



**INDEPENDENT CONSUMER AND
COMPETITION COMMISSION**

1st Floor Garden City, Angau Drive,
P.O. Box 6394, **BOROKO**,
National Capital District
Papua New Guinea
Telephone: (675) 325 2144
Facsimile: (675) 323 0052
Toll Free No. 180 3333
Email: infor@iccc.gov.pg
Website: www.iccc.gov.pg

Office of the Commissioner/CEO

06.6204.5/jt/RID

29th August 2013

Mr Charles Punaha
Chief Executive Officer
National Information Communication Technical Authority
P O Box 8444
BOROKO
National Capital District

Dear Mr Punaha,

**REF: SUBMISSION TO NICTA IN RESPONSE TO DISCUSSION PAPER ON A PUBLIC ENQUIRY INTO
THE POTENTIAL DECLARATION OF CERTAIN WHOLESALE MOBILE TELECOMMUNICATIONS
SERVICES**

I refer to NICTA's public inquiry in relation to the above matter, which was issued on 2nd August 2013.

Find attached is the Commission's submission to your discussion paper on the public enquiry into the potential declaration of certain wholesale mobile telecommunications services.

Should you have any queries or require further information, please contact Mr. Jack Timi, Executive Manager-Regulated Industries Division, on 325 2144 or via email on jtimi@iccc.gov.pg.

Yours sincerely,

Dr. Billy Manoka, PhD
Commissioner and Chief Executive Officer



INDEPENDENT CONSUMER & COMPETITION COMMISSION

SUBMISSION TO NICTA IN RESPONSE TO DISCUSSION PAPER ON A PUBLIC ENQUIRY INTO THE POTENTIAL DECLARATION OF CERTAIN WHOLESALE MOBILE TELECOMMUNICATIONS SERVICES

Introduction

The Commission has prepared this response to the discussion paper on the potential declaration of certain wholesale services on the basis of potential national economic interest and on what may be practically achieved if this course of action were to be taken.

Digicel has achieved a position of significant geographic reach with regard to the delivery of not only mobile telephony and text services, but also for internet and corporate data and voice services. The Commission agrees that it may be determined that Digicel has Significant Market Power (SMP) as a result of the wide geographic coverage of its network in Papua New Guinea, and through effective market positioning of the services provided over the network. Within this market context, the discussion paper considers a number of matters that relate only to mobile services – Mobile Access and Call Origination (MACO).

Papua New Guinea presents a number of practical constraints to the achievement of effective retail competition for mobile services:

- The construction of duplicated network infrastructure across the country to support separate retail competitors may be commercially unlikely due to high capital and operational costs that result from difficult terrain, widely distributed population and challenges with landowner support.
- The Average Revenue Per User (ARPU) for mobile services is low, especially in rural areas where the cost of infrastructure is high per user. This can mean that a second infrastructure build for a single mobile service provider can be difficult to justify due to limited market size and revenue availability, although it is acknowledged that competition usually grows total market size and revenues.

In the circumstances described above, and on the basis that Digicel is determined to have SMP, it is unlikely that another mobile provider could match the infrastructure owned by Digicel in the cities or rural areas of the country in a way that would be commercially viable.

The two matters under consideration are:

- i) Domestic mobile roaming services: This means that a non Digicel customer could connect to the Digicel network where their own network did not provide coverage, and terminate the call on any network connected to the Digicel network. In effect, this would give Digicel competitors the same coverage as Digicel. The same roaming arrangements would potentially arise in reverse too – Digicel clients could roam on any other mobile network in the same way.
- ii) Facilities access services: This means that a Digicel competitor would have access to – on suitable commercial arrangements – the facilities established by Digicel for their own service delivery. The goal here is to allow competitors to pay for access to Digicel infrastructure, rather than have to duplicate the buildings, radio masts etc that might be the declared facilities.

An important consideration when declaration of mobile services such as discussed in items i) and ii) above is whether the market is becoming more competitive or not. If there are signs that competition and investment are growing, it may not be necessary to intervene with the type of regulation outlined in the discussion paper.

Finally market intervention in the form of services declaration assumes competitors who may have an improved opportunity to expand their market are themselves relatively efficient in the way they operate. If this is not true, the declaration of mobile services may be of limited value in encouraging better competition in the mobile market.

In summary, it appears that Digicel does not have effective retail competition and so is likely to be shown to have achieved SMP. While there is now widespread geographic coverage of (especially Digicel) mobile services in PNG, and this has undoubted benefits for many users, we agree that market pricing is not subject to effective retail competition and that there will be some market sectors in PNG that cannot afford mobile services, or to use them as extensively as they wish.

Declaration Criteria

Part VI of the Act (Interconnection and Wholesale Access) describes the declaration criteria as follows (section 124):

(1) The objective of this Part and Part VII of this Act is to:

- (a) promote effective competition in markets for ICT services in Papua New Guinea, to be known as the "competition objective", subject to*
- (b) promoting the economically efficient use of, and the economically efficient investment in, the facilities by which ICT services may be supplied, to be known as the "efficiency objective".*

(2) In determining the extent to which a particular thing is likely to further the achievement of the efficiency objective, regard shall be had (without limitation) to all of the following matters-

- (a) whether it is technically feasible for the relevant ICT services to be supplied, having regard to:
 - (i) the technology available or likely to become available; and*
 - (ii) the reasonableness of the costs involved; and*
 - (iii) the effect of supplying the ICT services on the integrity, operation or performance of other ICT services or facilities; and**
- (b) the legitimate commercial interests of the access provider in supplying the ICT services, including the ability of the access provider to exploit economies of scale and scope; and*

(c) the incentives for investment in the facilities by which the ICT services may be supplied, including the risks involved in making the investment.

The Commission makes the following comments on these declaration criteria:

- a) We do not believe Telikom or Bemobile have demonstrated in recent years that they can compete effectively with Digicel, based on our understanding of the small market share held by these organisations. Both Telikom and Bemobile would need to invest heavily in more infrastructure to compete, and this would likely require a similar network coverage as has been achieved by Digicel.
- b) Building more infrastructure, especially in rural areas would be an inefficient way to increase competition, and may not be financially viable.
- c) Technology available and likely to become available that would facilitate efficient competition is a relevant question. There is currently an initiative to develop a national wholesale data network that will interconnect major population centres using existing and new (microwave radio, fibre optic cables) infrastructure and which would encourage service providers (mobile, ISPs, data services etc) to efficiently develop retail services through cost based pricing. This initiative may provide a partial backhaul solution for Bemobile in particular. In addition, there will be competition to introduce LTE / 4G mobile technology to PNG to meet rising demand for mobile data capability, and this requirement to re-invest will apply to Digicel as well as to Bemobile and Telikom. The use of a national backhaul network and the need to deploy LTE / 4G services will help to facilitate some efficiency improvements for the mobile market.
- d) The 'reasonableness' of the costs involved for declared services may be an important issue in achieving an overall fair and lower cost environment for further investment by competitors to Digicel. It may be necessary to assess the opportunity, through economic modelling, to achieve more efficient use of infrastructure. This means gaining an understanding of the potential cost targets that would apply to the following infrastructure elements of a mobile network:
 - i. Cost of mobile base stations and terminals. Should be similar if all parties engage in open competitive tenders.
 - ii. National backhaul. The planned wholesale dataco infrastructure should achieve economies of scale if most service providers become users, and so reduce the cost of this mobile network element.
 - iii. Regional backhaul. Connecting from the national backhaul to base stations, this may require new microwave or satellite infrastructure if the Digicel regional backhaul network is not available at reasonable cost. It may be that the national backhaul organisation could build and lease back this infrastructure if it could introduce cost efficiency through leasing capacity to multiple service providers.
 - iv. Radio site facilities. Providing access to Digicel facilities such as buildings and radio masts could reduce the costs for competing mobile service providers considerably, if the costs of access to the declared facilities can be shown to provide a fair return to their owner, and still reduce the cost for the competing service provider.

- v. Mobile roaming. In this situation, competitors would have access to roaming on the Digicel network to be able to offer the same coverage area as has been achieved by Digicel. It is necessary to agree on a price for mobile roaming that provides adequate remuneration for the infrastructure owner, and enough sales margin for the competing mobile provider that they can justify sales activities in areas where they do not yet have their own base station infrastructure.

It is the combination of costs for these five areas of service delivery that will assist the competing service provider to determine whether they are willing to compete with Digicel. It is just as important that wherever Digicel infrastructure does become a declared wholesale service, the prices paid properly reflect costs and a reasonable return on investment.

Pricing is a contentious matter when wholesale determinations are made and the service provider with SMP cannot be expected to welcome the prospect of competitors using their infrastructure under a legislated arrangement. We would expect that the dominant service provider would mount the strongest possible arguments for all declared costs to be as high as possible to optimise their return on investment and to limit the competitive benefit achieved by other mobile service providers.

- e) The effect of supplying the declared services on the integrity, operation or performance of the services or facilities is a relevant matter for consideration and the following problems may result for all parties:
 - a. Roaming traffic volumes to be carried by the declared network might cause congestion, reduced service levels and loss of revenues for all parties.
 - b. Third party access to Digicel facilities might increase the risk of damage to the facilities.
 - c. The use of facilities by third parties is likely to bring forward the timing of network upgrades, leading to earlier capital and operational costs for Digicel.

These matters are all managed in other countries where services and facilities are declared on telecommunications networks, so there is no reason why fair pricing and policy cannot be developed that supports the efficient use of common infrastructure.

- f) The legitimate commercial interests of Digicel in supplying the declared services, including the ability to exploit economies of scale. It is important that the benefits of economies of scale that apply to Digicel continue to apply when third parties are provided regulated access to services and facilities. It may be relevant that a small service provider cannot be offered the same cost plus pricing on the network as is available to a larger third party. There may need to be consideration given to a sliding scale of access prices.
- g) The incentives for investment in the facilities by which the mobile services may be supplied includes risks involved in making the investment for the access provider. It is likely that any access seeker will have to provide traffic forecasts to the access provider, in order that network capacity can be assessed, and that in some cases the forecasts will require the Access Provider to invest in new infrastructure to meet these forecasts. If the forecasts provided by the access seeker were to prove to be optimistic for example, then the access provider is unlikely to achieve their required return on investment for the new infrastructure and may seek assurances of a minimum income if traffic levels are not delivered.

Determining whether the mobile services market lacks competition

The Commission cannot comment on the outcomes of any market tests that may be carried out in determining whether the mobile services market is competitive, and whether any regulatory intervention might enhance the efficient delivery of competitive services.

The comments in sections 2.2.2 to 2.2.5 are important considerations as to the changing market conditions in PNG and in the Commission's view it is unlikely that any definitive decision can be made as to whether any lack of competition is due to market dominance, the high costs of infrastructure in PNG and / or competitor inefficiency.

Another matter that can influence competition is the ability to easily transfer from one carrier to the other – number portability. Given that there is probably a relatively high penetration of mobile services in the country, effective competition will result from attracting and holding existing customers on other networks. If customers are required to change their number in transferring to another service provider, the competitive process is likely to be limited as many people consider their mobile number as 'personal'. This matter is outside the scope of the discussion paper but is raised as a likely barrier to competition.

Whatever the reasons for a lack of competition in the mobile services market, any significant SMP leads to the potential for abuse in terms of predatory pricing, poor service levels and reduced market investment.

Technology impacts

In most developed countries, mobile services are highly competitive and in high demand. This leads to product innovation and attempts to provide enhanced customer services in order to maintain pricing margins. Mobile service providers introduce new services regularly and invest heavily in infrastructure as a result. We can expect PNG to follow the same path of investment, driven by the same vendors serving developed nations although limited competition is likely to delay investment in new technology because of a lack of incentive to invest from the dominant service provider.

All telecommunications networks now operate as common IP (Internet Protocol) platforms, irrespective of the services (voice, data, video, internet etc) delivered to end users. In the case of mobile services, they are largely defined by the wireless base stations and can now connect efficiently to simple IP links. This technology impact leads to the efficient use of common IP networks for many service providers and supports the development of a common wholesale national data network in PNG.

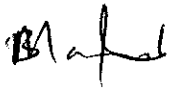
Concluding remarks

There is no doubt that Digicel is the largest mobile services provider and that by observation, Bemobile and Telikom provide limited competition, especially in rural areas. This situation can lead to high prices, underinvestment and limited services innovation and the Commission agrees that in PNG there is a need for careful market definition to understand why there is a relative lack of mobile services competition.

If national backhaul costs were to reduce through the dataco initiative discussed earlier, and the existing mobile competitors were to become more efficient, declared mobile services may also assist in encouraging increased competition. The alternative may be just as realistic – if mobile services are declared and other costs remain high, there might be limited improvement in competition.

It is suggested that market analysis continue into what level of competition can be encouraged in the mobile services market in the following areas:

- i. Declaration of mobile services. This requires an understanding of the value of the services to be declared, and an estimate of their likely cost for access seekers.
- ii. Market efficiency. Are the current mobile service providers able to benefit from declared mobile services? These organisations must be able to operate efficiently in order to benefit from any cost reductions resulting from declared services.
- iii. What other market and technology trends may foster the development of mobile services competition?



DR BILLY MANOKA, PhD
Commissioner & Chief Executive Officer