<p>Digicel agrees that NP should be restricted to service provider portability (mobile to mobile and fixed to fixed) in TCI.</p> <p>Digicel states that service provider portability is likely to minimize porting complexity for both consumers and service providers, aligns with practices in other similar markets and reduces NP implementation and operational costs.</p> <p>Digicel emphasizes the importance of reassessing the TCI calling area structure and that fixed NP should not be constrained by legacy competitor local exchange and area structures which potentially constrain future market development and competition.</p>	<p>Flow agrees that NP should be restricted to service provider portability (mobile to mobile and fixed to fixed) in TCI.</p> <p>Flow believes that the Commission's proposal the Turks &amp; Caicos number portability service should be restricted service provider portability only is less complex, more efficient and cost effective.</p>	<p>The Commission's Proposal is supported by Digicel &amp; Flow</p>
<p><b>Question 2.</b> <i>The NP process of moving a customer's number from one provider to another provider can be achieved by either Recipient Led (the</i></p>	<p>Digicel strongly supports a recipient led porting process which aligns to the approach adopted in other Caribbean markets.</p>	<p>Flow agrees that a recipient led porting process is more customer centric and has worked well in other Caribbean markets, but Flow recommends that the</p>	<p>The Commission's Proposal is supported by Digicel &amp; Flow</p>

<p><i>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?</i></p>		<p>Commission ensures appropriate safeguards are implemented.</p>	
<p><b>Question 3.</b> <i>It is proposed that NP is to be managed and operated in TCI through a centralised NP system which will track all TCI 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 TCI providers. Please provide your comments and views regarding this proposed approach</i></p>	<p>Digicel supports NP being managed and operated through a centralized NP system.</p> <p>Digicel believes that a centrally managed NP service will provide the most competitively neutral outcomes, aligns with the approach adopted in other Caribbean markets and thus provides opportunities to benefit from regional scale economies</p>	<p>Flow supports NP being managed and operated through a centralized NP system.</p> <p>Flow’s preference is for the NP system being located remotely, outside of TCI since this approach operates successfully across the region with low sustainable costs.</p> <p>Flow notes that the NP system must be implemented in a robust and resilient manner to be safeguarded from natural disasters.</p>	<p>The Commission’s Proposal is supported by Digicel &amp; Flow.</p>
<p><b>Question 4.</b> <i>By proposing to adopt the centralised driven NP approach, it is proposed that the successful provider of the NP Clearinghouse will be licenced by</i></p>	<p>Digicel does not have a preference for the contracting arrangements between the NP Clearinghouse provider and the TCI licenced operators. Digicel</p>	<p>Flow supports the licencing of the selected NP Clearinghouse by the Commission which should be aligned to the corresponding</p>	<p>The Commission’s Proposal is supported by Digicel &amp; Flow, but the Commission notes the points raised by the Operators</p>

<p><i>the TCI Telecommunications Commission to provide NP services and will be required to contract directly with the licenced TCI operators. Please provide your comments and views regarding this proposed approach.</i></p>	<p>recognizes contract only vs contract and licencing options both have advantages and disadvantages.</p> <p>Digicel is concerned that final NP Clearinghouse service management approach should be simple and minimize regulatory related costs.</p> <p>Digicel recommends that if is decided that the NP Clearinghouse provider should be licenced by the Commission, then such a licence should avoid double taxation on licences, either with licence being exempt from fees or the TCI licenced providers permitted to deduct the NP Clearinghouse licence fees from their own licence fees.</p> <p>Digicel notes that should the Commission decide to contract directly with the NP Clearinghouse provider then the Commission should not impose any mark-up of NP Clearinghouse on TCI licenced operators.</p>	<p>contract with licenced TCI operators.</p> <p>Flow recommends the NP Clearinghouse selection process should include the participation of the licenced TCI operators.</p> <p>Flow believes the TCI licenced operators should be given the opportunity to comment on the Commission's proposed NP Clearinghouse licence.</p> <p>Flow notes that the NP Clearinghouse licence and contract should require new entrant operators/ service providers to make an equitable contribution to the NP Clearinghouse costs.</p>	
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<p><b>Question 5.</b> <i>It is proposed that the NP Clearinghouse may be either operated from TCI or hosted overseas. Please provide your comments and views regarding this proposed approach.</i></p>	<p>Digicel does not have a preference for the location of the NP Clearinghouse service, provided the provider assures data integrity and security of the service.</p> <p>Digicel believes the final decision regarding the location of the NP Clearinghouse service should be made during the vendor selection process.</p>	<p>Flow recommends the NP Clearinghouse is hosted overseas since this model is proven to work successfully across the region and is cost effective, robust, reliable and efficient.</p> <p>Flow notes that if a remotely hosted NP Clearinghouse is adopted, the Commission may need to consider data privacy issues and compliance.</p>	<p>The Commission notes the operator comments and favours the NP Clearinghouse being hosted remotely overseas.</p>
<p><b>Question 6.</b> <i>It is proposed that all fixed and mobile traffic to be ported and non-ported numbers originated and terminated in the TCI 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 NP implementations across the world and is considered to be the most operationally efficient and reliable form of routing in NP jurisdictions. Please provide your comments and views regarding this proposed approach.</i></p>	<p>Digicel supports the Commission's proposal to adopt All Call Query direct routing, since this is widely used across the region.</p>	<p>Flow supports the Commission's proposal to adopt All Call Query direct routing, since this is widely used across the region and is a proven approach.</p>	<p>The Commission's Proposal is supported by Digicel &amp; Flow.</p>

<p><b>Question 7.</b> <i>Introducing NP is likely to enhance competition and choice in the TCI telecommunications market. Please provide your comments about this statement.</i></p>	<p>Digicel agrees with the Commission’s conclusion in the consultation document that <i>“Introducing NP is likely to enhance competition and choice in the TCI telecommunications market”</i></p> <p>Digicel is concerned that the Commission’s consultation document does not consider or quantify the likely consumer demand for NP nor the costs and benefits related to the introduction and operation of NP services, as required by Article 13 of the Telecommunications Regulations 2005.</p>	<p>Flow agrees that NP would enhance competition in the telecommunications market in TCI but advises that implementation should not be rushed and should be introduced in a reasonable timeline,</p> <p>Flow notes that NP is only one of several remedies to enhance competition in the telecommunications market in TCI.</p>	<p>Both Digicel and Flow agree that the introduction of NP is likely to enhance competition and choice in the TCI telecommunications market.</p> <p>The Commission has noted Digicel’s concerns about cost/benefit analysis of NP and this is addressed by the Commission in this response document.</p>
<p><b>Question 8.</b> <i>It is proposed that each operator and the successful provider of the NP Clearinghouse will be responsible for their set-up costs to prepare for the implementation and launch of NP in TCI 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</i></p>	<p>Subject to the completion of a LNP cost benefit analysis by the Commission, Digicel is generally supportive of the Commission’s proposal that each operator should cover their own LNP setup implementation and launch costs. Furthermore, Digicel stated that each operator should be responsible any operational costs associated with inbound porting of numbers.</p>	<p>Flow accepts its responsibility for its NP set-up costs but believes it is unreasonable for the Commission to bar TCI licenced operators from recovering NP set-up and operating costs from consumers through legitimate commercial means.</p> <p>Flow notes that being prevented from recovering NP set-up and operating costs would present an</p>	<p>Both Digicel &amp; Flow agreed in principle that each operator should be responsible for their own NP set-up and implementation costs.</p> <p>The Commission notes Digicel’s view that operators should be incentivized to minimize costs. The Commission notes Flow’s view that being unable to recover NP set-up and operating</p>

<p><i>preparing for the possible introduction of NP into TCI, and your comments and views regarding this proposed approach.</i></p>	<p>Digicel also noted that the Commission’s proposal could also incentivize operator cost minimization and maintain cost neutrality.</p> <p>Digicel did not provide an estimate of its likely NP set-up investment costs.</p>	<p>unreasonable burden on TCI licenced operators which could defer funding from other network service and quality improvement programmes.</p> <p>Flow did not provide an estimate of its likely NP set-up investment costs.</p>	<p>costs could be a burden, but the Commission believes that introducing NP will have genuine market and consumer benefits and experience from other markets has shown the operator costs have not been excessive.</p> <p>Neither operator provided an estimate of their respective NP set-up investment costs, but the Commission has used conservative cost estimates based on experience from neighbouring markets for the NP cost/ benefit analysis.</p>
<p><b>Question 9.</b> <i>It is proposed that Recipient operators will be allowed to charge customers for porting their numbers at the discretion of each recipient operator. Consumer charging will be reasonable and the TCI Telecommunications Commission reserves the right to set a maximum limit to consumer porting charges. Donor operators are not permitted to charge customers for porting out numbers from their network.</i></p>	<p>Digicel believes that Recipient operators should be permitted to charge (should they wish to do so) customers for porting their numbers but Digicel did not comment on whether the Commission’s proposal that the Commission should have the right to set a maximum limit to consumer porting charges.</p> <p>Digicel agreed that Donor operators should not be</p>	<p>Flow concurs with the Commission’s proposal that Recipient operators should be allowed discretion to charge customers for porting in their numbers.</p> <p>Flow advised that it had made the commercial decision in other markets as the Recipient operator not to charge customers for porting in their numbers.</p>	<p>The Commission notes the support by Digicel and Flow to the proposed principle that Recipient operators should be allowed discretion to charge customers for porting their numbers.</p> <p>The Commission welcomes Flow’s statement that as the Recipient operator it has decided not to charge customers for porting their numbers in other markets. The Commission hopes</p>

<p><i>Please provide your comments and views regarding this proposed approach.</i></p>	<p>permitted to charge customers for porting out their numbers.</p>	<p>Flow did not comment on the question that Donor operators should not be permitted to charge customers for porting out their numbers.</p>	<p>that Flow will adopt the same commercial approach for NP customer charges in TCI.</p> <p>Neither Digicel nor Flow commented on the Commission's proposal that the Commission should reserve the right to set a maximum limit to consumer porting charges. The Commission believes that discretion to set a maximum limit to consumer porting charges is reasonable to safeguard consumer interests.</p> <p>The Commission notes Digicel's support for the principle that Donor operators should not be permitted to charge customers for porting out their numbers. The Commission believes this approach is fair and is adopted across a number of neighbouring markets.</p>
<p><b>Question 10.</b> - <i>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</i></p>	<p>Digicel agrees that Donor operators should be able to cover the reasonable costs of customers porting out of their network. Digicel did not specifically comment on the</p>	<p>Flow agrees that Donor operators should be able to charge Recipient operators for the actual handling of port requests.</p>	<p>The Commission notes the support from both Digicel and Flow that Donor operators should be able to cover the reasonable costs of customers porting out of their network.</p>

<p><i>porting requests. The TCI Telecommunications Commission reserves the right to set a maximum limit to donor porting charges. TCI Telecommunications Commission reserves the right to set a maximum limit to donor porting charges.</i></p>	<p>Commission’s proposal 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 for the actual handling of port requests.</p>	<p>Flow advised that it had made the commercial decision in other markets as the Donor operator not to levy charges on Recipient operators.</p>	<p>The Commission welcome’s Flow statement that as the Donor operator it has decided not to levy charges on Recipient operators in other markets. The Commission hopes that Flow will adopt the same commercial approach for NP customer charges in TCI</p> <p>Neither Digicel nor Flow commented on the Commission’s proposal that the Commission should reserve the right to set a maximum limit to donor porting charges. The Commission believes that discretion to set a maximum limit to consumer porting charges is reasonable to safeguard competition and fairness.</p>
<p><b>Question 11.</b> <i>Should fixed and mobile NP be implemented and launched at the same time or should the introduction be phased? If you prefer a phased approach, what should the order of the phasing be and why?</i></p>	<p>Digicel is of the strong view that, consistent with what has been able to be achieved in other markets, there are no good technical or operational decisions for a “phased” approach both mobile number portability and fixed number</p>	<p>Flow expressed a preference for a phased NP launch approach, prioritizing the launch of mobile NP ahead of fixed NP since Flow stated ongoing network investment priorities and the nature of the Flow network may</p>	<p>The Commission notes that Digicel and Flow had differing views on whether fixed and mobile NP should be implemented and launched at the same time or launched in a phased manner.</p>

	<p>portability should be introduced at the same time.</p>	<p>provide challenges to implement either fixed or mobile NP.</p>	<p>Digicel favoured a coordinated launch of both fixed and mobile NP at the same time. Whereas Flow believed a phase approach whereby mobile NP would be launch first.</p> <p>In the interests of competitive fairness and customer choice, the Commission’s preferred approach is for the mobile and fixed NP services to be launched at the same time.</p> <p>The Commission notes that both mobile and fixed NP services were launched successfully at same time in Jamaica and the Cayman Islands and that this is the approach being adopted in Barbados.</p>
<p><b>Question 12.</b> <i>It is proposed that NP will be implemented and launched to the TCI public within 18 months of the date of this consultation. Please provide your comments and views regarding this proposed approach.</i></p>	<p>Digicel stated that based on experience from other jurisdictions that 18 months would be the minimum time required to implement NP.</p> <p>Digicel noted that the proposed ambitious timeframe would not allow for any delay or the</p>	<p>Flow indicated that due to current economic conditions and existing investment commitments, Flow believes that an implementation timeframe of between 24-36 months was preferable which would be notwithstanding any potential natural disaster.</p>	<p>The Commission notes views from both Digicel and Flow that the proposed 18-month NP service implementation and launch timeframe may be insufficient.</p> <p>Based on experience from other markets, the Commission</p>

	<p>complications that may arise as a result of market changes, including entry (or exit) of market players, upstream supplier delays, or other related regulatory issues.</p> <p>Digicel believes it would be more realistic for the Commission to provide for a two-year implementation timeframe and then to work together with industry stakeholders to improve on the implementation timeframe rather than to end up in a situation where, through no fault of any particular party, targets are not able to be met and consumers and other stakeholders are disappointed.</p> <p>Digicel also reiterated the view that the starting point for the implementation period must necessarily take into account the relative costs and benefits of implementing NP. This is because operators can ill afford “cost shocks” in the current business environment and will need</p>		<p>believes the proposed NP implementation and launch timeframe is not unreasonable, but the Commission will prioritise the review and discussion of the NP implementation and launch timeframes through the initial deliberations of the LNPWG.</p> <p>The Commission notes Digicel’s comments regarding the requirement for the Commission to undertake a cost/ benefit analysis for the introduction of the LNP service. The Commission has undertaken the appropriate NP cost vs benefit analysis of introducing the NP service as required by Article 13 of the Telecommunications Regulations 2005. The analysis is provided in schedule A of this document which demonstrates that introducing the LNP service could generate net benefits of between \$4.8 million and \$6.6 million to TCI consumers and the economy over the 5 years following LNP Service Launch.</p>
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	adequate time to factor in any establishment costs into existing capital investment programmes.		
<p><b>Question 13.</b> <i>It is proposed that the implementation and preparations for the launch of NP in TCI will be managed by a cross stakeholder working group reporting to the TCI Telecommunications Commission, but the TCI Telecommunications Commission shall be responsible for setting the key NP process and functional details and implementation timeframes etc. Please provide your comments and views regarding this proposed approach.</i></p>	<p>Digicel agrees that the implementation and preparations for the launch of NP in TCI should be managed by a cross stakeholder working group (“NPWG”) reporting to the TCI Telecommunications Commission. However, it is also critical that the Commission plays an active role in project management to ensure that the complex processes and interdependencies are managed and that parties adhere to committed timeframes.</p> <p>Digicel suggests that such project management may be undertaken either internally within the Commission or using an external firm but that the person or persons responsible must have a proven background in managing similar projects in a competitive stakeholder environment.</p>	<p>Flow agrees with the Commission’s proposed NP implementation approach, but Flow recommends that the licenced TCI operators should be given the opportunity to input into the design of the TCI NP service and the implementation schedule, to engender trust, clarity and collaboration.</p>	<p>The Commission notes the support from Digicel &amp; Flow to the Commission’s proposed NP implementation approach.</p> <p>The Commission notes Digicel’s suggestion that the Commission should lead the TCI LNP implementation programme. The Commission concurs with Digicel’s suggestion and plans to engage respected external expert consultants to support the TCI LNP implementation programme. The Commission intends to play an active role in driving the implementation and launch of the TCI NP service and will be the final decision maker on NP service functionality and frameworks based on recommendations from the LNPWG.</p> <p>The Commission is of the opinion that based on the successful introduction of NP services</p>

			across neighbouring jurisdictions, an effective, efficient and appropriate fixed and mobile NP service framework has been developed, whose key features and functions are appropriate for the TCI market. The Commission intends to base the TCI NP service on the successful operating model used in neighbouring jurisdictions but will allow for the model to be reviewed by the LNPWG for final recommendation to the Commission.
<b>Question 14.</b> <i>It is proposed that all customer porting requests will be completed within; 1 working day for mobile NP and 5 working days of fixed NP, from the date of the customer's validated and signed porting request. Please provide your comments and views regarding this proposed approach.</i>	Digicel agrees with the proposed NP service timelines appear reasonable but should be confirmed pursuant to operational and regulatory frameworks developed by the LNPWG during the implementation programme.	Flow agrees with the proposed NP service timelines but requests that further clarity is given to the definition of non-working days, public holidays and weekends applicable to TCI.	The Commission's Proposal is supported by Digicel & Flow.
<b>Question 15.</b> <i>It is proposed that data transfer during the porting process between the recipient and donor operators is minimised to ensure efficient and robust</i>	Digicel did not express a specific view on the proposed porting process data transfer but expects that decisions regarding data transfer will be developed during	Flow agrees with the Commission's proposed approach to minimize and optimize the transfer of data between the Recipient and	The Commission's Proposal is supported by Flow and the Commission notes that Digicel has no objections to the Commission's proposed

<p><i>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. Porting process security and integrity will be provided by independent customer validation for each porting request, by either SMS (for mobile number porting requests) or Interactive Voice Response or PIN (for fixed number porting requests). Please provide your comments and views regarding this proposed approach.</i></p>	<p>the LNPWG deliberations and will be engrained in the TCI LNP Business Rules.</p>	<p>Donor operators during the NP process.</p>	<p>approach to data transfer during the porting process. The Commission notes Digicel's suggestion that some decisions could further developed during the LNPWG deliberations to be finalized for inclusion in the TCI LNP Business Rules.</p>
<p><b>Question 16.</b> <i>It is proposed that once a customer's porting request has been authorised by the customer and validated by the NP Clearinghouse 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</i></p>	<p>Digicel did not express a specific view on the proposed validation approach for porting requests but expects that decisions regarding porting validation will be developed during the LNPWG deliberations and will be engrained in the TCI LNP Business Rules.</p>	<p>Flow agrees with the Commission's proposal that once a customer's porting request has been authorised by the customer and validated by the NP Clearinghouse 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</p>	<p>The Commission's Proposal is supported by Flow and the Commission notes that Digicel has no objections to the Commission's proposed approach to the processing of validated porting requests. The Commission notes Digicel's suggestion that some decisions could further developed during the LNPWG deliberations to be</p>

<p><i>determined by the TCI Telecommunications Commission. Once a validated porting request has been passed to the donor operator by the NP Clearinghouse it cannot be amended or cancelled by any party. Please provide your comments and views regarding this proposed approach.</i></p>		<p>reasons determined by the Commission.</p>	<p>finalized for inclusion in the TCI LNP Business Rules.</p>
<p><b>Question 17.</b> <i>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.</i></p>	<p>Digicel did not specifically comment on the proposed treatment of post-paid and pre-paid debt related to the consumer entitlement to port their number/ service.</p>	<p>Flow does not support the Commission's proposal since Flow believes it to be flawed because a customer would not know their unbilled balance when making the decision to port their number/ service.</p> <p>Flow proposes to update the text – "Post-paid customers can port their number if the total billed account balance is less than the deposit held by their current operator....."</p> <p>Flow will be willing to discuss revisions to the proposed Post-paid billing text as part of future LNPWG deliberations.</p>	<p>The Commission notes that Digicel has no objections to the proposed treatment of post-paid and pre-paid debt related to the consumer entitlement to port their number/ service.</p> <p>The Commission notes Flow's concerns about lack of customer visibility of unbilled account balances. The Commission concurs with the Flow proposal that the Post-paid billing text is reviewed as part of future LNPWG deliberations.</p> <p>The Commission notes Flow's support for the Commission's proposal that pre-paid customer debt should not prevent porting.</p>

		Flow agrees that debt should not prevent a pre-paid customer from porting.	
<b>Question 18.</b> <i>It is proposed that once the customer's validated porting request has been passed to the donor operator by the NP Clearinghouse, 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 days, the donor operator will only be permitted to contact the customer for the sole purpose of recovering any outstanding payments or debts and will under no circumstances contact the customer during this period with purpose of soliciting the customer to return to the donor operator's network. Please provide your comments and views regarding this proposed approach.</i>	Digicel did not specifically comment on the proposed Donor operator Winback provisions.	Flow agrees with the Commission's proposal that once the NP Clearinghouse has validated the porting request and passed the request to the donor operator by the NP Clearinghouse, the Donor operator should not be permitted to contact the customer during the period the porting request is being processed.  Flow notes that the Donor operator should be permitted to contact the subscriber to discuss recovery of any rented equipment such as handsets, and outstanding debts/ payments.	The Commission's Proposal is supported by Flow and the Commission notes that Digicel has no objections to the Commission's proposed Donor operator Winback provisions.  The Commission notes Flow's comments on Donor operator contact with subscribers to discuss recovery of outstanding debts/ payments and equipment. The Commission proposes that the Flow suggestions are discussed as part of the LNPWG deliberations.
<b>Question 19.</b> <i>It is proposed that customers will not be permitted to port their number to another</i>	Digicel did not specifically comment on the proposed	Flow agrees with the Commission's proposal that customers will not be permitted	The Commission's Proposal is supported by Flow and the Commission notes that Digicel

<p><i>operator within 60 days of their previous successful porting request. Please provide your comments and views regarding this proposed approach.</i></p>	<p>onward porting restriction provisions.</p>	<p>to port their number to another operator within 60 days of their previous successful porting request, but Flow recommends that some mechanism for the emergency repatriation of inappropriately ported numbers is put in place during the implementation of the TCI LNP service.</p>	<p>has no objections to the Commission's proposed Donor operator onward porting restrictions.</p> <p>The Commission notes Flow's comments on Donor operator contact with subscribers to discuss recovery of outstanding debts/ payments and equipment. The Commission proposes that the Flow suggestions about emergency repatriation of inappropriately are discussed as part of the LNPWG deliberations.</p>
<p><b>Question 20.</b> <i>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.</i></p>	<p>Digicel did not comment on the Commission's proposal that only real-time porting of customer numbers will be allowed and customers will not be permitted to delay or defer porting requests to later dates.</p>	<p>Flow agrees with the Commission's proposal that only real-time porting of customer numbers will be allowed and customers will not be permitted to delay or defer porting requests to later dates.</p>	<p>The Commission's Proposal is supported by Flow and the Commission notes that Digicel has no objections to the Commission's proposed real-time porting of customer numbers.</p>
<p><b>Question 21.</b> <i>It is proposed that the porting process will allow the porting of multiple customer numbers within a single porting request (where "multiple</i></p>	<p>Digicel did not specifically comment on the proposed multiple number porting provisions.</p>	<p>Flow agrees that "multi-line" ports should be supported., but measures must be implemented to ensure that only the duly</p>	<p>The Commission's Proposal is supported by Flow and the Commission notes that Digicel has no objections to the Commission's proposed process</p>

<p><i>number” is defined as two or more numbers belong 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.</i></p>		<p>authorised person can make such a porting request.</p>	<p>for porting multiple customer numbers within a single porting request.</p>
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## 4. Cost Benefit Analysis – Executive Summary

The Turks & Caicos Telecommunications Ordinance 14.02 dated 31 March 2018 includes provision 14 detailing the Commission’s obligations for progressing the introduction of Number Portability.

Under clause 14 (2) provisions (b) and (e), the Commission is required to assess the costs and market benefits associated with the introducing and operating the Number Portability service into the Turks & Caicos market.

The Commission has undertaken a cost benefit analysis study focusing on “type 2” benefits typically associated with the introduction of number portability services, i.e., the efficiency improvements, and any associated price reductions, which result from increased competitive pressure driven by the introduction of number portability which are potentially available to all consumers within the Tucks & Caicos Islands (TCI).

Voice and SMS services tend to be number specific but it has been difficult to identify voice and SMS specific charges from each of the benchmark markets since both operators tend to bundle their fixed and mobile products with inclusive minutes, SMS and data allowances. On this basis, the price benchmarking across both fixed and mobile products has compared similar bundled offerings.

The Commission’s study has followed the following methodology.

### Benefits

- Identify suitable similar regional benchmark markets;
- Identify current TCI fixed and mobile product bundle pricing from Digicel & Flow;
- Identify similar benchmark market product pricing from Digicel & Flow;
- Analyse benchmark market pricing between jurisdictions with and without NP to identify the average NP pricing benefit A;
- Analyse and compare TCI market pricing with:
  - Benchmark markets without NP – identify the pricing gap B
  - Benchmark markets without NP – identify the pricing gap C
- Analyse and present;
  - Average benchmark market NP pricing benefit A
  - TCI pricing gap with benchmark markets with NP – B
  - TCI pricing gap with benchmark markets with NP – C
- Identify TCI fixed and mobile market size based on the Commission’s market statistics;
- Analyse and identify appropriate NP driven pricing improvement modelling scenarios for TCI based on A, B & C;
- Analyse and produce potential realistic minimum and maximum estimates of the potential five-year pricing and value benefits to consumers and to the TCI fixed and mobile sectors – **Termed the market NP benefits.**

## Costs

- Identify potential operator/ stakeholder LNP implementation cost drivers.
- Assess potential minimum and maximum operator/ stakeholder LNP implementation for each identified cost driver;
- Collate the minimum and maximum operator/ stakeholder LNP implementation cost drivers;
- Identify potential Commission or central LNP implementation cost drivers;
- Assess potential minimum and maximum Commission or central LNP implementation costs;
- Collate the minimum and maximum Commission or central LNP implementation costs;
- Identify potential operator/ stakeholder LNP implementation cost drivers;
- Assess potential minimum and maximum operator/ stakeholder LNP implementation for each identified cost driver;
- Collate the minimum and maximum operator/ stakeholder LNP implementation cost drivers;
- Identify potential operator/ stakeholder LNP five-year operational cost drivers.
- Assess potential minimum and maximum operator/ stakeholder LNP five-year operational costs for each identified cost driver;
- Collate the minimum and maximum operator/ stakeholder LNP implementation cost drivers;
- Analyse, collate and produce potential realistic minimum and maximum estimates of the potential five-year costs to TCI LNP stakeholders, including the fixed and mobile operators – **Termed the market NP costs.**

## Cost/ Benefit Analysis

- Analyse identified minimum and maximum market NP costs and benefits;
  - Do the identified TCI market LNP benefits outweigh the identified TCI market LNP costs? Yes – Commission – Recommendation to progress the introduction of LNP
  - Do the identified TCI market LNP benefits outweigh the identified TCI market LNP costs? No– Commission – Recommendation TCI market not ready for the introduction of LNP

## Cost Benefit Analysis Findings

Service	Mobile		Fixed		Average Mobile	Average Fixed
	Post-Paid	Pre-Paid	Voice	Broadband		
Small Island Non NP vs Small Island with NP	177%	142%	109%	112%	160%	110%
TCI vs Small Island Non NP	154%	132%	215%	195%	143%	205%
TCI vs Small Island with NP	264%	186%	140%	187%	225%	164%

- Benefit parameter A - benchmark market pricing between jurisdictions with and without NP to identify the average NP pricing;
  - Mobile – 60%
  - Fixed – 10%
- Benefit parameter B - benchmark market pricing between jurisdictions with NP and TCI to identify the average NP pricing;
  - Mobile – 125%
  - Fixed – 64%
- Benefit parameter B - benchmark market pricing between jurisdictions with NP and TCI to identify the average NP pricing;
  - Mobile – 43%
  - Fixed – 105%

## Price Benefit Conclusions

- Introducing NP into a market result in pricing reductions of between 10% and 60%;
- Current TCI market pricing is between 64% and 125% higher than benchmark markets with NP;
- Current TCI market pricing is between 43% and 105% higher than benchmark markets without NP;
- The Commission’s conservative benefit estimates project 5-year post LNP launch of between 16% and 26% (fixed market) and 26% and 35% (mobile market);
- The Commission’s 2020 market report valued the TCI telecommunications sector at \$39.5 million (\$25 million mobile & \$14.5 million fixed);
- Based on the Commission’s conservative LNP benefit estimates, introducing LNP over 5 years could deliver consumer and market benefits of between \$8.1 million and \$11.2 million;
- The Commission’s conservative LNP stakeholder estimated minimum and maximum implementation and 5-year operational costs of between £3.35 million and \$4.70 million.

## TCI Cost Benefit Analysis Findings & Recommendations

- **Commission's Cost Benefit Analysis Conclusion – the benefits of introducing the TCI LNP service could generate between \$4.75 million and \$6.50 million to TCI consumers and the economy over the 5 years following LNP Service Launch**
- **Commission's recommendation is to progress the introduction of the LNP service to TCI**

# Annex A - Turks & Caicos Local Number Portability Cost Benefit Analysis

## Executive Summary

The Turks & Caicos Telecommunications Ordinance 14.02 dated 31 March 2018 includes provision 14 detailing the Commission's obligations for progressing the introduction of Number Portability.

Under clause 14 (2) provisions (b) and (e), the Commission is required to assess the costs and market benefits associated with the introducing and operating the Number Portability service into the Turks & Caicos market.

The Commission has undertaken a cost benefit analysis study focusing on "type 2" benefits typically associated with the introduction of number portability services, i.e., the efficiency improvements, and any associated price reductions, which result from increased competitive pressure driven by the introduction of number portability which are potentially available to all consumers within the Tucks & Caicos Islands (TCI).

Voice and SMS services tend to be number specific but it has been difficult to identify voice and SMS specific charges from each of the benchmark markets since both operators tend to bundle their fixed and mobile products with inclusive minutes, SMS and data allowances. On this basis, the price benchmarking across both fixed and mobile products has compared similar bundled offerings.

The Commission's study has followed the following methodology.

### **Benefits**

- Identify suitable similar regional benchmark markets;
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- Identify similar benchmark market product pricing from Digicel & Flow;
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- Identify TCI fixed and mobile market size based on the Commission's market statistics;
- Analyse and identify appropriate NP driven pricing improvement modelling scenarios for TCI based on A, B & C;

- Analyse and produce potential realistic minimum and maximum estimates of the potential five-year pricing and value benefits to consumers and to the TCI fixed and mobile sectors – **Termed the market NP benefits.**

### Costs

- Identify potential operator/ stakeholder LNP implementation cost drivers.
- Assess potential minimum and maximum operator/ stakeholder LNP implementation for each identified cost driver;
- Collate the minimum and maximum operator/ stakeholder LNP implementation cost drivers;
- Identify potential Commission or central LNP implementation cost drivers;
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- Assess potential minimum and maximum operator/ stakeholder LNP implementation for each identified cost driver;
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- Identify potential operator/ stakeholder LNP five-year operational cost drivers.
- Assess potential minimum and maximum operator/ stakeholder LNP five-year operational costs for each identified cost driver;
- Collate the minimum and maximum operator/ stakeholder LNP implementation cost drivers;
- Analyse, collate and produce potential realistic minimum and maximum estimates of the potential five-year costs to TCI LNP stakeholders, including the fixed and mobile operators – **Termed the market NP costs.**

### Cost/ Benefit Analysis

- Analyse identified minimum and maximum market NP costs and benefits;
  - Do the identified TCI market LNP benefits outweigh the identified TCI market LNP costs? Yes – Commission – Recommendation to progress the introduction of LNP
  - Do the identified TCI market LNP benefits outweigh the identified TCI market LNP costs? No– Commission – Recommendation TCI market not ready for the introduction of LNP

## Cost Benefit Analysis Findings

Service	Mobile		Fixed		Average Mobile	Average Fixed
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- The Commission’s 2020 market report valued the TCI telecommunications sector at \$39.5 million (\$25 million mobile & \$14.5 million fixed);
- Based on the Commission’s conservative LNP benefit estimates, introducing LNP over 5 years could deliver consumer and market benefits of between \$8.1 million and \$11.2 million;
- The Commission’s conservative LNP stakeholder estimated minimum and maximum implementation and 5-year operational costs of between £3.35 million and \$4.70 million.

## TCI Cost Benefit Analysis Findings & Recommendations

- **Commission's Cost Benefit Analysis Conclusion – the benefits of introducing the TCI LNP service could generate between \$4.75 million and \$6.50 million to TCI consumers and the economy over the 5 years following LNP Service Launch**
- **Commission's recommendation is to progress the introduction of the LNP service to TCI**

## Turks & Caicos Local Number Portability Cost Benefit Analysis

### Background

The Turks & Caicos Telecommunications Ordinance 14.02 dated 31 March 2018 includes provision 14 detailing the Commission's obligations for progressing the introduction of Number Portability.

#### **Number portability**

**14.** (1) If the Commission intends to introduce number portability, it shall initiate a proceeding to consult with service providers and the public to determine the technical feasibility, timing, costs, and market impacts of introducing various options for number portability.

(2) Any consultation initiated pursuant to subregulation (1) shall address, among others, the following issues—

- (a) the most appropriate technical and service arrangements for providing number portability by various types of service providers;
- (b) the costs associated with introducing and maintaining number portability, and how such costs should be recovered;
- (c) how quickly service providers can introduce both interim and permanent number portability;
- (d) whether portability should be required between mobile and fixed services, or only between fixed-to-fixed and mobile-to-mobile services, and the technical and economic questions raised by these options;
- (e) the anticipated market impact, in terms of competitive opportunity, customer choice, pricing, and other considerations, of various portability options;
- (f) what adjustments, if any, should be made to the National Numbering Plan and/or to these Regulations to accommodate the requirements of number portability; and
- (g) any other issues that the Commission or interested parties deem important to consider in devising a national policy and regulations on number portability.

Under clause 14 (2) provisions (b) and (e), the Commission is required to assess the costs and market benefits associated with the introducing and operating the Number Portability service into the Turks & Caicos market.

Following the stakeholder responses to the Commission's Number Portability consultation, Digicel noted the obligation to undertake cost benefit analysis under the Ordinance.

The Commission acknowledges the Digicel statement and has instructed its expert Consultants, Cenerva Limited, to assess the likely costs of implementing and operating an NP service in Turks & Caicos compared to the estimated competitive and consumer benefits.

The cost of number portability can be directly or indirectly associated with different parties especially the investment and resourcing obligations on the licenced network operators in Turks & Caicos to prepare for and support the operation of a NP service and the implementation and operating costs of third party NP systems and services.

## Number Portability Benefits Analysis Approach

- Type 1 benefits: are defined as the benefits which accrue to subscribers who retain their number when changing operators.
- Type 2 benefits: are the efficiency improvements and any associated price reductions which result from increased competitive pressure.
- Type 3 benefits: are the other resource savings that arise from fewer number changes and include fewer misdialled calls and changes to information stored in customer equipment.

### Type 1 Benefits

There are two categories of Type 1 benefits.

Type 1a benefits are the savings that accrue to those subscribers who would have changed operators regardless of the availability of NP. The benefits to these customers, once NP is available, are the saving they make by avoiding the costs associated with switching (such as informing friends or changing their stationery).

Type 1b - accrue to those subscribers who only switch because of the availability of NP. These subscribers benefit from access to lower prices, improved service etc.

### Type 2 Benefits

Type 2 benefits are the efficiency improvements, and any associated price reductions, which result from increased competitive pressure.

### Type 3 Benefits

These are the other resource savings that arise from fewer number changes and include fewer misdialled calls and changes to information stored in customer equipment.

Most cost benefit studies undertaken across the world recognise the greatest benefits provided by the introduction of NP services are driven by Type 2 market wide price and value enhancements.

## Methodology

- Estimate NP Benefits for TCI
  - Identify Benchmark Markets – with & without NP
  - Identify Benchmark Products/ Bundles
  - Research Benchmark Product Pricing – Markets with & without NP
  - Analyse Benchmark Pricing
    - Identify NP pricing factors – by sector
    - Compare markets without NP with TCI
    - Compare markets with NP with TCI
  - Identify NP Pricing Factors - by sector

- Estimate Current Value of TCI Fixed & Mobile sectors
  - Identify Potential NP Impact Scenarios on TCI Market
  - Calculate Minimum & Maximum NP Impact Value – NP BENEFITS over 5 years
- Estimate NP Costs for TCI
  - Operator Costs – Minimum & Maximum per Operator
    - Set-up
    - Operating
  - Central Costs
  - Calculate Total Stakeholder NP Costs – over 5 years - NP COSTS
- Assess NP COSTS vs NP BENEFITS

## Benchmarking Approach

On this basis, the Commission has undertaken a study to assess the competitive dynamics influencing current market pricing of fixed and mobile telecommunications services in Turks & Caicos, by benchmarking with similar neighbouring Caribbean markets.

The benchmark markets have been selected since a) dominated by the similar duopoly of C&W/ Flow and Digicel; b) have differing NP status and c) can be considered to be small island jurisdictions with similar demographics to Turks & Caicos.

Island	Population	Multi-Island	MNP	FNP	No. Mobile Operators	No. Fixed Operators
Turks & Caicos	38718	Yes	No	No	2	2
Anguilla	15094	No	No	No	2	2
Antigua & Barbuda	97928	Yes	No	No	3	1
Barbados	287371	No	No	No	2	2
British Virgin Islands	30237	Yes	No	No	3	2
St Lucia	183629	No	Yes	Yes	2	2
St Kitts & Nevis	53192	Yes	Yes	Yes	2	2
Dominica	71991	No	Yes	Yes	2	2
St Vincent & the Grenadines	110947	Yes	Yes	Yes	2	2
Grenada	112519	No	Yes	Yes	3	2
Cayman Islands	65720	Yes	Yes	Yes	2	2
Jamaica	2961000	No	Yes	Yes	2	2
Trinidad & Tobago	1399000	Yes	Yes	Yes	2	3

It is noted that:

- Jamaica and Cayman Islands have both Fixed and Mobile NP services
- ECTEL and Trinidad & Tobago currently only operate Mobile NP services, although ECTEL plans to launch Fixed NP later in 2022
- Barbados is currently preparing to launch Fixed and Mobile NP services in 2022
- Antigua & Barbuda is planning to launch Mobile NP in late 2022/ early 2023

The Commission's consultants have researched and compared a range of fixed and mobile products from Cable & Wireless/ Flow and Digicel websites in each benchmark market which were similar to those available in Turks & Caicos, namely:

### Mobile

- Post Paid Bundles – Voice/ SMS/ Data
  - 10-20GB Data
  - 25-40GB Data
- Pre-Paid Bundles – Voice/ SMS/ Data
  - 7 Day 2-10GB Data
  - 30 Day 8-30GB Data

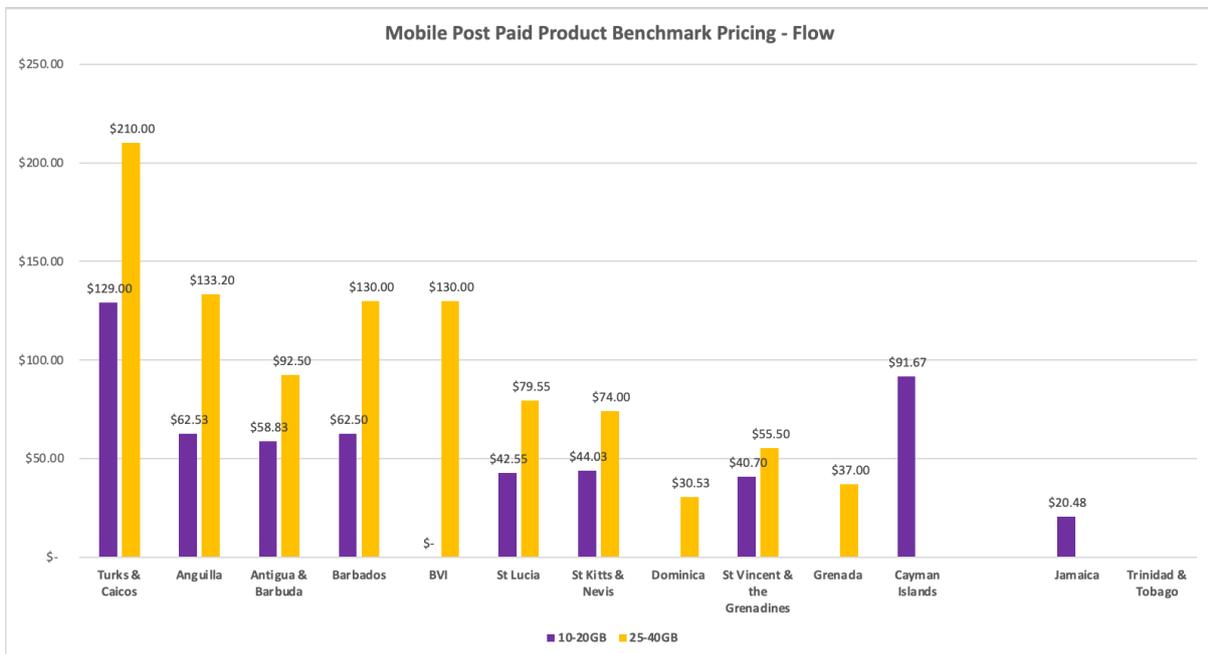
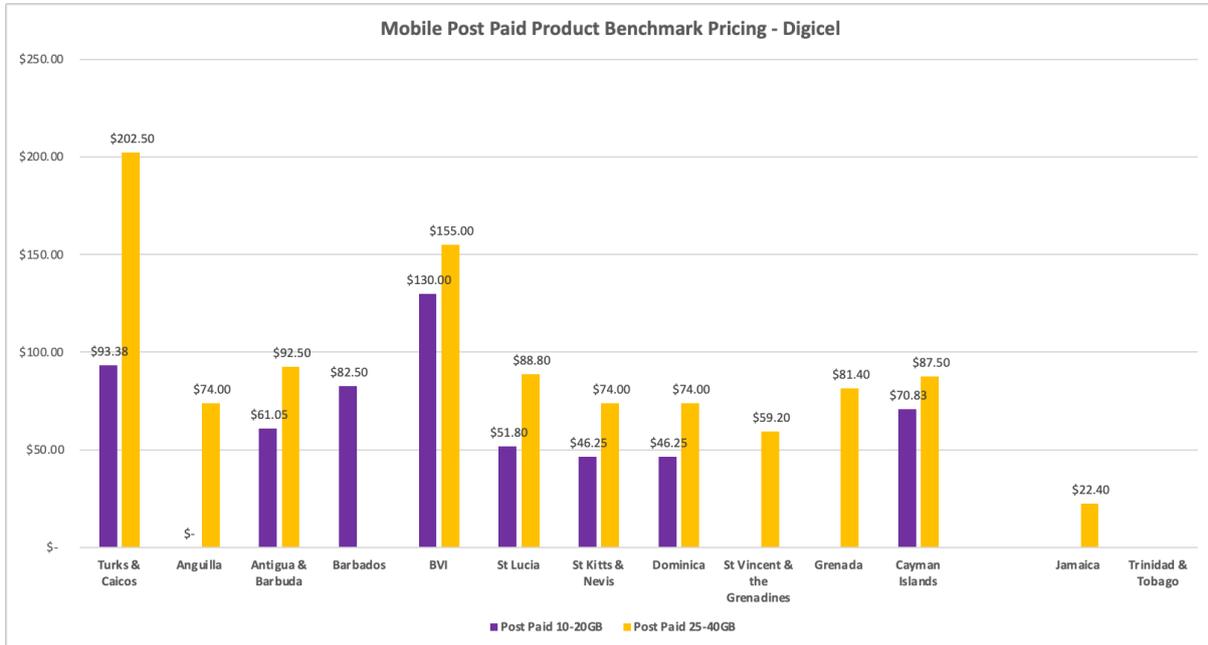
### Fixed

- Voice
  - Basic
  - Including 500-800 minutes per month
- Broadband
  - 25-50GB Download

- 50-100GB Download

# Mobile Service Value Benchmarking

## Post Paid Products

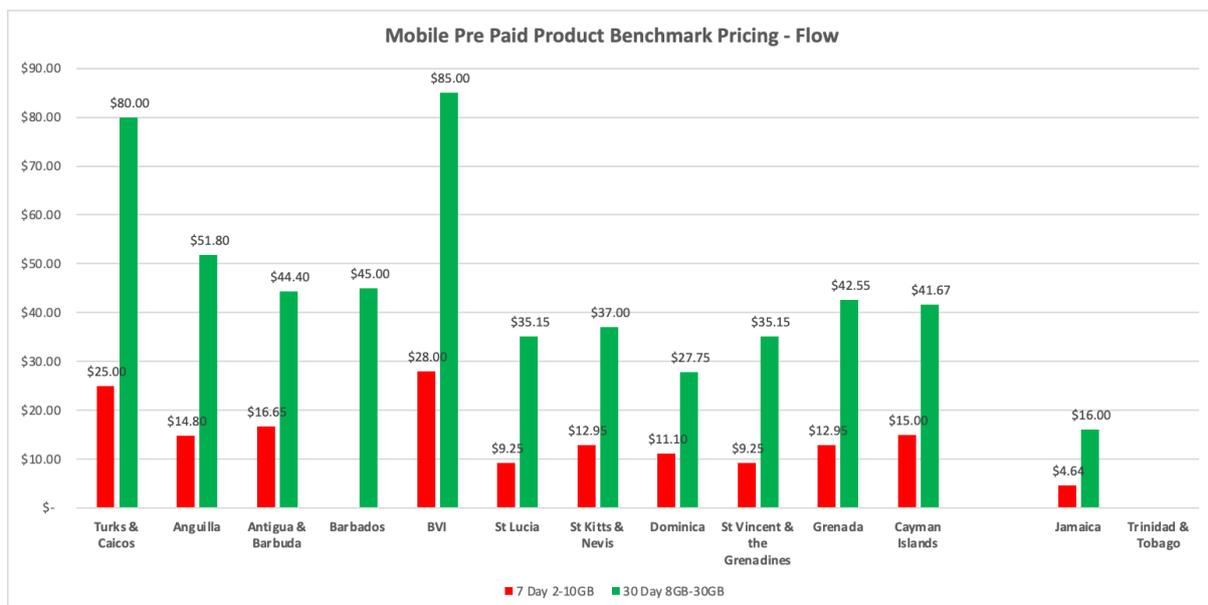
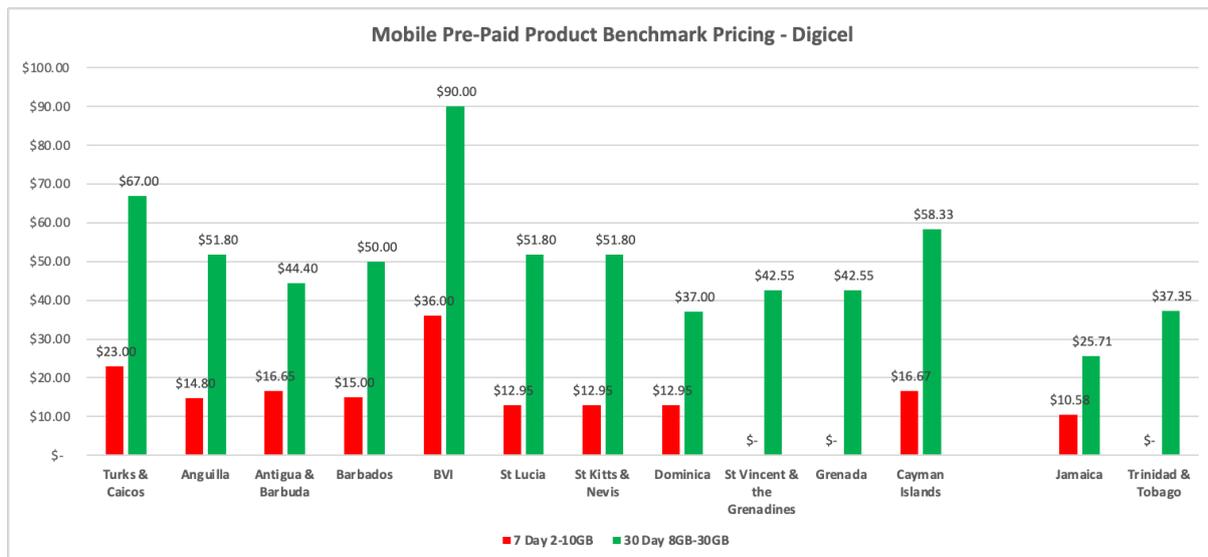


	Digicel		Flow		Average
	10-20GB	25-40GB	10-20GB	25-40GB	
Post Paid					
Small Island Non NP vs Small Island with NP	170%	174%	114%	252%	177%
TCI vs Small Island Non NP	102%	155%	206%	151%	154%
TCI vs Small Island with NP	174%	268%	236%	380%	264%

The benchmark analysis shows:

- Turks & Caicos Post-paid pricing is the highest in the region
- The alignment of Cable & Wireless/ Flow and Digicel pricing varies by market, close alignment in some non-NP markets but the differentials are greater in some ECTEL markets with NP
- Pricing in non-NP markets is on average 70% higher than NP markets, indicating a potential NP pricing opportunity of upto 70%
- Turks & Caicos post-paid mobile pricing is on average 54% higher than equivalent in neighbouring non-NP markets and a staggering 164% higher than neighbouring NP markets, such as ECTEL

## Pre-Paid Products



Pre Paid	Digicel		Flow		Average
	7 Day 2-10GB	30 Day 8GB-30GB	7 Day 2-10GB	30 Day 8GB-30GB	
Small Island Non NP vs Small Island with NP	149%	138%	126%	155%	142%
TCI vs Small Island Non MNP	112%	106%	168%	141%	132%
TCI vs Small Island with MNP	166%	146%	213%	219%	186%

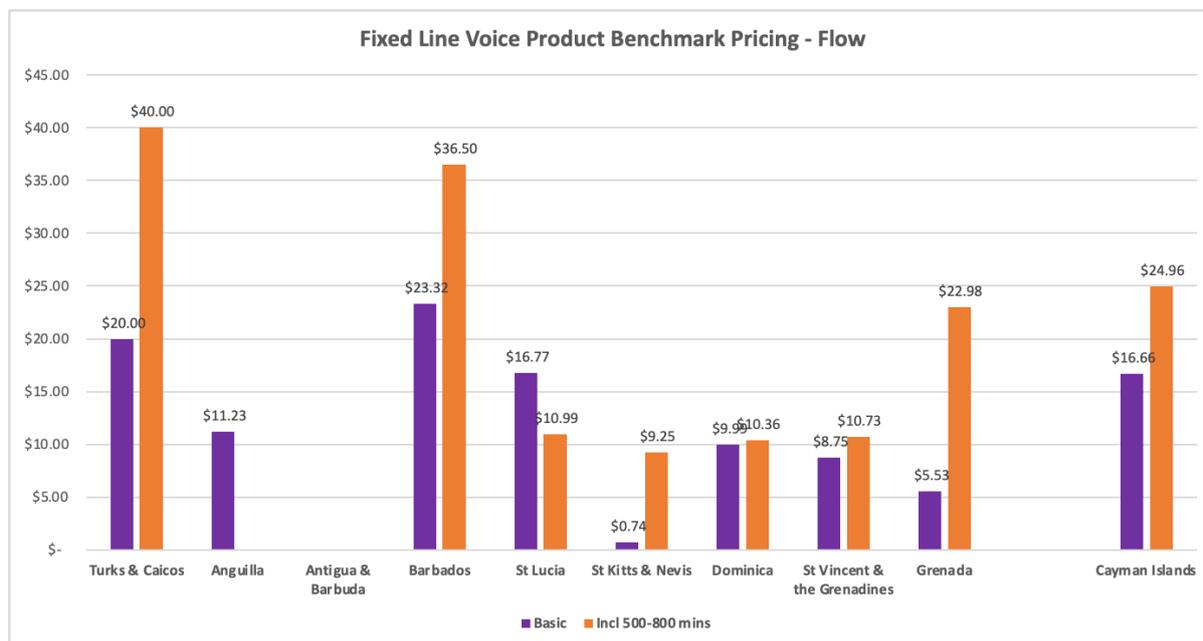
The benchmark analysis shows:

- Turks & Caicos pre-paid pricing is the second highest in the region after BVI (another non-NP market)
- 7-day package pricing is more closely aligned between Cable & Wireless/ Flow and Digicel than 30 day package pricing which has greater variation in data volumes

- Pricing in non-NP markets is on average 42% higher than NP markets, indicating a potential NP pricing opportunity of upto 42%
- Turks & Caicos post-paid mobile pricing is on average 32% higher than equivalent in neighbouring non-NP markets and 86% higher than neighbouring NP markets, such as ECTEL.

## Fixed Service Value Benchmarking

### Fixed Voice Products



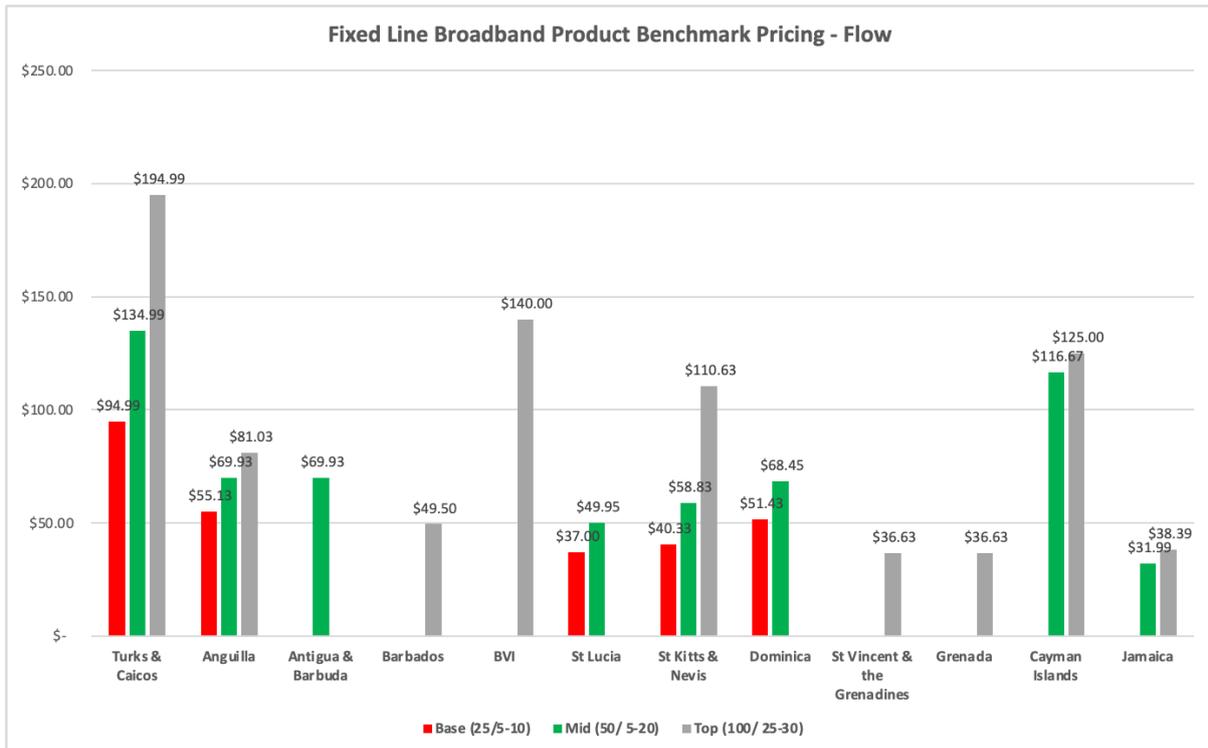
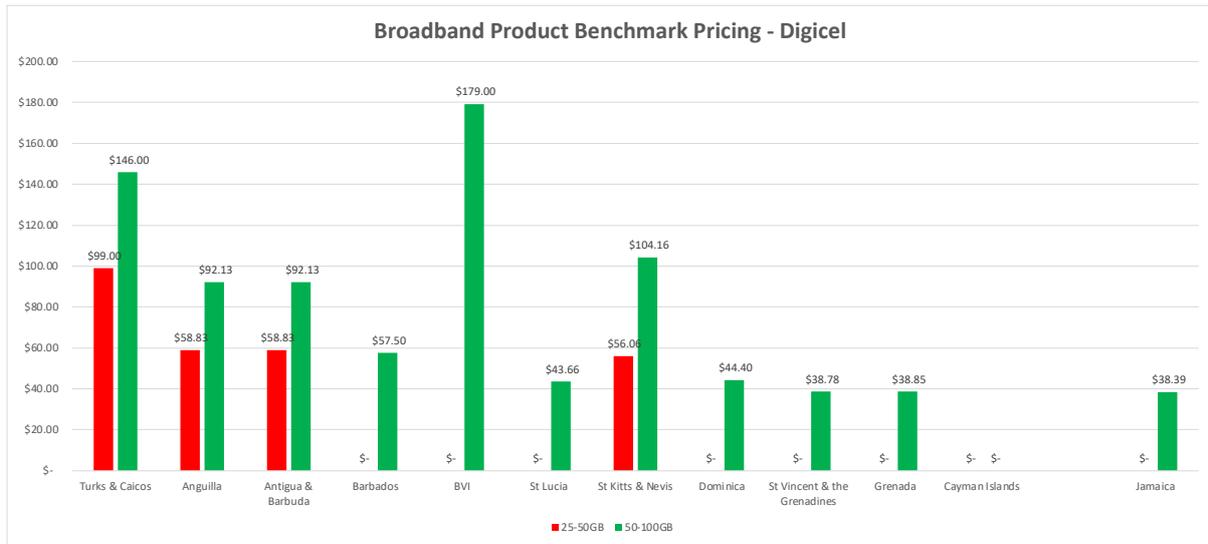
	Digicel		Flow		Average
	Basic	Incl 500-800 mins	Basic	Incl 500-800 mins	
Fixed Voice					
Small Island Non NP vs Small Island with NP			153%	65%	109%
TCI vs Small Island Non NP			183%	247%	215%
TCI vs Small Island with NP			120%	160%	140%

Fixed NP was only available in the Cayman Islands within the benchmark markets, although Fixed is planned to be launched across ECTEL and Barbados.

Only Cable & Wireless/ Flow offered separate fixed voice services across the benchmark markets, which aligns with the current monopoly of Fixed voice services in many markets prior to the launch of Fixed NP services. Thus, the fixed voice benchmark analysis is restricted to comparing Cable & Wireless/ Flow pricing between Turks & Caicos and the other benchmark markets.

- Since only one market (Cayman Islands) has fixed NP, the differential with the other non-Fixed NP markets is much smaller at only 9%
- Turks & Caicos fixed voice pricing is a staggering 140% higher than the average pricing across the other non-Fixed NP markets suggesting significant scope of price/ value improvement
- Base fixed line only services cost \$20 per month in Turks & Caicos compared to \$0.74 in St Kitts & Nevis and \$5.53 in Grenada
- Turks & Caicos fixed voice pricing with 800 inclusive minutes, \$40 per month, is significantly higher than some markets offering unlimited inclusive minutes, for instance, \$10.36 Dominica and \$10.99 St Lucia etc

## Fixed Broadband Products



Unlike fixed voice services, Digicel offers competing broadband services across all the benchmark markets, either as standalone broadband products or bundled with TV/ media content.

Broadband	Digicel		Flow			Average
	25-50GB	50-100GB	25 Up/5-10 Down	50 Up/ 5-20 Down	100 Up/ 25-30 Down	
Small Island Non NP vs Small Island with NP	N/A	200%	0%	117%	130%	112%
TCI vs Small Island Non NP	171%	190%	207%	213%	310%	195%
TCI vs Small Island with NP	N/A	380%	0%	182%	239%	187%

The analysis of the benchmark data shows:

- Turks & Caicos has the highest broadband pricing across all of the benchmark markets and product types, with the exception of Digicel BVI
- Pricing differential between the Cayman Islands (the only small island with Fixed NP) and the benchmark markets without Fixed NP increases to 12% compared to 4% for the monopolistic fixed voice service pricing; and
- Turks & Caicos broadband product pricing is between 72% (base) and 39% (top) higher than the benchmark markets without Fixed NP.

## Price Benchmarking Summary

Service	Mobile		Fixed		Average Mobile	Average Fixed
	Post-Paid	Pre-Paid	Voice	Broadband		
Small Island Non NP vs Small Island with NP	177%	142%	109%	112%	160%	110%
TCI vs Small Island Non NP	154%	132%	215%	195%	143%	205%
TCI vs Small Island with NP	264%	186%	140%	187%	225%	164%

The benchmarking analysis clearly shows current Turks & Caicos fixed and mobile pricing is significantly higher than the neighbouring markets, pricing premiums being a) with markets with number portability between 64% for fixed services and 125% for mobile services; and b) with markets currently without number portability between 43% for fixed services and 105% for mobile services

The benchmarking analysis also suggests that the average pricing premium between markets with number portability and those without is between 10% for fixed services and 60% for mobile services.

The Commission believes the Number Portability cost benefit analysis should be based on conservative price reduction/ value enhancements of between 15% and 35% over a five-year period following the launch of a potential number portability service in Turks & Caicos.

In 2020, the Commission valued the Turks & Caicos fixed and mobile sectors (excluding internet services) at \$39.5 million USD (mobile \$25.5 USD and fixed voice \$14 million USD).

The Commission understands that Digicel reports its internet services revenues within the reported mobile services revenues and Flow reports its internet services revenues within the reported fixed services revenues

Thus, the total Turks & Caicos telecommunications market based on 2020 subscriber volumes and 2022 high-level pricing is estimated to be around \$39.5 million USD.

The Commission has made the following assumptions in assessing the potential price reduction benefits over five years following the introduction of local number portability for each segment could be between:

- Mobile sector – 25% and 35%
- Fixed sector – 15% and 25%

The Commission has modelled minimum and maximum market price reduction scenarios over both mobile and fixed sectors using different annual market price reduction profiles.

<b>Mobile Market - Maximum</b>	<b>Market - Start</b>	<b>\$ 25,000.00</b>	
	<b>%ge Reduction</b>	<b>Reduction</b>	<b>Revised Market</b>
Year 1 Saving	16%	\$ 4,000.00	\$ 21,000.00
Year 2 Saving	10%	\$ 2,100.00	\$ 18,900.00
Year 3 Saving	6%	\$ 1,134.00	\$ 17,766.00
Year 4 Saving	2%	\$ 355.32	\$ 17,410.68
Year 5 Saving	1%	\$ 174.11	\$ 17,236.57
<b>Total 5 Year Mobile Market Saving - Maximum</b>	<b>35%</b>	<b>\$ 7,763.43</b>	

<b>Mobile Market - Minimum</b>	<b>Market - Start</b>	<b>\$ 25,000.00</b>	
	<b>%ge Reduction</b>	<b>Reduction</b>	<b>Revised Market</b>
Year 1 Saving	12%	\$ 3,000.00	\$ 22,000.00
Year 2 Saving	7%	\$ 1,540.00	\$ 20,460.00
Year 3 Saving	5%	\$ 1,023.00	\$ 19,437.00
Year 4 Saving	2%	\$ 388.74	\$ 19,048.26
Year 5 Saving	0%	\$ -	\$ 19,048.26
<b>Total 5 Year Mobile Market Saving - Minimum</b>	<b>26%</b>	<b>\$ 5,951.74</b>	

<b>Fixed Market - Maximum</b>	<b>Market - Start</b>	<b>\$ 14,500.00</b>	
	<b>%ge Reduction</b>	<b>Reduction</b>	<b>Revised Market</b>
Year 1 Saving	12%	\$ 1,740.00	\$ 12,760.00
Year 2 Saving	8%	\$ 1,020.80	\$ 11,739.20
Year 3 Saving	4%	\$ 469.57	\$ 11,269.63
Year 4 Saving	2%	\$ 225.39	\$ 11,044.24
Year 5 Saving	0%	\$ -	\$ 11,044.24
<b>Total 5 Year Fixed Market Saving - Maximum</b>	<b>26%</b>	<b>\$ 3,455.76</b>	

<b>Fixed Market - Minimum</b>	<b>Market - Start</b>	<b>\$ 14,500.00</b>	
	<b>%ge Reduction</b>	<b>Reduction</b>	<b>Revised Market</b>
Year 1 Saving	8%	\$ 1,160.00	\$ 13,340.00
Year 2 Saving	5%	\$ 667.00	\$ 12,673.00
Year 3 Saving	3%	\$ 380.19	\$ 12,292.81
Year 4 Saving	0%	\$ -	\$ 12,292.81
Year 5 Saving	0%	\$ -	\$ 12,292.81
<b>Total 5 Year Fixed Market Saving - Minimum</b>	<b>16%</b>	<b>\$ 2,207.19</b>	

<b>Total TCI Market - Maximum</b>	<b>Market - Start</b>	<b>\$ 39,500.00</b>	
	<b>%ge Reduction</b>	<b>Reduction</b>	<b>Revised Market</b>
Year 1 Saving	15%	\$ 5,740.00	\$ 33,760.00
Year 2 Saving	9%	\$ 3,120.80	\$ 30,639.20
Year 3 Saving	5%	\$ 1,603.57	\$ 29,035.63
Year 4 Saving	2%	\$ 580.71	\$ 28,454.92
Year 5 Saving	1%	\$ 174.11	\$ 28,280.81
<b>Total 5 Year TCI Market Saving - Maximum</b>	<b>32%</b>	<b>\$ 11,219.19</b>	

<b>Total TCI Market - Minimum</b>	<b>Market - Start</b>	<b>\$ 39,500.00</b>	
	<b>%ge Reduction</b>	<b>Reduction</b>	<b>Revised Market</b>
Year 1 Saving	11%	\$ 4,160.00	\$ 35,340.00
Year 2 Saving	6%	\$ 2,207.00	\$ 33,133.00
Year 3 Saving	4%	\$ 1,403.19	\$ 31,729.81
Year 4 Saving	1%	\$ 388.74	\$ 31,341.07
Year 5 Saving	0%	\$ -	\$ 31,341.07
<b>Total 5 Year TCI Market Saving - Minimum</b>	<b>22%</b>	<b>\$ 8,158.93</b>	

The Commission's analysis suggests using conservative price reduction assumptions that introducing fixed and mobile number portability could generate market price reductions of between \$8.1 million and \$11.2 million over five years, driving the alignment Turks and Caicos market pricing with the regional benchmark markets.

## Turks & Caicos Local Number Portability Implementation and Operating Cost Assessment

Based on the Commission's consultants experience of supporting the implementation of local number portability across neighbouring Caribbean markets, the Commission has prepared estimations of the different stakeholder costs for implementing and operating a proposed local number portability service in Turks & Caicos.

The implementation and operating costs can be split into two groups, a) individual operator costs and b) shared central costs.

### **Operator Costs**

Operator implementation costs tend to be focused around the following key technical, organisational and project investments/ costs, including:

- Core Network Routing Upgrade
- VAS System Upgrade
- NP Gateway
- Automated NP Business System Upgrade
- Billing System Upgrade
- Testing
- Project Support
- Training

Operator operating costs are focused on staff resources for operating local number portability helpdesks to support the internal operation of the service and the requisite interworking with the helpdesks of the NPC provider and other operators to address operational and customer related porting issues.

The Commission has assumed that both licenced operators (Digicel & Flow) will be responsible for their own local number portability implementation and operating costs. The Commission has assumed that the local number portability implementation and operating costs will be similar for each operator. The Commission's analysis has considered minimum and maximum estimates for the specified implementation

### **Central/ Shared Costs**

The Central/ Shared costs are split into two categories, namely a) the costs of setting up and operating the central number portability clearinghouse which are typically shared between the operators and b) the central programme management/ consultant charges funded by the Commission to progress the effective and timely implementation and launch of TCI local number portability service/

The Commission is pleased to provide its analysis in the table overleaf.

<b>NP Activity/ Operator</b>	<b>Minimum</b>	<b>Maximum</b>
Core Network Routing Upgrade	\$ 400,000.00	\$ 600,000.00
VAS System Upgrade	\$ 150,000.00	\$ 250,000.00
NP Gateway	\$ 150,000.00	\$ 200,000.00
Automated NP Business System Upgrade	\$ 300,000.00	\$ 380,000.00
Billing System Upgrade	\$ 150,000.00	\$ 240,000.00
Testing	\$ 40,000.00	\$ 60,000.00
Project Support	\$ 30,000.00	\$ 50,000.00
Training	\$ 10,000.00	\$ 15,000.00
NPC Set-Up	\$ 20,000.00	\$ 20,000.00
<b>Total LNP Investment - per Operator</b>	<b>\$ 1,250,000.00</b>	<b>\$ 1,815,000.00</b>
<b>Total Operator LNP Investment - 2 Operators</b>	<b>\$ 2,500,000.00</b>	<b>\$ 3,630,000.00</b>
TCI Telecommission Programme	\$ 150,000.00	\$ 150,000.00
<b>Total Implementation Costs</b>	<b>\$ 2,650,000.00</b>	<b>\$ 3,780,000.00</b>
NPC Operating Costs/ Annum	\$ 60,000.00	\$ 60,000.00
Operator LNP Helpdesk Support Costs/ Annum	\$ 40,000.00	\$ 60,000.00
<b>Total Annual LNP Operating Costs</b>	<b>\$ 140,000.00</b>	<b>\$ 180,000.00</b>
<b>Total 5 Year LNP Operatng Costs</b>	<b>\$ 700,000.00</b>	<b>\$ 900,000.00</b>
<b>Total LNP 5 Year Implementation &amp; Operating Costs</b>	<b>\$ 3,350,000.00</b>	<b>\$ 4,680,000.00</b>

The Commission's assessment suggests the overall costs of implementing and operating the TCI local number portability service for five years from launch could be between \$3.35 million and \$4.70 million across all stakeholders.

## Cost Benefit Analysis

Under the terms of the Turks & Caicos Telecommunications Ordinance 14.02 dated 31 March 2018 includes provision 14, the Commission is required to demonstrate that the market, economic, consumer benefits derived from regulatory initiatives are greater than the identified market and stakeholder costs.

The Commission's conservative evaluation of the likely benefits of introducing local number portability indicate the benefits to the TCI economy and consumers range between **\$8.2 million** and **\$11.2 million** over five years post the launch of the local number portability service.

Similarly, Commission's evaluation of the likely cross industry costs of introducing local number portability range between **\$3.35 million** and **\$4.70 million** over five years post the launch of the local number portability service.

The Commission concludes that the Cost Benefit Analysis of just type 2 benefits from the potential introduction of introducing a local number portability service into TCI could generate net positive benefits of between **\$4.75 million** and **\$6.50 million** to the TCI economy and consumers over five years post the launch of the local number portability service.

**On this basis, the Commission concludes that Cost Benefit assessment obligations required under the terms of the Turks & Caicos Telecommunications Ordinance 14.02 dated 31 March 2018 includes provision 14, have been fulfilled and support the Commission's decision to progress with the implementation and launch of the TCI local number portability service.**

## Annex B – Summary of Digicel Consultation Response

TCI Telecommission NP Consultation Question	Digicel Consultation Response	Turks & Caicos Telecommission Response
<p><b>Question 1.</b> <i>NP should be restricted to service provider number portability, specifically porting between mobile to mobile and fixed to fixed numbers only. It is not proposed to offer hybrid fixed to mobile and mobile to fixed NP in TCI. In the case of fixed NP, it is intended to allow porting of fixed numbers within the same local exchange and local call areas only. Please provide your comments and views regarding this proposed approach.</i></p>	<p>Digicel agrees that NP should be restricted to service provider portability (mobile to mobile and fixed to fixed) in TCI.</p> <p>Digicel states that service provider portability is likely to minimize porting complexity for both consumers and service providers, aligns with practices in other similar markets and reduces NP implementation and operational costs.</p> <p>Digicel emphasizes the importance of reassessing the TCI calling area structure and that fixed NP should not be constrained by legacy competitor local exchange and area structures which potentially constrain future market development and competition.</p>	<p>Digicel concurs with the Commission’s proposal that the Turks &amp; Caicos number portability service should be restricted service provider portability only, i.e., mobile to mobile and fixed to fixed NOT mobile to fixed or fixed to mobile.</p> <p>The Commission notes Digicel’s observations on the benefits of service provider portability in terms of complexity and costs, as well as alignment to regional best practices.</p> <p>The Commission notes Digicel’s concerns regarding potential service and competitive constraints posed by legacy TCI calling area structures and agrees that the proposed TCI LNP working group should discuss and make recommendations to the Commission on the most appropriate TCI calling area structures to support Fixed NP.</p>
<p><b>Question 2.</b> <i>The NP process of moving a customer’s number from one provider to another provider can be achieved by either Recipient Led (the customer requests porting through the new Recipient operator) or Donor Led (the customer porting approaches their</i></p>	<p>Digicel strongly supports a recipient led porting process which aligns to the approach adopted in other Caribbean markets.</p>	<p>The Commission notes Digicel’s strong support for a Recipient Led porting service.</p>

<p>current operator to seek permission to leave). Please state your preference and outline your reasoning?</p>		
<p><b>Question 3.</b> It is proposed that NP is to be managed and operated in TCI through a centralised NP system which will track all TCI 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 TCI providers. Please provide your comments and views regarding this proposed approach</p>	<p>Digicel supports NP being managed and operated through a centralized NP system.</p> <p>Digicel believes that a centrally managed NP service will provide the most competitively neutral outcomes, aligns with the approach adopted in other Caribbean markets and thus provides opportunities to benefit from regional scale economies</p>	<p>Digicel agrees that a number portability service should be managed via a central clearinghouse/ database system.</p> <p>The Commission concludes that the proposed Turks &amp; Caicos number portability service should be managed via a central clearinghouse/ database system to ensure number portability is delivered in a consistent and efficient manner.</p>
<p><b>Question 4.</b> By proposing to adopt the centralised driven NP approach, it is proposed that the successful provider of the NP Clearinghouse will be licenced by the TCI Telecommunications Commission to provide NP services and will be required to contract directly with the licenced TCI operators. Please provide your comments and views regarding this proposed approach.</p>	<p>Digicel does not have a preference for the contracting arrangements between the NP Clearinghouse provider and the TCI licenced operators. Digicel recognizes contract only vs contract and licencing options both have advantages and disadvantages.</p> <p>Digicel is concerned that final NP Clearinghouse service management approach should be simple and minimize regulatory related costs.</p>	<p>The Commission notes that Digicel does not have a preference for the proposed contract only vs contract and licencing options.</p> <p>The Commission notes Digicel's concerns about the imposition of TCI licenced operators of additional regulatory or licencing fees.</p> <p>The Commission is committed to ensuring the NP Clearinghouse costs funded by the TCI licenced operators are minimised and are fair and equitable.</p> <p>The Commission does not favour the option whereby the NP</p>

	<p>Digicel recommends that if is decided that the NP Clearinghouse provider should be licenced by the Commission, then such a licence should avoid double taxation on licences, either with licence being exempt from fees or the TCI licenced providers permitted to deduct the NP Clearinghouse licence fees from their own licence fees.</p> <p>Digicel notes that should the Commission decide to contract directly with the NP Clearinghouse provider then the Commission should not impose any mark-up of NP Clearinghouse on TCI licenced operators.</p>	<p>Clearinghouse provider contracts directly with the Commission.</p>
<p><b>Question 5.</b> <i>It is proposed that the NP Clearinghouse may be either operated from TCI or hosted overseas. Please provide your comments and views regarding this proposed approach.</i></p>	<p>Digicel does not have a preference for the location of the NP Clearinghouse service, provided the provider assures data integrity and security of the service.</p> <p>Digicel believes the final decision regarding the location of the NP Clearinghouse service should be made during the vendor selection process.</p>	<p>The Commission notes Digicel does not have a strong preference for the location of the NP Clearinghouse service and notes Digicel’s comments about data security and integrity.</p> <p>The Commission notes Digicel’s suggestion that the decision regarding the location of the NP Clearinghouse service should be made during the vendor selection process.</p>
<p><b>Question 6.</b> <i>It is proposed that all fixed and mobile traffic to be ported and non-ported numbers originated and terminated in the TCI</i></p>	<p>Digicel supports the Commission’s proposal to adopt All Call Query direct routing, since this is widely used across the region.</p>	<p>The Commission notes Digicel’s support for All Call Query direct routing.</p>

<p><i>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 NP implementations across the world and is considered to be the most operationally efficient and reliable form of routing in NP jurisdictions. Please provide your comments and views regarding this proposed approach.</i></p>		
<p><b>Question 7.</b> <i>Introducing NP is likely to enhance competition and choice in the TCI telecommunications market. Please provide your comments about this statement.</i></p>	<p><i>Digicel agrees with the Commission’s conclusion in the consultation document that “Introducing NP is likely to enhance competition and choice in the TCI telecommunications market”</i></p> <p><i>Digicel is concerned that the Commission’s consultation document does not consider or quantify the likely consumer demand for NP nor the costs and benefits related to the introduction and operation of NP services, as required by Article 13 of the Telecommunications Regulations 2005.</i></p>	<p>The Commission notes Digicel’ agreement that NP could be potential driver for enhancing competition in the telecommunications market in TCI.</p> <p>The Commission notes Digicel’s comments regarding the obligation on the Commission under Article 13 of the Telecommunications Regulations 2005 to consider and quantify the estimated NP demand, costs and benefits.</p> <p>The Commission has undertaken the appropriate NP cost vs benefit analysis of introducing the NP service as required by Article 13 of the Telecommunications Regulations 2005. The analysis is provided in schedule A of this document which demonstrates that introducing the LNP service could generate net benefits of between \$4.8 million and \$6.6 million to TCI consumers and the economy</p>

		over the 5 years following LNP Service Launch.
<p><b>Question 8.</b> <i>It is proposed that each operator and the successful provider of the NP Clearinghouse will be responsible for their set-up costs to prepare for the implementation and launch of NP in TCI 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 NP into TCI, and your comments and views regarding this proposed approach.</i></p>	<p>Subject to the completion of a LNP cost benefit analysis by the Commission, Digicel is generally supportive of the Commission’s proposal that each operator should cover their own LNP setup implementation and launch costs. Furthermore, Digicel stated that each operator should be responsible any operational costs associated with inbound porting of numbers.</p> <p>Digicel also noted that the Commission’s proposal could also incentivize operator cost minimization and maintain cost neutrality.</p> <p>Digicel did not provide an estimate of its likely NP set-up investment costs.</p>	<p>The Commission appreciates Digicel’s support for the Commission’s proposal that each operator should cover their own LNP setup implementation and launch costs.</p> <p>The Commission notes Digicel’s comments that each operator should be responsible any operational costs associated with inbound porting of numbers.</p>
<p><b>Question 9.</b> <i>It is proposed that Recipient operators will be allowed to charge customers for porting their numbers at the discretion of each recipient operator. Consumer charging will be reasonable and the TCI Telecommunications</i></p>	<p>Digicel believes that Recipient operators should be permitted to charge (should they wish to do so) customers for porting their numbers but Digicel did not comment on whether the Commission’s proposal that the Commission should have the right to</p>	<p>The Commission notes Digicel’s support for the principle for Recipient operators to be allowed discretion to charge customers for porting in their numbers.</p> <p>The Commission also welcomes Digicel’s support for the proposal that Donor operators should not be permitted to charge</p>

<p><i>Commission reserves the right to set a maximum limit to consumer porting charges. 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.</i></p>	<p>set a maximum limit to consumer porting charges.</p> <p>Digicel agreed that Donor operators should not be permitted to charge customers for porting out their numbers.</p>	<p>customers for porting out their numbers.</p>
<p><b>Question 10.</b> - <i>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. The TCI Telecommunications Commission reserves the right to set a maximum limit to donor porting charges. TCI Telecommunications Commission reserves the right to set a maximum limit to donor porting charges.</i></p>	<p>Digicel agrees that Donor operators should be able to cover the reasonable costs of customers porting out of their network. Digicel did not specifically comment on the Commission’s proposal 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 for the actual handling of port requests.</p>	<p>The Commission notes Digicel’s support for the principle for Donor operators to be allowed to recover reasonable costs of customers porting out of their network.</p>
<p><b>Question 11.</b> <i>Should fixed and mobile NP be implemented and launched at the same time or should the introduction be phased? If you prefer a phased approach, what should the order of the phasing be and why?</i></p>	<p>Digicel is of the strong view that, consistent with what has been able to be achieved in other markets, there are no good technical or operational decisions for a “phased” approach both mobile number portability and fixed number portability should be introduced at the same time.</p>	<p>The Commission notes Digicel’s view that fixed and mobile NP should be launched at the same time.</p> <p>The Commission believes that in the interests of competitive fairness and customer choice, the Commission concurs with Digicel that the mobile and fixed NP services to be launched at the same time.</p>

		<p>The Commission notes that both mobile and fixed NP services were launched successfully at same time in Jamaica and the Cayman Islands and that this is the approach being adopted in Barbados.</p>
<p><b>Question 12.</b> <i>It is proposed that NP will be implemented and launched to the TCI public within 18 months of the date of this consultation. Please provide your comments and views regarding this proposed approach.</i></p>	<p>Digicel stated that based on experience from other jurisdictions that 18 months would be the minimum time required to implement NP.</p> <p>Digicel noted that the proposed ambitious timeframe would not allow for any delay or the complications that may arise as a result of market changes, including entry (or exit) of market players, upstream supplier delays, or other related regulatory issues.</p> <p>Digicel believes it would be more realistic for the Commission to provide for a two-year implementation timeframe and then to work together with industry stakeholders to improve on the implementation timeframe rather than to end up in a situation where, through no fault of any particular party, targets are not able to be met and consumers and other stakeholders are disappointed.</p> <p>Digicel also reiterated the view that the starting</p>	<p>The Commission notes Digicel’s comments and preference for a two-year launch timeframe rather than the proposed 18 month launch timeframe from consultation. However, the Commission believes the proposed 18 month launch timeframe is not unreasonable considering the licenced TCI stakeholders NP experience in neighbouring markets, resources and the presence of a proven regional NP service operating model.</p> <p>The Commission will prioritise the review and discussion of the NP implementation and launch timeframes through the initial deliberations of the LNPWG.</p> <p>The Commission has undertaken the appropriate NP cost vs benefit analysis of introducing the NP service as required by Article 13 of the Telecommunications Regulations 2005. The analysis is provided in schedule A of this document which demonstrates that introducing the LNP service could generate net benefits of between \$4.8 million and \$6.6 million to TCI consumers and the economy over the 5 years following LNP Service Launch.</p>

	<p>point for the implementation period must necessarily take into account the relative costs and benefits of implementing NP. This is because operators can ill afford “cost shocks” in the current business environment and will need adequate time to factor in any establishment costs into existing capital investment programmes.</p>	
<p><b>Question 13.</b> <i>It is proposed that the implementation and preparations for the launch of NP in TCI will be managed by a cross stakeholder working group reporting to the TCI Telecommunications Commission, but the TCI Telecommunications Commission shall be responsible for setting the key NP process and functional details and implementation timeframes etc. Please provide your comments and views regarding this proposed approach.</i></p>	<p>Digicel agrees that the implementation and preparations for the launch of NP in TCI should be managed by a cross stakeholder working group (“NPWG”) reporting to the TCI Telecommunications Commission. However, it is also critical that the Commission plays an active role in project management to ensure that the complex processes and interdependencies are managed and that parties adhere to committed timeframes.</p> <p>Digicel suggests that such project management may be undertaken either internally within the Commission or using an external firm but that the person or persons responsible must have a proven background in managing similar projects in a competitive stakeholder environment.</p>	<p>The Commission notes Digicel’s support for the proposed implementation approach.</p> <p>The Commission notes Digicel’s suggestion that the Commission should lead the TCI LNP implementation programme. The Commission concurs with Digicel’s suggestion and plans to engage respected external expert consultants to support the TCI LNP implementation programme.</p>

<p><b>Question 14.</b> <i>It is proposed that all customer porting requests will be completed within; 1 working day for mobile NP and 5 working days of fixed NP, from the date of the customer’s validated and signed porting request. Please provide your comments and views regarding this proposed approach.</i></p>	<p>Digicel agrees with the proposed NP service timelines appear reasonable but should be confirmed pursuant to operational and regulatory frameworks developed by the LNPWG during the implementation programme.</p>	<p>The Commission appreciates Digicel’s support for the proposed NP service timelines. The Commission notes Digicel’s comments regarding the alignment of the porting timelines to the corresponding operational and regulatory frameworks developed during the implementation programme.</p>
<p><b>Question 15.</b> <i>It is proposed that data transfer during the porting process between the recipient and donor operators is minimised to ensure 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. Porting process security and integrity will be provided by independent customer validation for each porting request, by either SMS (for mobile number porting requests) or Interactive Voice Response or PIN (for fixed number porting requests). Please provide your comments and views regarding this proposed approach.</i></p>	<p>Digicel did not express a specific view on the proposed porting process data transfer but expects that decisions regarding data transfer will be developed during the LNPWG deliberations and will be engrained in the TCI LNP Business Rules.</p>	<p>The Commission notes Digicel’s view that the specific porting process data transfer requirements should be finalised during the LNPWG deliberations as part of the development of the TCI LNP Business Rules.</p>
<p><b>Question 16.</b> <i>It is proposed that once a</i></p>	<p>Digicel did not express a specific view on the</p>	<p>The Commission notes Digicel’s view that the approaches for</p>

<p><i>customer's porting request has been authorised by the customer and validated by the NP Clearinghouse 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 the TCI Telecommunications Commission. Once a validated porting request has been passed to the donor operator by the NP Clearinghouse it cannot be amended or cancelled by any party. Please provide your comments and views regarding this proposed approach.</i></p>	<p><b>proposed validation approach for porting requests but expects that decisions regarding porting validation will be developed during the LNPWG deliberations and will be engrained in the TCI LNP Business Rules.</b></p>	<p>validating porting requests should be finalised during the LNPWG deliberations as part of the development of the TCI LNP Business Rules.</p>
<p><b>Question 17.</b> <i>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</i></p>	<p><b>Digicel did not specifically comment on the proposed treatment of post-paid and pre-paid debt related to the consumer entitlement to port their number/ service.</b></p>	<p>The Commission assumes that Digicel does not have any specific objections to the proposed treatment of post-paid and pre-paid debt within the porting process.</p> <p>The Commission assumes that Digicel would prefer that post-paid and pre-paid debt porting provisions should be finalised during the LNPWG deliberations as part of the development of the TCI LNP Business Rules.</p>

<p><i>your comments and views regarding this proposed approach.</i></p>		
<p><b>Question 18.</b> <i>It is proposed that once the customer’s validated porting request has been passed to the donor operator by the NP Clearinghouse, 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 days, the donor operator will only be permitted to contact the customer for the sole purpose of recovering any outstanding payments or debts and will under no circumstances contact the customer during this period with purpose of soliciting the customer to return to the donor operator’s network. Please provide your comments and views regarding this proposed approach.</i></p>	<p><b>Digicel did not specifically comment on the proposed Donor operator Winback provisions.</b></p>	<p>The Commission assumes that Digicel does not have any specific objections to the proposed Donor operator Winback provisions.</p> <p>The Commission assumes that Digicel would prefer that Winback provisions within the porting process should be finalised during the LNPWG deliberations as part of the development of the TCI LNP Business Rules.</p>
<p><b>Question 19.</b> <i>It is proposed that customers will not be permitted to port their number to another operator within 60 days of their previous successful porting request. Please provide</i></p>	<p><b>Digicel did not specifically comment on the proposed onward porting restriction provisions.</b></p>	<p>The Commission assumes that Digicel does not have any specific objections to the proposed onward porting restrictions provisions.</p> <p>The Commission assumes that Digicel would prefer that onward porting restriction provisions</p>

<p><i>your comments and views regarding this proposed approach.</i></p>		<p>within the porting process should be finalised during the LNPWG deliberations as part of the development of the TCI LNP Business Rules.</p>
<p><b>Question 20.</b> <i>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.</i></p>	<p>Digicel did not comment on the Commission’s proposal that only real-time porting of customer numbers will be allowed and customers will not be permitted to delay or defer porting requests to later dates.</p>	<p>The Commission assumes that Digicel does not have any specific objections to the proposed real-time porting provisions.</p> <p>The Commission assumes that Digicel would prefer that real-time porting provisions should be finalised during the LNPWG deliberations as part of the development of the TCI LNP Business Rules.</p>
<p><b>Question 21.</b> <i>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 belong 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.</i></p>	<p>Digicel did not specifically comment on the proposed multiple number porting provisions.</p>	<p>The Commission assumes that Digicel does not have any specific objections to the proposed multiple number porting provisions.</p> <p>The Commission assumes that Digicel would prefer that multiple number porting provisions should be finalised during the LNPWG deliberations as part of the development of the TCI LNP Business Rules.</p>

## Annex C – Summary of Flow Consultation Response

TCI Telecommission NP Consultation Question	Flow Consultation Response	Turks & Caicos Telecommission Response
<p><b>Question 1.</b> NP should be restricted to service provider number portability, specifically porting between mobile to mobile and fixed to fixed numbers only. It is not proposed to offer hybrid fixed to mobile and mobile to fixed NP in TCI. In the case of fixed NP, it is intended to allow porting of fixed numbers within the same local exchange and local call areas only. Please provide your comments and views regarding this proposed approach.</p>	<p>Flow agrees that NP should be restricted to service provider portability (mobile to mobile and fixed to fixed) in TCI.</p> <p>Flow believes that the Commission’s proposal the Turks &amp; Caicos number portability service should be restricted service provider portability only is less complex, more efficient and cost effective.</p>	<p>Flow concurs with the Commission’s proposal that the Turks &amp; Caicos number portability service should be restricted service provider portability only, i.e., mobile to mobile and fixed to fixed NOT mobile to fixed or fixed to mobile.</p>
<p><b>Question 2.</b> The NP process of moving a customer’s number from one provider to another provider 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?</p>	<p>Flow agrees that a recipient led porting process is more customer centric and has worked well in other Caribbean markets, but Flow recommends that the Commission ensures appropriate safeguards are implemented.</p>	<p>Flow concurs that Recipient Led porting is appropriate in terms of implementation and operation.</p> <p>The Commission notes Flow’s observation that appropriate safeguards should be implemented in the design and operation of the number portability service.</p>
<p><b>Question 3.</b> It is proposed that NP is to be managed and operated in TCI through a centralised NP system which will track all TCI numbers, manage the</p>	<p>Flow supports NP being managed and operated through a centralized NP system.</p> <p>Flow’s preference is for the NP system being</p>	<p>Flow concurs that a number portability service managed via a central clearinghouse/ database system would be preferable.</p> <p>The Commission concludes that the proposed Turks &amp; Caicos</p>

<p>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 TCI providers. Please provide your comments and views regarding this proposed approach</p>	<p>located remotely, outside of TCI since this approach operates successfully across the region with low sustainable costs.</p> <p>Flow notes that the NP system must be implemented in a robust and resilient manner to be safeguarded from natural disasters.</p>	<p>number portability service should managed via a central clearinghouse/ database system to ensure number portability is delivered in a consistent and efficient manner.</p> <p>The Commission notes Flow’s observation that appropriate safeguards should be implemented to protect the NP service from natural disasters.</p>
<p><b>Question 4.</b> By proposing to adopt the centralised driven NP approach, it is proposed that the successful provider of the NP Clearinghouse will be licenced by the TCI Telecommunications Commission to provide NP services and will be required to contract directly with the licenced TCI operators. Please provide your comments and views regarding this proposed approach.</p>	<p>Flow supports the licencing of the selected NP Clearinghouse by the Commission which should be aligned to the corresponding contract with licenced TCI operators.</p> <p>Flow recommends the NP Clearinghouse selection process should include the participation of the licenced TCI operators.</p> <p>Flow believes the TCI licenced operators should be given the opportunity to comment on the Commission’s proposed NP Clearinghouse licence.</p> <p>Flow notes that the NP Clearinghouse licence and contract should require new entrant operators/ service providers to make an equitable contribution to the NP Clearinghouse costs.</p>	<p>Flow supports the Commission’s proposal that the NP service be centrally driven by licenced NP Clearinghouse which is funded by the TCI licenced operators through a common framework contract.</p> <p>The Commission notes Flow’s observations and recommendations regarding the development of the NP Clearinghouse licence and operator contracting framework.</p> <p>The Commission agrees with Flow that the selection of the NP Clearinghouse provider should involve the TCI licenced operators.</p>
<p><b>Question 5.</b> It is proposed that the NP Clearinghouse may be</p>	<p>Flow recommends the NP Clearinghouse is hosted overseas since this model</p>	<p>The Commission notes Flow’s preference for a remotely hosted NP Clearinghouse approach, but</p>

<p><i>either operated from TCI or hosted overseas. Please provide your comments and views regarding this proposed approach.</i></p> <p>.</p>	<p>is proven to work successfully across the region and is cost effective, robust, reliable and efficient.</p> <p>Flow notes that if a remotely hosted NP Clearinghouse is adopted, the Commission may need to consider data privacy issues and compliance.</p>	<p>the Commission also notes the potential data privacy implications of such an approach.</p>
<p><b>Question 6.</b> <i>It is proposed that all fixed and mobile traffic to be ported and non-ported numbers originated and terminated in the TCI 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 NP implementations across the world and is considered to be the most operationally efficient and reliable form of routing in NP jurisdictions. Please provide your comments and views regarding this proposed approach.</i></p>	<p>Flow supports the Commission’s proposal to adopt All Call Query direct routing, since this is widely used across the region and is a proven approach.</p>	<p>The Commission notes Flow’s support for All Call Query direct routing.</p> <p>.</p>
<p><b>Question 7.</b> <i>Introducing NP is likely to enhance competition and choice in the TCI telecommunications market. Please provide your comments about this statement.</i></p>	<p>Flow agrees that NP would enhance competition in the telecommunications market in TCI but advises that implementation should not be rushed and should be introduced in a reasonable timeline,</p> <p>Flow notes that NP is only one of several remedies to</p>	<p>The Commission notes Flow’s support for NP as a potential driver for enhancing competition in the telecommunications market in TCI.</p> <p>The Commission notes Flow’s comments regarding the NP service implementation timelines.</p>

	<p>enhance competition in the telecommunications market in TCI.</p>	
<p><b>Question 8.</b> <i>It is proposed that each operator and the successful provider of the NP Clearinghouse will be responsible for their set-up costs to prepare for the implementation and launch of NP in TCI 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 NP into TCI, and your comments and views regarding this proposed approach.</i></p>	<p>Flow accepts its responsibility for its NP set-up costs but believes it is unreasonable for the Commission to bar TCI licenced operators from recovering NP set-up and operating costs from consumers through legitimate commercial means.</p> <p>Flow notes that being prevented from recovering NP set-up and operating costs would present an unreasonable burden on TCI licenced operators which could defer funding from other network service and quality improvement programmes.</p> <p>Flow did not provide an estimate of its likely NP set-up investment costs.</p>	<p>The Commission notes Flow’s comments and concerns regarding legitimate NP set-up and operating cost recovery from consumers and will be pleased to engage with the licenced TCI operators through the NP service implementation programme to agree a defined and reasonable cost recovery solution which does not disadvantage either consumers or licenced TCI operators</p>
<p><b>Question 9.</b> <i>It is proposed that Recipient operators will be allowed to charge customers for porting their numbers at the discretion of each recipient operator. Consumer charging will be reasonable and the TCI Telecommunications Commission reserves the</i></p>	<p>Flow concurs with the Commission’s proposal that Recipient operators should be allowed discretion to charge customers for porting in their numbers.</p> <p>Flow advised that it had made the commercial decision in other markets as the Recipient operator</p>	<p>The Commission notes Flow’s support for the principle for Recipient operators to be allowed discretion to charge customers for porting in their numbers.</p> <p>The Commission welcomes the Flow statement that Flow has made the commercial decision in other markets as the Recipient operator not to charge customers for porting in their numbers and</p>

<p><i>right to set a maximum limit to consumer porting charges. 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.</i></p>	<p><b>not to charge customers for porting in their numbers.</b></p> <p><b>Flow did not comment on the question that Donor operators should not be permitted to charge customers for porting out their numbers.</b></p>	<p>would welcome Flow adopting the same approach in the TCI market.</p>
<p><b>Question 10.</b> - <i>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. The TCI Telecommunications Commission reserves the right to set a maximum limit to donor porting charges. TCI Telecommunications Commission reserves the right to set a maximum limit to donor porting charges.</i></p>	<p><b>Flow agrees that Donor operators should be able to charge Recipient operators for the actual handling of port requests.</b></p> <p><b>Flow advised that it had made the commercial decision in other markets as the Donor operator not to levy charges on Recipient operators.</b></p>	<p>The Commission notes Flow’s support for the principle for Donor operators to be allowed discretion to charge Recipient operators for the actual handling of port requests.</p> <p>The Commission welcomes the Flow statement that Flow has made the commercial decision in other markets as the as the Donor operator not to levy charges on Recipient operators and would welcome Flow adopting the same approach in the TCI market.</p>
<p><b>Question 11.</b> <i>Should fixed and mobile NP be implemented and launched at the same time or should the introduction be phased? If you prefer a phased approach, what should the order of the phasing be and why?</i></p>	<p><b>Flow expressed a preference for a phased NP launch approach, prioritizing the launch of mobile NP ahead of fixed NP since Flow stated ongoing network investment priorities and the nature of the Flow network may provide challenges to implement either fixed or mobile NP.</b></p>	<p>The Commission notes Flow’s explanation for its preferred phased launch of the mobile NP service ahead of the fixed NP service.</p> <p>However, the Commission believes that in the interests of competitive fairness and customer choice, the Commission’s preferred approach is for the mobile and fixed NP services to be launched at the same time.</p>

		<p>The Commission notes that both mobile and fixed NP services were launched successfully at same time in Jamaica and the Cayman Islands and that this is the approach being adopted in Barbados.</p>
<p><b>Question 12.</b> <i>It is proposed that NP will be implemented and launched to the TCI public within 18 months of the date of this consultation. Please provide your comments and views regarding this proposed approach.</i></p>	<p>Flow indicated that due to current economic conditions and existing investment commitments, Flow believes that an implementation timeframe of between 24-36 months was preferable which would be notwithstanding any potential natural disaster.</p>	<p>The Commission notes Flow’s comments and reticence over the proposed 18 month launch timeframe from consultation, however, the Commission believes the proposed 18 month launch timeframe is not unreasonable considering the licenced TCI stakeholders NP experience in neighbouring markets, resources and the presence of a proven regional NP service operating model.</p> <p>The Commission will prioritise the review and discussion of the NP implementation and launch timeframes through the initial deliberations of the LNPWG.</p>
<p><b>Question 13.</b> <i>It is proposed that the implementation and preparations for the launch of NP in TCI will be managed by a cross stakeholder working group reporting to the TCI Telecommunications Commission, but the TCI Telecommunications Commission shall be responsible for setting the key NP process and functional details and implementation timeframes etc. Please provide your comments and views regarding this proposed approach.</i></p>	<p>Flow agrees with the Commission’s proposed NP implementation approach, but Flow recommends that the licenced TCI operators should be given the opportunity to input into the design of the TCI NP service and the implementation schedule, to engender trust, clarity and collaboration.</p>	<p>The Commission notes Flow’s support for the proposed implementation approach. The Commission recognises that the evolution of NP services across neighbouring jurisdictions has created a proven and effective NP service operating model.</p> <p>The Commission intends to base the TCINP service on the proven regional NP service operating model but welcomes the input of the licenced TCI operators through the proposed cross stakeholder working group to tailor the regional NP service operating model to align to the specific requirements of the TCI telecommunications market.</p>

<p><b>Question 14.</b> <i>It is proposed that all customer porting requests will be completed within; 1 working day for mobile NP and 5 working days of fixed NP, from the date of the customer’s validated and signed porting request. Please provide your comments and views regarding this proposed approach.</i></p>	<p>Flow agrees with the proposed NP service timelines but requests that further clarity is given to the definition of non-working days, public holidays and weekends applicable to TCI.</p>	<p>The Commission appreciates Flow’s support for the proposed NP service timelines. The Commission will ensure consideration is given by the proposed LNP working group to clearly define non-working days, public holidays and weekends in TCI.</p>
<p><b>Question 15.</b> <i>It is proposed that data transfer during the porting process between the recipient and donor operators is minimised to ensure 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. Porting process security and integrity will be provided by independent customer validation for each porting request, by either SMS (for mobile number porting requests) or Interactive Voice Response or PIN (for fixed number porting requests). Please provide your comments and views regarding this proposed approach.</i></p>	<p>Flow agrees with the Commission’s proposed approach to minimize and optimize the transfer of data between the Recipient and Donor operators during the NP process.</p>	<p>The Commission notes and appreciates Flow’s support for the Commission’s proposed approach to minimize and optimize the transfer of data between the Recipient and Donor operators during the NP process.</p>
<p><b>Question 16.</b> <i>It is proposed that once a</i></p>	<p>Flow agrees with the Commission’s proposal</p>	<p>The Commission notes and appreciates Flow’s support for</p>

<p><i>customer's porting request has been authorised by the customer and validated by the NP Clearinghouse 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 the TCI Telecommunications Commission. Once a validated porting request has been passed to the donor operator by the NP Clearinghouse it cannot be amended or cancelled by any party. Please provide your comments and views regarding this proposed approach.</i></p>	<p><b>that once a customer's porting request has been authorised by the customer and validated by the NP Clearinghouse 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 the Commission.</b></p>	<p>the Commission's proposal that once a customer's porting request has been authorised by the customer and validated by the NP Clearinghouse 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 the Commission.</p>
<p><b>Question 17.</b> <i>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</i></p>	<p><b>Flow does not support the Commission's proposal since Flow believes it to be flawed because a customer would not know their unbilled balance when making the decision to port their number/ service.</b></p> <p><b>Flow proposes to update the text – "Post-paid customers can port their number if the total billed account balance is less than the deposit held by their current operator....."</b></p> <p><b>Flow will be willing to discuss revisions to the</b></p>	<p>The Commission notes Flow's concerns regarding the interpretation of "unbilled balances" and the implications on subscriber decision making regarding porting. The Commission appreciates Flow's submission of alternative wording for this provision and concurs that this issue should be discussed further as part of future LNPWG deliberations.</p> <p>The Commission notes and appreciates Flow's agreement that debt should not prevent a pre-paid customer from porting.</p>

<p><i>your comments and views regarding this proposed approach.</i></p>	<p>proposed Post-paid billing text as part of future LNPWG deliberations.</p> <p>Flow agrees that debt should not prevent a pre-paid customer from porting.</p>	
<p><b>Question 18.</b> <i>It is proposed that once the customer's validated porting request has been passed to the donor operator by the NP Clearinghouse, 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 days, the donor operator will only be permitted to contact the customer for the sole purpose of recovering any outstanding payments or debts and will under no circumstances contact the customer during this period with purpose of soliciting the customer to return to the donor operator's network. Please provide your comments and views regarding this proposed approach.</i></p>	<p>Flow agrees with the Commission's proposal that once the NP Clearinghouse has validated the porting request and passed the request to the donor operator by the NP Clearinghouse, the Donor operator should not be permitted to contact the customer during the period the porting request is being processed.</p> <p>Flow notes that the Donor operator should be permitted to contact the subscriber to discuss recovery of any rented equipment such as handsets, and outstanding debts/ payments.</p>	<p>The Commission notes Flow's agreement to the proposed provision and believes the proposed wording adequately addresses Flow's concern that the Donor operator should be permitted to contact the subscriber for the purposes of discussing recovery of any rented equipment such as handsets, and outstanding debts/ payments</p>
<p><b>Question 19.</b> <i>It is proposed that customers will not be permitted to port their number to another</i></p>	<p>Flow agrees with the Commission's proposal that customers will not be permitted to port their number to another</p>	<p>The Commission notes and appreciates Flow's support for the Commission's proposal for an onward porting restricted of 60 days from the previous successful</p>

<p><i>operator within 60 days of their previous successful porting request. Please provide your comments and views regarding this proposed approach.</i></p>	<p><i>operator within 60 days of their previous successful porting request, but Flow recommends that some mechanism for the emergency repatriation of inappropriately ported numbers is put in place during the implementation of the TCI LNP service.</i></p>	<p><i>porting request but the Commission notes Flow’s recommendation that a mechanism for the emergency repatriation of inappropriately ported numbers is put in place during the implementation of the TCI LNP service.</i></p>
<p><b>Question 20.</b> <i>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.</i></p>	<p><i>Flow agrees with the Commission’s proposal that only real-time porting of customer numbers will be allowed and customers will not be permitted to delay or defer porting requests to later dates.</i></p>	<p><i>The Commission notes and appreciate Flow’s support for the Commission’s proposal that only real-time porting of customer numbers will be allowed and customers will not be permitted to delay or defer porting requests to later dates.</i></p>
<p><b>Question 21.</b> <i>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 belong 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.</i></p>	<p><i>Flow agrees that “multi-line” ports should be supported., but measures must be implemented to ensure that only the duly authorised person can make such a porting request.</i></p>	<p><i>The Commission notes and appreciate Flow’s support for the Commission’s proposal that “multi-line” ports should be supported., but the Commission notes Flow’s suggestion measures should be implemented to ensure that duly authorised persons can make such a porting request</i></p>