August 12, 2016







Digicel TCI 991 A Leeward Highway Providenciales Turks and Caicos Islands, B.W.I. Tel:+1 (649) 331 3444 Fax:+1 (649) 339 8944 www.digiceltci.com

Mr. John Williams
Director General
Turks & Caicos Islands
Telecommunications Commission
P.O. Box 203 Business Solutions Complex
Leeward Highway
Providenciales

Dear Mr. Williams,

Re: Number Portability Consultation

Digicel thanks the Commission for the opportunity to submit its comments on the Commission's proposals relating to the introduction of number portability in the Turks & Caicos Islands, as set out in the Consultation Document published on July 15, 2016.

The comments as provided herein are not exhaustive and Digicel's decision not to respond to any particular issue(s) raised in this consultation or any particular issue(s) raised by any party relating to the subject matter generally does not necessarily represent agreement nor does any position taken by Digicel in this document represent a waiver or concession of Digicel's rights in any way. We expressly reserve all rights in this matter generally.

Please see below are our comments on the specific proposals.

Question 1 – NP should be restricted to service provider number portability, specifically porting between mobile to mobile and fixed to fixed numbers only. It is not proposes 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.

Digicel agrees that NP should be restricted to service provider portability (mobile to mobile and fixed to fixed) in TCI.

Although we believe that service portability might have been implemented in the US (described as intermodal porting by the FCC), Canada and South Africa, this might have been considered to be a practical approach in these markets given the historical structure of their respective numbering and billing schemes. Since these structures are not present in TCI, we do not consider that it is feasible to implement service portability in TCI.

As it relates to location portability, we consider that the options for location portability identified by the Commission can only work if the fixed number which is the subject of a location portability request has inherent geographic location information which is used for retail billing. If, on the other hand, all fixed to

fixed and mobile to fixed calls are charged at a single retail price point, then there would be no reason, from a consumer welfare perspective, why location portability would not work.

We believe, however, that the suggestion to limit location portability to the same local exchange area is a view that would be most touted by the incumbent. New entrants are likely to employ IP-based voice services, which will not have the same legacy technology constraints as the fixed incumbent. If a new entrant has a "local exchange area" covering all of the TCI, then the question arises whether this is the exchange area being referenced? If the Commission decides to base the definition on the fixed incumbent network topology, this would give the fixed incumbent a market advantage as its IT and retail systems are already designed to map to this topology. To force new entrants to match this would not only unnecessarily increase costs for them but would also restrict consumers from benefitting from the technology capabilities of newer networks.

Therefore, to summarise, it is Digicel's position that service provider portability (mobile to mobile and fixed to fixed) should be the approach to NP in TCI. As it relates to fixed NP, we consider that the location element ("local exchange area") of the obligation should be removed as this would necessarily limit market entrants to the fixed incumbent's legacy network constraints.

Question 2 – 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 porting customer approaches their current operator to seek permission to leave). Please state your preference and outline your reasoning.

Digicel agrees that a recipient led porting process is more straightforward and efficient both in terms of its operation and implementation.

Question 3 – 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 provide 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.

Digicel agrees that a solution utilising a centralised database offers operational and implementation benefits and is the preferred approach.

Question 4 – By proposing to adopt the centralised driven NP approach, it is proposed that the successful provider of the NP Clearinghouse will be licensed by the TCI Telecommunications Commission to provide NP services and will be required to contract directly with the licensed TCI operators. Please provide your comments and views regarding this approach.

The Commission has not identified the specific need for the licensing of this clearing house or, more importantly, the legislative basis for this. Therefore, we do not necessarily agree that this is the most feasible approach to engage the services of a clearinghouse.

Although we believe that the Commission can effectively facilitate movement of the process during the procurement phase, the operators should be the proper contracting entities in any agreement with a clearinghouse. In our respectful view, the determination of the specific terms of engagement between the operators and the clearinghouse are beyond the Commission's remit. Similarly, it is also more appropriately the operators' decision as to whether, among themselves, they can directly provide, own and operate the centralised database function themselves or whether they should it outsource it to a third party.

The procurement logistics and the commercial arrangements between the operators and any clearinghouse provider require discussion and agreement between the operators themselves. If the Commission considers that, by licensing a specific clearinghouse provider, it will mandate the use of this clearinghouse provider, then the Commission must also be prepared to underwrite any liabilities and or damages that might arise as a result of this provider's actions and or omissions. The Commission should also assume the responsibility for the ongoing relationship with the clearinghouse provider and for the delivery of all contractual deliverables.

Question 5 – 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.

Digicel agrees that maintaining flexibility as to the location of the Number Portability clearinghouse services allows costs to be minimized and widens the potential choice of supplier. At this stage of the consultation, we consider that the best approach would be to keep all options open in this regard.

Question 6 – It is proposed that all fixed and mobile traffic to 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 Query approach. All Call Query direct routing is widely used in NP implementation 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.

Although we agree that the ACQ approach might be the most operationally efficient, we do not necessarily agree that these benefits would outweigh the high cost of implementation. In very small markets with very few operators, like TCI, the volume of indirect routing will likely be limited in the short to medium term. Originating number blockholders will, in any event, have to offer a lookup and transit capability to international carriers for inbound traffic destined for ported out numbers. Therefore, if an indirect routing approach is applied, it is not likely that the originating operator network will consume additional resources significantly beyond what it would have otherwise consumed.

With the indirect routing approach, we recommend that blockholders must be allowed to charge for lookup and transit services in relation to calls which are offered into their network without a routing code which indicates that a previous lookup has been carried out by the network offering the traffic into them. These charges, which should be negotiated and determined among the operators themselves, would serve as a commercial incentive for local operators to route traffic directly. However, any operator setting too high a price to international carriers would face being out priced by the other local operators in the market. However, for this charging scheme to work, the clearing house should be restricted from selling

lookup-only access to third party operators unless previously agreed with local operators and the funds received by third party operators can then be applied to reduce the charges levied on the local operators. This approach will encourage the use of ACQ direct routing approach without having to mandate it.

Question 7 – Introducing NP is likely to enhance competition and choice in the TCI telecommunications market. Please provide your comments about this statement

Digicel agrees that NP would enhance competition in the telecommunications market in TCI – in the fixed market moreso than in the mobile market provided, however, that the Commission gives proper consideration to the following:

- i. TCI is a comparatively small market and that the benefits of the some of the proposals made by the Commission might not necessarily outweigh implementation costs; and
- ii. The whole objective of introducing NP is to reduce barriers to entry and spur competition in the market

Question 8 – 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-ups 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.

Digicel agrees with the recommendation that operators should be responsible for their own set-up costs. The cost to an individual operator will depend on its internal network and IT systems configuration. The intention to introduce NP in TCI has been well flagged in legislation. Therefore, operators who have chosen network and IT architectures which will not facilitate the implementation of NP should not be subsidised by those who have.

At this time, we are unable to provide an estimate for set up costs for Digicel to implement NP in TCI. Any reliable costing estimate will depend on the Commission's decisions post-consultation on the issues set out herein. However, we undertake to provide such estimate as soon as we are in a position to do so.

Question 9 – 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 Commission reserves the right to set a maximum limit to consumer porting charges. Donor operators are not permitted to charge customers for porting out number from their network. Please provide your comments and views regarding this proposed approach.

Where any operator has incurred costs in acquiring a new customer (for example the cost of a SIM or the cost of a landline installation) this cost must ultimately be recovered from the customer or the operator will not be profitable. Whether these costs are explicitly recovered on an itemized basis or recovered in the wider service charges is a commercial decision for that operator. These commercial considerations also arise where the recipient operator for porting incurs a cost from the port. Therefore, we agree with

the Commission's proposal that recipient operators should have the commercial freedom to recover such costs as they see fit.

We believe that competitive pressures will necessarily keep porting charges to a minimum and there would be no need for the Commission to intervene in this regard. Notwithstanding any other contractual conditions or liabilities between a donor operator and its departing customer Digicel believes that provided that the donor operator is compensated by the recipient operator for the cost of the porting activity, it would not be appropriate for the donor operator to recover such costs from the departing customer.

Question 10 – 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 Commission reserves the right to set a maximum limit to donor porting charges

Digicel agrees that donor operators should be able to charge recipient operators for the actual handling of port requests. From a service provider perspective, number portability is a customer acquisition tool. Porting is in the commercial interest of the recipient operator and, in this regard, it is the recipient operator who would initiate the porting activity that drives cost. Since NP is used by the recipient operator to acquire a new customer, it should stand to reason that the recipient operator should bear the reasonable costs of using the facility.

In the first instance, the level of such porting charges should be a matter of commercial negotiation between the operators engaged in porting.

Question 11 – 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 be the order of phasing and why?

Digicel strongly endorses the position that fixed portability should be launched before mobile portability. At the very least, fixed and mobile portability should be launched at the same time in TCI.

The Commission has rightfully noted that the mobile market in TCI can be considered to be mature with a penetration rate of approximately 150% and with true competition existing among the operators. On the other hand, service penetration in the fixed line sector is lower at a rate of about 20%. Digicel considers that the implementation of NP would be key to spur competition and to increase the take up of fixed line services in TCI.

The rationale for the introduction of Number Portability is that is lowers barriers to switching. This in turn facilitates competition and market entry. Given the high concentrations in the fixed market following the Cable and Wireless and Columbus merger such market entry enablers are all the more necessary.

To introduce mobile number portability before fixed portability would simply allow the fixed incumbent (which also offers mobile services) to enjoy the advantages of mobile number portability while continuing to leverage its fixed market position. Any delay in the implementation of fixed portability would allow the fixed incumbent to lock in mobile customers by offering fixed/mobile bundles which, even if they could

be replicated by competitors, consumers would still be unwilling to switch because of the need to change their fixed numbers.

On the other hand, the early introduction of fixed portability would facilitate the offering of competitive fixed services to the Government and to state agencies thereby contributing towards the reduction of cost to the public purse and the redirection of savings to the exchequer and to other public policy priorities.

Question 12 – 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.

Digicel believes that the timeline set out by the Commission is achievable. However, from our experience in the region, we respectfully caution the Commission that, even with the willing participation of all stakeholders in the process, such complex projects may be subject to unforeseen issues and difficulties which could impact the project plan. Therefore, while the proposed timeframe is reasonable, we should reserve the identification of target dates until the project has progressed sufficiently to give greater confidence as to the completion date.

Question 13 – It is proposed that the implementation and preparation for the launch of NP in TCI will be managed by a cross stakeholder working group reporting to the Commission but the 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 approach.

Digicel believes that it is an excellent idea for the Commission to be actively engaged in the management of the implementation process, although recognising that many of the decisions would best lie with the operators as the key issues will be technical, operational and commercial in nature.

Digicel is willing to participate cross stakeholder working group. However, we recommend that the terms of reference of this working group should be clearly defined to ensure that different the stakeholders are, in fact, addressing all the relevant and pertinent issues.

Question 14 – It is proposed that all customer porting requests will be completed within 1 working day for mobile NP and 5 working days for fixed NP, from the date of the customer's validated and signed porting request.

We strongly disagree with the proposal to have different porting times for fixed and mobile NP as there is no objective reason to have this difference.

International best practice in this area is for porting times to be the same irrespective of the service type. As the Commission notes, one-day porting times for all service types are in place and fully functional in all EU states since 2011. In the US, the FCC number porting rules require "simple" ports to be processed in one business day. This is direct empirical evidence that,

notwithstanding technology differences between fixed and mobile there is no technical, operational or commercial reason to have longer porting times for fixed when compared to mobile.

In terms of fixed line ports, a 5 working day (or one week) delay between the recipient provider installing a fixed access path and the consumer transferring their number represents a significant impairment of the customer experience. This also places a significant operational overhead on the recipient operator, who is then forced hold open its provisioning processes for an extra week. There is also an unnecessary delay for the recipient operator to enable the service and commence customer billing. Conversely, during this period, there is a windfall accruing to the losing operator from the unnecessary prolonging of its billing relationship with the customer.

Given the structure of the fixed markets in TCI, the Commission's proposal, if implemented, would only benefit the incumbent and impair the prospect of effective competition in the fixed market.

Question 15 – 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)

Digicel agrees that the transfer of information during the porting process should be minimized. This reduces complexity and cost.

In terms of the secondary authentication, we believe that the benefits of this TCI might not necessarily outweigh the cost of implementation. Fraud by third parties is a limited issue in the case of fixed portability since the recipient operator must provide a fixed access path to the location before initiating the porting request. This limits the scope for such fraud and/or error. For mobile portability, provided the validation carried out by the gaining operator includes some form of call back with the requesting customer, there would also be safeguards against fraud. Although we acknowledge that there is a possibility of error, our experience in the implementation of NP without secondary authentication is that the incidence of this is very low. Short porting times also mitigate the negative impact of such errors as they can readily be rectified and the incorrect port reversed.

Since the cost of implementation of NP must ultimately be recovered from the market in some respect, Digicel believes that it is appropriate for the Commission to give serious consideration as to whether there is an overall consumer welfare surplus when balancing the cost of implementation of secondary authentication with the prevention of low levels of input error.

Question 16 – It is proposed that once a customer's porting request has been authorised by the customer and validated by the 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. Once a validated porting request has been passed to the donor operator by the clearinghouse it cannot be amended or cancelled by any party.

Digicel agrees that there should be a point at which the port request cannot be "recalled". This would simplify the process flows and reduce cost. For short porting times, this point of no recall should be on submission of the request to the clearinghouse.

Although we do not agree that secondary authentication should be implemented, if the Commission decides to do so, then the authentication should be the point of no return. There must also be some defined time-out period on the secondary authentication so that if it is not initiated within a prescribed and reasonably short timeframe the port request should lapse.

Question 17 – It is proposed that post paid customers can port their number if the total billed and unbilled account balance is less than the deposit held by the donor operator, provided their service is not barred or suspended from making outbound calls at the time the porting request is processed by the recipient operator. It is proposed that debt cannot be used to prevent pre-paid customers from porting their number.

Digicel agrees with the Commission's proposals that postpaid customers should not be allowed to port until they have paid all charges incurred with the donor operator, whether billed or unbilled, and have taken all steps as may be required by the donor operator to restore service.

Question 18 – It is proposed that once the customer's validated porting request has been passed to the donor operator by the clearinghouse, the donor operator will not be permitted to contact the customer during the period that 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 for the purpose of soliciting the customer to return to the donor operator's network.

There are two parts to this recommendation. The first relates to contacting the customer during the porting process. The second relates to post-porting contacts.

In relation to contacting the customer during the porting process, if the Commission implements a point of no recall in accordance with its proposals, the point at which the donor operator finds out about the port request is after the point of no return. Therefore, even if the donor operator contacts the customer before the porting process is complete, this cannot influence the completion of the port.

As it relates to contacting the customer after the porting process if complete, we can see no reason why an operator who has just lost customer cannot compete to win that customer back. A donor operator should have the ability to offer former customers enhanced terms of service and if the customer wishes

to avail himself of this, then he should be able to do so in as short a period of time as he desires. On the other hand, if a donor operator's offers are not sufficient compelling to woo back the customer, then the customer may continue to build the relationship with his new provider. In fact, if customers become aware that once you switch operators, your previous supplier is likely to extend an improved offer to you, then it is likely that customers would contact their existing suppliers before switching to obtain better terms by threatening to leave. This can only benefit customers as it crystallizes the benefits of Number Portability by giving consumers a tool to drive more competitive offerings.

The issue of contacts by donor operators being an annoyance can be dealt with by the limiting the number or volume of such contacts rather than prohibiting them entirely.

Therefore, we believe that the Commission's proposals would deny customers the opportunity to receive better terms of service and, in this regard, would not be in the best interest of customers.

Question 19 – It is proposed that customers will not be permitted to port their numbers to another operator within 60 days of their previous successful porting request.

Digicel disagrees with this proposal. Given the small sizes of the mobile and fixed markets in TCI, the volume of ports is likely to be low in comparison with the clearinghouse capacity capability and therefore this would not constitute reasonable grounds to place constraints on consumers switching.

Similarly it appears to be anti-consumer to limit consumers' ability to avail themselves of the latest or best offers or price promotions. In fact the whole premise of NP is to lower the threshold for consumers to switch providers and, in so doing, to spur competition among service providers.

We consider that high levels of switching are indicative of intensive levels of competition in the market, which the Commission should encourage rather than inhibit.

Ultimately, if consumer switching reaches problematic levels, recipient operators are likely to introduce mechanisms to minimize the issue.

Question 20 – 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.

Digicel does not agree with this recommendation. While so called deferred ports may not be a material issue in the fixed and mobile retail consumers markets they are a key enabler of customer choice in the Enterprise/Business Solutions markets. In these cases, larger Enterprise/Public Sector bodies prefer out of hours disruption to customer/client contact lines. In addition, such customers often require coordination between service providers and suppliers of PBX equipment. The ability for recipient operators to specify out- of- hours deferred ports is an important input to driving a competitive fixed market.

Therefore, we consider that the Commission's proposals on this point only serve to entrench the position of the fixed incumbent and are distortive within the market.

Question 21 - 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.

Digicel agrees that so called "multi-line" ports should be supported. As these are likely to be associated with business/enterprise accounts in both fixed and mobile markets. In this regard, Digicel's comments in respect of Question 20 are relevant.

Digicel is of course available, and would be happy, to discuss our submission further. Please do not hesitate to contact me to refer any questions or remarks that may arise as a result of these comments.

Yours sincerely,

Sinead/O' Marcaigh

CEO

Digicel (TCI) Ltd.