



INDEPENDENT CONSUMER & COMPETITION COMMISSION

**NATIONAL ICT POLICY
PHASE II CONSULTATION**

SUBMISSION
OF THE
INDEPENDENT CONSUMER & COMPETITION
COMMISSION ("COMMISSION or ICCC")
TO THE
DEPARTMENT OF COMMUNICATION &
INFORMATION ("DOCI")

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1. EXECUTIVE SUMMARY

This initial Submission is provided by the Independent Consumer & Competition Commission (hereinafter "ICCC" or "the Commission") to the Department of Communication & Information ("DOCI") in response to calls for submissions by DOCI's legal advisors, Freehills on various legal and regulatory matters concerning the telecommunications industry as detailed on their letter dated 10 October 2008.

Given the short time frame allowed for initial submissions and the extensive list of issues to be considered by DOCI's legal advisors, the Commission has provided only short comments on some of the more important issues arising and will likely elaborate and cover new aspects of the discussion in subsequent submissions.

On the issues the Commission has provided comments on, a brief summary of its comments are outlined below:

- Any reform agenda for the regulatory frameworks and division of responsibilities between the Commission and Pangtel will not greatly assist the Government in reaching its goals described in the ICT Policy without significant change in performance and behaviour within the incumbent, Telikom.
- The Independence of the regulator and regulatory process should be maintained
- There should be a clear and confirmed path to a fully competitive market for telecommunications services within a definite timeframe
- This review should be driven by an Inter-Agency Taskforce which should consist of the following:
 - The Department of Communication and Information (Chair);
 - The Department of Treasury;
 - The Department of National Planning;
 - The Prime Minister's Department;
 - The Department of State Enterprise;
 - The PNG Chamber of Commerce

The ICCC, PANGTEL, the IPBC and especially Telikom should not be part of the taskforce because of their particular roles in implementing the outcomes of the review, although each should provide their comments to the review which need to be carefully considered by the taskforce. Accordingly, the consultants should be reporting to a taskforce. It would be the duty of the taskforce

to advise NEC after taking into consideration the findings from the review.

- The ICT review needs to have regard to the whole picture, by including the transformation of Telikom as a major part of the review. This must necessarily include an examination of the corporate governance and structural arrangements for Telikom's board and, of necessity, also of the IPBC.
- The Commission would be happy to work with Freehills to make appropriate adjustments to definitions and the limits of particular reserved rights for particular types of licensed carriers. However, we do not consider that any fundamental change to the types of carrier licences is necessary in the PNG environment at this stage.
- The Commission recommends that all regulation under the *Telecommunications Act* should be undertaken by one regulatory agency, the Commission, with PANGTEL being the regulator under the *Radio Spectrum Act* for all radio spectrum and radiocommunications matters.
- The Commission considers that the distinction between the policy making functions of the national government and the policy implementation functions of the independent regulator are adequately defined and dealt with in the current legislation. Potential problems could be avoided in future when any Government Policy is notified to the Commission, if that notification is given strictly in accordance with the Act after approval by the NEC, is clear and unambiguous, and where care has been taken to ensure that a carrier or other person cannot complain that the Policy is inconsistent with the Act or with Telikom's regulatory contract or licences.
- The Commission considers that the current requirements for transparency and accountability for the regulator are appropriate, and are being fully observed by the Commission. Were the Commission to assume responsibility for the technical aspects of telecommunications regulation as well as its current economic and social regulatory responsibilities, as is recommended above, the same level of transparency and accountability would apply.
- The Commission recommends that the Act be amended so that, while the Commission should still retain "absolute discretion" in selecting to whom carrier licences should be granted, any carrier licences which are to operate on a national basis should not be granted without the Commission first obtaining the approval of the NEC. When selecting new licensees, the Commission would expect to again be assisted by PANGTEL and the Treasury, though this procedure need not be enshrined in legislation. Such an

arrangement provides appropriate transparency and accountability in the selection process, which is an important assurance required by potential foreign and domestic investors in telecommunications.

- Carrier licences should be administered by an independent regulator, not by an executive government department directly responsible to a Minister
- The enforcement of licence conditions, including suspension and revocation of licences, should be undertaken by the independent regulator which administers the licences.
- Overall, the mandatory mobile network roll out has proved to be an outstanding success in extending the reach of telecommunications to many parts of PNG never before serviced by any telephony. This has been achieved without any government subsidy, either for installation or for operation, and at (apparently) affordable prices.
- The only way for the Universal Access Scheme to be efficiently and effectively implemented is for the administrator to put all of the projects out to competitive tender. Under no circumstances should projects be allocated to existing carriers without considering alternative suppliers.
- The ICCC could be the body to administer the UAS fund and its implementation, with its statutory independence and the reputation for honesty and integrity which the ICCC has earned in the years since its establishment as the telecommunications regulator.
- The Commission is of the view that the Government should commit to a defined time frame for the end of the Telikom international gateway monopoly and that once set it should not be further reviewed or extended. This is the only way to reasonably comply with its international treaty agreements, such as the GATS agreement
- The Commission welcomes the statement made in a letter from the Minister for Foreign Affairs on behalf of the Government, to the Commissioner for External Trade for the European Commission, that the Government has no intention of continuing to reserve the international gateway monopoly to Telikom indefinitely and is committed to removing exclusivity over these rights in 2009 as part of the implementation of open competition, with the exact timetable to open competition being embodied in the report to be provided to the NEC by March 2009

- The Commission strongly suggest that we would stay with the “negotiate and arbitrate model” for interconnection arrangements. Any direct intervention by the Minister should be carefully considered although we would not support such an approach as it will likely lead to further complex litigation which will delay the benefits from competition flowing to consumers
- In the context of the current review, the ICCC does not think that the review (given the optimistic timeframes) has at its disposal ample and adequate time to effectively engage in the public consultation process to consider and carefully asses the issue of Price Regulation in the industry. The ICCC therefore submits that this review does not consider reviewing price regulation arrangements at this stage but leave it for the Commission to asses in 2011 on the basis of the reasoning detailed in the submission.
- The Commission does not believe that there should be any watering down of the current regulatory and statutory powers it has with respect to information gathering and reporting. However the Commission would welcome any genuine attempts for a further improvement in the information requirements and a strengthening and extension of powers to require and enforce reporting of financial and operational data
- The current competition and market conduct provisions of the ICCC Act should apply to all sectors of the economy and that no new telecommunications industry specific competition and market conduct rules be established.

2. INTRODUCTION & SCOPE OF REVIEW

This Submission is provided by the Independent Consumer & Competition Commission (hereinafter “ICCC” or “the Commission”) to the Department of Communication & Information (“DOCI”) in response to calls for submissions by DOCI’s legal advisors, Freehills on various legal and regulatory matters concerning the telecommunications industry as detailed in their letter dated 10 October 2008.

Set out below are some introductory remarks on the background of this review including certain aspects of the overall matters intended to be assessed as part of this Review.

2.1 Introduction

The Commission understands that the Review derives its mandate from the NEC Decision made in February 2008 which was further encompassed into a National ICT Policy. However, the Commission has not sighted an official terms of references from the Minister (although Freehills’ letter dated 23 September 2008 advised the Commission of Freehills’ appointment, including the involvement of Concept Economics) to conduct the review nor any written evidence or approval from the appropriate bodies concerning the statutory procurement process (if any was undertaken) by which Freehills was selected and appointed to undertake this important review.

Notwithstanding this, the Commission provides its primary comments for the purposes of the review, as set out, in the rest of this submission.

2.2 2000/2001 Reforms

To set the scene for our submissions, the Commission considers it prudent and beneficial to detail the overall purpose and objectives of the reforms that occurred in 2000 and 2001. In fact, a comprehensive competition and regulatory review was undertaken at that time of a number of sectors in the economy, including the telecommunications sector¹. This review considered the overall regulatory arrangements in each sector of the economy at that time including the role, performance and reinvigoration of all the State Owned Enterprises in those industries (not just telecommunications). The review then made numerous recommendations which were adopted by the Government, and subsequent legislative and regulatory adjustments were adopted in early 2002 to implement the revised government policy for each of the relevant sectors.

¹ The sectors reviewed included the electricity, ports & harbours, motor vehicle insurance, telecommunications, postal and airlines industry sectors.

One of the recommendations was the establishment of the ICCC as the main economic regulator. In terms of the telecommunications industry, amendments were made to the then *Telecommunications Act 1996* (the Act) to reflect the existence of the ICCC, and the establishment of the regulatory arrangements including the Telikom Regulatory Contract, the timing for the introduction of competition, and the role that the ICCC had as principal telecommunications regulator, in juxtaposition to that of PANGTEL. The revisions were undertaken in the context of the need for fundamental reform designed to make fundamental and permanent improvements to the telecommunications infrastructure in PNG, and to provide the structural basis for the then government's policy for the 'sale' of Telikom PNG Limited (Telikom). This proposed sale was considered the most expedient way to provide the necessary changes to management expertise and funding for urgently needed capital expenditure to turn Telikom around and have it transform into a viable service-orientated business which could meet the pent-up demand for fixed and mobile voice and data services which was evident at the time.

Thus the 2000/01 reforms addressed the issue of establishing an independent regulatory environment with appropriate safeguards, public and transparent review processes, and certainty for both the potential investor in a privatised Telikom and for the community which was looking for improvements in the wide range of telecommunications services. The Commission strongly recommends that the DOCI and its advisers obtain and peruse the comprehensive reports on the 2001 review as the Commission believes it may assist in the current review.

The key features emanating from these reforms in 2001 were:

- **Regulatory and legislative certainty**
 - Intended to provide a platform for the extensive investment that was required in the fixed line network² and the mobile network³ to provide the basis upon which "future technologies" such as the internet (which effectively were current technologies in the rest of the world) could be built around.
- **Independence of the regulatory process**
 - Transferred to the Commission the issuing of licences, the development and application of codes and other regulatory arrangements relating to economic, pricing and competition issues, and the general oversight of the telecommunications industry;

² At that time the fixed network had only a small number of mostly business line connections (around 62,000 lines at 30 June 2001) and an aging international submarine co-axial cable to Australia with limited capacity (believed to be around 12 Mbps).

³ At that time the analogue network was operative but with only a small number of customers (around 4,500 at 30 June 2001) and with diminishing service quality and the GSM network was partially installed but was not providing commercial services due to lack of network coverage, handset availability and marketing expertise.

- This was also influenced by the perceived poor performance of the industry specific regulator at that time including its ad-hoc application of the law and its apparent lack of independence from, in particular the state owned enterprise (SOE).
- The gradual and staged introduction of competition into the telecommunications sector
 - This was designed to allow a reasonable period to allow Telikom to get its house in order and to price its services for recovery of considerable capital expenditure needed to revitalise its networks⁴ while at the same time providing the opportunity for the emergence of new service providers who could offer a range of add-on and associated services which would be built around the Telikom network but would be able to compete in a fair way in the overall telecommunications market.

While the policy decisions taken by the National Executive Council (NEC) at that time did not use the term 'ICT policy', effectively that is what it was. From a closer scrutiny the recently published ICT policy statement of April 2008, it would appear that the overall objective in 2001 was exactly the same as that identified in the 2008 document. However for some reason, the Commission notes that the 2008 ICT Policy did not make any reference to the reforms undertaken in 2000 and 2001. Furthermore, as stated in the Background section of the current ICT Policy document, the conclusions reached by the then government were very similar to that now espoused by the current Government as the reason for the poor roll out of ICT capabilities in PNG, namely the development of ICT in PNG *"has been hampered by a significant shortcoming in the capabilities and availability of appropriate telecommunication services from Telikom PNG"* (emphasis added)⁵.

Thus, the ICT Policy recognises that the principal problem delaying much of the implementation of the provision of new, innovative and affordable services to Papua New Guineans is centred on the lack of performance of the regulated entity, Telikom. However, while it appears the scope of the current review is almost entirely geared to the regulatory arrangements, history has shown that a lack of focus on reform of Telikom and delay in the introduction of competition has delayed or prevented the achievements of the policy goals identified in 2001 and again in NEC decision 188/2007 and the current ICT Policy. **The Commission is firmly of the view, that any reform agenda for the regulatory frameworks and division of responsibilities between the Commission and Pangtel will not greatly assist the Government in reaching its goals described in the ICT Policy without significant change in performance and behaviour within the incumbent, Telikom.**

⁴ The initial introduction of competition was considered to occur 18 months after the commencement of the initial regulatory contract, but this was later amended to 17 October 2007.

⁵ National ICT Policy. April 2008. page 2.

Further comments are set out below under the section Transformation of Telikom.

2.3 The need for current reforms

The experience of the Commission in dealing with the telecommunication industry has been rather interesting and in some instances, enlightening over the last three years. These experiences are further complicated by the Commission's role to implement lawful government policy, albeit in the face of apparently frequently changing government policies.

Nonetheless, review and reforms should be part of any dynamic economy, and so in the PNG context the Commission certainly encourages any review and reforms. However these reforms should be carried out in a disciplined and independent manner and from detailed consideration of the current facts surrounding the industry performance and the interaction between the regulatory arrangements, the carrier's performance delivery against the legislation and regulatory settings, and the uncertainty relating to changes to Government Policy. For any reform agenda, these two principles (that is discipline and independence) are vital pre-requisites that will drive the reforms to serve the best interest of the PNG economy as a whole.

Having said the above, the Commission considers that there is clearly room for some sensible consideration of just where Government Policy should now be directed going forward, given the recent changes to Government Policy and the outcomes of the reforms that were undertaken in 2000/01. In particular, the following issues need to be considered:

- there is a need to understand just what is the Government's Policy towards the continuation of any form of protected status for Telikom in its fixed line business;
- there is the need to resolve the issues of the VSATs and other apparatus that have been allowed to operate uncontested by Telikom with their own international gateways in PNG while the international gateway for the new mobile competitor(s) has been curtailed by law and government policy; and
- the need to resolve the never ending problems with allowing VAS providers access to telecommunication services at appropriate prices and terms & conditions to allow a competitive market for these services to develop and allow provision of services at world standards to end-users which are displaying a pent-up demand for reasonable service.

The above issues are critical and challenging and therefore would require rigorous, robust and detailed solutions that are in the best national interest to be devised and independently recommended to Government.

Whatever the outcome/solutions proposed, the Commission strongly believes that the principles that should be maintained and espoused are those that were embodied in the 2000/01 reforms, namely:

- **Independence of the regulator and regulatory process**
 - With appropriate transparent reviews and safeguards;
 - Backed by clear legislation that will stand the tests of time and the courts.
- **A clear and confirmed path to a fully competitive market for telecommunications services**
 - With any limits on competition being either time limited (to give certainty to all parties) or regulated in terms of price, service delivery etc by an independent regulator without direct government interference, but recognising that Government Policy may be set from time-to-time to guide the direction of the roll out of competition and activity in the telecommunications sector.
- **Reform of the economic and technical regulatory arrangements**
 - Extending the reforms started in 2000/01 and placing the relevant technical regulation activities in a statutorily independent body and ensuring that the wireless regulatory arrangements clearly require the return of excess spectrum licence fees to the Government purse.

2.4 Scope of this Review

As detailed above, the scope of the current Review is very much similar to the review undertaken in 2000/2001. However the notable difference is that the review in 2000/2001 was comprehensive in that it included both the regulated entities and the regulatory framework and identified areas where both the performance of the regulated entity can be improved whilst concurrently, putting in place the appropriate regulatory arrangements that can encourage and facilitate such improvements including penalties for non compliance. The current review is weakened by the omission of Telikom and IPBC from a concurrent organisational and performance review to go in tandem with the review of regulatory arrangements. Further comments are provided below under Transformation of Telikom.

In addition, the current review appears to be driven and executed solely by the DOCI and its advisers, whose final recommendations will be encompassed into a submission to be presented by the Minister to the NEC in March 2009. This is in stark contrast to the review undertaken in 2001 (or for that matter any major policy review and implementation). For the 2001 review, an inter-departmental task force (chaired by the Secretary for Treasury as the main economic policy department) was established to oversee that review and report back to NEC. The task-force was known as the Central Agencies Working Group ("CAWG") comprising senior representatives from all the key Government

departments. Such an approach was necessary to ensure the task-force was able to go through the key findings of the review then discuss these findings to reach a balanced view which was then encompassed into an NEC submission. Any major policy review or reform is normally driven through an inter-agency task-force and not by a single department in isolation. In the context of the current review, certain competition and regulatory matters within the ambit of this review would at best appear to fall within the domain of the Department of Treasury and to a certain extent the Planning Department.

The relevant issue of prudence / process under the current circumstances is not a questioning of the particular NEC Decision and Government Policy for the carriage of this review; however it is more the manner in which the policy is executed. **The implementation of a very important economic policy such as the current policy review would be better executed and monitored through an inter-agency taskforce than a single department in total isolation.**

The Commission therefore suggests that for a balanced view to be put before NEC, this review should be driven by an Inter-Agency Taskforce which should consist of the following:

- The Department of Communication and Information (Chair);
- The Department of Treasury;
- The Department of National Planning;
- The Prime Minister's Department;
- The Department of State Enterprise;
- The PNG Chamber of Commerce

It may well be desirable for the taskforce to include an industry representative as well, perhaps someone of stature from the Chamber of Commerce

The ICCC, PANGTEL, the IPBC and especially Telikom should not be part of the taskforce because of their particular roles in implementing the outcomes of the review, although each should provide their comments to the review which need to be carefully considered by the taskforce. **Accordingly, the consultants should be reporting to a taskforce. It would be the duty of the taskforce to advise NEC after taking into consideration the findings from the review.**

2.5 Transformation of Telikom

The current ICT review is extensive and wide ranging, looking at the regulatory arrangements and regulatory structures in telecommunications, but the terms of reference appear to ignore the main issue in the provision and development of telecommunications services in PNG - the need to

transform Telikom into becoming an effective and efficient provider of telecommunications services, which, at the present time, it clearly is not.

The review must surely take as a starting point the inadequacy of telecommunications services in PNG and how to improve those services and extend their accessibility to a majority of Papua New Guineans, from the current limited locations and limited range of services, combined with poor and unreliable service and unacceptable repair times and connection delays.

Looking at the regulatory structure for telecommunications, including its legislation, is certainly an important part of that review, but equally important is the need to examine the operations of the monopoly provider of fixed line, data and international services, Telikom PNG Ltd.

The ICT review cannot sensibly consider regulatory changes without having regard to Telikom and its capabilities, or lack of them. For example, decisions on a Universal Access Scheme may depend on whether Telikom, currently the only fixed line and broadband data carrier, is in a position to develop, install or operate any of the projects for bringing extended and enhanced telecommunications to PNG (at the moment, any objective assessment of Telikom would probably conclude it is not able to do that).

More particularly, major decisions on the structure of competition in the telecommunications industry have been taken in the past few years, most recently in the March 2008 amendments to the *Telecommunications Act*, with the specific objective of promoting the "transformation" of Telikom into an efficient provider of telecommunications services. For example, it is said that the requirement for Telikom to have a continued monopoly over international gateway services is essential for Telikom's transformation, by having Telikom retain its monopoly rents from excessive international termination rates, to help pay for its transformation.

Similarly, the whole issue of delaying the move to open competition in telecommunications through the Phase 1/Phase 2 approach, including the prohibition on issuing any new general carrier licences, is predicated on the use of continuing monopoly profits to fund Telikom's transformation into an efficient service provider which could survive in an openly competitive market.

But the transformation of Telikom cannot come about simply through throwing money at it. That has been done before, and failed. Telikom has been making monopoly profits for years, but has singularly failed to use those profits to strengthen, improve or expand its network for the benefit of PNG.

Telikom's problems are systemic, principally related to its very poor corporate governance, which itself arises from inappropriate structural governance. Telikom's Board of Directors has for years been highly politicised, with poor and delayed decision making, and decisions being taken for political reasons or after political intervention. This has resulted

in inconsistent and inadequate direction to Telikom management and staff, characterised by four or more changes in the CEO (indeed, several wholesale changes in the senior management team also) over the last four years. It is not surprising that in that time, Telikom has undertaken little or no capital investment for network improvement (with the exception of expanding its mobile network in response to competition from Digicel) and major investment decisions which were taken have been reversed by subsequent management.

That is where the “transformation” of Telikom needs to start - with a restructuring of the institutional arrangements, initially at Board level. The Board must be independent of Government, acting in the interests of the company and, while it retains any monopoly rights, in the interests of all Papua New Guineans, while not catering to political influence or interests. This poor corporate governance starts with its governance structure. What should have occurred is that there should be an independent Board appointed by Telikom’s shareholder, IPBC. Since the inclusion of section 9A in the *IPBC Act* a few years ago, Directors of Telikom have effectively been appointed directly by the responsible Minister. The Commission is not suggesting in any way that directors of Telikom have acted improperly, merely that the institutional arrangements for Board appointments are not in accordance with good corporate governance of an independent government owned instrumentality.

The same considerations apply for the governance of Telikom’s shareholder, the IPBC. It is not appropriate that there be the perception of a close association between the IPBC and senior politicians, of whatever persuasion. Again, the Commission is not suggesting that the IPBC or its officers have acted improperly or illegally, but the clear perception of a close relationship between IPBC officers and politicians is quite contrary to principles of good governance for a body which is supposed to be independent of government, by name and by statute.

Accordingly, in the Commission’s view the ICT review needs to have regard to the whole picture, by including the transformation of Telikom as a major part of the review. This must necessarily include an examination of the corporate governance and structural arrangements for Telikom’s board and, of necessity, also of the IPBC. The Commission recognises that it may be difficult for Freehills to undertake that task without facing criticism from some quarters of a perception of bias, because of Freehills’ extensive prior consultancy engagement by IPBC on telecommunications matters. Nevertheless, these issues should be addressed as they are integral to the overall review of ICT policy.

Finally, in relation to the transformation of Telikom, it needs to be understood that the partial sale of Telikom’s mobile business into a public-private-partnership (PPP) is not particularly relevant. If that sale occurs, as is proposed and seems likely, that will simply halve off one part of Telikom’s business into a separate entity partly owned by Telikom, without in any way affecting or “transforming” the way Telikom operates its core network,

other than by removing from Telikom its largest revenue stream and probably a large part of its profit. If, as is currently rumoured, Telikom also sells off its Telinet internet service to a PPP or otherwise, that would further reduce Telikom's profitable services, leaving it with a rump of the backbone fixed network and not much else. Those two divestitures would, of course, then have the effect of making it more difficult for Telikom to fund the regeneration or transformation of its network, which it desperately needs, from its own internal funds, since its internal revenues and profits would be greatly reduced.

3. LICENSING FUNCTIONS

The current definitions for the three classes of licences, general carrier licences, public mobile licences and value added services licences, were drafted at the end of the 1980s, when mobile phones were in their infancy and the internet was unknown. That may suggest that those divisions into three licence types are out of date and should be scrapped, but it is not as simple as that.

Putting aside value added services licences for the moment, the interests of the current general and mobile carriers must be taken into account. Telikom's existing general carrier licence, and the three current mobile licences, includes valuable legal rights for which, in relation to Digicel at least, a significant amount of money has been paid. While Telikom did not directly pay anything for its licences, they too are valuable property. For that reason alone, it would not be appropriate to change the licensing regime to allow other industry players to supply part or all of the services currently reserved to licensed carriers.

This is also important because, concomitant with those rights, licensed carriers have obligations under their licence, to provide services to all customers and, in the case of mobile carriers, to roll out their networks to many areas, some of which will be, initially and into the longer term, unprofitable for those carriers. Any fundamental change to carriers' reserved rights, in particular mobile carriers' reserved rights, would be likely to provoke demands for compensation from those carriers, including Telikom's mobile PPP.

This is not to say that there should not be some changes made to the licensing regime under the Act, or perhaps to the licences themselves. In particular, technology changes over the years means that some of the definitions in the Act may need revising to reflect the reality that, for example, mobile networks can only operate efficiently and effectively if they include some fixed line facilities as part of their network rather than trying to define the boundary of a mobile network as extending only as far as each mobile base station.

Similarly, it would be sensible to bring greater clarity to defining the extent of all carriers' rights to carry international traffic, especially considering the ubiquitous nature of satellite communications today, which inevitably know no national boundaries. Trying to reserve the right to satellite facilities to one type of carrier, for example, is probably no longer appropriate in the current environment.

The Commission would be happy to work with Freehills to make appropriate adjustments to definitions and the limits of particular reserved rights for

particular types of licensed carriers. However, we do not consider that any fundamental change to the types of carrier licences is necessary in the PNG environment at this stage.

One area which could usefully be clarified would be defining the limits between basic carriage services, which can only be supplied by a licensed carrier, and services carried over those basic carriage services, which can be provided by carriers or service providers. An essential part of this is the need for a more effective regulation of bundling of carriage services with value added services, including internet provision, to more easily prevent licensed carriers from misusing their market power through bundling and by their making it difficult for service providers to have access to carriage services at competitive prices.

Most of the requirements here can be achieved by having greater flexibility for the regulator in precisely defining the limits of carriers' powers where that is causing competitive distortions, and perhaps through some changes to the wording of carrier and service provider licences to produce a more level competitive playing field. For example, the new mobile licences include constraints on use of the latest technology (3G) or data services without the Commission's consent. This was and is intended to protect the emerging competition in mobiles until all participants were in a position to apply the latest technology, to prevent one competitor from quickly swamping the others and perhaps becoming the new monopolist.

None of this requires horizontal licensing, which would be verging on the netco/servco model, which is inappropriate for PNG, and which has been rejected as an option. All that is required is the flexibility outlined above and some changes to the definitions in the Act, but more particularly, a (phased in) end to monopoly licences for fixed networks, data services, data and international gateways and the like. If monopolies are done away with and additional licensees permitted (not open slather - careful granting of additional licences), most of the definitional and competitive problems will fall away. Technological advances and convergence will be applied in a competitive fashion, to the benefit of all in Papua New Guinea.

4. REVIEW OF REGULATORY MANDATE

4.1 The Mandate of ICCC and PANGTEL

The Act sets out in reasonable detail the particular functions of the Commission and PANGTEL, and identifies those functions where both organisations have a role, in consultation. Those arrangements have not worked out as well in practice as they should, for a number of reasons.

The Commission and PANGTEL have had different approaches on the application of the law, particularly in taking action for breaches of the Act, where the Commission would take action through the courts to seek a sanction or penalty for a contravention of the Act whilst PANGTEL has, in the past, levied fines or penalties itself, without going through the courts.

Also, there have been instances where industry participants have misunderstood the roles of the Commission and PANGTEL and, having sought a licence under the *Radio Spectrum Act* for, for example, a VSAT service, PANGTEL has issued a test permit under that Act to the applicant, who then assumes that he has the necessary licence to operate his VSAT service - he has paid a licence fee to PANGTEL (actually a permit fee for a six months test permit) and has been given permission by PANGTEL to operate.

This is not, of course, the case. VSAT operations require a general carrier licence under the *Telecommunications Act* to be issued by the Commission, but the Commission is prevented by Government Policy from issuing any general carrier licences. (VSATs also require a spectrum licence from PANGTEL for use of radio spectrum). The Commission is aware of several instances where PANGTEL has issued test permits, some extended beyond the statutory six months period, for VSAT services, because PANGTEL wants to help persons to get their VSAT service operational and sees this as a way of achieving that. The Commission also wants to help these people to get the services they need, but cannot do so because the law does not allow it. PANGTEL does not issue spectrum licences for these services, only test permits, because PANGTEL must consult the Commission before issuing licences for telecommunications services. PANGTEL, or at least some staff in PANGTEL, is aware that VSAT services require a licence under the *Telecommunications Act* and is aware that the Commission is prevented by Government Policy from issuing such licences.

These contradictory approaches to VSAT operations from PANGTEL and the Commission are highly undesirable and create confusion for VSAT users and worse, place those VSAT operators in a position where they are in breach of the law even though they think, by paying a licence fee to PANGTEL, they are then acting lawfully.

Under the *Telecommunications Act*, the Commission is designated as the principal regulator, while PANGTEL's functions are confined to technical regulation. A primary technical regulatory function for PANGTEL under the Act is the determination of technical standards under section 87, though the Commission is not aware of any technical standards which have been determined by PANGTEL in the twelve years since the Act has been in operation.

PANGTEL's primary focus is, and remains, spectrum management and other radiocommunications matters under the *Radio Spectrum Act*, which it carries out, as far as the Commission is aware, quite adequately.

Finally, the independence and corporate governance approach of the Commission and PANGTEL are widely different. The Commission has statutory independence from government, reinforced by the statutory bipartisan appointment process for Commissioners and tenure for Commissioners similar to judges. By contrast, PANGTEL's Board is appointed in effect by the Minister (though there was public confusion earlier this year about the Minister's awareness of PANGTEL Board appointments), the Board does not have statutory independence and Board members do not have tenure like Commissioners. The Commission provides Telikom with an annual, independently audited, justification for the quantum of its licence fees; PANGTEL does not.

All of these differences create confusion and uncertainty for those in the industry who have to deal with the Commission and PANGTEL. Many in the industry have said to the Commission that they would far prefer to deal only with the Commission rather than both the Commission and PANGTEL. The regulator of the telecommunications industry needs to be an independent body acting to the highest standards of corporate governance. At the same time, the industry can best be regulated by having only one regulatory agency with prime responsibility and, desirably, sole responsibility for that industry, and which is trusted and respected by participants in that industry. In those circumstances, the Commission recommends that all regulation under the *Telecommunications Act* should be undertaken by one regulatory agency, the Commission, with PANGTEL being the regulator under the *Radio Spectrum Act* for all radio spectrum and radiocommunications matters. This would require a small increase in technical staff for the Commission, (with some cost savings for PANGTEL) but would greatly assist the telecommunications industry and provide consistency in regulatory decision making and administration.

4.2 Policy making and policy implementation - Is greater specificity desirable on specific rule and code making powers?

In every industry and in every government administration throughout the world, there will always be times when there is tension between the making or development of policy - a government responsibility, through the

parliament - and the implementation or administration of that policy - the responsibility of the bureaucracy; government departments, government agencies and other statutory bodies. Papua New Guinea is no different.

The *Telecommunications Act* and the *ICCC Act* currently strike a good balance and reasonably workable distinctions between government policy making responsibility and the regulator's role in implementing and administering that policy. The basic telecommunications policy, particularly in relation to the regulatory structure, is set out in the legislation. That creates a principal regulator whose independence is guaranteed by the *ICCC Act*, with the legislation giving sufficient detail to allow the regulator to administer telecommunications regulation with reasonable certainty for all parties.

At the same time, the Act makes provision for the government to give guidance to the regulators (ICCC and PANGTEL) by formal written notification of Government Policy in relation to telecommunications, or changes to Government Policy, which the regulators are required, by law, to carry out (sections 19I and 36 of the *Telecommunications Act*). That Government Policy must first be approved by the NEC, and must not be inconsistent with Telikom's regulatory contract or its licences.

It is clear that there have been instances in the last two years particularly, where there have been tensions between the Commission, as principal regulator administering policy, and some Ministers who have desired to change policy and who believed that the Commission was not giving effect to those policy changes which the minister or Ministers were seeking to implement.

With the benefit of hindsight, those difficulties generally arose because the policy changes which some in government were promoting, had not at that time been endorsed by the NEC and thus had not been formally notified in writing to the Commission. The Commission was legally required to carry out the Government Policy which had been notified to it, and could not implement those changes in policy if they were not consistent with the Government Policy which had earlier been notified to the Commission. The Commission has to act strictly in accordance with the law in administering telecommunications. Quite apart from the clear obligation on all government agencies to act lawfully, the Act establishes valuable rights for participants in the telecommunications market, and if the Commission, as regulator of that market, did not act strictly in accordance with the law, it risked significant damages claims against it and the State by telecommunications industry participants who were dissatisfied with the Commission's actions.

Further problems had been experienced where government policy had been notified to the Commission, but the Commission had difficulty in implementing some parts of that policy because the Commission felt those elements were either inconsistent with Telikom's licences, and thus legally not able to be implemented, being contrary to section 19B of the Act; ambiguous or unclear in some respects and thus difficult to implement; or

were policy changes in anticipation of proposed subsequent legislative change, but which were inconsistent with the law at that time. A further area of concern was where the changed government policy may have required the Commission to alter contractual or licensing obligations which had been lawfully entered into at the time, thus risking potential liability for the State in legal actions from those who had been adversely affected. The last notification of Government Policy to the Commission, given in March 2008, does not suffer from these defects, and is being implemented by the Commission and, as far as we are aware, by PANGTEL also.

The commission considers that the distinction between the policy making functions of the national government and the policy implementation functions of the independent regulator are adequately defined and dealt with in the current legislation. Potential problems could be avoided in future when any Government Policy is notified to the Commission, if that notification is given strictly in accordance with the Act after approval by the NEC, is clear and unambiguous, and where care has been taken to ensure that a carrier or other person cannot complain that the Policy is inconsistent with the Act or with Telikom's regulatory contract or licences.

Reference has also been made to whether greater specificity is desirable in the regulator's rule and code making powers. The Commission considers any greater specificity is not necessary. Codes of practice are a necessary procedure for the regulator to apply to give practical effect to the regulatory rules set out in general terms in the Act. Codes cannot themselves change the law; they merely provide guidance on how persons should operate in accordance with the relevant law.

The code making powers in the Act presently provide for a consultation process before any code is implemented, with the carriers and other interested parties to be consulted and their views taken into account. While the Minister for Communications may not always be interested in the minutiae of some issues codes may deal with, it may be sensible for the Act to be amended to provide specifically for the Minister to be included in the consultation process before any code is made by the regulator.

4.3 Transparency of Regulatory processes and appropriate levels of regulatory accountability

The Commission operates professionally with a high degree of transparency and accountability in its decision making processes. This is not just the view of the Commission - those with whom the Commission deals, in the telecommunications industry and elsewhere, have praised the Commission for its professional approach to its regulatory functions. The Commission provides an annual report to Parliament, is fully audited by the Auditor General, and has a special audit of its telecommunications functions each

year to fully justify the level of telecommunications fees in accordance with the Act.

The Commission is not able to comment on the level of transparency and accountability to which PANGTEL operates; that is a matter for others, including those in the telecommunications industry, to consider and formulate their own views.

The Commission's decisions are also subject to administrative review by the Appeals Panel and by the courts. Some of the Commission's activities are necessarily confidential, such as the arbitration proceedings between carriers for interconnection arrangements, where the carriers agreed at the start of the arbitration that they required confidentiality for commercial reasons. In such cases, the Commission respects the claims for commercial confidentiality in accordance with the requirements of the *ICCC Act* and the *Telecommunications Act*.

The Commission considers that the current requirements for transparency and accountability for the regulator are appropriate, and are being fully observed by the Commission. Were the Commission to assume responsibility for the technical aspects of telecommunications regulation as well as its current economic and social regulatory responsibilities, as is recommended above, the same level of transparency and accountability would apply.

4.4 Licensing arrangements for ICCC and PANGTEL

Licensing encompasses a number of elements: issuing licences and selecting licensees; setting the terms and conditions of licences; administering and regulating the actions of licensees in accordance with the terms of their licences and the law; enforcement of licence conditions including the power to suspend or revoke licences; and the relationship between the Commission and PANGTEL in relation to spectrum licences for operation of telecommunications services. Different considerations apply when dealing with each of these elements.

Issuing licences: The Act currently provides for licences to be issued or refused by the Commission "in its absolute discretion" (section 57), which means the Commission decides who will be licensed, while the government may control the number of licences to be issued. The government has exercised that control on at least two occasions; in December 2005, the Commission was notified of Government Policy for the Commission to conduct a closed tender process for the issuing of two new public mobile licences, which the Commission carried out, calling for tenders in March 2006, determining the successful tenderers in September 2006 after an exhaustive tender evaluation process, and issuing the two new mobile licences in March 2007. The second time the government controlled the number of licences to be issued was in March 2008, when it notified the

Commission of new Government Policy which prohibited the Commission from issuing any new general carrier licences or public mobile licences.

Thus the government was not directly involved in the selection of the new licensees, but did (and does) determine how many licences are issued. In fact, the licensee selection process for mobile licences did have input beyond the Commission; the tender evaluation was undertaken by a tender evaluation committee which comprised the Chief Executive of PANGTEL and a senior officer of the Treasury as well as the Commission. While the Commissioners ultimately made the decision as to who should be awarded the two mobile licences (as they had to by law), that decision was also the unanimous view of the tender evaluation committee.

In the Commission's view, this is an appropriately transparent and accountable means of selecting who should be granted licences which carry valuable rights and obligations. Some in government were critical of the Commission for not asking the government to decide who ultimately should be awarded the mobile licences, notwithstanding that the law provided clearly that it was the Commission's responsibility. The Commission recognises that the government does have an interest in who is awarded a licence as significant as a national carrier licence, even though this is not how the law currently stands. However, it is considered that having carrier selection undertaken exclusively by the government would not have the necessary degree of transparency and accountability now expected in modern government.

Accordingly, the Commission recommends that the Act be amended so that, while the Commission should still retain "absolute discretion" in selecting to whom carrier licences should be granted, any carrier licences which are to operate on a national basis should not be granted without the Commission first obtaining the approval of the NEC. When selecting new licensees, the Commission would expect to again be assisted by PANGTEL and the Treasury, though this procedure need not be enshrined in legislation. Such an arrangement provides appropriate transparency and accountability in the selection process, which is an important assurance required by potential foreign and domestic investors in telecommunications.

Setting licence conditions: Setting licence conditions are important, but it is essential that this be done by whoever is administering the licence and enforcing the licence conditions. An independent regulator, presented with predetermined licence conditions may find them difficult or impossible to administer or enforce, so the regulator must be involved in the determination of those conditions. Licence conditions would necessarily have to comply with the Act and with any relevant Government Policy, which had been made known to the regulator through the mechanisms in the Act.

Licence conditions may also be decided, to some extent, by negotiations between the person issuing the licence and the new licensee, particularly if

it is a high value licence requiring large expenditure (and capital risk) on the part of the licensee. The regulator which administers that licence must therefore be involved in any such negotiations; if, as recommended above, the regulator is also the issuer of the licence, that issue would not arise.

Administering and regulating licensees: A critical part of any industry regulation regime in any jurisdiction is that industry participants be, and be seen to be, subject to the integrity of transparent, consistent, accountable and fair regulation and administration. The only way to achieve that is to have an independent regulator with an established reputation for integrity, administering those licences. No government, no matter how honest or open it may be, will have that perceived level of objectivity and transparency which can only come from an independent regulator. **Accordingly, it is essential that carrier licences be administered by an independent regulator, not by an executive government department directly responsible to a Minister.**

Enforcement of licence conditions: Whoever administers licences should logically also have responsibility for enforcing licence conditions. This may include the ultimate sanctions against licensees in breach of their licence conditions, of suspension or revocation of their licences. This should be the case even if the party administering and enforcing the licences is not the party which issued the licences. The power of revocation should not follow the power to issue licences; it necessarily follows the administration and enforcement functions. Any enforcement regime must necessarily have adequate arrangements for administrative or judicial review, especially where the ultimate sanctions of licence suspension or revocation are being used. Again, enforcement by a government department responsible to a Minister would be unlikely to have such review mechanisms built in. **Thus the enforcement of licence conditions, including suspension and revocation of licences, should be undertaken by the independent regulator which administers the licences.** The Act as it presently stands provides quite adequate procedures and structural arrangements, without any need for amendment.

The relationship between the Commission and PANGTEL for spectrum licences for telecommunications providers: Section 7 of the *Radio Spectrum Act 1996* makes specific provision for PANGTEL to adopt a principle that, as far as possible, persons wanting to supply telecommunications services under a carrier licence in the *Telecommunications Act* should be given access to such radio spectrum as may reasonably be required to allow the effective operation of their licensed telecommunications network. Section 7 then goes on to require PANGTEL to consult the Commission before granting, refusing to grant, or revoking any such spectrum licence, and in the event of any disagreement between the Commission and PANGTEL, the Commission's views shall prevail.

This provision recognises the critical importance of spectrum availability for telecommunications carriers, in a regulatory structure where spectrum licences are issued by a different body from the telecommunications

regulator. Section 7 has actually worked well since its inception in 2002, subject to one exception where PANGTEL sought to revoke certain licences or permits held by Digicel; that question is currently before the courts, with PANGTEL restrained from carrying out its proposed actions until conclusion of the hearing.

The Commission considers that no change is needed to the *Radio Spectrum Act*, except perhaps that section 7(3) may be clarified to ensure it applies to value added service licensees under the *Telecommunications Act* as well as to licensed carriers. Even if PANGTEL's technical regulation functions under the Act were transferred to the Commission, as is proposed above, PANGTEL would retain responsibility for spectrum allocation, so section 7 and the consultative arrangements between PANGTEL and the Commission would still be necessary.

4.5 Whether clarity on areas of potential overlaps are necessary

In general, the answer is "no". More particularly, if the one regulator, the Commission, assumes responsibility for all regulation under the *Telecommunications Act*, there should be little if any potential overlap between the Commission and PANGTEL. Any overlapping responsibilities would then relate to spectrum licences for telecommunications users which, as indicated above, is adequately catered for in current legislation.

The only area where legislative amendment could be preferred, if the Commission and PANGTEL were to both retain regulatory responsibilities under the *Telecommunications Act*, would be to include a provision in that Act similar to section 7(8) of the *Radio Spectrum Act*, which would provide that, where the commission and PANGTEL were to consult each other on particular matters, in the event of disagreement, the Commission's view, as principal regulator under the Act, would prevail.

5. UNIVERSAL ACCESS SCHEME

Full universal access to telecommunications for everyone in Papua New Guinea would not be practically achievable in the medium term, without enormous expenditure out of proportion to, and at the expense of, expenditure on other critical priority community needs in remote areas such as education, health care, food and nutrition, power and transportation. This is largely because PNG's telecommunications infrastructure expansion has started from such a low base.

5.1 Background - No universal service program or coverage

This is amply demonstrated by the appallingly low teledensity which existed in PNG until the advent of mobile competition last year. Before 2007, the year mobile competition was announced, PNG had approximately 60,000 fixed lines, about 70% of which are for government or commercial subscribers, and mostly contained in the larger towns. With a population of about 6,500,000, this gave PNG a fixed line teledensity of less than 1%, just about the lowest anywhere in the world. At that time Telikom's mobile network was effectively confined to Port Moresby, with fewer than 30,000 customers.

Telikom, the monopoly provider of telecommunications in PNG, had not expanded its fixed line coverage for many years; there was (and still is) a long waiting time for new connections; Telikom's expansion into mobiles had been extremely slow (it did not move to GSM from its analogue AMPS network, confined to Port Moresby alone with 7,500 customers, until 2004); and despite making monopoly profits for years, its capital expenditure year on year was essentially minimal.

Yet Telikom claimed it had an (undefined) universal service obligation which it was fulfilling. This was demonstrably not the case. Thus the Government's decision in December 2005 to introduce two new competitors into the mobile market provided the opportunity to greatly expand the proportion of the population who could have network coverage, and to achieve that within a short time frame and without government subsidy.

5.2 CSO achieved through mobile networks rollout

This was achieved through a requirement in the mobile tender specifications that each mobile network must progressively be rolled out, over a five year period, to all major and mid-sized towns in PNG and to a significant number of smaller and more remote population centres throughout the country, in every province. This roll out obligation was crystallised into 229 identified

towns, villages or population centres, which is intended to cover virtually all locations in PNG with a population of about 1,000 or more.

New mobile licences are a valuable resource, and it was considered that a mandatory roll out requirement of this magnitude would be an acceptable burden for mobile tenderers to bear while still being prepared to bid for a licence to invest in a new network. This proved to be the case, when the successful tenderers were chosen. For competitive neutrality, and to provide an added incentive for the new licensees to roll out their networks quickly, the existing Telikom mobile network was put under exactly the same network roll out obligation.

These arrangements are in fact working well. There was no way at that time (or even now) that Telikom was going to extend its fixed line network to any remote areas. Telikom had declined, or been unable, to install any telecommunications systems, including VSAT, in remote areas, while still refusing to allow customers to seek alternative suppliers, which prompted a number of businesses in remote areas to install their own VSATs, with dubious legality.

In the Commission's assessment, in the absence of regular fixed line services being available in remote areas, GSM mobile networks could provide adequate and appropriate levels of telecommunications functionality for rural and remote areas which had previously had no access to telecommunications at all. While GSM services do not currently provide full broadband access in remote areas, the level of services they do provide, voice and text, and limited, basic data facilities, is sufficient for the present and is the only practical means of providing services at all in those locations. More particularly, it is relatively easy to upgrade those GSM facilities to GPRS, EDGE or 3G capability, leading to good capacity data services through the mobile networks. The Commission would expect this to occur in the near future.

The network roll out by Digicel has been exceptionally good, with its network coverage now extending to more than half of the required 229 locations (and some other locations not required to be serviced), only 15 months after the commencement of its network. This has brought telephony to many population centres which have never previously had any telephone access, with extremely heartening social and economic consequences. At its present roll out rate, Digicel will have completed its network roll out obligations to all 229 locations and more, in less than half of the five years allowed.

Telikom too has been significantly extending its mobile network, though it is not doing so as rapidly as Digicel. Nevertheless, Telikom's GSM network now has much greater coverage than it had 18 months ago, and is expanding continually.

Overall, the mandatory mobile network roll out has proved to be an outstanding success in extending the reach of telecommunications to

many parts of PNG never before serviced by any telephony. This has been achieved without any government subsidy, either for installation or for operation, and at (apparently) affordable prices.

When the mobile network roll out obligations are completed, by mid 2012 at the latest (though likely to be much earlier than that, for Digicel at least), the mobile networks, combined with the existing fixed line network, will provide telephone access for a significant proportion of the population. It is recommended that these combined mobile and fixed networks form the basis to which the UAS should be added, to extend telephone access to a larger proportion of the population, living in the more remote areas.

5.3 How can the UAS be achieved

The most efficient and cost effective way to extend these networks to more remote locations is through expansion of, and enhancements to, the existing GSM mobile networks. Extending the existing fixed network to provide extended coverage through fixed lines and facilities is not a practical proposition (much of the fixed network is already supplied by radio links rather than cable anyway) and would be much more expensive than doing it through extending the GSM networks. (This is unrelated to the strengthening and improvement of Telikom's fixed backbone network, through the currently planned fibre optic ring and otherwise, which is not part of a UAS because that backbone network improvement will not, of itself, increase or extend network coverage or telephone access to new areas). There is also no point in establishing a UAS network on its own - any network providing services to rural and remote areas would need to interconnect with mobile and fixed networks anyway, so the result can be far more effectively achieved by the simple expansion of the existing mobile networks.

The objectives for UAS in PNG needs to recognise the very low degree of urbanisation in the population, the rugged terrain and the very low base of teledensity from which we are starting. It must also recognise the lack of infrastructure in most remote areas, including roads, power and basic education. On that basis, the most appropriate objective is for extending coverage to rural areas progressively up to network coverage of, perhaps, 60% of the land mass over time, getting to perhaps 80%-90% of the population within the medium term.

5.4 Technology

This also means that the most appropriate type of telecommunications network to most efficiently provide that coverage would, at least in the first instance, be voice services with perhaps basic internet access, rather than full-blown broadband data services. This is not to say that the UAS should not consider broadband services for remote schools etc as being desirable - simply that such services can most effectively and efficiently be provided

through enhancements to GSM networks, with currently available technologies to provide high speed data.

The services which could be provided on such a network would be virtually unlimited - village phones, computer links, internet services, shared mobile handsets, wiMAX and wifi, would all be possible. Some locations may need sophisticated data services, others may suffice with voice calls through one village phone.

In considering the best way to get extra coverage within a reasonable time, thought should be given to utilising the new low cost mini-GSM base stations now being marketed by Ericsson, which can provide GSM services very cheaply in remote locations with low phone usage, using very low power and low impact base stations and facilities. Another technology which should be well worth considering is utilising the O3b Networks⁶ project, now under development, for broadband satellites in orbits specifically designed for tropical or equatorial countries. It is claimed that O3b will be able to offer bandwidth on a wholesale basis to ISPs and transmission services to carriers to link remote locations to core networks, for about US\$500 per megabit per month, compared to existing satellite charges of about US\$4,000 per megabit per month. O3b is planning on having its satellites in orbit by late 2010⁷

The UAS should focus on spreading access to remote locations beyond the 227 population centres to which the mobile carriers are already required to accommodate. In other words, there should be an assumption that adequate telecommunications are (or will soon be) provided to the 227 locations, through fixed line services supplied by Telikom or through mobile services supplied by Telikom mobile, Digicel and, in future, Greencom, so the UAS should go beyond those areas.

5.5 Who should supply the UAS

The only way for the UAS to be efficiently and effectively implemented is for the administrator to put all of the projects out to competitive tender. Under no circumstances should projects be allocated to existing carriers without considering alternative suppliers. Regrettably, Telikom has in the past proved incapable of developing or expanding its existing services, and could not be relied upon to do so here, if it were simply allocated UAS funding. But Telikom should be capable of winning its fair share of tenders for supply of UAS services through competitive tender, and providing those services. In considering suppliers for these services, the administrator should not be confined to carriers alone; ISPs and other service providers may well be able to install and supply the required services efficiently and effectively.

⁶ O3b = "Other 3 billion" people not currently served by existing satellites

⁷ *The Economist* 18 October 2008, page 69

There need be no concern that there may be resistance from existing carriers to interconnect with UAS networks installed by ISPs or others; the law requires carriers to interconnect with each other. There will be a requirement for current Government Policy to be changed to allow the ICC to issue new general carrier licences or mobile carrier licences for the supply of these UAS services. That requires a decision from the NEC, but does not require any change to the legislation.

5.6 How should the UAS be funded

While the PNG economy may well be able to provide government funding for the UAS from the annual budget, the reality is that this would not work, because continuing funding would always be uncertain and at the whim of the government of the day. For instance, a new incoming administration could cut annual budget funding. There ought to be a fund set up with a steady source of income, for allocation annually on designated projects. This may be a mix of donor funding, government funding (a specific legislation setting out an amount guaranteed each year from the annual budget would ensure certainty) and industry/customer levies.

If an industry levy is considered, it should not be by any direct tax or increased licence fees on carriers, particularly mobile carriers. When the two new carrier licences were put to tender in March 2006, there was no expectation that there would be any USO levy on carriers, and the compulsory rollout was, in effect, a substitute (and a very effective one). Thus the mobile carriers may justifiably complain if a new tax on their operations were imposed now.

However, there may be a way of securing significant funding to go part way towards funding the UAS, if a surcharge were imposed on all customers of all carriers (and service providers?) of, say, 2 toea per call, or something of that sort. Such a surcharge could be collected by carriers and service providers from their customers and provided to the fund. With the dramatic increase in telephone traffic since the introduction of Digicel, that could generate significant revenue. All carriers have full details of the number of calls made on their network, so this system should be relatively easy to administer.

5.7 Who should administer the UAS

It is absolutely critical that the UAS be administered by a body which is independent of government and immune from political interference. If that is not done, history has demonstrated that, regardless of which party or coalition is in power, there is a high risk that funds will be allocated on a basis of favouritism or political expediency, without regard for consumer need, or for the most effective and efficient use of the limited funds available. This is not just the view of the Commission; it is a widely held belief, shared throughout the community and those organisations who have

taken an interest in such issues, such as Transparency International, Chambers of Commerce, etc.

The ICCC is such an independent body, because of its statutory independence and the way its members are appointed (by a bipartisan high level committee) and whose members have tenure equivalent to a judge. By contrast, PANGTEL does not have such statutory independence - its members are directly appointed on the advice of the Minister and their tenure is less secure than that of ICCC members.

Accordingly, the ICCC could be the body to administer the fund and its implementation, with its statutory independence and the reputation for honesty and integrity which the ICCC has earned in the years since its establishment as the telecommunications regulator. If it were not the ICCC, the administrator of the funds should be a body with equivalent statutory independence and tenure. The fund could either be administered by the ICCC alone, or in consultation with some other, equally independent body. Alternatively, it may be possible to have some small group acting as an advisory committee in the selection of projects, though with the decisions ultimately taken by the independent administrator.

The area where the administrator of the fund would be most subject to political or other pressure or influence would be in the selection of projects to be funded for the UAS. Once those project selections had been made (presumably an annual exercise), the administrator would undertake a tender selection process, which may also require resisting some external pressures, followed by supervision of the project implementation and auditing of completed projects and their continuing operations.

The ICCC may be the most appropriate body for all of these tasks because of its continuing role in regulating the telecommunications industry and the need for the ICCC to ensure that UAS activities do not have a damaging effect on the competitive commercial operations of carriers and service providers. It should also be noted that if and when Greencom develops its mobile network, the ICCC will have the role of administering the funds which Greencom has agreed, as part of its licence obligations, to put towards telecommunications projects (beyond its network roll out obligations) over the next 10 years.

5.8 Legislative changes

If the UAS were implemented as described above, there would be little need for legislative amendment. Being telecommunications specific, there may need to be some limited amendment of the *Telecommunications Act 1996*, to provide for the establishment of the UAS fund, its administration by, say, the ICCC, auditing of the fund and projects it funds, and the power to levy a surcharge on telephone calls, if appropriate. Any alternative scheme may require more extensive legislative amendment. One other requirement

would be additional resources for the ICCC to administer the UAS and its projects, but that should not require legislative change.

6. INTERNATIONAL GATEWAY REVIEW

Background – the physical network

The international gateways for voice calls and data transmission into and out of PNG which are owned and operated by Telikom are the monopoly gateways⁸ mandated under Government Policy defined in the NEC decision no. NG 21/2008 of 13 February 2008⁹. These international gateways are located at the Ela Beach exchange in Port Moresby and at the Lae exchange in Lae. The primary gateway at Ela Beach is connected to the APNG2 fibre-optic submarine cable which terminates in Sydney, Australia. This international gateway is also connected to back-up international satellite transmission capacity for redundancy purposes¹⁰. The international gateway at the Lae exchange is connected to international satellite transmission capacity, but currently this is of small capacity.

Digicel has owned and operated a second pair of international gateways from around July 2007 under a consent notice issued by the ICCC dated 3 July 2007 under s.2.4 of Digicel's licence. These international gateways are located at the Gordons exchange in Port Moresby and the Lae exchange in Lae and are connected to international satellite transmission capacity for primary transmission purposes. Telikom and the Minister of Communications and Information allege that this consent issued by the Commission is illegal and the matter is currently before the courts¹¹.

Background – the interconnection process

In a letter dated 17 March 2008, Telikom formally requested arbitration of an Access Agreement citing an inability to agree various access and interconnection issues with Digicel. In a letter dated 20 March 2008, Digicel formally requested arbitration of an Access Agreement citing an inability to agree various access and interconnection issues with Telikom. In a letter dated 7 April 2008, the Commission separated the arbitration of domestic and international access and interconnect issues into two arbitrations.

⁸ The legal validity of this Government Policy has been challenged by Digicel and the matter is currently before the courts, refer [OS No. 156 of 2008].

⁹ See ICCC web site at www.iccc.gov.pg for a copy of the latest Government Policy for the telecommunications sector. Also the two previous policies issued in 2007. The ability of the Commission to issue new General Carrier and Public Mobile licences ceased with the Government Policy embedded in NEC decision no. NG 13/2007 dated 3 October 2007 and notified to the Commission on 11 October 2007.

¹⁰ Albeit that the back-up capacity immediately & automatically available is less than the full PNG international traffic requirement. Telikom has indicated that additional back-up capacity should be available within a reasonably short time should a submarine cable failure occur.

¹¹ The legal validity of the Commission's consent has been challenged by Telikom and the matter is currently before the courts, refer [xyz case number].

Following a rigorous arbitration process the Commission issued its Final Determination on the International Access Agreement dated 11 August 2008. In separate letters dated 21 August 2008 both Telikom and Digicel lodged an application with the Appeals Panel for review of the Commission's decision. The Appeals Panel handed down its decision dated 17 September 2008, dismissing Digicel's appeal and upholding 4 out of Telikom's 7 grounds for appeal, and its decision dated 24 September 2008 awarding costs, half to be paid by Digicel and half to be paid by the Commission. The Commission reconsidered its decisions and signed its Final Revised Determination on the International Access Agreement on 9 October 2008. The making and publication of such decision was stayed by Digicel in [OS (JR) No. 612 of 2008], as was the timetable for withdrawal of consent which was contingent upon the issuance of the Commission's Final Revised Determination. In a letter dated 20 October 2008, Telikom lodged an application with the Appeals Panel for review of the Commission's revised decision. Through orders dated 24 October 2008, the Appeals Panel has entered a second review process.

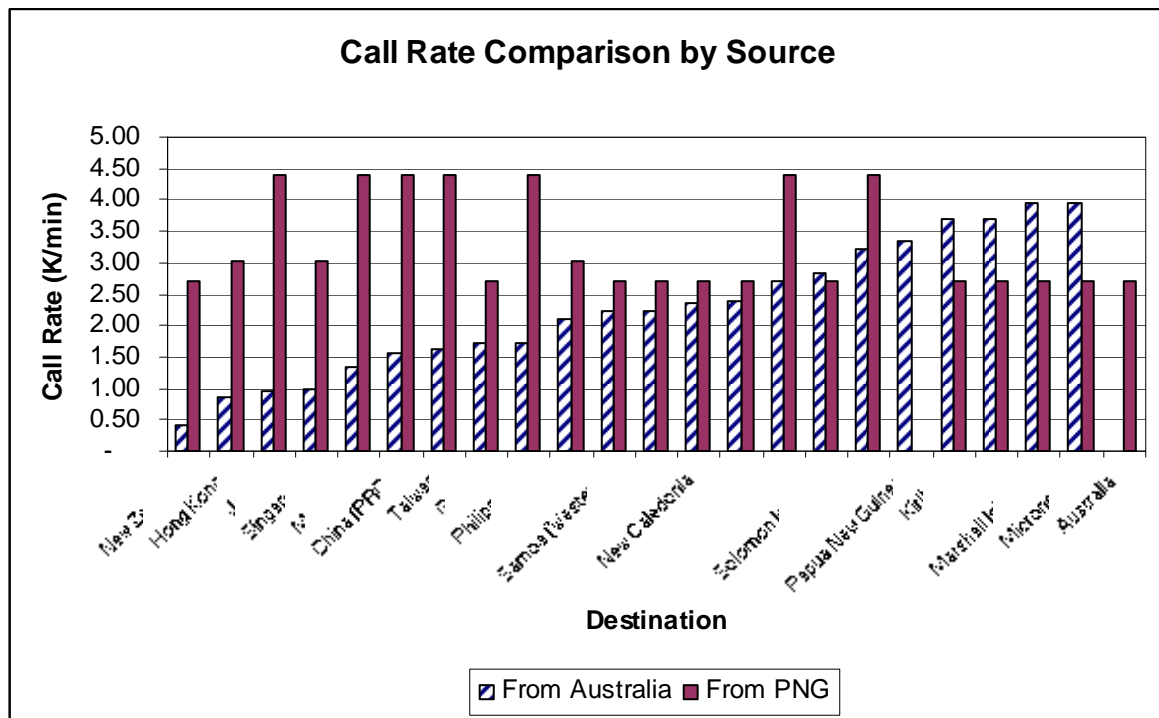
Background – the retail rates

Having set out above, the primary issues in the current state of play regarding the international gateway, it is important to recognise the issues which are faced by Papua New Guineans calling to international numbers, and international consumers calling in to PNG numbers. Calls from PNG to Australia currently cost K2.7/min which calls from Australia to PNG currently cost K3.34/min¹². The following figure shows that the retail call rates from PNG are generally a lot higher than the same destinations called from Australia¹³. Some of the call rates to smaller Pacific nations from PNG are lower than from Australia, but these are not primary traffic volume destinations for calls from PNG.

¹² The Optus charge rate for a call to PNG is A\$1.49/min and the exchange rate as at 29 August 2008 from the BPNG was K0.4461/A\$1.00.

¹³ Figure based on international rates for SingTel Optus Pty Limited from web information downloaded on 21 October 2008 and stated "correct as at 25 May 2006", and a K0.4461/A\$ 1.00 exchange rate published by the BPNG at 29 August 2008.

Figure 6.1 : International Call Rate Comparison



The economic impact of higher call rates from PNG to other countries, particularly its major trading partners, should not be underestimated. The higher call rates impact negatively on export industries, tourism and general business activity within PNG.

Background – no universal service program or coverage

Telikom had a universal service obligation prior to the changes to legislation in 2002. Telikom’s performance in rolling out new services to unserved and under served areas was quite poor. The changes in legislation in 2002 removed Telikom’s universal service obligation and restricted its monopoly to Designated Service Areas (DSAs). The other areas in PNG outside the serviced areas were then accessible to other providers so long as they sought a telecommunications licence from the ICCC and spectrum licences from Pangtel. The ICCC issued a number of restricted general carrier licences, but these were related to specific industries and issues where Telikom could not respond. Unfortunately these additional licences did not address the roll-out of network customer access to the remote unserved communities, and no substantive applications were proposed to address the customer access issue. It is possible that not enough dissemination of the availability of these loosened licence arrangements occurred to more remote villages and communities.

The new regulatory arrangements in 2002, put telecommunications prices under a price cap, resulting in a substantial improvement to Telikom’s financial position. Unfortunately, this was not mirrored by the increased capital investment required by the price cap, and in many ways Telikom did not meet the Commission’s expectations for improved customer service or

network performance. Thus, even though the revenues were provided under the price cap, the network expansion to unserved or under served areas did not expand under Telikom's extended monopoly period. This is amply demonstrated by the appallingly low teledensity which existed in PNG until the advent of mobile competition last year. Before 2007, the year mobile competition was announced, PNG had approximately 60,000 fixed lines, about 70% of which are for government or commercial subscribers, and mostly contained in the larger towns. With a population of about 6,500,000, this gave PNG a fixed line teledensity of around 1%, just about the lowest anywhere in the world¹⁴. At that time Telikom's mobile network was effectively confined to Port Moresby, with fewer than 30,000 customers.

The Commission believes that the change to Government Policy under NEC 257/2005 to allow three mobile carriers in PNG was as a result of the continuing poor performance by Telikom, and its inability to internally change its culture to a customer focused and technically responsive telecommunications company. The introduction of mobile competition, albeit with only two operative players at this stage, has been spectacularly successful. Informal reporting of customer numbers by Digicel and Telikom suggest the number of connected mobile customers is above 900,000 by mid of 2008 and Telikom's responsiveness to mobile customer needs is demonstratively improved. While formal feedback on their licence network roll-out obligations has yet to be received, Digicel appears to be well in advance of its roll-out obligations and Telikom has been actively rolling out new base stations throughout the country.

The signal appears clear, that competition under a strong regulatory framework and with an independent regulator can produce the results espoused by the Government.

While the Commission will provide more detail on the various issues raised by the Freehills consultation document dated 10 October 2008, the following brief points are made.

6.1 Gateway liberalisation

PNG is a signatory to the General Agreements on Trade in Services (GATS). As such it has committed to liberalisation of its telecommunications sector including the need to allow competition both nationally and in international gateways. The changes to the legislation in 2002 went a long way towards meeting PNG's obligations under this treaty, particularly the commitment to open access to competitive licensing arrangements by 17 October 2007.

¹⁴ Only 4 WTO countries had lower teledensity than Papua New Guinea at 1.07% in 1996. Refer Attachment 6, *Report of International Telecommunications Markets 1997-1998*, FCC, 7 December 1998.

In terms of other international obligations, in the mid 1990's there was pressure for all countries to reduce their international termination rates (ITR) initiated by the Federal Communications Commission (FCC) of the USA. This was in response to the considerable outflows of cash from the USA in support of developing countries which used high international termination rates to increase the roll-out of their own fixed network infrastructure. The settlement rate benchmarks determined by the FCC were set to move towards cost based levels but, in the FCC's view, still likely to exceed the actual cost base for various countries given the lack of accuracy in the data it used to set the benchmarks. The table below displays the benchmarks sought for different countries based on their telecommunications development classifications which resulted from consideration of teledensity and gross domestic product (GDP).

Table 6.1 : FCC Settlement Rate Benchmarks¹⁵

Country Classification	Benchmark Settlement Rate (US\$/min)	Date by which Benchmark was to Apply
Upper Income (> US\$8,956 pa)	0.15	January 1999
Upper Middle Income (US\$2,896 to US\$8,955 pa)	0.19	January 2000
Lower Middle Income (US\$726 to US\$2,895 pa)	0.19	January 2001
Low Income (< US\$725 pa)	0.23	January 2002
Teledensity Less than One	0.23	January 2003

In 1997 PNG was classified as a lower middle income country with a teledensity of 1.07 in 1996¹⁶ and a benchmark international settlement rate of US\$0.19/min to be achieved by January 2003. By 2002 PNG had complied with the benchmarks and the FCC reported its international settlement rate to be US\$0.188/min¹⁷. While compliant with the FCC benchmarks, PNG continued to be a route subject to the FCC's International Settlements Rate Policy (ISRP). It was alleged PNG did not comply with open access provisions in other respects in the FCC's view.

¹⁵ FCC, 7 August 1997, page 2.

¹⁶ FCC, Report on International Telecommunications Markets 1997 - 1998, 7 December 1998, Attachment 6.

¹⁷ FCC, International Settlement Policy Reform, First Report and Order, Report No. FCC-04-53A, IB Docket No. 02-324, IB Docket No. 96-261, 11 March 2004, Appendix C, page 61 & Appendix E, page 64.

Around 2003, Telikom reversed its previous compliant status and dramatically increased the ITR it charged its overseas correspondents for termination of calls into PNG. As a result the negotiation and a preference for balancing of international volumes and settlement payments, the termination of Telikom's outgoing international calls to other countries also dramatically increased. The high international retail rates in Figure 6.1 above are as a direct result of the current ITRs agreed by Telikom, through its international gateways. While the existence of the current Digicel international gateways may have had an ameliorating effect on the ITRs obtained by Tekikom, the unmet demand for mobile customer connections and call opportunities have not reduced to a point where further competition will flourish with only two gateways.

6.2 Existing settlement agreements

Existing settlement agreements allow for flexibility in the ITR, as evidenced by the changes Telikom made around 2003. The Commission does not believe there are barriers to further gateway liberalisation included in its international treaty agreements. Indeed the allowance of gateway competition (even restricted to only licensed fixed and mobile carriers in PNG) will allow PNG to move significantly closer to its current obligations under the GATs agreement.

The Commission hopes to comment further on this issue in a subsequent submission.

6.3 Gateway liberalisation in comparable jurisdictions

The Freehills consultation paper requests feedback on a number of detailed issues including:

- comparisons of gateway competition in comparable jurisdictions;
- cost and benefits of further gateway liberalisation;
- time frame for further liberalisation; and
- impact of technical liberalisation such as pre-selection and call override on international calls.

The Commission hopes to comment on these issues in a subsequent submission.

6.4 Impact of VOIP, Internet Access and Call Refiling

The current Government Policy on an exclusive monopoly for international voice calls has been and continues to be undermined by the technological advances in the communications sector over the last 5 to 10 years. Internet access is critical to business development and hence the economy of PNG as

a whole. Electronic commerce and less complex technical innovations (such as e-mail) are now central elements of any business operating nationally and internationally. There are enormous issues currently evident in the PNG telecommunications sector relating to internet access and delivery. While these are not solely related to the international gateway, the opening up of gateway capacity for data transmission is a critical development for the PNG economy.

VOIP is fostered through the extremely high prices for international calls which have resulted from the Telikom monopoly of the international gateway. While VOIP cannot correctly be described as a "free service", its lower cost base means end-users prefer this alternative (even with poor or patchy quality) to the high voice grade circuits available from, in particular, the fixed network.

The lack of customer access to the internet at reasonable speeds and the apparent lack of international data gateway capacity, have directly led to the proliferation of alleged illegal international VSAT gateways for data calls into and out of PNG.

A continuation of the Telikom gateway monopoly will be significantly undermined as VSAT, VOIP and other technology bypass is encouraged by the high prices and lack of connectivity to Telikom's fixed network and international gateway. The Government's goal of financing Telikom's rejuvenation through the monopoly of the international gateway is unlikely to be met in this environment. Indeed better pricing may lead to more overall volumes and revenues at the expense of higher cost alternatives such as VSAT.

The Commission hopes to comment further on these issues in a subsequent submission.

6.5 Summary on gateway competition

From a competition perspective, the Commission would support the removal of these exclusivity rights. However the Commission is mindful of the reality within the development context of PNG, and the continuing need to provide a further window for Telikom to improve its competitiveness and performance in the face of potential new competitive entry. Accordingly, the Commission will comply with lawful Government Policy and be mindful of the Governments' overall position on where it wishes to place Telikom in the overall development agenda.

In the 2000/01 reforms, the overall recommendation was for Telikom to continue its exclusivity but for a defined period of time. The exclusivity was time limited and set to expire on 17 October 2007. The timing was linked to what was reasonably envisaged and expected for a private sector owner would need to turn the company around and deliver competitive service. It

was possible when the last privatisation process was attempted during 2003. That opportunity has now gone, and retaining Telikom in Government ownership propped up by the current exclusivity arrangements (which are not time limited) and possibly the CSO funding arrangements which are currently also under review, is unlikely to result in further improvement in customer service, network performance or network coverage over the next few years.

To maintain exclusivity or otherwise, the question that goes to the heart of the issue is: **'What is the plan to get Telikom operating on a commercially efficient basis and acting as a facilitator of the ICT program for the benefit of the nation as a whole rather than being a dead weight that is holding the country back?'**

This is the fundamental question. It is no good saying that 'Telikom just needs a little more time', or 'If Telikom can just hang on to its exclusive rights everything will be OK'. Experience over the last 6 years in particular has indicated to the contrary.

The fact of the matter is that technology has now bypassed Telikom, and it is possible to deliver the telephony services that it has offered in the past more efficiently, effectively and at a lower cost using new technologies that Telikom is unlikely to be able to fund (even using a CSO arrangement) or more importantly **manage**. This is the crucial point. Telikom has not shown any ability to be able to handle the big issues over the last 20 years. And the country now does not have another 10 years to wait to see if Telikom can do the job. The fact is, all the evidence indicates that Telikom will not be able to do the job unless the overall corporate governance of Telikom is greatly improved. The Government believes this can be partly addressed through a public private partnership (PPP) for the BMobile arm of Telikom.

To have a sensible go forward plan, there needs to be not just lofty aims and objectives, but a fully documented managerial plan and financial costing of how Telikom can actually make a contribution to the economy by being allowed to maintain its exclusivity. Such a plan, including the cost / benefit analysis of this approach does not seem to exist at present. Accordingly, in the absence of proper corporate governance and commercial acumen in the overall administration, Telikom appears to be doomed to failure and the retention of exclusivity and CSO funding is just drawing out the process which is costing PNG dearly.

So, the issue here, and it applies to the other points that Freehills have raised, is what the strategic plan is and what is the practical implementation for that plan in hard financial and managerial terms. The pertinent issue is that Telikom has to quickly undergo a comprehensive operational and performance review of which clear strategic plans and operational improvements are necessary. If otherwise, just simply remove the exclusivities because it is an economic cost of the nation and hinders overall growth and development in the ICT sector. Again we make reference

to our comments on “transformation of Telikom” in section 2 of this Submission.

The Commission is of the view that the Government should commit to a defined time frame for the end of the Telikom international gateway monopoly and that once set it should not be further reviewed or extended. This is the only way to reasonably comply with its international treaty agreements, such as the GATs agreement.

In this respect, the Commission welcomes the commitment given by the Foreign Minister, Hon. Sam Abal, on behalf of the PNG Government, in his letter dated 8 September 2008 to Mr Peter Mandelson, the Commissioner for External Trade for the European Commission, in which it was stated:

“Viewed in this context, the amendments to PNG law concerning the international gateway that have apparently been brought to your attention are part of the transitional arrangements to apply only during Phase 1.

The Government has no intention of continuing to reserve these rights indefinitely and is committed to removing exclusivity over these rights in 2009 as part of the implementation of open competition. The exact timetable to open competition will be embodied in the report to be provided to the NEC by March 2009.”

With the government commitment to remove the international gateway monopoly by no later than the end of 2009, as part of the implementation of open competition, there is now a timetable, or at least an end date, for removal of Telikom’s monopoly gateway rights and the introduction of across the board competition in telecommunications, which will remove the market distortion and constraints on the development of efficient, world class communications for PNG.

7. INTERCONNECTION REVIEW

In terms of interconnection and or access arrangements, the fundamental point is that there **must be clear rules and obligations** relating to interconnection and sharing of network infrastructure. The existing arrangements can always be improved, but at least they have allowed for interconnection under a negotiate and arbitrate model. This model essentially allowed the parties to determine the prices for interconnection between themselves rather than have a bureaucratic process whereby the regulator pre determines an access arrangement which then have to be applied. In the event the parties are unable to reach a mutually acceptable solution then the law allows for either one or both of the parties to apply to the regulator to arbitrate on the matter.

The pre approval of an access arrangement is a practice that is applied in other places, but it is costly to administer in the sense that the setting up of the access arrangements, the approval of the access arrangements and charges, and then the ongoing enforcement of the access arrangements is a lengthy regulatory process which is not costless. In stating this, this does not mean that a negotiate and arbitrate model is not without costs.

As shown in PNG in the recent Telikom/Digicel disputes on interconnect (described in section 6 above), there is plenty of room for argument and in the matter of interconnection between Digicel and Telikom the matter came to the Commission to settle and then went to the independent Appeals Tribunal for review. But the beauty of this is that it worked, and it was the first case of this type in PNG. In addition this initial arbitration had occurred between early March and early August of 2008, and national interconnection had occurred. An arbitration in this short time frame is unusual in international comparison terms. However, while national interconnected traffic now flows, there are four additional court cases concerning the review of the Commission's decisions and the validity of the Government's decision to extend the international gateway monopoly now underway. Having seen how the arbitration process works and what the possible outcomes are, there should be added pressure on the parties to negotiate a satisfactory outcome between them rather than incur all this additional expenses of the arbitration and review process in the future.

The negotiate and arbitrate model does have its drawbacks in terms of both time and costs because there will always be people who think they can go the extra mile and get something more. And in the PNG situation, the memory of the recent experiences indicates that parties may always push for commercial self interest and take the matter to both arbitration and possibly appeal.

In particular Telikom's financial and operational system and especially data is not up to par and therefore regardless of how many access agreements are formulated, Telikom will always be aggrieved whilst many practical problems are inevitable. One only has to look at the problems that the ICCC has had to date in getting the modelling of the Regulatory Contract right. Their systems are very poor, and we may potentially spend many years developing the access arrangements for Telikom with them and of which they will be delaying at every possible opportunity which may be used as an excuse for holding off new entry by competitors.

So, in the current circumstances, and giving priority to competition, we would strongly suggest that we would stay with the "negotiate and arbitrate model". Any direct intervention by the Minister should be carefully considered although we would not support such an approach as it will likely lead to further complex litigation which will delay the benefits from competition flowing to consumers.

The Commission hopes to comment further on these issues in a subsequent submission.

8. PRICE REGULATION REVIEW

We note that one of the matters that will be covered in the review is the consideration as to whether a price regulation regime is necessary and appropriate to ensure improved service quality for consumers. Our comments are set out below.

8.1 Current Pricing Arrangements

The Mobile telephony business of Telikom is no longer subject to price regulation given the recent emergence of competition in this segment. Prices are now determined by the market. However Telikom's fixed line business is subject to price regulation through a price cap arrangement. The current Telecommunications Regulatory Contract details these regulatory arrangements and includes, *inter alia*:

- The future price path for the fixed line business;
- The Minimum service Standards expected from Telikom; and
- The future capital expenditure requirements.

These arrangements essentially recognise that Telikom's fixed network is effectively a monopoly and accordingly consumer's welfare and interest will be jeopardised if Telikom's fixed network is not appropriately regulated. It is quite rare these days for monopoly service providers in the utility sector to be left un-regulated.

8.2 Future Pricing Arrangements

For purposes going forward, we believe that to determine whether price regulation should be maintained or otherwise be subject to the test of whether:

- There is adequate competition in the fixed line segment; and
- There are any countervailing powers for fixed network consumers.

These two tests are very critical irrespective of any arguments advanced concerning the standard economic or legal tests of a competitive market. They point to the issue of market power. In this respect, while ever Telikom maintains exclusivity in the fixed network and there are no countervailing powers that consumers can bring to bear on the pricing of services, then there needs to be price regulation. This is standard competition principles and regulatory theory and practice. There is clearly no competitive tension in the service provision of fixed networks which could be argued would eliminate the need for some form of price control. In the service provision

by mobile networks, only the network roll-out by the third licensed carrier would allow sufficient competition to support an argument for reduced or eliminated price control arrangements. Of equal importance is the pertinent issue of whether or not there is adequate competition in the relevant market (in this case market for fixed line telecommunication services) before one could decide to remove the regulation of prices. This is simple rudimentary economics! Test of market power is crucial and needs to be applied.

We also draw to your attention the fact that the next regulatory reset of the current regulatory arrangements will be in 2011. The intention of which, among others, will be to look at this issue through a transparent public process provided for under the regulatory contract and the ICC Act. It is therefore not the intention of the Commission to automatically continue with the current arrangements, but whether regulation is still needed or whether the market has changed to the point where it is no longer required will need to be carefully assessed through a transparent public process that will involve a wider and comprehensive stakeholder consultation with sufficient time provided for the consultation process.

In doing so, the Commission will need to assess the market and form a view as to whether the mobile market is different to the fixed line market, and whether there was adequate competition now in this market. This would also depend on what access arrangements were in place, and how these prices were set. The exclusivity provisions of any arrangement with Telikom would also need to be considered. This therefore means that an independent and transparent inquiry will need to be undertaken by the Commission with an open mind, but a clear set of principles around which the Commission would form a view as to whether price regulation or even price monitoring is still required or otherwise. The Commission has previously undertaken such reviews into other industries and sectors of the economy as well and has the expertise to effectively review the current fixed line pricing arrangements in early 2011 but in a more comprehensive, transparent public process in which sufficient time is provided for the consultation process.

Accordingly, in the context of the current review, we do not think that the review (given the optimistic timeframes) has at its disposal ample and adequate time to effectively engage in the public consultation process to consider and carefully assess this issue. We therefore submit that the review does not consider this issue at this stage but leave it for the Commission to assess in 2011 on the basis of the reasoning detailed above.

9. INFORMATION REPORTING/GATHERING REGIME

9.1 Current Arrangements

The Commission has wide ranging powers under both the Telecommunications Act and the ICCA Act to request and or demand any information considered necessary or relevant for its purposes. In particular section 128 of the ICCA Act gives the Commission statutory powers to demand any information necessary for its purposes.

In addition, the current regulatory instruments also contain requirements for the regulated entities to produce period reports and or provide certain information as and when requested by the Commission. In terms of the telecommunications sector, the various licences issued including the industry codes and the regulatory contract contain a number of requirements and obligations on Telikom and other participants in the industry to provide periodic service standard and capital expenditure reports, report on market penetration and other such relevant reports including the obligation to supply information once requested.

9.2 Future Arrangements

Going forward, we would support any genuine improvements in the information requirements and an extension of powers to require and enforce reporting of financial and operational data. In the past Telikom has demonstrated non-compliance to the reporting arrangements in the Regulatory Contract, its licences and other laws and instruments. Telikom has not submitted any reports including its accounting and operational separation which is a requirement under its licences.

The Commission has advised Telikom of its non compliance to these requirements but in doing so, the Commission was mindful of the operational state, Telikom was operating under in that there were no appropriate systems in place whereby reliable and meaningful financial and operational data can be generated. Further, the Commission was mindful of the need for Telikom to incur the appropriate capital expenditure to have these systems in place in order to effectively deliver on these requirements. The Commission understands that Telikom has in recent times invested in its systems and technology.

In all, the Commission would not agree to a watering down of the current regulatory and statutory powers it has with respect to information gathering and reporting. However the Commission would welcome any genuine attempts for a further improvement in the information requirements and a strengthening and extension of powers to require and enforce reporting of financial and operational data.

10. INDUSTRY SPECIFIC COMPETITION REGIME

Based on the meeting between us and Freehills, we understand that this aspect of the review is referring to the possibility of establishing a different set of competition rules in the telecommunications sector to those that apply generally in the ICC Act and which guide our behaviour in general. It appears to us that the inclusion of this aspect seems to advocate that the telecommunications industry is for some reason special and therefore needs different rules to reflect different circumstances, technologies etc.

It is our respectful opinion that such an assertion is not justified and will only serve to undermine the overall competition principles and market conduct rules in the ICC Act. There might be the need for some special arrangements that have to apply to certain industries, and at the moment these are encapsulated in the relevant industry specific legislation (such as exclusivity arrangements). Thus the role of the ICC is in part determined by the ICC Act and the Telecommunications Act.

However to create a different set of competition rules for the telecommunications industry to the rest of the economy is not a good idea and should not be done under the current PNG context. Such is due to the following:

- If one starts establishing an industry specific regulator for the Telco industry, then what do you do with the other regulated industries - the question of precedence is inevitable;
- There will be cost, staffing and funding implications once industry specific regulators are established, thus adding more pressure on Government Budget. To the extent that funding is sourced from the industry, prices for utility services will inevitably increase and cost passed on to consumers; and
- Different competition and regulatory rules will be confusing and create a lot of uncertainties. This will affect investor confidence.
- In a country like PNG it would not be wise to make the task even harder by having numerous different competition laws or independent regulatory bodies.
- A multi sector regulator ensures uniformity; on regulatory accounting procedures , efficiency requirements, reasonable rates of return for regulated entity and maintenance of service standards.
- Having a multi sector regulator ensures cost of providing regulatory functions are kept at a minimum as against having different sector regulators.

Ultimately we consider that the telecommunications is not so different that different competition rules should apply. There can be some exclusive anti-competitive arrangements in the industry specific legislation of which can be administered. However this does not mean that an entire market conduct

provisions be designed to allow certain activities that would not be allowed under the general competition and market conduct rules under the ICCA Act or in a sense an exemption from the ICCA Act. But this should be done by exception in the industry specific legislation, rather than by a new piece of exclusive telecommunications competition legislation.

In the PNG context, the advantages of having a single competition and market conduct rules to oversee the entire economy are:

- It is consistent with the Government policy of rightsizing or downsizing the public sector;
- It facilitates certainty, avoids duplication and eliminates confusion and is suitable for current size of the market and the PNG economy;
- It ensures, consistency, transparency and accountability in the overall administration and application of the competition law to all sectors of the economy without favouring or being exempted from any particular industry; and
- In the current context of Telikom where a lot of competition and market conduct issues are being carefully scrutinised by the Commission, a move to exempt the industry from the main competition law is very suspicious and will only be a retrograde step to the pre-reform era.

We therefore suggest that the current competition and market conduct provisions of the ICCA Act should apply to all sectors of the economy and that no new telecommunications industry specific competition and market conduct rules be established.