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Digicel™

The Bigger, Better Network.

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19 October 2012

Mr. Charles Punaha
Chief Executive Officer
NICTA
Frangipani Street, Hohola
PO Box 8444
Boroko
National Capital District

*Noted
for
CEO
19/10/12*

*EA
Forward original to DECIA.
Scan and email copies.
KW
CEO
19/10*

Dear Mr. Punaha,

Re: Public Inquiry into the need for declaration of certain wholesale services in international connectivity markets

Please find attached our Submission in response to the Discussion Paper of 4 September 2012 on the Public Inquiry into the need for declaration of certain wholesale services in international connectivity markets. There is no confidential information in this Submission.

Many thanks for the opportunity to comment on your Discussion Paper.

Yours sincerely

John Mangos
CEO, Digicel

Cc: David Dillon, General Counsel, Digicel Asia Pacific

SCHEDULE

- 1 Digicel welcomes NICTA's public inquiry into the need for the declaration of certain wholesale services in international connectivity markets ("**Public Inquiry**") and an opportunity to comment on its discussion paper ("**Discussion Paper**").
- 2 This Schedule does not contain information of a commercially sensitive and confidential nature, the disclosure of which will cause significant commercial damage to Digicel, will benefit our competitors and will distort the ICT sector in an unfair manner.
- 3 The Public Inquiry is the first declaration inquiry held by NICTA under the National Information and Communication Technology Act 2009 ("**Act**"), including the first review of the declaration criteria established by Section 128 of the Act. Digicel encourages NICTA to make Section 128 of the Act the starting point for its methodology and analysis as statutorily required of it. Digicel submits that NICTA should not "short cut" this process by simply following the approach that has been adopted by regulatory authorities in other countries.
- 4 In particular, Digicel cautions NICTA against being enticed by the analytical approach of Liberia with its different statutory regime and should not allow the approach adopted by the Liberia Telecommunications Authority to take on a life of its own in PNG, independent of the Act. In the event that NICTA does draw on international precedents, we submit that NICTA has a duty to ensure that such an approach does not mean that NICTA's enquiries become detached from the language of the Act itself. With this in mind, we encourage NICTA to revise the analytical approach it has adopted in the Discussion Paper. That approach is an almost mirror image of the analytical approach (and indeed the reasons, facts and conclusions) adopted by the Liberia Telecommunications Authority, but which is based on a significantly different statutory test under the Liberian Telecommunications Act of 2007. (See Public Consultation Document of September 2011 on the Licensing of the Cable Consortia of Liberia).
- 5 The Act outlines a two stage process for NICTA to adopt for the wholesale access regime in PNG.
 - The first stage of the process is for NICTA to determine whether or not to recommend to the Minister of Communication and Information ("**Minister**") that one or more defined wholesale services should be declared services based on the application of the declaration criteria, the objectives and the regulatory principles of the Act. If NICTA recommends that a declaration be made, the Minister must then make a decision to either accept or reject NICTA's recommendation to declare the service. In the event that a service is declared, access rights and obligations are imposed on access seekers and access providers. However, determination of the terms and conditions upon which the

declared service is to be supplied is, in the first instance, a matter between the access provider and the access seeker.

- The second stage of the process is for NICTA to conduct an arbitration of a dispute about access to a declared service where the parties are unable to reach agreement by good faith and reasonable negotiation.
- In between these two stages, but only after the declaration of a service in accordance with the Act, NICTA may adopt a determination of model non-price terms and conditions relating to access to a declared service and must determine service-specific pricing principles relating to the price of access to a particular declared service.

6 Having regard to the first stage, Digicel submits that all of the declaration criteria of Section 128 of the Act would be met by the declaration of certain wholesale international connectivity access services on particular terms. Our reasoning is detailed below.

7 While it is premature to discuss remedies, we strongly consider that not all access seekers should be permitted to obtain unbundled access to international capacity on Telikom’s submarine cables or to its cabling landing station. The Act permits, and good regulatory governance encourages, NICTA to distinguish between access seekers that have made substantial investments in telecommunications infrastructure in PNG and those that have not made such investments. The latter access seekers should not be permitted to undermine sustainable investment in PNG. Access seekers that have not made investments in telecommunications facilities in PNG of greater than US\$ 250 million would not be entitled to access the full suite of declared wholesale access services. Instead, they would be entitled to access a more limited number of services *e.g.*, international transit carriers with would only be permitted to access bundled – and not unbundled – PPC-1 capacity services from Telikom.

A. THE CANDIDATE WHOLESAL SERVICES

8 Before considering each declaration criterion, Digicel agrees with NICTA that it is necessary to identify those wholesale services which should be subject to the declaration test or as NICTA states in its Discussion Paper “suitable candidate services for consideration”.

9 While NICTA considers it necessary to undertake a market definition exercise for such purposes (which is arguably influenced by the approach in Liberia), Digicel considers it more appropriate at this stage to identify those candidate wholesale services that are most likely to be sought by an access seeker in PNG having regard to the definition of a “wholesale service” under the Act.

10 Section 4(1) of the Act provides the following definition of “wholesale service”:

““wholesale service” means –

- (a) an ICT service that is supplied to a wholesale customer; and
- (b) for the purposes of Part VI of this Act only, includes –
 - (i) a service that facilitates the supply of such an ICT service (excluding intellectual property where it is not an integral but subsidiary part of that ICT service), where that service is supplied, or is capable of being supplied, by an operator licensee to a wholesale customer; and
 - (ii) the supply of access to, or use of, a site on which any facility is located, but only to the extent –
 - (a) that the site is owned, occupied or controlled by the network licensee that has the facilities right in respect of that facility; and
 - (b) that network licensee has a legal right (whether conditional or unconditional) to use that site; and
 - (c) the facility may be used to supply a network service”.

11 Section 4(1) of the Act further provides the following associated definitions:

- ““ICT service” means –
 - (a) a facilities access service; and/or
 - (b) a network service; and/or
 - (c) an applications service; and/or
 - (d) a content service”;
- ““a wholesale customer” means an operator licensee, but excluding circumstances where that operator licensee acquires an ICT service for that operator licensee’s own personal use rather than to facilitate the supply of an ICT service by that operator licensee”;
- ““site” means –
 - (a) land; or
 - (b) a building or other structure on land”;
- ““facility” means any element or combination of elements of physical infrastructure (including any line, equipment, apparatus, tower, mast, antenna, tunnel, duct, pit, pole or other structure or thing) used principally for, or in

connection with, the provision of a network service, but excluding any customer equipment”;

- ““facilities right” means the right to construct, maintain, own, operate and/or otherwise make available one or more facilities.

12 It is clear that the starting point for this Public Inquiry is those wholesale services identified in Section 132 of the Act, namely:

- (a) access to international gateway facilities;
- (b) access to capacity on international communications cables; and
- (c) access to international communications satellite links.

13 Following its market definition exercise, NICTA in its Discussion Paper has considered the potential declaration of two services, namely: the provision of wholesale capacity on, and access to, international fibre-optic submarine cables landed in PNG; and the provision of wholesale access to international gateway facilities at submarine cable landing stations in PNG. NICTA proposes a definition for each of these services in section 4.6 of the Discussion Paper.

14 Digicel submits that the name of the service and the proposed definition of the service should be revised. The current definitions lack specificity and are likely to result in a lack of clarity and potential for regulatory gaming by Telikom. Digicel considers it appropriate for the purposes of the current application of the declaration criteria to refine NICTA’s defined wholesale services as follows:

- (a) ***Madang to Sydney / Guam / West Coast of United States of America PPC-1 Capacity Services:*** end-to-end Madang to Sydney/Guam / West Coast of the United States of America and Sydney to Guam / West capacity on Pipe Pacific Cable 1 (“PPC-1”) at wavelength level, Layer 1 (SDH), Layer 2 (Ethernet) and / or Layer 3 (IP-Transit) and for varying requested capacity levels (e.g., DS3, STM-1, STM-4, STM-16, STM-64);
- (b) ***Madang to PPC-1 Spur Capacity Services:*** capacity on Telikom submarine cable spur from Mandang to PPC-1 at Layer 1 (SDH) and Layer 2 (Ethernet) and for varying requested capacity levels (e.g., STM-1, STM-4, STM-16, STM-64);
- (c) ***Unbundled PPC-1 / Telikom Spur Services:*** unbundled wholesale access services to include any or all of the following:
 - i access to capacity on Telikom submarine cable spur from Mandang to PPC-1 at wavelength level, Layer 1 (SDH) and Layer 2 (Ethernet) and for varying capacity levels (e.g., STM-1, STM-4, STM-16, STM-64);

- ii access to the cable landing station of Telikom at Madang, including:
 - physical and or virtual collocation (including building space, power, environmental services, security, site operation and maintenance, *etc.*);
 - interconnection; and
 - grooming services.
- (d) **Branching Unit Services:** wholesale access to any branching unit owned and or operated by Telikom, including in relation to PPC-1.
- (e) **IXP Services:** offering transit / peering model, domestic traffic and interfacing with the other Internet Service Providers for IP related services.

(the Madang to Sydney / Guam / United States of America PPC-1 Capacity Services, the Madang to PPC-1 Spur Capacity Services, the Unbundled PPC-1 / Telikom Spur Services, the Branching Unit Services and IXP Services are collectively referred to as the “**Declared Wholesale Services**”).

15 The reasons for such refinement include:

- a reference to an “international gateway” facility leads to ambiguity as it is not defined in the Act while there is no universally agreed definition from a technical and or legal perspective, regardless of the definition in National Information and Communications Technology (Operator Licensing) Regulations 2010;
- access to international gateway facilities would include satellite gateway facilities which Digicel – and NICTA, at least on a preliminary basis – consider need not be regulated on an *ex ante* basis at this time given, for example, the multiple satellite operators offering transmission in PNG and the potential for further operators to establish such facilities; and
- access to PNG-2 Cable System (APNG-2), which utilises the old Pacific Rim East (PacRim East) cable system has limited capacity and has suffered repeater failure. It is not an alternative to access to PPC-1.

16 As discussed in paragraph 7 above, Madang to PPC-1 Spur Capacity Services, Unbundled PPC-1 / Telikom Spur Services and Branching Unit Services would only be available to access seekers that have made significant investments in telecommunications facilities in PNG.

17 Digicel agrees at this time with NICTA’s proposal to conclude that wholesale access to satellite transmission should not be susceptible to *ex ante* regulation by NICTA. Digicel considers that the declaration of such satellite transmission services would not satisfy the declaration criteria, the objectives and the regulatory principles of the Act. There are multiple actual and potential satellite operators providing

transmission services in PNG, while wholesale access to submarine transmission has the potential to constrain the price of satellite transmission.

- 18 Digicel agrees with NICTA's conclusion that there is no need to consider the potential declaration of wholesale capacity on national backhaul services. Digicel considers that the declaration of such national backhaul services would not satisfy the declaration criteria, the objectives and the regulatory principles of the Act.

B. THE COMPETITION OBJECTIVE IS SATISFIED

- 19 The declaration of each of the Declared Wholesale Services will further the achievement of the "*competition objective*" to promote effective competition in markets for ICT services in PNG.

B.1. Necessary for the Promotion of Effective Competition in a Market

- 20 Specifically, having regard to the obligations of Section 128(b)(i) of the Act, access or increased access to each of the Declared Wholesale Services is necessary for the promotion of effective competition in at least one market other than the market for the Declared Wholesale Services.

- 21 For the purposes of the above criterion and each of the Declared Wholesale Services, Digicel defines the retail market for the provision of narrowband and broadband access services to end-users in PNG. Digicel concurs with NICTA that the European Commission's market definition exercise is regarded as setting best practice in market definition.

- 22 Once the relevant market has been defined, it is necessary to examine the effective competitiveness of this market, including an examination of:

- the relevant competitive metrics and trends of the marketplace in question;
- sunk investment, proposed investment and investment incentives;
- the conditions for rivalry;
- the rivalry itself, including positions of market participants; and
- other related factors affecting the relevant market and the broader relevant ecosystem.

- 23 Since December 2008, Digicel has offered Internet access services to its consumers at speeds of up to 100 kbps using GPRS and EDGE infrastructure. Since May 2011, Digicel has been able to offer its customers Internet access services at speeds of up to 2 Mbps using its 3G+ broadband network. Digicel has also been able to offer specialized telecommunications services to large users.

- 24 Digicel sources the majority of its transmission requirements for its data services from satellite providers given the prohibitive pricing of Telikom's wholesale IP-transit offering and the poor quality of service associated with the latter offering. This is illustrated by the fact that critical issues such as service outages take between

- 24 and 72 hours to rectify, while minor issues such as packet drops of five per cent take in excess of seven days to rectify with no proactive rectification updates.
- 25 There are also several other participants on the retail market for the provision of narrowband and broadband access services to end-users in PNG, including Telikom, Bemobile, Daltron, Datec and several other ISPs. These participants have invested in a range of narrow and broadband access technologies, including dial-up, WiMAX, CDMA and ADSL. These market participants provide their services via accessing Telikom's current IP-Transit service and or satellite services.
- 26 The appropriate metrics of the retail market for the provision of narrowband and broadband access services to consumer and business users in PNG include: availability, including deployment rate, subscribership and adoption rate, speeds, including upload and download speeds, quality of service, including latency, prices, data limits, demand, scalability, services and innovation. Digicel considers that most if not all of these metrics do not reflect the metrics of other comparable countries to PNG, as well as those of the most developed countries in Oceania and beyond. We also stress that the percentage of the population with access to the Internet in PNG is less than two per cent according to the ITU and Government itself, while the Government estimates that less than one per cent of the population has access to broadband services.
- 27 Most importantly, the metrics and evidence of the downstream market indisputably demonstrate that Telikom has failed over a significant period of time to be dynamic, to innovate and to meet the demands of consumers and businesses in PNG.
- 28 Other market participants cannot simply make up for Telikom's failings given that Telikom controls a *true* essential facility, that it offers an unreliable and expensive IP-transit wholesale service and that it does not offer more appropriate wholesale services. It is not simply that access to Telikom's submarine cable and associated assets would be more advantageous for other market participants. Without such access, Digicel and others are foreclosed from providing new, speedier and innovative solutions and from meeting pent-up demand from consumers and business users. Without access, the poor metrics currently characterising broadband access cannot improve in PNG and the national broadband objectives of the PNG Government be met. Digicel, for example, cannot despite customer demand currently provide customers with PLCs, Ethernet, MPLS, BGP peering services in PNG given the limitations of satellite facilities and Telikom's refusal to offer any wholesale access services over its submarine cable other than a limited Layer 3 (IP-transit) service. Digicel has repeatedly been refused Layer 2 (Ethernet) and Layer 1 (SDH) access by Telikom.
- 29 Digicel, like many other market participants, has to rely on satellite transmission for its voice and data services. But it is widely accepted that geo-stationary satellite transmission is expensive in the Pacific region, including PNG, carries a high latency, suffers quality of service issues and is weather dependent. The capital and

operational costs of deploying a new submarine cable in PNG within a five year period are also prohibitively expensive.

- 30 Consequently, if the Declared Wholesale Services proposed by Digicel are declared, Digicel and other access seekers will be able to provide higher quality and innovative new services that will, in turn, create incentives for Telikom to improve its own performance. The competitive benefits that will be realised by the people of PNG will be new, faster and higher quality services at significantly lower prices.

B.2. Facility Cannot Feasibly be Substituted as a Matter of Commercial Reality

- 31 Having regard to Section 128(b)(ii) of the Act, each of the Declared Wholesale Services are supplied in whole or in part by a facility that cannot feasibly be substituted, as a matter of commercial reality, via another facility in order to supply that Declared Wholesale Service.

- 32 Satellite facilities are not a substitute for the supply of the Declared Wholesale Services for the reasons discussed in section B.1 above. Equally, it cannot be shown to be likely that any party could profitably, and therefore would be likely to, develop within, for example, a five year period another submarine cable and its associated facilities to provide sometime soon thereafter the Declared Wholesale Services in PNG, including self-supply.

C. THE EFFICIENCY OBJECTIVE IS SATISFIED

- 33 The declaration of each of the Declared Wholesale Services will further the achievement of the "*efficiency objective*" of promoting the economically efficient use of, and the economically efficient investment in the facilities by the ICT services may be supplied in PNG.

C.1. No Material Compromise of the Incentives for Efficient Investment

- 34 Having regard to the obligations of Section 128(c)(i) of the Act, declaration of the Declared Wholesale Services would not materially compromise the incentives for efficient investment in any facility over which the Declared Wholesale Service may be supplied.

- 35 The investment incentive on any party other than Telikom to invest and to develop a new submarine cable and its associated facilities in PNG are not materially compromised within a five year period. As indicated in section B above, it cannot be shown to be likely that any party could profitably, and therefore would be likely to, develop within, for example, a five year period another submarine cable and its associated facilities to provide sometime soon thereafter the Declared Wholesale Services in PNG, including self-supply.

- 36 As discussed above in section B, the metrics of the retail narrowband and broadband access market indisputably demonstrate that Telikom has failed over a significant period of time to invest, to be dynamic, to innovate and to meet the demands of

consumers and businesses in PNG. Contrastingly, Digicel has shown a significant appetite to invest in broadband infrastructure and services within PNG. Digicel has already invested in excess of US\$ 600 million in PNG since 2007. Further investment in domestic broadband services is now being constrained as a result of the failure of Telikom to provide access to the Declared Wholesale Services on reasonable terms.

C.2. Access to the Declared Wholesale Services is Technically Feasible

37 Having regard to Section 128(c)(ii) of the Act, access or increased access to the Declared Wholesale Services (as a consequence of declaration) is technically feasible having regard to:

- (a) the technology available or likely to become available;
- (b) the reasonableness of the costs involved; and
- (c) the effect of supplying the Declared Wholesale Services on the integrity, operation or performance of other ICT services or facilities.

38 Digicel is not aware of objective technical justification for Telikom not immediately offering the Declared Wholesale Services, especially the Madang to Sydney / Guam / United States of America PPC-1 Capacity Services. Such services are provided in other jurisdictions without technical difficulty or impediment. Digicel would welcome an opportunity to review any technical reasons presented by Telikom in response to the Discussion Paper, as well as any third party expert opinions.

C.3. The Inefficient Replication of Facilities is Avoided

39 Having regard to Section 128(c)(iii) of the Act, increased access to the Declared Wholesale Services would avoid inefficient replication of underlying facilities that may be efficiently shared.

40 It is undeniable that the Telikom spur submarine cable accessing PPC-1 and the associated facilities would enable Digicel to offer new innovative services to consumers and businesses in PNG and to satisfy their pent-up demand. As indicated in section B above, it cannot be shown to be likely that any party could profitably, and therefore would be likely to, develop within, for example, a five year period another submarine cable and its associated facilities to provide sometime soon thereafter the Declared Wholesale Services in PNG, including self-supply.

41 Consequently, any replication of Telikom's submarine cable within the next five years would necessarily be inefficient and would result in the unwarranted diversion of investment away from domestic infrastructure where it is most needed to support the social and economic development of PNG.

D. INTERNATIONAL INBOUND CALLS

- 42 Digicel notes apparent NICTA's concerns set out in section 6 of the Discussion Paper about "*the relatively high costs of calling into PNG compared to other countries in the region*". In response to those concerns, Digicel submits the following.
- 43 The retail prices that overseas operators, including those referenced in the Discussion Paper, charge for calling to PNG are generally unregulated and reflect the competitive influences and pricing practises in those overseas jurisdictions rather than the underlying costs of the call.
- 44 Digicel suggests that attempting to control the behaviour and practises of overseas operators through the application of domestic regulation in PNG would not support the economic and social development of PNG and would simply result in a wealth transfer to overseas operators. The core issue is competitive pressure at the retail level in foreign markets, not wholesale markets in PNG.
- 45 It seems likely that improving access to international bandwidth by PNG operators will improve access into PNG, creating a more competitive environment that will provide a foundation for more innovative mechanisms for reducing international calling costs for inbound international communication.
- 46 In any case, the domestic fixed and mobile termination access services are already declared services under the Act. The Act is clear with respect to the application and implementation of such service declarations. Digicel respectfully suggests that there is no further need to consider this matter in this proceeding.

E. NEXT STEPS

- 47 Digicel has refrained in its response from addressing the issues raised by NICTA in sections 4.7 and 4.8 of the Discussion Paper. NICTA is foreclosed by the Act from addressing such remedial matters at this stage. It is also a matter of good practice as NICTA should not provide a "regulatory backstop" for any access seeker at this stage, but instead allow any future commercial access negotiations to proceed in good faith. This is also the process imposed on NICTA and stakeholders by the Act.
- 48 Digicel has serious concerns with the next steps of the inquiry process as proposed by NICTA. Digicel is concerned that the process proposed by NICTA cannot reasonably be considered to be a meaningful consultation. NICTA should publish all submissions in response to its Discussion Paper and allow those that have made submissions to submit additional comments on these third party submissions. While Digicel considers that the complexity of certain inquiries will necessitate NICTA to release a further discussion paper to include its views on the submissions it received, to then release a draft recommendation and a draft report, Digicel does not consider this Public Inquiry to .

- 49 Digicel respectfully requests a copy of any expert advice that NICTA has sought or seeks on particular issues raised during the Public Inquiry.
- 50 Finally, Digicel thanks NICTA once again for this opportunity to submit its comments on the Discussion Paper.

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