

Regulating the Telecommunications Sector in Papua New Guinea

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Abstract

Telecommunications and information is vital to nation building. In PNG telecommunication sector is viewed as a significant partner in national development resulting in the Government's active participation and involvement through its corporate vehicle, Telikom PNG Ltd which owns and operates most of the telecommunication infrastructure. Telikom PNG Ltd is the sole wholesale provider of telecommunications services throughout Papua New Guinea. Its operations together with the other retail operators are subject to a regulatory system set up by the government through PANGTEL and the ICCC which are respectively technical and economical regulators.

1. Introduction

Papua New Guinea is known for its cultural diversity and harsh rugged terrain making delivery of communications and other infrastructure difficult to reach the 85% of its rural-based population. The rugged terrain coupled with lack of adequate road infrastructure makes access to markets and to the main commercial and government centres difficult. Telecommunications is therefore the only hope for the country.

Efficient delivery of telecommunications services in Papua New Guinea is of course the responsibility of the State. As background information, I will first discuss the various telecommunication services available in the country. I will then discuss the regulatory arrangements established by law to regulate the sector.

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The telecommunication sector is by virtue of s 19A of the *Telecommunications Act* 1996 a regulated industry for purposes of application of the competition law processes and is therefore subject to the regulatory requirements and jurisdiction of the *Independent Consumer and Competition Commission* (ICCC) through a regulatory contract.² The sector is regulated by way of regulatory contract³ and is binding on both Telikom PNG Ltd and the *Independent Consumer and Competition Commission* pursuant to the provisions of *ICCC Act* and the *Telecommunications Act*. And therefore, any government policies must be consistent with the regulatory contract and licenses. The technical licencing and regulatory arrangements of the sector are administered by Papua New Guinea Radiocommunications and Telecommunications Technical Authority (PANGTEL).

Telikom PNG Ltd, is the dominant, rather monopolistic corporate vehicle established by the government to provide telecommunications services in PNG. Under current arrangements, Telikom PNG Ltd is given the task to provide wholesale telecommunications services relating to internet and data services. Apart from Telikom PNG, currently, there are about five (5) private sector service providers that are involved in the various telecommunication services. Specific services in the telecommunication sector include, internet and e-mails, facsimile, telex, data transfer, mobile network, fixed network, cabling, PABX (private automatic branch exchange) and key systems, paging, modems, network termination units (NTUs), private payphones and telephone directories.⁴

The provision of internet gateway service is the responsibility of Pacific Mobile Communications Ltd, a subsidiary of Telikom PNG Ltd.⁵ Pacific Mobile Communications Ltd is also involved in the mobile phone sector trading as B-Mobile. The mobile phone sector of the industry has been partially opened up for competition and it is regulated through regulatory contracts which have been issued pursuant to competition law requirements. In the mobile telephone sector, there are currently two

² That declaration was made pursuant to s 32 of the *Independent Consumer and Competition Commission Act* 2002 (ICCC Act).

³ www.iccc.gov.pg

⁴ www.iccc.gov.pg

⁵ <https://idl-bnc.idrc.ca/dspace/btistream>

(2) service providers operating in the market with a third one yet to commence operation. These are respectively B-Mobile (Telikom PNG), Digicel and GreenCom.

In the internet service sector, issuance of the country top-level domain space (.pg) is administered by the University of Technology in Lae, Papua New Guinea. Since the commencement of internet services in PNG in April 1997, there are a total of five (5) licensed commercial Internet Service Providers (ISPs). These are: Daltron Electronics Ltd, Datec (PNG) Ltd, DG Computers, Global Technologies Ltd, and Online South Pacific (Data Nets). These ISPs are involved in the provision of retail IT-related services on a purely commercial basis. The range of service they provide include computer networking, data communications, internet, PC distribution, software, mobile phones, broadband, domain names, e-mail accounts, dial-up account, pre-paid wireless internet access cards and other related services.

Papua New Guinea's internet gateway is operated by Pacific Mobile Communications Ltd (PMC), which is a subsidiary of Telikom PNG Ltd. Since Telikom PNG Ltd is the sole distributor and wholesaler of bandwidth, PMC leases bandwidth from Telikom and then resells this product via the gateway under the brand name 'Tiare' to ISPs. This product is then leased to other users in PNG through ISPs.

2. Regulation of the telecommunications sector

Under the telecommunications sector, the principal economic regulator is the Independent Consumer and Competition Commission (ICCC)⁶. As the principal regulatory agency it is required to ensure that provisions of telecommunication services provided under the *Telecommunications Act* are fulfilled except where there is any provision relating to the technical regulation of the sector, which is the responsibility of PNG Radiocommunications & Telecommunications Technical Authority (PANGTEL) as the designated principal regulatory agency.⁷ If ICCC and PANGTEL are given concurrent powers, both agencies are required to consult each other before exercising any powers. However, in the event that they are unable to agree, views of ICCC will prevail and that decision will not be challenged for reason

⁶ It was established under the *Independent Consumer and Competition Commission Act* 2002.

⁷ (PANGTEL) was established in January 1, 1997 under the *Telecommunications Act* 1996.

that no consultation had taken place or if there was, it was defective. PANGTEL's core functions, after consultation with ICCC are to:⁸

- establish performance standards for any carrier and monitoring compliance with those standards;
- regulate and control the use of the radio frequency spectrum without causing interferences;
- determine Codes on technical telecommunications matters;
- act as the duly appointed representative of the State at all international bodies or authorities which have the purpose of designating international technical standards; and
- monitor the use of telecommunications services on any ship or aircraft; and in consultation with the Commission, developing and monitoring a numbering plan for Papua New Guinea.

PANGTEL also has the power to enforce certain reserved rights set aside for the use of the following facilities:

- reserved line links and ancillary facilities;
- supply of telecommunications services by satellite based or microwave facilities;
- provision of public pay phones;
- supply of public mobile telecommunication services; and
- Telikom mobile carrier operations.

However, there are exceptions allowed under the *Telecommunications Act* for a person other than a carrier to perform certain activities. These are outlined as follows:

- line links used by civil aviation;
- line links used by broadcasters; and
- line links for defence purposes.

PANGTEL also ensures that radio communications services administered in Papua New Guinea complies with the standard set by the world regulatory body like International Telecommunication Union (ITU). PNG is a member to this international body and it is therefore required to ensure that international standards and best practices are observed and maintained.

⁸ See Part IIIA, s 19C of the *Telecommunications Act* 1996.

Through the recently endorsed revised government policy on ICT sector which took effect on February 2008, the government of PNG aims to achieve open competition in all sectors of the industry through a staged approach mainly in the mobile phone sector.

The current revised ICT policy dated February 2008 issued and sanctioned by the ICCC pursuant to s 19I⁹ of the *Telecommunication Act* now sees Telikom PNG Ltd as the:

- sole operator over fixed network;
- sole general carrier licence holder;
- sole international gateway operator by which all telecommunications networks in PNG are connected to international networks; and
- sole wholesaler of internet gateway.

2.1 Radio Spectrum Management

Matters relating to radio communication in PNG are regulated by the *Radio Spectrum Act* 1996 (the Act). The Act has extra-territorial applicability in relation to the use of the spectrum. However, there are certain exemptions. These exemptions relates to the frequency bands allocated for the exclusive use by the Defence Force; apparatus intended for reception of broadcast services other than broadcast satellite service receivers; and low power devices. Except for the use of the spectrum, the Defence Force shall pay an annual fee as notified to it by PANGTEL.

In relation to granting of licences to establish radio-communication stations, PANGTEL has the exclusive right in granting licences for the following:

- (a) the use of a radio frequency or group of frequencies allocated by PANGTEL;
- (b) the establishment, erection, maintenance and operation of stations and apparatus for the following purposes:

⁹ Section 19I(2) reads: 'The Commission shall ensure that any Government Policy notified in accordance with Subsection (1) is carried out.'

- (i) transmitting radio communication to, and receiving radio communication from, any place, vehicle, vessel or aircraft in the country;
- (ii) transmitting radio communication to, and receiving radio communication.¹⁰

A licensed telecommunication carrier or a person applying for a licence must be given access to such radio spectrum that is required to allow effective operation of their licensed telecommunication network.¹¹ However, before issuance or refusal of any license, PANGTEL is required to consult the Independent Consumer and Competition Commission (ICCC). The period of a radio spectrum licence issued to a person will be valid within the period of the person's telecommunications carrier license. The terms and conditions of the carrier licence must not be inconsistent with the telecommunications carrier license. Regarding any revocation or suspension of a license, PANGTEL is required to consult the ICCC before taking any further actions.¹² In the event ICCC and PANGTEL are unable to agree, the views of ICCC are bound to prevail.¹³

PANGTEL is the sole authority in ensuring that all equipments used for the provision of telecommunication and radio communication services meet its 'type-approved equipments' before use in PNG. Following are the various licences it issues:

- i) business license to allow the licensee to provide service within a specified area for purposes specifically stated in the license; and
- ii) spectrum license to allow the licensee use a particular frequency within a specified period specifically under conditions set in the license.

Any breach thereof may result in seizure of the equipments or apparatus.¹⁴

In relation to search and seizure of any unauthorized apparatus, s 12 of the *Radio Spectrum Act 1996* empowers a District Court magistrate to grant search warrant to a person authorized by PANGTEL. However, a search warrant is only granted if the

¹⁰ Section 6 of the *Radio Spectrum Act 1996*.

¹¹ See s 7(3) of the *Radio Spectrum Act 1996*.

¹² S 7(6) of the *Radio Spectrum Act 1996*.

¹³ S 7(7) of the *Radio Spectrum Act*.

¹⁴ This is provided under s 12 of the *Radio Spectrum Act 1996*.

magistrate is satisfied based on the information on oath. There must be reasonable grounds that an offence has been or is being committed against the Act. Granting of such powers relates to a search warrant issued to a person authorized by PANGTEL in order to conduct search and remove any apparatus that is in contravention of the Act.

Any persons aggrieved by any decision of PANGTEL is entitled to have the decision reviewed by an Appeals Panel authorised under Part IIA of the *Radio Spectrum Act*.

3. Review of the telecommunication sector

The key players in the telecommunication sector include Telikom PNG Ltd, PANGTEL and ICCC. Telikom PNG Ltd is a state-owned entity incorporated under the *Companies Act*. It is the incumbent network provider for the national network and the international gateway.

Telikom PNG Ltd is currently undergoing a transformation program in order to adequately deliver on its promises to the people of PNG. These promises are now being translated into such project as constructing one of it's largest-ever tower in Port Moresby located at Burns Peak. This tower will be used to launch Telikom's signals from a vantage point 85 meters skyward. This lofty tower has the capacity to serve the following:

- B-Mobile's base station around the National Capital District (NCD) and Central Province;

- an improved police radio communications system in NCD and other single and dual channel radio links; and

- the proposed television service by the National Broadcasting Commission (NBC) will also benefit from this improved national telecommunication network.¹⁵

On completion, it will cost Telikom K2.5 million. Issues relating to security and capacity will now be adequately enhanced which means that Telikom's international

¹⁵ 'Telecommunications' *Post Courier* (Port Moresby), 17 April 2008, 21.

gateway, routed through the APNG2 submarine cable, with satellite as a backup will now be further strengthened.¹⁶

4. Current Update on ICT Policy in PNG

With the recent update on the 2008 ICT policy document, the effects are now witnessed in the recent amendments to the *Telecommunication Act 1996* passed by the Papua New Guinea National Parliament on 16 April 2008. Furthermore, Telikom PNG Ltd is currently undergoing a transformation program which is already discussed elsewhere in this paper.

The amendments to the *Telecommunication Act*, are intended to achieve the following:¹⁷

Clarify ambiguities in the legislation;

Determined exclusive reserved rights for Telikom PNG which includes: International Gateway services; and Fixed line services;

Mobile carriers also have the right to use satellite, microwave or any other wireless links in providing a public mobile telecommunications service provided such links are not used between places in PNG and outside PNG other than through facilities owned by a general carrier; and

Private network operators have the right to use physical lines and satellite, microwave or any other wireless links in operating approved private networks; and

Create a new licensing regime for private networks;

Facilitate early interconnection through the conferral on the Minister the ability to make determinations regarding terms and conditions for interconnection and conferral on the Independent Consumer and Competition Commission (ICCC) the ability to make interim determinations; and

Correct a number of inconsistencies, inaccurate references and typographical errors in the principle Act. These provisions are designed to

¹⁶ As above.

¹⁷ Minister for Communication & Information Hon. Patrick Tammur during the celebrations of World Technology Day on 17th May 2008.

be the least restrictive or disruptive measures possible to put the Government in a position to prepare for Phase 1 of the ICT reforms.”¹⁸

The long awaited mobile telephone interconnections between the incumbent operator - B-mobile and Digicel finally arrived at mid-night 26th June 2008, much to the delight of both cell-phone and landline users. According to the rate charges, it will depend on which respective network one uses. After agreeing on the rate charges set by PNG watchdog on competition and consumer policies, Independent Consumer and Competition Commission (ICCC), the rates were set out as follows:¹⁹

Operators	Rate during Off Peak period	Rates during Peak period
B-Mobile to B-Mobile (prepaid)	25 toea per 30 secs	55 toea
B-Mobile to B-Mobile SMS	20 toea per message sent	
B-Mobile to fixed line	22 toea per 30 secs	44 toea
Fixed line to B-Mobile	22 toea per 30 secs	44 toea
B-Mobile to Digicel	48 toea per 30 secs	88 toea
Fixed line to Digicel	48 toea per 30 secs	88 toea

In my view, there are not much differences of rate charged between these two operators. The current rate by Telikom PNG is subject to change because these are currently promotional rates in order to commemorate its 53rd Anniversary on July 1, 2008.

Since this sector is a regulated industry subject to a regulatory contract, ICCC as the watchdog on competition and consumer policies has the responsibility to ensure that monopolistic prices are not being charged which would substantially lessen competition. In my view, Telikom PNG Ltd has a substantial degree of power in the telecommunication market, and therefore, it must behave within the market conduct rules stipulated under Division 2 of the *Independent Consumer and Competition Commission Act*.

¹⁸ “World Telecommunication Day Supplement”, *The National* May 16, 2008, p 36.

¹⁹ *The National* July 3, 2008 p 10.

Under current arrangements, Digicel has a separate international gateway and it has had an enormous impact on its customers. Its customers are currently enjoying affordable and high quality international services. Since its launch in July 2007, Digicel has invested in excess of K450 million in PNG including substantial investment in its international gateway. It is also expected to invest a total of K1billion in the next three (3) years. Digicel's enjoyment of this international gateway is now under clouds since the April 16 2008 amendments which has now restricted international gateway rights to Telikom PNG only.

5. Conclusion

No doubt the telecommunications and information sector in PNG are an essential tool to accelerate social and economic development. PNG government under the auspices of Minister for Communication and Information Hon. Patrick Tammur, has reviewed the ICT policy in order to foster competition in the sector. It is viewed that in order for that to happen, regulatory structures must be strengthened and furthermore, market performances must be monitored so that necessary adjustments can be made and the dominant market players do not abuse their market powers.

Under the revised policy of 2008, there are two key national interest objectives and these are:

The staged introduction of competition which will be carried out under Phase 1; and

Having a transformed and efficient Telikom PNG to compete on equal basis with incoming private operators.

Under the telecommunications sector, the principal regulatory agency is ICCC, however, it is noted that when exercising the powers and functions of PANGTEL and ICCC, they must consult each other on matters relating to provisions of the *Telecommunications Act 1996* and the *Radio Spectrum Act 1996*. ICCC being the watchdog on matters relating to competition and consumer policies, it is legally duty bound to ensure that all participants in the sector compete on an equal footing.

