Establishment of Harmonized Policies for the ICT Market in the ACP Countries

Licensing: Knowledge-based Report

CB4PAC

Capacity Building and ICT Policy, Regulatory and Legislative Frameworks for Pacific Island Countries







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Capacity Building and Frameworks for Pacific Island Countries







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Foreword

Information and communication technologies (ICTs) are serving as the most important driving force behind the Pacific Islands' economic and social integration into the wider global community.

In light of the huge changes that are taking place and mindful of the need to shape them in ways that best reflect the aspirations of the individual islands societies -- each with their unique heritage -- 15 Pacific countries in the Group of African, Caribbean and Pacific States (ACP) have come together to develop and promote the use of harmonised ICT policies, legislation and regulatory frameworks.

This cooperation has taken the form of a project entitled "Capacity Building and ICT Policy, Regulatory and Legislative Frameworks Support for Pacific Island countries" (ICB4PAC). Executed by the International Telecommunication Union (ITU), the project has been undertaken in close collaboration with the Pacific Islands Forum Secretariat (PIFS), Secretariat of the Pacific Community (SPC), Pacific Islands Telecommunication Authority (PITA), and the Pacific ICT Regional Regulatory Centre (PIRRC), with the support of the University of the South Pacific (USP). A global steering committee composed of the representatives of the ACP Secretariat and the Development and Cooperation - EuropeAid (DEVCO, European Commission) oversees the overall implementation of the project.

This project is taking place within the framework of the ACP Information and Telecommunication Technologies (@CP-ICT) programme and is funded under the 9th European Development Fund (EDF), which is the main instrument for providing European aid for development cooperation in the ACP States, and co-financed by the ITU. The @CP-ICT aims to support ACP governments and institutions in the harmonization of their ICT policies in the sector by providing high-quality, globally-benchmarked but locally-relevant policy advice, training and related capacity building.

All projects that bring together multiple stakeholders face the dual challenge of creating a sense of shared ownership and ensuring optimum outcomes for all parties. ICB4PAC has given special consideration to this issue from the very beginning of this project in November 2009. Having agreed upon shared priorities, stakeholders reviewed the methodology and governance for implementing the project. The specific needs of the region were then identified and likewise potentially successful regional practices; these were then benchmarked against practices and standards established elsewhere.

These detailed assessments (knowledge-based reports), which reflect country-specific particularities, served as the basis for the model policies and legislative texts that offer the prospect of a legislative landscape for which the whole region can be proud. The project is certain to become an example for other regions to follow as they too seek to harness the catalytic force of ICTs to accelerate economic integration and social and economic development.

I take this opportunity to thank the European Commission and ACP Secretariat for their financial contribution. I also thank the Pacific Islands Forum Secretariat (PIFS) and the Secretariat of the Pacific Community (SPC) for their contribution to this work. Without political will on the part of beneficiary countries, not much would have been achieved. For that, I express my profound thanks to all the ACP governments for their political will which has made this project a resounding success.

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Brahima Sanou BDT, Director

Acknowledgements

This report documents the achievements of the regional activities carried out under the ICB4PAC project, Capacity Building and ICT Policies, Regulations and Legislative Frameworks for Pacific Island countries, officially launched in Fiji in November 2009.

In response to both the challenges and the opportunities of information and communication technologies' (ICTs) contribution to political, social, economic and environmental development, the International Telecommunication Union (ITU) and the European Commission (EC) joined forces and signed an agreement aimed at providing "Support for the Establishment of Harmonized Policies for the ICT market in the ACP", as a component of the Programme "ACP-Information and Communication Technologies (@CP-ICT)" within the framework of the 9th European Development Fund (EDF). i.e., ITU-EC-ACP Project.

This global ITU-EC-ACP project is being implemented through three separate sub-projects customized to the specific needs of each region: the Pacific island countries (ICB4PAC), sub-Saharan Africa (HIPSSA) and the Caribbean (HIPCAR).

The ICB4PAC focal points and project coordinator provided guidance and support to the consultant, Jim Holmes, who conducted the assessment of the present situation of licensing regimes in ACP member countries of the Pacific Island sub-region. The resulting draft assessment report was then reviewed, discussed and adopted by broad consensus, by participants at the first workshop to discuss and agree its findings (Cook Islands, August 2010).

ITU would like to especially thank the workshop delegates from the Pacific Island ICT and telecommunication ministries, regulators, academia, civil society, operators, and regional organisations for their hard work and commitment in producing the contents of this report. These include the Pacific Island Forum Secretariat (PIFS), University of the South Pacific (USP), Secretariat of the Pacific Communities (SPC), Pacific Island Telecommunications Association (PITA). This broad base of public sector participation representing different sectors allowed the project to benefit from a cross-section of views and interests.

Without the active involvement of all of these stakeholders, it would not have been possible to produce a report such as this, reflecting the overall requirements and conditions of the Pacific island countries while also representing international best practice.

The activities have been implemented by Ms Gisa Fuatai Purcell, responsible for the coordination of the activities in the Pacific (ICB4PAC Project Coordinator), and Mr Sandro Bazzanella, responsible for the management of the whole project covering sub-Saharan Africa, Caribbean and the Pacific (ITU-EC-ACP Project Manager) with the overall support of Ms Reshmi Prasad, ICB4PAC Project Assistant, and of Ms Silvia Villar, ITU-EC-ACP Project Assistant. The work was carried out under the overall direction of Mr Cosmas Zavazava, Chief, Project Support and Knowledge Management (PKM) Department. The document has further benefited from comments of the ITU Telecommunication Development Bureau's ICT Applications and Regulatory Monitoring and Evaluation Division. Support was provided by Mrs Eun-Ju Kim, Regional Director for Asia and the Pacific. The team at ITU's Publication Composition Service was responsible for its publication.

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Executive Summary

This report provides new information on the current situation relating to telecommunication licensing regimes in the Pacific Island countries. There has been a dearth of information on information and communication technology (ICT) and telecommunication development in the Pacific Island countries in general and, until this report was completed, on licensing regimes in particular.

This assessment of the current situation was conducted as part of the project jointly funded by the International Telecommunication Union (ITU) and the European Commission (EC). The project, Capacity Building and ICT Policies, Regulations and Legislative Frameworks for the Pacific Island countries (ICB4PAC), is a sub-project of the global project for Africa, Caribbean and Pacific (ACP) member countries. The recipient countries in the Pacific are: the Cook Islands, Fiji, Kiribati, the Marshall Islands, Micronesia, Nauru, Niue, Palau, Papua New Guinea, Samoa, the Solomon Islands, Timor-Leste, Tonga, Tuvalu and Vanuatu.

The project was officially launched in Nadi, Fiji, in November 2009. The launch was supported by the Pacific Island Forum Secretariat and other regional organizations as well as donor and partner organizations. Participants at the official launch included the 15 recipient member countries, civil society, private sector and academia.

At the launch, participants were asked what their priority telecommunication and ICT needs were. A long list was presented and after much discussion, they agreed on six topics to be addressed by ICB4PAC given the limited time frame and funding. These six topics were:

- national ICT policy;
- interconnection and cost modeling, and international mobile roaming;
- licensing;
- numbering;
- universal access and services;
- cyber-security/crime.

ICB4PAC's objective is to build local capacity and facilitate the establishment of enabling sustainable telecommunication and ICT policy, regulations, legislative and strategic frameworks to accelerate telecommunication and ICT development, maximize economic and social benefits, and serve national priorities in line with the goals of the World Telecommunication Development Conference (WTDC)¹ of ITU and the WSIS² Plan of Action³, in and among ACP countries in the Pacific Island region.

The project is assisting individual beneficiary countries to adopt and implement ICT policies, regulatory and legislation guidelines. At the same time, it is focused on building human and institutional capacity in the field of ICT through a range of targeted training and knowledge-sharing measures at regional and national levels.

¹ The ITU World telecommunication development conference (WTDC) declaration of the Doha meeting 2006 (WTDC06) declared the need to be responsive to small island developing states (SIDS) in terms of emerging technologies. See ITU (2006).

² WSIS refers to the World Summit on the Information Society led by the ITU. The first summit was held in Geneva in 2003 where the WSIS Declaration of Principles and Plan of Action was agreed upon by all ITU member states and the second summit was held in Tunisia in 2005 where the Plan of Action was finalized and agreed to by all ITU member states. See ITU (2003a) for all documents and follow-up meetings.

³ ITU (2003b)

The project uses a demand-driven, bottom-up approach that pays specific attention to linking the substance of policies and regulations to capacity building, and transposing regional discussions to each individual country's needs so that they can be matched to the objectives of the project.

Within the context of ICB4PAC, this report's objective is to assess and review the frameworks and practices relating to telecommunication operator and service provider licensing in the 15 countries. More specifically, it identifies the current type of licence in terms of being either service-specific, unified or multi-service; the existing administrative and formal requirements to enter the market and provide a service; the restrictions placed on the license; and the institutions issuing licenses. It also identifies any existing initiatives for amending licensing frameworks so that they include convergence, and technology and service neutrality issues. It compares individual country's best practices with international best practices. The assessment also looks at the number of staff currently working on licensing in each country, and identifies capacity-building needs.

This report was conducted through replies to a data collection form that was sent to the appointed contact person in each recipient country, and a desk study. The first draft was sent to key contacts to solicit comments and feedback. It was later discussed in depth during a workshop (Cook Islands, August 2010). The content of this report was agreed by consensus during the workshop. A list of the participants is attached in Annex B.

Conclusions

The key conclusion from the assessment in this report is that that the sector's performance will be enhanced by the implementation of best practice licensing regardless of whether or not there is competition.

Best practices in licensing should be introduced irrespective of the immediate prospects for competition because the resulting transparency and certainty will help all stakeholders to improve their outcomes.

It is not surprising that the larger Pacific Island economies tend to have had the resources and opportunity to develop more detailed legislative and regulatory frameworks for licensing in the past. They have also tended to have a market potential that has attracted competitive entry, thereby making improved licensing not only desirable but a necessity. Based on this report's findings, a number of recommendations are offered.

Recommendations

- 1. Legislation should be reviewed and amended, where necessary, to ensure that legal and regulatory frameworks meet best practice standards. This entails a number of actions.
 - (a) All providers of telecommunication services to the public should require explicit licensing in accordance with published rules, regulations or orders setting out detailed processes and criteria.
 - (b) Rules, regulations and orders should be developed and published in accordance with legislated requirements for due process by a regulator or regulatory agency that is separate and independent from any and all service operators and from the general activities of any ministry or department.
 - (c) Licensing, and the legislation that supports it, should encourage competitive service provision where this is economically sustainable.
 - (d) Provision should be made for individual and class licences. The regulator should be encouraged to maximize the use of class licensing processes and minimize individual licensing processes, wherever feasible.

- (e) The goals of service and technology neutrality should be included as aspirations in such legislation, but the regulator should be given power to determine how far they can be reflected in licensing at any specific time.
- (f) The regulator should be empowered to limit the number of individual licences issued but only on the basis that, firstly, there is a published study of reasons and, secondly, the holders of licences issued or renewed shall be selected using competitive processes determined by either the legislation or by the regulator in accordance with guidelines in legislation.
- (g) Provision should be made for presumptions to be made explicit about whether renewal of a licence on similar terms can be reasonably anticipated and to entitle a licensee to increase the certainty required for continued and future investment by applying for early renewal up to 12 months before an expiry date.
- (h) Provision should be made for fair and equitable processes for varying and revoking licences, including provision for adequate notice in both cases to permit stakeholders and directly affected parties to comment and provide views and information that might assist the regulator's final determination in the matter.
- (i) Explicit provision should be made for an appeal process when a licence has been revoked.
- (j) There should be a commitment to processes and outcomes being transparent. In this way, all decisions, procedures, licences, charges and their method of calculation, and other aspects of licence administration should be published promptly on a regulator's website and in any other effective media.
- 2. A model legislation that reflects licensing best practices should be developed via Pacific forums. This could assist all Pacific Island countries to review their current arrangements and consider legislative amendment.
- 3. Pacific Island countries should share licensing fee and charging practices, and the rationales behind them, through appropriate forums. Individual Pacific Island countries can then review their own arrangements and determine the most appropriate ways of improving their administrations in accordance with their particular circumstances.

1 Introduction

1.1 Convergence and Licensing

In this digital age, countries recognize that telecommunication licensing is no longer about voice only. As a result, countries around the world are in the process of updating their licensing and regulatory frameworks to address the increasing reality of convergence.

Convergence is the ongoing development and provision of voice, video and data services, whether separately or together over Internet Protocol (IP) networks, using various fixed and mobile systems⁴. In this case, the convergence scenario provides for the potential expansion of access to various telecommunication services in addition to the telephone service

According to the ITU⁵, convergence is a cross-disciplinary agenda and integrates the following areas:

- The integration of customer end terminal equipment/access devices such as the telephone, television and personal computer.
- The provision of various communication services like text, data, image, multimedia and video over the existing infrastructure or over a single transmission medium.
- The capability of the same technology (infrastructure) to offer various services.
- The provision of different services under a converged licensing regime.
- The convergence (substitution) of fixed and wireless technologies/services.

This whole process of integration of telecommunications and broadcasting in general, infrastructure, service and content provision, and end user equipment in specific is denoted as convergence. Thus, convergence refers to integration of different technologies into a common digital technology of information and communications that allows delivery of (broadband) services of video, audio, text, graphics, data and other content. The above definition shows that convergence in the ICT area can be divided into technology convergence and market convergence. Adding the need for regulation, it can be further divided into convergence of regulatory provisions ("legislative convergence"), and convergence of regulatory organizations ("institutional convergence").

This study is concerned with operator licensing only and not spectrum licensing. However in some countries and for some licences (such as for mobile network service operators) the two types of licences are inter-related or merged, and this needs to be discussed when it arises.

1.2 Methodology

This assessment was undertaken as desk-based research and analysis. A questionnaire was also developed and sent to the focal points of each recipient country to be completed and returned on a given date. This method should, in principle, have been adequate for ensuring the data could be collected, assessed and reported on. To clarify the type of data collected, the questionnaire is included in Annex B. To validate the report, a workshop was held (Cook Islands, August 2010) to discuss the findings and agree the content. A list of participants is in Appendix A.

⁴ ITU (2010).

⁵ ITU (2005).

The stages in the assessment's overall process are shown in Figure 1-1.

Figure 1-1: Project stages

12InitialInformationdescriptioncollectionframework	3 Information clarification	4 Assessment	5 Consultation	6 Revision and recommendations
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Stage 1 involved determining the ways in which licensing frameworks might be described.

Stage 2 was the development of a data request proforma, which, if completed fully, would allow the situation in each of the study countries to be described in a systematic manner that would, in turn, aid assessment and analysis.

Stage 3 clarified with each study country's focal points the information provided in the data requests, and, if necessary, sought additional information about situations not anticipated when the request was formulated.

Stage 4 was the assessment stage and involved:

- documenting the arrangements that apply for operator and service provider licensing in each country;
- establishing a best practice framework from the expert's experience in various country markets around the world, but with appropriate concessions to the typical constraints that apply in the Pacific region.

Stage 5 involved drafting the assessment report and sharing it with each participating country so that they could:

- confirm or correct any factual errors;
- comment on the best practice standards adopted in the assessment;
- comment on the assessment of individual country's arrangements against the best practice standards.

Stage 6 took account of the comments received in stage 5 and revisions made to the report as required. Recommendations at both regional and country levels were formulated during this stage.

1.3 Organisation of the report

This report is divided into five sections.

Chapter 2 describes telecommunication operator and service provider licensing, the issues that can arise, and best practices associated with regulatory administration.

Chapter 3 describes the licensing regulation and practices in each of the 15 countries listed alphabetically.

Chapter 4 provides a assessment of each country's practices and an analysis of national and regional best practice.

Chapter 5 sets out a series of recommendations arising from this study.

2 Telecommunication licensing

2.1 Scope of this study

This study is concerned with the licensing of operators and service providers so that they have the legal authority to provide specified telecommunication services within a nominated service area. This study is not concerned with the arrangements that apply for authorizing the use of the radio frequency spectrum within a country. However it is sometimes the case that the licensing of spectrum usage and the licensing of an operator are substitutes for each other, or are merged in regulatory practice. In such cases, the arrangements are within the scope of this study.

2.2 What are licences?

- Licences are legal authorizations to provide nominated telecommunication services within a geographic (often national) territory. Licences may take many forms, and for the purposes of this study may be:
- authority given by legislation directly to an operator or service provider, or classes of operators or service providers, to provide services;
- authority given to individual (named) operators or service providers or to classes of operators
 or service providers (the former is often referred to as an individual licence and the latter as a
 class licence);
- called licences, but may also be called authorizations or permits or some other name which
 indicates that services are being provided in accordance with the law or a decision pursuant to
 the law;
- limited to certain services, technologies, potential users or geographies or may be general in respect of one or more of these dimensions.

From this, it can be concluded that what we call licences can take many and varied forms.

2.3 Evolution of licensing

Historically, the authority of incumbent monopoly operators was set out in legislation so that the rights and obligations of the operator, and of those dealing with them, could be made clear. Typically this form of legislation, common in most countries until the 1980s and 1990s when network service competition was introduced, contained provisions such as:

- the types of telecommunication services that the operator was permitted to provide; typically these included all types of services, but could have been separated into national and international services if there were two separate carriers (as in the case of Australia and Japan, for example);
- the exclusivity of the permission;
- services to the public;
- rights in relation to the entry on land, and to establish easements and rights of way (usually subject to a requirement to compensate for any damage caused to private property in the process);
- specific provisions on the regulation of various matters such as tariffs, service quality and universal service.

This form of licensing proved adequate in a monopoly situation involving one operator or, if national and international services were allocated separately, two operators. It was considered to be particularly suitable to situations, as in much of the Pacific, where the operators were state-owned enterprises.

This form of licensing was inappropriate when a government's policy moved to liberalization of telecommunication markets and new entrants, which are typically not state owned, needed to have a clear authority to operate. Further, it became inappropriate to license incumbent operators on a different basis to new entrants. Equitable regulatory treatment required that the licensing regime should apply equally to all competitors.

At that stage, governments and regulators sought to establish licences that were outside primary legislation and were separate instruments created pursuant to legislation. A number of issues arose in the course of this change of approach.

2.4 Policy issues that arise in licensing

There are a range of administrative and policy issues that arise in the course of developing a licensing framework. These include issues related to:

- the legal nature of the licence itself and the extent to which it is a contract or an administrative instrument;
- the policy associated with licence issue and the way in which policy goals might shape the licence and its key terms;
- the opportunities provided by licensing to advance other state goals such as government revenue-raising.

2.4.1 Legal nature

When the licence, conceived of as an authority to provide services to the public, was implicit in legislation, there was no issue about the legal nature of the authority. In these circumstances, the licence would be in legislative form and only able to be varied in its terms by legislative amendment. This approach had the benefit that the nature of the rights granted and obligations imposed derived from a clear source. The disadvantage, however, was that any amendments would require a similar process of legislative change, which could be a substantial and protracted process that might compete for attention with other legislative initiatives in an overall programme.

With liberalization and the need to make licences available to new entrant operators, the most appropriate model became individual licences issued in the form of separate instruments made pursuant to legislative authority. Licences in this form may have a number of variants, including:

- a. being in the nature of a contract between the government and the licensee (not a preferred variant but one that is often forced onto governments that have difficulty in attracting competitive entrants);
- b. being a grant that has been made by the government (subject to certain pre-conditions having been implemented or accepted or undertakings having been given);
- c. being a conditional grant, or a grant that can only be amended if the parties agree, or, failing that, if certain notices are given.

The issue that arises here is that the new entrant will intend to, or be expected to, develop a business and to invest as a result of obtaining the licence. The licence might even have explicit network roll-out obligations. In addition to network investment, the licensee will have commitments to systems, staff, accommodation and many other things. The licensee is unlikely to maximize investment or commit to developing the business if the licence can be modified unilaterally or without some legal or other process to protect its interests and provide a level of commercial certainty.

On the other hand, the government (or public authority) issuing the licence will want to retain its power to make and implement policies in response to changes in the sector and the telecommunication environment without undue impedance from existing licences.

There are various ways in which a balance can be struck between providing certainty to licensees and responding to the need for policy change during the life of a licence. None are particularly neat or totally satisfactory. They can include compensation for early termination or reduction of certain licence rights.

2.5 Who issues and administers licences?

There a many variants on the issue of who has licensing power. For example, the issue of licences could be a matter for:

- a minister;
- a minister, but only on the recommendation of a regulatory body;
- a regulatory body;
- a regulatory body, automatically on the applicant meeting statutory criteria;
- a regulatory body, upon registration by the intending licensee.

2.6 Automatic application of legislation on class licences

This list of possibilities is not exhaustive. The list is in descending order of discretion and increasing order of automatic application in accordance with known rules and procedures. However, licensees would not necessarily prefer that licensing be undertaken by the automatic application of rules and procedures. This approach may be appropriate where the market is able to sustain many licensees and the level of investment expected of each is not significant. It may be less appropriate if industry development has reached a stage where the number of licensees required is limited, and substantial long-term investments in network and infrastructure are required. Ultimately the question is whether the market can be left to determine the number of competitors that should be permitted as viable and sustainable in the medium to longer term, or whether there should be regulatory intervention to limit the numbers of entrants in the interests of a more certain environment for earlier investment.

There are no easy answers to these issues.

There are further issues if judgments are to be made by ministers not operating on the advice of independent regulators. The possibility of political interference is always large, and both the perception and the reality will affect investment in the sector, service provision and investment.

Many licences require the licensee to provide services across all or most of the national territory (or region if the licence is not a national licence). Quite often this requirement is made specific with network roll-out and service availability targets, requiring investment in infrastructure and network capacity on a basis that is specific and measurable.

This is especially the case with the first competitive entrant to any market. The expectation of government will be that this is the first opportunity that customers will have to exercise choice, and that this choice should be enjoyed by all customers not just those living in high-demand urban areas. Service roll-out obligations may be less important and even dispensed with for later entrants, should the market be able to sustain more than two competitors.

2.7 Services and service categories

Originally licences were very specific about the types of services to be provided by the licensee. In the monopoly era the split was often between a monopoly national service provider and a monopoly international service provider.

With liberalization many countries became more specific about the services that a new entrant was entitled to provide, such as fixed, mobile, data and Internet Service Provider (ISP).

In addition, licence categories might have reflected the licensee's position in a network services value chain, and this might have been relevant not only to licence conditions but also to licence charges. For example, the categorisation of licences into Class I (Infrastructure) and Class II (Service) was popular in the 1980s followed the examples set in Japan and Canada.

Another approach, exemplified in the Australian licensing regime in 1998, was to grant all individual licences as general licences, giving the licensee the authority to provide any service. The original legislation required the submission of a simple business plan which provided details of the services the applicant intended to offer, but this requirement has since been withdrawn. In the case of some services, especially mobile, it is necessary to obtain spectrum subject to another spectrum licence, but the service provider licence is separate and distinct conceptually and in fact.

There is a trend to say that service provider licences and regulation should be service-neutral, and any residual service specific regulation comes into play if and when such services are provided. Licensing practice overall falls short of such an approach, although both the Australian and European general authority approach come closest.

2.8 Technology

The licence is generally seen as a granting of authority to provide telecommunication services to the public. The services may be general or as specified in the licence. Generally licences seek to avoid specifying the technology that may be used for providing the services involved. However, this is not always the case, and many mobile service licences specify the generation of the mobile technology that is intended to be rolled out by the licensee. Licences seek to be technology-neutral – but there are many exceptions such as in the mobile and radio communications spheres generally.

If licences are service and/or technology specific, they will be barriers to the development of convergent services by the licensee. Licensing can inadvertently hold back sector growth and service innovation.

2.9 Geographic coverage

Licences specify the territory in which the licensee may operate – or even *must* operate. In countries with large territories, licences may be local or regional. Generally, however, licences are national. There are usually good policy reasons for licences to be national in scope. Generally the government and regulator will want the licensee to provide services across the range of social and geographic environments that make up the national market. In the case of second and even third mobile licences, there may well be service roll-out requirements and timetables to ensure that regional and remote populations gain the benefit of choice of service provider.

2.10 Duration of licence

The policy issue associated with the duration of the licence is the period in which the licensee might reasonably expect to be undisturbed in making and recovering on its investments. To set a short period, or not to set any period at all, may not provide the certainty for optimal investment. To set an unduly long period, especially in the case of markets that are unlikely to sustain many competitors, may attract licensees but may lead to complacency. Under these circumstances, re-contesting, or at least reviewing or renegotiating the licences at the end of a suitable licence period, may be a way to give competition a fillip.

2.11 Amendments

A licensee has reason to believe and expect that its operation will not be unduly affected by major policy changes during the period of its licence – particularly changes that may reduce the value of the licence significantly. The precise expectations depend on the understanding of the licensing authority and of the licensee at the time the licence was issued, and the precise terms of the licence.

There are many policy issues and balances to be considered when establishing a policy on licence amendment. If the licensing authority reserves for itself the right to make any changes that it considers to be necessary in the public interest, then it is creating a potential for uncertainty that will put investment at risk.

Furthermore, it may not require the flexibility being claimed and could, therefore, be asserting a principle without any likelihood of benefits to offset the loss of investment that could result.

On the other hand, if the licensing authority has established the licence as a contract for a specific period, it will have no flexibility unless the licensee is agreeable to future amendments. This will be dependent on how the proposed licence amendments affect the commercial interests of the licensee.

There are many positions that can be established intermediately between complete flexibility and a contractual straitjacket. These might include detailed procedures including consultation and notice before certain types of changes are introduced. In the Pacific, for example, a minimum period of notice before number portability is introduced may be appropriate when encouraging investment by mobile operators who have not yet entered the market.

The issue of amendment will also be associated with the location of the licensing authority in the regulatory and policy framework, and the issues discussed in section 2.4.1 become relevant here. If the licensing and licence amending authority is the minister, and the matter is considered to be one of ministerial discretion, then that will not bode well for providing a predictable investment climate.

2.12 Legislation and legislative change

Clearly the sovereign powers of the legislature are intact and not affected at law by the issue of any licences. However, there are issues associated with compensation if legislative change takes away the value of a licence or amounts to an appropriation of property and other rights possessed by a licensee.

2.13 Bargaining – special and general conditions

As the telecommunication market moves from monopoly to competition, and from restricted to more general entry, it is appropriate that licensing arrangements should reflect these circumstances.

Licences or equivalent remits in a monopoly environment are by definition special terms that relate entirely to the rights, obligations and powers of the specific individual enterprise. The trend has been that liberalization has been accompanied by a move to general licence conditions that affect all service providers in a market, and that the use of special (individual enterprise) conditions should be reduced accordingly.

If there is bargaining that affects only one enterprise then the conditions that result should be special. For example, if the second or third mobile licence has been awarded on the basis of auction, then the one-off payments and the roll-out plan associated with the winning bidder might be included as special conditions (but transparent nevertheless) of that service provider's licence.

There are circumstances where the bargain negotiated by a new entrant might be appropriate in a new general condition. If a new entrant operator negotiates a notice period before number portability can be introduced, that condition should be general and apply to all potentially affected service providers. Tax concessions and other input assistance would (or should) be in the same category, because the conditions of competition should be established on an equal basis for all licensees in the market.

2.14 Fees and charges

Governments need to consider very carefully how they wish to derive benefit from the sector and economic development that results from competitive entry. There are many ways in which this might be done, and they are not mutually inconsistent, such as:

- charging for cost recovery (for example, application fees);
- charging for the value of the business opportunity or franchise (for example, through auctions or other means of establishing value, such as a percentage of revenues);
- charging other up-front or one-off fees (for example, to obtain a initial benefit from awarding the licence);
- charging royalties, however determined, based on some measure of business activity, such as subscribers or revenues;
- punitive charges for licence default such as failure to roll out services according to a licence timetable;
- obtaining government benefit through normal taxation processes, based on net earnings or profits.

The mix of charges will depend on the circumstances of the market and the goals being pursued by a government.

Governments in developing economies need to be especially careful not to impose charging regimes that will be passed onto customers and limit the service take-up and socio-economic benefits of service availability.

2.15 Spectrum

The allocation of spectrum is a separate matter conceptually from the licensing of operators in the sense discussed so far in this report. However, in the case of wireless-based networks it is a closely related matter. It is important that spectrum and operator licences are not confused.

2.16 Access to other scarce resources

In order to access spectrum and other scarce resources, including the essential facilities and mandated wholesale services of other operators, an enterprise has to be a licensed service provider. The nature of the access and the resources that are available to be accessed will be set out, typically, in the general regulatory framework, rather than in the licence itself.

2.17 Recent developments and best practice in licensing

This chapter is concerned with recent developments and the best practices in licensing internationally. We examine the situation in the Pacific and the circumstances that might lead to changes in best practice expectations in Pacific Island countries in section 4.7 below.

For now, the important thing is to understand where the world is moving on the issues raised in this chapter and the reasons for these trends.

The discussion is relevant to the Pacific even if the trends may need adapting when applied to the circumstances of Pacific Island countries. In section 4.7, we also discuss how the circumstances of the Pacific Island countries may vary where licensing is concerned.

2.17.1 General

In its publication, *Licensing in an Era of Convergence*,⁶ ITU noted that there were many different objectives that regulators might seek to achieve through licensing, including:

- the allocation of scarce resources;
- expansion of networks and services;
- privatisation and commercialisation;
- regulatory certainty;
- establishing a competitive framework;
- consumer protection;
- regulating market structure;
- generating government revenue.⁷

All of these goals have been mentioned in the discussion of issues in this chapter. The issue is not which of these goals should be pursued but what mix of goals is appropriate in the circumstances of developing economies.

⁶ ITU (2005).

⁷ Chapter 2, pp. 25-27

The ITU publication also notes that the role of licensing is evolving:

'As telecommunication liberalization increases, the role of licensing in facilitating competition diminishes. Similarly, with the increasing maturity of regulatory frameworks, licensing is less useful as a means of providing regulatory certainty. As telecommunication markets develop, the essential body of regulatory orders and decisions on various issues tends to grow correspondingly. Licences become less important as regulatory instruments as the list of decisions and orders accumulates.

'Despite this greater reliance on other regulatory instruments, the licensing process has been retained in some form by all the countries that have adopted it in the past. Licensing gives regulators the ability to shape market development by controlling market entry. This is an important tool, even in countries where telecommunication competition is relatively mature.'⁸

As the telecommunication market matures and becomes liberalized, the role of licensing changes. In an immature market, licensing ensures that privileged (or at least numerically limited) enterprises commit to investment in network roll-out and service deployment. As the market endures, licensing's role changes to delivering the benefits of competition and choice to end-users.

The role of licensing, therefore, moves from supporting infrastructure and network investment to supporting competition; it also moves from ensuring that there are services to supporting a choice of services.

2.18 The fundamental issues with licensing today

There are many specific issues of importance that affect the role and implementation of licensing today.

The fundamental issue is how to balance the many telecommunication goals that licensing is intended to deliver at any given time. It follows that the role of licensing should change as the telecommunication market changes, or is considered to be in need of change. In this way, it can support the changing set of policy goals appropriate to the sector. This section looks at a list of fundamental issues related to the general question of 'what do we want the licensing regime to do now?'

2.18.1 Investment versus utilisation

Where there is no service, the role of a licence may well be to require roll-out of network platforms and the provision of services in areas that are underserved.

In these circumstances, licence conditions usually provide for access to areas of higher demand but require commitment to ensure services are available in areas of lower or untested demand. They also typically provide for facilities-based competition, or reflect the need for facilities-based competition elsewhere in the regulatory and policy framework.

Once initial investment needs have been met and competition takes the form of more intensive rivalry in the areas with network coverage, there will be an opportunity for competition and licensing to be transformed so that there is an emphasis on network utilization and services-based competition.

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2.18.2 Government revenues versus licence fees and charges

There is always a balance to be struck between the different ways in which licensing should reflect government approaches to revenue. At one level, licensing may be seen as the conferring of valuable rights to exploit a grant or franchise, and the licensee should be prepared to pay for that opportunity. However, there may well be substantial social and economic needs that the roll-out of networks and deployment of services will address in circumstances where the level of demand and the economics of the venture are uncertain and risky.

Licensing fees and charges may well shift the commercial balance against investment, or reduce or defer investment.

In a more mature economy, where the tax system is operating effectively, profitable economic activity makes a contribution to social needs and development. In such an economy, it may be more appropriate for the government to tax the licensee's profits without royalty or other charges, and to tax the profits from the economic activity resulting from the availability of modern telecommunications services. In other words, the government might be content to treat the industry in the same way that general activity is treated across the economy, and to benefit from the hopefully rising tide of profitable economic activity that results from maximising the provision of infrastructure services (such as telecommunications).

2.18.3 Giving away too much for service

A problem for small developing economies, which includes almost all of the Pacific Island countries in this study, is that they cannot offer a new entrant substantial demand at commercial price levels, and they run the risk of offering substantial concessions in order to change the equation.

The risk is that countries will not offer enough concessions and have no investment, or that they will give away too much and compromises the policy settings in this sector for a long time into the future. There are substantial risks whichever way the country goes.

The following are often sought and given as concessions to attract investment generally or to attract telecommunication investment in particular, and may be included in a licence agreement:

- exclusivity;
- tax concessions;
- immigration concessions (for specialist staff);
- land grants;
- agreement for backing up or running operating systems offshore;
- agreement for backing up or running administrative and billing systems offshore;
- agreements that licence conditions will only be changed by agreement or with pre-determined levels of compensation;
- profit repatriation agreements;
- minimum notice for regulatory changes such as for the introduction of number portability;
- agreement on termination charges and other conditions ;
- automatic licence renewal;
- confidentiality or secrecy of process and result.

There are many more concessions that could be added to this list.

The purpose of this study is not to comment on the suitability or otherwise of any individual or group of concessions, but to signal that these arrangements carry a risk of distorting sector development long into the future and typically for the duration of the licence. The alternative may be limited service or no competition at all.

2.18.4 Certainty versus flexibility

The evolution of licensing is to provide a framework that balances certainty of licence conditions and of licence duration (to promote investment and longer-term commitment generally) with the need for changes in the legal and policy framework to meet emerging new circumstances in a dynamic and fast-changing market.

Over time the special conditions that might be included in licences need to give way to general conditions that are transparent, fair and non-discriminatory, and which provide for processes that are as orderly as possible for changed terms during the life of individual licences.

2.18.5 Transparency of process

A key issue for licensing is to reduce the discretions in the processes for licence issue, administration and renewal, and, in particular, to reduce or eliminate the involvement of ministers and others operating at the political level with greater exposure to the imperatives of short-term expediency.

Ministers and their departments may well be involved in a formal manner, but substantial discretions in the licensing process should be exercised in a transparent manner according to published procedures and guidelines.

A commitment to transparency both generally and in relation to licensing is included in the World Trade Organisation's (WTO) general agreement on trade and services (GATS) Telecommunications Annex⁹:

'Each Member shall ensure that relevant information on conditions affecting access to and use of public telecommunications transport networks and services is publicly available, including: tariffs and other terms and conditions of service; specifications of technical interfaces with such networks and services; information on bodies responsible for the preparation and adoption of standards affecting such access and use; conditions applying to attachment of terminal or other equipment; and notifications, registration or licensing requirements, if any.'¹⁰

2.18.6 Legacy regulation versus future-proofing

Telecommunications regulation and traditional approaches to licensing rely heavily on categorisation. Category distinctions of importance to telecommunications include, or have included:

- services versus infrastructure;
- basic services versus value added services;
- voice versus data;
- fixed versus mobile;
- narrowband versus broadband;
- specific medium versus multimedia;

⁹ WTO (2012).

¹⁰ Section 4.

- analogue versus digital;
- regulated versus unregulated.

The list could easily be extended and is not exhaustive by any means. The point is that the important distinctions in one era of telecommunication policy and regulation are superseded by developments in a very dynamic industry, underpinned by rapid developments in technology.

We are now in the era of converged services supported by the ubiquitous implementation of Internet Protocol (IP) packet switched technologies. The development of Next Generation Network (NGN) broadband systems means that multiple services can be provided over a common multimedia platform. It follows that regulatory distinctions based on older technologies and service distinctions are misaligned with the realities of current and future convergence, and could have a major distorting or retarding effect on developments and the provision of benefits to users.

The place where older distinctions are likely to linger the most is in 10-15 year operator licences. If changing the licences affects commercial rights there will be strong financial pressures for maintaining the status quo and against change.

Modern licensing, therefore, seeks to future-proof against the risk of outdated distinctions becoming enshrined and difficult to move.

Licences in many countries tend to be as generic as possible and to be service-neutral and technologyneutral. Clearly that may not be an achievable aim where the licence is for the provision of a specific service (such as mobile) and for a specific technology (say, 3rd Generation or 3G) and needs to say so explicitly to ensure that 3G mobile services are delivered. Even in these cases it may be open for the licence to be otherwise service- and technology-neutral, except for the special conditions that require provision of 3G mobile services.

3 Licensing in the Pacific – by country

3.1 Cook Islands

3.1.1 Country and market background

The Cook Islands consist of 15 islands with a total land area of 240 square kilometers within an exclusive economic zone. It covers 1.8 million square kilometers of ocean.

The total population at the 2006 census was 19,569, although current estimates have approximated the resident population at less than 14,000.

For telecommunication purposes, it is important to note that there is a much larger population of Cook Islanders in New Zealand. In the 2006 census, 58,008 people self-identified as being of ethnic Cook Island Maori descent. Tourism is a major and growing industry, and this drives the need for telecommunication services that meet tourist expectations and needs.

Telecom Cook Islands Limited is jointly owned by the government (40 per cent) and Telecom New Zealand (60 per cent) and is the only service provider in the country. Telecom Cook Islands provides fixed, mobile, internet and international gateway services.

3.1.2 Legislative framework

The provision of telecommunications services is governed by the *Telecommunications Act 1989*¹¹, which is administered by Telecom Cook Islands.

The legislation is of the pre-competition style and creates rights and obligations for the service provider and defines the Minister's power.

The Cook Islands Government has approved a policy to introduce competition, and institute independent regulatory oversight.

The government has reviewed the existing act and looking to prepare a new legislation.

The bill provides for the creation of the office of Telecommunications Commissioner as an independent regulatory authority, whose duties include promoting and achieving the objectives of the legislation. The objectives include:

Establish a fair, objective and transparent licensing regime for service providers.

The detailed arrangements on licensing are set out in part 3 of the bill. In relation to the licensing of operators and service providers, they provide for the following licence issue arrangements.

- A requirement for a person who provides mobile services to the public in return 'for compensation' to hold a licence. ¹²
- A licence is to be issued by the commissioner or a delegate. ¹³
- A licence 'is a unilateral grant of permission from the Commissioner to provide

¹¹ Government of Cook Islands (1989).

¹² sub-section 11(1).

¹³ sub-section 12(1).

- a telecommunications service or operate a telecommunications network, and for all purposes it shall not be regarded as a contract or bilateral agreement'.¹⁴
- The commissioner may deny any applicant a licence 'as he sees fit'¹⁵ but 'the reasons for denial of a licence shall be provided in writing by the Commissioner to an applicant upon request'¹⁶
- 'In all circumstances where a licence is required, the following shall be made publicly available by the Commissioner:
 - (a) the applicable licensing procedures and licensing criteria; and

(b) the period of time normally required to reach a decision concerning an application for a licence.' 17

- 'Licences for service providers that provide the same telecommunications services or own or operate the same telecommunications networks shall not unfairly discriminate between such licensees.' ¹⁸
- The commissioner may issue individual and class licences and is required to establish rules for each, ¹⁹
- The procedures for applying for and determining applications are to be set out in regulations prepared by the Commissioner.²⁰
- The commissioner is required to establish the conditions of all licences, but to keep the conditions 'to a minimum and used only where rules of general application cannot adequately provide regulatory controls that the Commissioner considers necessary to implement this Act.'²¹

Part 3 also provides for licence revocation and amendment.

'Amendment and revocation of licences – (1) The Commissioner may amend or revoke a licence if:

- (a) the amendment or revocation has been requested or agreed to by the licensee;
- (b) the licensee has been in breach of a material licence condition or this Act or a regulation, rule or order made under this Act;
- (c) changes to international treaties, commitments, recommendations, standards or the laws of the Cook Islands require an amendment or a revocation; or
- (d) the Commissioner decides that the amendment or revocation is required to implement this Act in a manner consistent with the objectives listed in section 3.

(2) Prior to amendment or revocation of a licence pursuant to this section, the Commissioner shall notify the licensee in writing that the Commissioner is considering the relevant action, and shall consider any comments made by the licensee in a timely manner.

(3) Notice under subsection (2):

(a) shall give the licensee at least 14 days from service of the notice to prepare comments on the relevant actions;

¹⁴ sub-section 12(2).

 $^{^{15}}$ sub-section 12(4).

¹⁶ sub-section 12(5).

¹⁷ sub-section 12(6).

¹⁸ sub-section 12(7).

¹⁹ Section 14.

²⁰ Section 15.

²¹ Section 16.

- (b) shall set out any procedures the Commissioner will use in considering the relevant action; and
- (c) may invite comments from other interested parties or the public.

(4) If the Commissioner amends or revokes a licence pursuant to this section, the Commissioner shall provide the licensee with reasonable time to comply with the amendment or revocation.

(5) Where a licence is revoked the Commissioner shall take into account continuity of service to customers and include in the revocation order such terms and conditions as the Commissioner deems appropriate.

(6) Further procedures related to the amendment or revocation of a licence may be set out in rules or orders.'²²

Section 20²³ of the bill deals with renewal of licences.

'Term and renewal – (1) The term of a licence shall be stated in the licence.

(2) Subject to subsection (3), upon application of the licensee, a licence shall be renewed by the Commissioner on the same conditions.

(3) The Commissioner may renew a licence on new conditions or deny the renewal of a licence if:

- (a) the licence has been in breach of one or more material licence conditions, or this Act, or a regulation, rule or order made under this Act; or
- (b) changes to:
 - (i) any international treaty to which the Cook Islands is a party; or
 - (ii) any commitment or standards applicable to the Government; or
 - (iii) any applicable law, require a renewal on new conditions or denial of a renewal, as the case may require; or
- (c) the Commissioner decides that a renewal on new conditions or the denial of a renewal is required to implement this Act in a manner consistent with the objectives listed in section 3.'

3.1.3 Granting of licences

As noted in section 3.1.2, currently, there is not a separate regulatory agency.

The ministerial oversight of Telecom Cook Islands is currently with the Prime Minister's Department. Under current policy, the granting of licences would be left to the discretion of an independent agency required to abide by public rules and regulations, and be accountable for exercises of discretion to deny licence applications or renewals.

3.1.4 Licence administration and enforcement

There is no licence enforcement as such at present but the Prime Minister's Department has the policy and supervision role in relation to the sector and to Telecom Cook Islands.

²² Section 19.

²³ Reproduced with kind permission of the Cook Island Government.

3.1.5 Licensing capability

The legal capability of the proposed commissioner in relation to all licensing matters is made clear in the bill. At present, however, any matter going to licensing or its practical equivalent would be handled by Telecom Cook Islands for the Prime Minister's Department. Telecom Cook Islands does not have statutory authority to grant licences to other telecommunication providers but may enter into agreements with others for the resale of its services or for the construction or operation of parts of its network.

3.2 Fiji

3.2.1 Country and market background

The Republic of the Fiji Islands comprises an archipelago of about 322 islands, of which 106 are permanently inhabited and 522 islets. The two major islands, Viti Levu and Vanua Levu, account for 87 per cent of the population of 849,000.

The telecommunication sector has been opened to controlled competition for some time, and has been opened further in the past two years with the licensing of Digicel to provide mobile services.

Licensing is undergoing significant change and the new licensing arrangements are still in draft.

Consequently, licences date from different periods in the liberalization history of the Fijian sector. There has been industry agreement, however, that licensing should be open, entitling the licensee to participate and provide services in any telecommunication market. Notwithstanding this, in practice, licensees have tended so far to remain in the service markets that represent their strengths, as shown in Table 3-1.

Service market	Licensed service providers
Fixed	Telecom Fiji Limited (TFL)
Mobile	Vodafone, Digicel, INKK (an MVNO associated with Vodafone)
Internet	Many licensed ISPs including ISPs associated with carriers, such as Connect (associated with TFL)
International services	FINTEL (Fiji International Telecommunications Limited, which controls the only landing station in operation so far, connected to Southern Cross Cable)

Table 3-1: Licensed service providers' markets in Fiji

3.2.2 Legislative framework

By the *Telecommunications Promulgation*²⁴ of January, 2008 the Fijian Government established the Telecommunications Authority of Fiji (TAF) to be the regulatory agency for the sector.

Amongst the functions and powers of TAF is the power to 'grant, suspend, vary or revoke licences with respect to telecommunications'.²⁵

²⁴ Government of Fiji (2008).

²⁵ Paragraph 17(c).

TAF has the power to determine annual charges for licence fees to be calculated on a percentage of audited annual gross revenue calculated net of settlements with other licensees in Fiji...'²⁶

Part 3 Division I deals with telecommunication licensing.

- No person can provide a telecommunication service without a licence, unless the service is exempted²⁷
- The minister may exempt a service from the requirement for a licence²⁸
- The power to issue telecommunications licences is with TAF²⁹
- A licence may be issued for a duration not exceeding 15 years³⁰
- There is a presumption in favour of renewal of a licence on similar terms, but TAF may vary the conditions, ³¹ if this is needed to meet the objectives of the promulgation
- TAF may modify the conditions of a licence if that is needed to better meet the objectives in section 3 of the promulgation, but TAF is required to provide a notice period of 30 days and give reasons in writing for the modification so that interested parties may put forward their views. ³²

3.2.3 Regulatory arrangements

In November 2007, the Amalgamated Telecom Holdings³³ (ATH), a public company and government entered into a deed of settlement with ATH which affected licensing in Fiji. The deed recorded the agreement of the operators and the government to the revocation of the licences held by each operator that had been granted under the Posts and Telegraphs Decree 1989, in return for new licences set out in the schedules to the deed. In the event, the licences that were referred to in each of the bilateral schedules (between the government and each operator individually) have not been issued and operators continue to operate on the basis of the deed. The deed is not a licence, however, and does not purport to be one.

3.2.4 Further information

Fiji did not complete and return any information in response to the information request for this project. Information was directly requested from the Fiji Commerce Commission and other sources, but not from the Ministry of Communications. The main reason was due to the fact that there were staff changes in the ministry including the permanent secretary. Those with some knowledge that could have completed the form had already left the ministry. The Ministry was undergoing reform at the time of this assessment.

²⁶ Paragraph 24(1)(c).

²⁷ Sub-section 33(1).

²⁸ Sub-section 33(2).

²⁹ Sub-section 33(4).

³⁰ Sub-section 35(1).

³¹ Sub-sections 35(2) and (3).

³² Section 36.

³³ See Amalgamated Telecom Holdings (2010) for the list of companies that make up ATH.

3.3 Kiribati

3.3.1 Country and market background

The Republic of Kiribati is composed of 32 atolls and one raised coral island dispersed over 3,500,000 square kilometers. The estimated population in 2009 was 98,000, of whom around 50 per cent live on South Tarawa.

The telecommunication sector has an incumbent operator, Telecom Services Kiribati Limited (TSKL), providing fixed, mobile and international gateway services, and TSKL and Television Kiribati Limited (TKL) provide internet services.

The government has indicated that it is seeking to introduce competition into the sector and had had lengthy negotiations over the terms of a licence and other conditions with one potential entrant before they were broken off in 2009.

3.3.2 Legislative framework

The telecommunication industry in Kiribati is administered by the Ministry of Communications, Transport and Tourism Development (MCTT) and the Telecommunications Authority of Kiribati (TAK). In 2005, TAK was established as an independent regulator for the telecommunication sector as envisaged under the *Telecommunications Act 2004*³⁴. The functions and powers of TAK are drawn from the act but important regulatory decisions necessitate approval of the minister.

The act provides TAK with the powers to issue licences after taking into consideration the applicant's capacity to operate the system or provide the service for which the licence is sought. It looks at the extent to which granting such a licence would be consistent with the objectives stated in section 3 (covering general objectives) of the Telecommunications Act and the public interest. However, the fee for the license requires the approval of the minister. The act also lays down certain conditions (in section 16) that the authority may include in the licence.

TAK can modify any conditions of a licence on the application of the licensee. In addition, TAK can modify any condition of a licence it grants if it considers this to be in the public interest. Before modifying a condition, the authority must give the licensee 90 days' notice, stating the reasons for the intended modification and giving the licensee the opportunity to make representations. TAK is required to give due consideration to any representation made by the licensee.

Section 46 of the act generally deals with appeals against the authority's decision. The decisions of the authority in exercising its powers and performing its functions under the act are final and conclusive on questions of fact. Any person aggrieved by the decision of the authority on any question of law may appeal to the High Court with the leave of that court.

3.3.3 Regulatory arrangements

There are not any operator licensing regulations or guidelines.

³⁴ Government of Kiribati (2004).
3.3.4 Licences

TAK prepared a draft licence in 2007 to serve as a template for a unified licence and as a basis for negotiating with a potential new entrant and competitor to TSKL. In the event, the negotiations did not lead to a new entrant, and the need for a licence for both the new entrant and TSKL disappeared.

3.3.5 Licensing fees and charges

There is a one-time fee of AUD\$1,500 for the processing of licence applications and an annual fee of one per cent of gross revenue. The minister has discretion to exempt operators from paying licence fees. Currently, there is an exemption from the need to pay universal service levies for the first three years of a licence.

3.3.6 Licensing resources

TAK has a total of 12 employees, three of whom have duties associated with licensing.

3.4 Marshall Islands

3.4.1 Country and market background

The Marshall Islands has a population of approximately 62,000 and a land area of 181 square kilometres.

The Marshall Islands National Telecommunications Authority (NTA) is the sole provider of all services, and was established pursuant to the *Marshall Islands National Telecommunications Authority Act 1990*³⁵. It is a private corporation with significant government ownership (approximately 76 per cent).

3.4.2 Legislative framework

The Communications Act authorizes the authority to provide services. Spectrum licensing and management are retained by the government, but these powers have not been used to modify NTA's effective monopoly on all services – including providing internet services at hotspots.

In 2008, a telecommunications bill was prepared to encourage greater private investment in the sector in the Marshall Islands. The bill's purpose includes further development of the sector and creating a regulatory regime that is supportive of that development.³⁶

The bill establishes an Office of Telecommunications (OFTEL) as an independent regulatory agency.³⁷ One of OFTEL's powers is to 'grant licenses for telecommunication systems and services and supervise and enforce compliance with the conditions of licenses.'³⁸

There are a number of specific provisions dealing with licensing.

³⁵ Government Marshall Islands (1990).

³⁶ Clause 3.

³⁷ Clause 6.

³⁸ Clause 7(b).

- No person 'may construct or operate a telecommunication system or provide a telecommunication service in the Marshall Islands or between any place in the Marshall Islands and any place outside the Marshall Islands except in accordance with a license granted by OFTEL'.³⁹
- It is a matter for OFTEL to 'prescribe and or determine the types and or classes of licenses for telecommunications systems and or services.'⁴⁰
- It is for OFTEL to determine the conditions of licenses subject to the objectives of the legislation.⁴¹ These conditions may relate to:
 - (a) universal services and the provision of services to outer islands, rural or sparsely populated areas or other specific areas;
 - (b) the interconnection of an operator's telecommunication system with any other system and permitting the connection of telecommunication apparatus to an operator's system;
 - (c) prohibiting an operator from giving undue preference to, or from exercising undue discrimination against, any particular person or any class of persons (including any operator);
 - (d) furnishing to the authority such documents, accounts, returns, or other information as OFTEL may require for the performance of its functions under this act;
 - (e) requiring an operator to publish, in such manner as may be specified in the license, a notice stating the charges and other terms and conditions that are to be applicable to facilities and service provided;
 - (f) relating to the provision of service on a priority basis to the government or specified organizations;
 - (g) requiring a licensee to ensure that an adequate and satisfactory information system including billing, tariffs, directory information, and directory enquiry services are provided to consumers;
 - (h) relating to the period for which a license is valid;
 - (i) requiring the licensee to pay fees;
 - (j) relating to circumstances under which the license terms may be amended;
 - (k) relating to network coordination;
 - (I) protecting consumer information;
 - (m) prohibiting unfair market practices;
 - (n) provisioning of performance bonds;
 - (o) relating to the criteria for setting tariffs;
 - (p) permitting the resale of its telecommunications services;

³⁹ Clause 24(1) – exemptions are provided for police and other functions.

⁴⁰ Clause 25 – repeated in Clause 36.

⁴¹ Clause 26.

- (q) requiring a licensee to comply with such technical standards or requirements (including service performance standards) as may be specified in the license;
- (r) relating to compliance with directions, guidelines, regulations, this act or any other act and international obligations; and
- (s) relating to any matter within the OFTEL's powers under this act or any other act.'42

This provision sets out a long list of possible conditions. They are mostly matters that should be included in general conditions or regulations rather than be developed in the context of issuing individual licence. Of course, when and if the bill is passed, it may work differently in practice, and OFTEL may develop general conditions and regulatory requirements in separate instruments.

The bill makes provision for the reissue, varying or revocation of a licence.⁴³ OFTEL must give the licensee 90 days notice of any intended variation to the licence to enable the licensee to make submissions on the matter.⁴⁴

In a policy statement issued by the minister in September 2008 there is no mention of the bill or the proposed OFTEL agency at all.⁴⁵ In the statement, licensing is left as a matter for the minister, albeit subject to transparent and non-discriminatory procedures.⁴⁶ This raises the issue of whether there is a commitment to pass the bill at an early stage.

3.4.3 Regulatory arrangements

Spectrum management and regulation is retained by the government, which oversees the operations of the National Telecommunications Act. There are no regulations in place relating to operator licensing.

3.4.4 Licensing resources

There are no resources in place at present. When the new bill is passed into law and OFTEL is established, it is planned to create the agency with between 7 and 15 staff, some of whom will have duties relating to licensing.

3.5 Micronesia

3.5.1 Country and market background

Micronesia is spread across the 607 islands of the Caroline Islands within the wider region of Micronesia. It has a population of approximately 111,000 and a land area of about 700 square kilometers.

3.5.2 Legislative framework

The FSM Telecom Corporation (FSMTC) is established by law as a public corporation with authority to provide services and is a monopoly service provider.

⁴² Clause 26(2).

⁴³ Clauses 37(5), 38, 40 and 41.

⁴⁴ Clause 38(2).

 ⁴⁵ Republic of the Marshall Islands (2008).
 ⁴⁶ Republic of Marshall Islands (2000).

⁴⁶ Republic of Marshall Islands (2008).

3.5.3 Regulatory arrangements

There is no separate regulator. Policy control and supervision generally in the sector, as well as spectrum management, is with the Department of Transportation, Communication, and Infrastructure. There are no current regulations relating to operator licensing. These are not seen as necessary because FSMTC is a public corporation with a monopoly remit. It has not been issued an operator's licence.

3.6 Nauru

3.6.1 Country and market background

Nauru has a territory of 21 square kilometers and a population of approximately 14,000.

The traditional incumbent is the Republic of Nauru Telecommunications (RONTEL) Corporation, which in the past has had a monopoly in the provision of all services, including international services. In 2009, however, a licence was granted to Digicel Nauru to provide mobile services. It is understood that the licence allows Digicel Nauru to provide all other services, including fixed and international gateway services. A mobile service was launched in August 2009.

3.6.2 Legislative framework

The current act in Nauru is the *Telecommunications Act 2002*⁴⁷, which established RONTEL as a statutory corporation and sets out its obligations as the national service provider. There is no provision in the act for the licensing of competitive operators. More recent developments, in relation to the agreement with Digicel, must, therefore, have been undertaken outside any statutory licensing arrangement, since there is not one.

In practice, RONTEL has found it difficult to provide service on Nauru and has struggled to maintain the fixed networks deployed in earlier times. Consequently, the introduction of a second operator might not be competitive, but a means of providing an initial service.

3.6.3 Regulatory arrangements

The 2002 act did not establish an independent agency for regulating the provision of services. By implication, the power is reserved with the government.

Digicel entered the Nauru market on the basis of a licence granted by the government. The terms of the licence, and the rights and obligations acquired by Digicel as a result, are not known. The licence is said to be confidential and not available to third parties. It is not possible, therefore, to examine the post-licence relationship between Digicel and RONTEL, and to determine whether it is competitive.

3.7 Niue

3.7.1 Country and market background

Niue has a population of around 1,400 and a land area of 260 square kilometres.

⁴⁷ Government of Nauru (2002).

Telecom Niue (Niue P&T) provides fixed, mobile and international gateway services as per the Communications Act 1989⁴⁸. Internet services are provided by a private company, the Internet Users Society of Niue (IUS-N), under an agreement with the government. Internet services have been provided using Wi-Fi technology, and have been free of charge since 2003.

3.7.2 Legislative framework

The current legislation comprises the *Communications Act* and the *Telephone Regulations and Radio Communications Regulations of 1972*⁴⁹. These laws and regulations are of an earlier era, and the government has expressed an intention to update them. The arrangements, permitting IUS-N to provide a nationwide free internet service, were developed with the government. A major incentive for this initiative was to provide connectivity to support tourism in Niue.

The Communications Act empowers the Cabinet in relation to service licences:

'(1) The Cabinet may grant public communications service licences.

(2) The Cabinet may grant a licence under subsection (1) for any period not exceeding 5 years and may renew such a licence for further periods each not exceeding 5 years.

(3) A licence granted under subsection (1) is subject to such conditions as are specified in it.

(4) The Cabinet may revoke, or vary any condition specified in a licence granted under subsection (1) and may make such a licence subject to additional conditions.

(5) The Cabinet may refuse to renew a licence granted under subsection (1) or may revoke such a licence if, in its opinion, the licensee –

- (a) Has failed to comply with any condition of the licence or with any law relating to the operation of the transmission installation; or
- (b) Is no longer a suitable person to hold the licence or no longer has the financial, technical or management capability to provide a service appropriate to the general public of Niue.

(6) The Cabinet may either generally or in any particular case authorize another person to exercise all or any of its powers under this section.' 50

3.7.3 Regulatory arrangements

There are in effect no regulatory arrangements in place for operator licensing. Telecom Niue has a direct remit relating to its operations under the act.

3.7.4 Licensing resources

There is a single staff member, the director of telecommunications, in the minister's office, who advises the cabinet on all telecommunications matters.

⁴⁸ Government of Niue (1989).

⁴⁹ Government of Niue (1972).

⁵⁰ Communications Act 1989, section 9 reproduced with permission from Government of Niue

3.8 Palau

3.8.1 Country and market background

The Republic of Palau occupies islands that have an aggregate land area of 460 square kilometres with a population of around 20,000. About two-thirds of the population lives on the island of Koror.

Fixed, mobile, internet and international services are provided by the incumbent, the Palau National Communications Corporation (PNCC), a private company incorporated in 1982. Palau Mobile Corporation (PMC) also provides mobile services.

3.8.2 Legislative framework

Legislation is in place that governs the operations of the PNCC and its powers and duties in the course of providing services. However, this legislation does not provide a framework for the competitive provision or licensing of telecommunications in Palau.

3.8.3 Regulatory arrangements

Because the telecommunication sector is not regulated at all, except in relation to spectrum, neither PNCC nor PMC are required to have telecommunication operating licences.

PMC has been separately authorized to provide mobile services by the government. As a foreign corporation, PMC was required to obtain a Foreign Investment Board (FIB) business licence as a preliminary matter before being issued service provider, frequency spectrum and earth station licences by the government.

The sector is supervised by the Communications Division of the Ministry of Public Infrastructure, Industries and Commerce.

3.8.4 Licensing resources

The ministry has two staff members covering all telecommunication issues, including spectrum licensing. To date, the need for operator licensing expertise has not arisen. However this will arise when Palau examines its overall telecommunications legislative and regulatory framework further.

3.9 Papua New Guinea

3.9.1 Country and market background

Papua New Guinea, with an estimated population of 6,732,000 in 2009 and a land area of 463,000 square kilometres, is the largest of the Pacific Island countries in this study. The capital, Port Moresby, has over 250,000 people.

The telecommunication market is served by Telikom PNG Limited (Telikom), the incumbent general carrier, licensed to provide national fixed and international services.

There is competition in the public mobile services market between B Mobile (the Telkom affiliated service provider) and Digicel PNG Limited (Digicel). There are approximately ten licensees in the value-added services market.

3.9.2 Legislative framework

Papua New Guinea is moving from an existing legislative arrangement in the *Telecommunications Act* 1996⁵¹ to a new scheme, which is expected to be implemented during the second quarter of 2010, based on the *National Information and Communications Technology Act 2009*⁵² (*NICT Act*) which came into effect in August 2010.

The NICT Act provides for the creation of a super-regulatory authority, the National Information Communications and Technology Authority (NICTA), to combine the telecommunications functions of the ICCC and the technical and administrative regulatory functions of Papua New Guinea Telecommunication Authority (PANGTEL).

Part III of the NICT Act makes comprehensive provision for operator licensing by NICTA in the context of the obligations on NICTA to operate impartially, ethically and objectively.

- An operator licence is required for the provision of facilities, access services or network services. Other types of licence relate to content and applications.
- A network licence is required by persons supplying any facilities, facility access services or any network services.⁵³
- Similar arrangements apply to the need for an application's licence and a content licence for the provision of applications and content services, respectively. ⁵⁴
- Regulations for all individual licences, network, applications and content, are to be made by the head of state acting on advice.⁵⁵ Specifically, the regulations will identify the type of ICT services and facilities rights that will be subject to an individual licence. The advice to the head of state is provided by ministers, not by regulatory agencies. There is no provision that the minister, in turn, should act on the recommendation of NICTA. However, in this context, the head of state's power is limited.
- NICTA can make rules setting out standard terms and conditions for applications, special terms, and conditions for individual licences.⁵⁶ NICTA is required to make rules for the licence application and approval processes and criteria for granting individual licence.⁵⁷
- There is a presumption that individual licences will be renewed on expiry, although national ICT authority (NICTA), subject to compliance and to continued technical and financial capacity.⁵⁸
- NICTA can vary licence conditions on providing a notice period of 30 days for the licensee to make submissions. The variations have to be consistent with the act, but this is not a major limitation for NICTA.⁵⁹ NICTA also has the power to suspend or revoke individual licences.
- Similar powers are granted to NICTA in relation to class licences.⁶⁰

⁵¹ Government of Papua New Guinea (1996).

Government of Papua New Guinea (2009).

⁵³ NICT Act, section 49.

⁵⁴ Act, sections 50 and 51 respectively.

⁵⁵ Act, section 54.

⁵⁶ Act, section 55.

⁵⁷ Act, section 56.

⁵⁸ Act, section 57.

⁵⁹ Act, section 58.

⁶⁰ Act, sections 62 – 67 inclusive.

3.9.3 Regulatory arrangements

The current regulatory arrangements for licensing, based on the powers that reside with the ICCC, are about to change with the establishment of NICTA. In practice, the administration of licensing may not be interrupted if the staff resources currently allocated to licensing in the ICCC are transferred to NICTA. However, even if there is a seamless transfer of staff, NICTA will have a major initial workload to establish a regulatory framework of rules and processes under the new act. The expert is aware that Papua New Guinea is seeking external consultancy support in this area.

3.10 Samoa

3.10.1 Country and market background

The Independent State of Samoa has a population of around 180,000 and a land area of 2,831 square kilometres. Approximately two-thirds of the population lives on Upolu with the balance on Savaii and smaller islands.

The telecommunication market has been progressively liberalized since 2005 and there is competition in the provision of mobile, international gateway and internet services, as indicated by Table 3-2.

As of July 2009, the policy is that all services should be liberalized and the exclusive provision of services by SamoaTel effectively ended in all telecommunication markets. At the time of this assessment, the Government of Samoa was already in the process of selling SamoaTel.

Telecommunication service markets	Service providers
Fixed	SamoaTel
Mobile	SamoaTel; Digicel Samoa Limited
Internet	 a. Lesa's Telephone Services (LTS) b. Computer Services Limited (CLS) c. Ipasifika Limited d. SamoaTel Limited e. Datec Samoa Limited f. Bear Systems International Limited
International gateway	SamoaTel; Digicel Samoa Limited; WiMAX Samoa Limited
Submarine cable licence	Samoa American Samoa (SAS) Cable Limited

Table 3-2: Service providers' service markets in Samoa

3.10.2 Legislative framework

To provide the required legislative framework for the then-pending liberalization of the telecommunication sector in Samoa, the legislative assembly passed the *Telecommunications Act* in 2005^{61} .

This act established the Office of the Regulator and also set up the framework for the introduction of competition in many parts of the market. Experience soon showed the need for improvements, and the act went through a series of improvements and amendments, the most recent being in 2008.

⁶¹ Government of Samoa (2005).

One of the act's objectives is to 'promote a fair, objective and transparent licensing regime for service providers.'⁶² Part III deals with telecommunication licences.

- A licence or exemption is required to provide a telecommunications service to the public for compensation or to own or operate a network for such services.⁶³
- Power to issue a licence is with the regulator.⁶⁴
- A licence is a unilateral grant of permission from the regulator to provide a telecommunications service or operate a telecommunications network, and for all purposes it shall not be regarded as a contract or bilateral agreement.⁶⁵
- A licence shall be copied and made available for inspection by the regulator.⁶⁶
- The regulator is required to make publicly available licensing procedures and criteria and the normal decision time on processing licence applications.⁶⁷
- Reasons for denial of a licence must be provided in writing to the applicant on request.⁶⁸
- There is to be no unfair discrimination between a licence for providing the same services or operating the same networks.⁶⁹
- The regulator's powers to issue licence are not limited by any agreements, contracts or other matters in existence when the act came into effect in 2005.⁷⁰
- There shall be individual and class licences, and the regulator is responsible for determining the types of services requiring these, in the absence of any rules on the subject.⁷¹
- The regulator has the power to determine licensing procedures and conditions.⁷²
- The regulator has power to amend and revoke a licence under specific conditions. The regulator may determine that amendments are needed for consistency with the objectives of the act. The licensee is to be given at least 14 days notice of an intention by the regulator to amend or revoke in order to be able to prepare and submit comments. The regulator may invite comments from other interested parties. Reasonable time must be allowed for compliance with amendment or revocation of a licence.⁷³
- There is a presumption that a licence will be renewed on the same terms.⁷⁴

3.10.3 Regulatory arrangements

The regulator is given the functions and power to implement the act, regulations and other elements of the legal and regulatory framework.⁷⁵ This includes the specific power to regulate and administer the licensing regime. The regulator's powers under the act have been described in section 3.10.2.

⁶² Paragraph 3(k).

⁶³ Section 12.

⁶⁴ Sub-section 13(1).

⁶⁵ Sub-section 13(2).

⁶⁷ Sub-section 13(3).

⁶⁷ Sub-section 13(4).

⁶⁸ Sub-section 13(5).

⁶⁹ Sub-section 13(6).

⁷⁰ Sub-section 13(7).

⁷¹ Section 15.

⁷² Sections 16 and 17, respectively.

⁷³ Section 18.

⁷⁴ Section 19.

⁷⁵ Paragraph 8(1)(b).

The *Telecommunications Licence Fee Regulations 2007*⁷⁶ set out the fees to apply for the processing of licence applications and annual fees based on absolute amounts or a percentage of gross revenue (as defined) with a minimum fee level.⁷⁷

All licensees pay a licence fee, except for holder of class licences (minimum administration fee only) and those that are exempted under section 14 of the act.

3.10.4 Licensing resources

Section 3

The regulator is responsible for licensing and acts on advice from the three operational units: technical, legal, and regulatory. The technical division is staffed with a manager and two technical officers; regulatory by a manager and one technical staff; and legal by the legal counsel.

3.11 Solomon Islands

3.11.1 Country and market background

The Solomon Islands cover a land area of 28,400 square kilometres, with a population estimated at 552,400 in 2006. Approximately 10 per cent live in the capital and largest city, Honiara.

The Solomon Islands is one of the least connected countries in the world according to the World Bank⁷⁸. The total population covered by telecommunication networks (fixed and mobile) is about 60,000 (around 11 percent). This compares to over 90 per cent population coverage in Samoa, and over 80 per cent in Vanuatu. As of March 2009, there were 12,000 fixed lines in service and 35,000 mobile subscribers.

Fixed and mobile services are provided by the monopoly operator, Solomon Telecommunications Limited (STL, also known as Our Telekom). Internet access is primarily via dial-up, though a small, high-frequency (HF) radio e-mail service is available in some locations through a non-governmental organisation, People First Network funded by the Asia Development Bank (ADB)⁷⁹. There are fewer than 1,000 broadband (DSL) subscribers. Prepaid wireless local area network (LAN) access is available in Honiara in selected Wi-Fi hotspots.

3.11.2 Legal and regulatory framework

The government's policy is to improve telecommunication services and to liberalize markets and harness competition to do so.

In accordance with this policy, the government initiated the process of developing new telecommunication legislation, and invited the shareholders of STL to renegotiate the terms of their exclusive license in late 2008. The negotiations concluded in June 2009 with the signing of a settlement agreement to terminate STL's monopoly, phase in competition, and transfer regulatory functions such as spectrum and numbering management to a new, independent regulator.

The new *Telecommunications Act 2009⁸⁰* was enacted by Parliament on 27 August 2009, and gazetted. The new mobile operator, B Mobile from Papua New Guinea, commenced commercial operations in June 2010. Other segments of the telecommunication market (international gateway and internet service provision) will also be liberalized.

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⁷⁶ Government of Samoa (2007).

⁷⁷ (Fee) Schedule to the Regulation.

⁷⁸ World Bank (2010).

⁷⁹ ADB (2010).

⁸⁰ Government of Solomon Islands (2009).

While some aspects of regulation (interconnection, spectrum and numbering) have been incorporated into the settlement agreement, a complete set of sector regulations prepared and implemented in 2010.

The act is a comprehensive piece of sector legislation. Part five deals with service licences.

- Licences are required to provide telecommunication services.⁸¹
- 'Regardless of their form or content, service licences and exemption orders comprise the grant of rights to licensees and are unilateral administrative actions of the Telecommunications Commission pursuant to its powers under this Act and not bilateral agreements or contracts.'⁸²
- There is provision for individual and class licences.⁸³
- The telecommunications commissioner has power to issue individual licences but only if an individual licence is needed.⁸⁴ This suggests that class licences are to be preferred.
- The telecommunications commissioner can make determinations, orders and directions on licence conditions and other aspects of licensing as is appropriate, subject to procedural safeguards.⁸⁵
- 'If the Telecommunications Commission intends to restrict the number of service providers to be licensed for any telecommunications service, it shall select such service providers pursuant to a competitive selection process.'⁸⁶ The criteria for a competitive process are also set out.⁸⁷ This is a very important section not yet adopted in other Pacific Island countries.
- 'Individual licences shall be for a term of not less than five years and not more than twenty years.'⁸⁸
- 'An individual licensee may request renewal of such licence by application made at least one year prior to the end of the term of its individual licence or such shorter period, if any, as the Telecommunications Commission may allow.'⁸⁹ In these cases the telecommunications commissioner has three months to determine the application.⁹⁰ This is a further legislative innovation that has considerable merit for the avoidance of doubt and interruptions to service if the licence is not renewed or the renewal is delayed. This provision would seem to be in the interests of all stakeholders including end users.
- 'There is no presumption that an individual licence will or will not be renewed.'⁹¹ This provision appears to be different from the typical implicit presumption. However, its effect is moderated by the provision allowing early application for, and resolution of, renewal.
- The act makes provision for registration of class licensees in accordance with procedures and conditions determined by the telecommunications commissioner.⁹²
- The telecommunications commissioner is empowered to prescribe standard licence conditions by order or regulation.⁹³
- The telecommunications commissioner may vary the terms of or suspend or revoke a licence. This is subject to restrictions and also to the possibility of appeal to the High Court.⁹⁴

⁸¹ Sub-section 36(2).

⁸² Sub-section 37(4).

⁸³ Section 38.

⁸⁴ Sub-section 38(4).

⁸⁵ Sub-section 38(5).

⁸⁶ Sub-section 39(2).

⁸⁷ Sub-section 39(3).

⁸⁸ Sub-section 39(4).

⁸⁹ Sub-section 39(5).

⁹⁰ Sub-section 39(7).

⁹¹ Sub-section 39(8).

⁹² Section 40.

⁹³ Section 41.

⁹⁴ Section 42.

3.11.3 Regulatory arrangements

• Regulator

The act established the Telecommunications Commission as the regulatory agency. The government has recently completed an internationally competitive recruitment process and appointed a commissioner in December 2009. The establishment of the regulatory agency and details of the regulatory framework are on-going. The act requires that the regulator be independent and impartial when making decisions.

- '(1) The Telecommunications Commission must –
- (a) act in a manner that is independent of, separate from, and not accountable to any person or service provider, including any service provider in which the State of Solomon Islands or Solomon Islands National Provident Fund holds an interest; and
- (b) make determinations, orders and regulations, and follow procedures, that are impartial with respect to all service providers.⁹⁵

• Mobile competition

The government has also launched a tender for a second mobile licence to be awarded before the end of 2009. On 17 December 2009, the government announced that the second 15-year licence had been awarded to Bemobile, over other bidders including Digicel. Bemobile currently provides mobile telecom services in Papua New Guinea.

• Licence fees

STL pays a seven per cent gross revenue tax for its operator's licence. This will change when Bemobile launches. Both companies will then face a charge of two per cent on gross revenue.⁹⁶

• Licences

Licences were issued by the Evaluation Committee, established to assist in the implementation of the new regulatory and legislative framework to STL and to the new entrant. The licences are included as schedules to the act, as they are required to be if granted by the Evaluation Committee.

3.12 Timor-Leste

3.12.1 Country and market background

Timor-Leste has an estimated population of 923,000 (based on the 2007 census) and a land area of 15,400 square kilometres. Around 20 per cent of the population lives in Dili.

Before independence in May 2002 the telecommunications infrastructure of Timor-Leste was effectively destroyed due to unrest in the country, as reported by the International Development Research Center (IDRC)⁹⁷.

⁹⁵ Sub-section 14(1).

⁹⁶ Clause 3.1 of STL's licence – included as a Schedule to the Act.

⁹⁷ IDRC (2006).

However, fixed, mobile, internet and international gateway services are now provided by Timor Telecom. Timor Telecom is operating on an exclusive basis in relation to fixed, mobile and international services. iNet also provides internet services.

Timor-Leste's government is committed to liberalization and privatization of the sector. The government is considering the issuing of a license for a second mobile operator in 2012.'

3.12.2 Legislative framework

Telecommunication legislation has been drafted but not yet enacted. It includes provision for interconnection and related access arrangements. In the meantime, ARCOM continues to operate under the immediate post-independence decree arrangements. It was established under Decree Law 12/2003. Telecommunication regulation is still operating under Decree Law 11/2003 regarding the Basic Telecommunications and Carrier Service Providers regulation.

3.12.3 Regulatory arrangements

As noted above, regulation of the sector (effectively a monopoly arrangement) is with the authority established following independence, ARCOM. However, in practice, there is no established legal framework for competition, access and interconnection, and no network services competition to which it might be applied, at this stage.

3.12.4 Licensing resources

ARCOM has advised that it is expected that the licensing regime will be modified to enable a move from monopoly service provision to competition in future. ARCOM has five staff and they have duties relating to licensing.

3.13 Tonga

3.13.1 Country and market background

The Kingdom of Tonga has an estimated population of 104,000 in 36 inhabited islands. The total land mass of the archipelago is 748 square kilometres. Around 35 per cent of the population lives in the capital, Nuku'alofa.

Local and international telecommunication services are provided by Tonga Communications Corp (TCC), which also operates the ISP Kalianet, and a GSM 900 mobile network. In addition, an emerging second carrier, Shoreline Communications (TonFon), has been building a hybrid mobile communication system using global system for mobile (GSM) communication, a very small aperture terminal (VSAT) and Internet Protocol (IP) to deliver low-cost voice, video, data, Internet, entertainment and wireless services throughout the kingdom⁹⁸. Digicel acquired TonFon in late December 2007 and re-launched as Digicel in 2008. Liberalization has resulted in a significant increase in teledensity,⁹⁹ and substantial reduction in prices.

⁹⁸ ITU (2010).

⁹⁹ The fixed teledensity in 2008 was 25% and the mobile teledensity in 2008 was 50%, according to the CIA Fact Book (2010).

The licensed service providers in Tonga currently are:

- a. Fixed services TCC
- b. Mobile services TCC and Digicel
- c. Internet services TCC, Digicel, and Pacific Rural Internet Connectivity System (RICS)
- d. International gateway services TCC, Digicel, RICS (for some schools), USPNet (only on the University of the South Pacific campus).

3.13.2 Legislative framework

The telecommunications sector in Tonga is governed by the *Communications Act 2000¹⁰⁰*. The objects of the act are set out in section 4, and include¹⁰¹:

- (a) to establish a communications licensing and regulation framework in support of the national development policy objectives;
- (b) to establish the powers and functions of the Department of Communications;
- (c) to consolidate the regulation and policy control of the communications sector in a single Government department;
- (e) to establish and to promote competition in the supply, installation, maintenance and operation of customer equipment and related services;
- (f) to promote fair and sustainable competition in the supply and provision of network facilities, network services and applications services.'

The minister and Department of Communications are established with both policy and regulatory functions for telecommunications. The minister is given power 'to exercise general supervision and control over all matters relating to the communications sector in the Kingdom'¹⁰² and 'make determinations on any matter specified as being subject to the Minister's determination under this act, the *Radio Communication Act* (Cap 98), the *Telegraph Act* (Cap 99), and other applicable laws'.¹⁰³

Part V of the act deals with licensing for individual and class licences.

- Unless otherwise exempted no person may own network facilities or provide network, applications or content applications services without a licence.¹⁰⁴
- 'Subject to the approval of His Majesty in Council, the Minister may, by declaration, grant an
 individual licence under this Act.'¹⁰⁵ Note, however, that the minister has extensive powers of
 delegation particular to his department.
- The act provides that 'all individual licences granted under this Act shall include the standard licence conditions specified in the Schedule'.¹⁰⁶ The standard conditions are very generic and unexceptional.

¹⁰⁰ Government of Tonga (2000).

¹⁰¹ Reproduced with kind permission of the Ministry of Information and Communications of the Government of Tonga.

¹⁰² Section 5(a).

¹⁰³ Section 11.

¹⁰⁴ Section 16.

¹⁰⁵ Section 20.

¹⁰⁶ Section 23.

- Special conditions: 'In addition to section 23, the Minister may with the consent of His Majesty in Council, by declaration, determine and impose special conditions in addition to the standard conditions, including but not limited to, licence fees, on an individual licence granted under this Act.'¹⁰⁷ This has the unfortunate effect of converting all other conditions into special conditions, and not retaining that term for conditions that may be applicable to individual licensees, possibly under transitional or temporary circumstances.
- Licence condition variations: 'The Minister may with the consent of His Majesty in Council, by declaration, vary or amend any or all special conditions of an individual licence'.¹⁰⁸ No procedural safeguards or statutory opportunity for comment by the affected licensee or other interested stakeholders are provided for.
- Terms of licence are to be at least five and not more than ten years.¹⁰⁹
- The minister may revoke or suspend a licence but must give three days notice before doing so. $^{\rm 110}$

3.13.3 Regulatory arrangements

The regulatory administration of licensing, and of the sector generally, is with the minister and the department. There is no separate regulatory agency outside the department.

3.14 Tuvalu

3.14.1 Country and market background

Tuvalu comprises four reef islands and five atolls for a total land area of 26 square kilometres. It has a population of about 12,400.

Telecommunication services are provided by the Tuvalu Telecommunication Corporation (TTC), which operates as a monopoly service provider.

3.14.2 Legislative framework

Service provision is governed by the *Tuvalu Telecommunications Corporation Act 1993*¹¹¹, which established the operator in corporate form and set out powers and duties in relation to service provision.

Section six of the Act specifically reserves exclusive service provision rights to TTC.

'(1) Subject to subsection (2) of section 3 of this Act¹¹² and subsection (2) of this section the Corporation shall have the sole and exclusive right to supply telecommunication services and to establish and develop telecommunication systems in Tuvalu in accordance with its functions and powers under this Act.

¹⁰⁷ Section 24.

¹⁰⁸ Section 25.

¹⁰⁹ Section 27.

¹¹⁰ Section 29.

¹¹¹ Government of Tuvalu (1993).

¹¹² These relate to military communications.

(2) Where the Corporation is for any reasons unable to supply or provide a telecommunication service to any person in any part of Tuvalu or to establish and develop an appropriate telecommunication system for that person, it may in accordance with the regulations made by the Minister under this Act, licence a person as it may consider fit and suitable to supply or provide the service at a cost to be paid for by the person requiring the service and upon such other conditions as may be prescribed by regulations and contained in the licence.'

These statutory provisions are exceptional. They do not only reserve a monopoly to the incumbent operator, but make it clear that the only way in which a new entrant will be considered is in the situation where the incumbent is unable to provide a service. On this basis, competition is not contemplated at all, even if more than one operator is licensed.

3.14.3 Regulatory arrangements

Policy oversight and management is retained by the minister and the department. However, the very broad legislation of the act gives the Tuvalu Telecommunication Corporation the sole right to deal with telecommunications. Consequently, regulation and TTC administration are much the same things.

3.15 Vanuatu

3.15.1 Country and market background

Vanuatu has an aggregate land area of 12,200 square kilometres, and a population at the 2009 census of 243,304.

There are 10 licensed operators. It is intended that they be technology- and service-neutral. However, the provision of mobile services was restricted to two service providers, Digicel Vanuatu and Telecom Vanuatu Limited until March 2012. The licensees are set out in Table 3-3.

Company	Licence constraints	Current services	Comment
Telecom	No constraints – can	Fixed	Internet role to be
Vanuatu	provide all types of	Mobile	reviewed
	telecommunication	Internet	
	services.	International gateway	
Digicel	No constraints – can	Mobile	Planning broadband
	provide all types of	Internet (via mobile phone	internet services
	telecommunication	and BlackBerry only)	
	services.	International gateway	
Interchange	Can provide all types of	None	Investigating provision
	telecommunication		of a submarine cable
	services, except mobile		linking Vanuatu to New
	before March 2011		Caledonia
Can'l	Restricted to IP-based	None	Planning internet
	services		services (ISP)
	No submarine cables		Restriction to IP-based
	No mobile		services and prohibition
	telecommunication		on international cables
	services before March		to be removed
	2011		

Table 3-3: Vanuatu licensees and their current services

Company	Licence constraints	Current services	Comment
CNS	Restricted to IP-based services No submarine cables No mobile telecommunication services before March 2011	None	Planning internet services (ISP) Restriction to IP-based services and prohibition on international cables to be removed
Hotspotzz	Restricted to IP-based services No submarine cables No mobile telecommunication services before March 2011	Reseller of internet services via hot spots	Restriction to IP-based services and prohibition on international cables to be removed
Micoms	Restricted to IP-based services No submarine cables No mobile telecommunication services before March 2011	None	Planning internet services (ISP) Restriction to IP-based services and prohibition on International cables to be removed
Telsat	Restricted to IP-based services No submarine cables No mobile telecommunication services before March 2011	Broadband wireless Internet Services in Port Vila only (at this stage)	Restriction to IP-based services and prohibition on international cables to be removed
Wavcom	Restricted to IP-based services No submarine cables No mobile telecommunication services before March 2011	None	Plans unclear Restriction to IP-based services and prohibition on international cables to be removed
Yumi Konek	Restricted to IP-based services, No submarine cables No mobile telecommunication services before March 2011	Providing Internet services to two remote sites using HF radio (UNDP project)	Restriction to IP-based services and prohibition on international cables to be removed

3.15.2 Legislative framework

The Telecommunications and Radio Communications Regulation Act 2009¹¹³ was passed into law in 2009. Section four provides for the appointment of a regulator. The regulator is intended to be an independent authority with substantial powers and functions as generally set out in section seven of the act, and as specifically identified elsewhere in the act. Two of the general powers under section seven are noteworthy, because of their implications for licensing regulation¹¹⁴.

- (3) The Regulator may, with the approval of the Minister, make such regulations as may be necessary or convenient to give effect to the provisions of this Act.
- (4) Without limiting the generality of subsection (3), the Regulator may make regulations:
 - (a) prescribing standard terms in various licences and exemptions; or
 - (b) prescribing procedures, forms and fees in respect of any licence or exception or anything which might be done by any person under this Act, except the provision of reasons for any decision by the Regulator; or
 - (c) providing for the methodology by which any calculation required to be made under this Act is to be made; or
 - Under part three of the act, the regulator is responsible for issuing licences, including the determination of circumstances where licensing may not be required, and for overseeing compliance with and operation of the licence requirements and system.

3.15.3 Regulatory arrangements

All licences granted prior to January 2010 have been granted under the 1989 Telecom Act ¹¹⁵as amended. Only two new licences have been granted so far under the 2009 act and one licence has been amended.

The draft *Telecommunications Licensing Regulations 2010¹¹⁶* provide further detail on regulatory arrangements.

- The regulator is not permitted to issue any mobile service licence until March 2011.¹¹⁷
- Specific exemptions are granted to certain service providers including resort, hotel and guest house operators, internet café operators, village payphone operators, village internet service resellers, internet wireless hotspot operators, and the owners of aircraft and vessels.¹¹⁸ The regulator may grant further individual exemptions for operators with annual revenue excluding VAT of under 4,000,000 vatu.¹¹⁹

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Refer www.trr.vu/attachments/article/53/Telecommunications%20and%20Radiocommunications%20Regulation%20Act%2 02009.pdf

¹¹⁴ Reproduced with permission of the Government of Vanuatu through the office of the Regulator.

¹¹⁵ Government of Papua New Guinea (1996)

Government of Papua New Guinea (2010).

¹¹⁷ Sub-section 3(2).

¹¹⁸ Section 4.

¹¹⁹ Section 5.

• Licence fees are set at 2.25 per cent of net annual revenue.120

In addition, the regulator has included a document entitled *Principles and Objectives of Telecommunications Licensing Policy* on the regulator office website.¹²¹ This sets out policy aims and additional information on how licensing processes will be conducted. One important principle is that the regulator will not artificially restrict the number of licences. The clear suggestion is that the market will determine this. This contrasts with the situation elsewhere, such as in the Solomon Islands, where the regulator is empowered to limit the number of licensees, provided the licences that are issued are gained by contest.

Certain existing licences contain restrictions on the range of services that can be offered. These restrictions arose from political considerations at the time the licences were issued. The restrictions are not in accord with the approved policy, which states that there will be no restriction to the number of licences offered or the type of services that can be provided.

¹²⁰ Section 6(1).

¹²¹ Government of Vanuatu (2008).

4 Country and regional assessment

4.1 Assessment method

All of the countries in this study are compared along various dimensions that are important if licensing regulation is to be in accordance with best practice. These are:

- legislation;
- licensing framework;
- procedures and criteria for issuing licences;
- variation and revocation of licences;
- licence renewal;
- institutional capability for licensing.

However, many of the countries in the study have not yet moved to a competitive telecommunication arrangement and the need for an adequate, modern licensing regime is less apparent. The real need is to review existing licensing regimes, especially in countries that are planning to move towards liberalization.

The reasons for little or no competition in the provision of telecommunications services vary, but it would seem that the most common reason is that the population to be served, and current and future demand for services, are insufficient to sustain two or more operators in the market. Later in this chapter, an analysis of regional best practice is presented.

4.2 Legislative framework

Table 4-3 sets out the legislative arrangements of the countries in the study. Many of the countries have sector legislation that has been adapted from Australian, New Zealand and Canadian originals from various eras.

In most cases, it is clear those drafting the legislation have considered the arrangements in other countries to ensure that useful ideas have been considered, and, if apparently useful, incorporated. This is a standard and sensible practice. However, the sector acts are less than a decade old in only eight of the countries and, in some cases, such as Nauru, the legislation harks back to much earlier templates from elsewhere.

In two of the countries, the management of the sector, effectively that is any regulation, has been left with the monopoly operator for all practical purposes. These countries are the Marshall Islands and Niue. In a further six countries (refer to table 4.3 on page 65), the regulatory function has been left to a minister or a ministry (or government department).¹²² In these countries, there is not a separate regulatory agency. Only six countries have a regulatory agency established separately from both the operators in the industry and from the policy-making levels of government.

¹²² In the case of Tonga there is oversight by the ministry but substantial operational and policy issues are left to the incumbent operator to determine.

Only seven of the 15 countries have specific provision in their sector legislation requiring or promoting competition in the sector. Another country plans to introduce competition into legislated policy, and another (Kiribati) has a requirement in its act but no actual fixed and mobile network services competition in the sector at this stage.¹²³ Of the seven countries with legislated provision for competition, all also have legislated provision for licensing, as might be expected. In addition, two countries that have no provision for or prospect of competition in the medium term also have licensing provisions.

Only Fiji and Papua New Guinea have general economy-wide competition laws which seek to identify and proscribe anti-competitive behaviour. Many of the sector-specific acts have made up for this legislative gap by including provisions on competition generally. For example, this is the case in Samoa, Tonga and Vanuatu.

4.3 Procedures and criteria for issuing licences

A number of issues arise from considering the licensing frameworks that do exist. Specific characteristics are set out in Table 4-4 and summarised in Table 4-1.

Provision for	Yes	No	N/a or unknown	Comments
Individual and class licences	7	5	3	
Eligibility criteria	10	2	3	
Reasons for denial of licence	4	8	3	
Transparency (publication)	5	7	4	Positive transparency obligation is a 'Yes'
Limitations on number of licences	2	10	3	Explicit requirement to limit is a 'Yes'
Regulations and orders	3	9	3	In place rather than required

Table 4-1: Procedures and criteria for issuing licences (15 countries)

A legislative requirement for licences to be either service-neutral or technology-neutral has not been counted separately because no existing legislation either requires or encourages this. Given the stage of regulatory and market development in most Pacific Island countries, this may well be appropriate. In addition, most legislation requires regulators to have regard for the legislation's objectives. Whether this is too subtle a reference to the need for unified licences suited to the provision of convergent services in the future is an interesting point. Perhaps it is better to have very explicit directions about what the regulator should take into account when establishing licensing criteria and related rules.

4.4 Variation and revocation of licences

The commitment of a regulatory regime to fairness and transparency can be gauged by the arrangements (if any) provided in legislation for the revocation and amendment of operator licences.

In countries served by a publicly owned monopoly operator, one might expect there to be little value in outlining in the legislation arrangements and procedures for licence variation or revocation. In these situations, an amendment might be seen as a negotiation within the same party (the government and the management of the monopoly enterprise). Revocation is not an option unless the legal basis for the provision of services is to be suspended. This is hardly a useful outcome. This study confirms the expectations in these cases.

¹²³ In Kiribati's case, the government has negotiated with potential new entrants but has not come to any agreement with any new entrants at this stage.

Where there is a licensing regime and competition in place, the matter of variation and revocation becomes a real issue, particularly when private investment is being sought and further encouraged.

Where variation and revocation are specifically provided for, there needs to be some arrangement for at least a minimal dialogue with affected parties and an opportunity for those parties to submit their views. There also needs to be some degree of transparency and objectivity characteristics that can be reinforced by explicit rights of appeal.

Table 4-2 shows the arrangements for revocation in the 15 study countries.

N/a or Provision for ... Yes No Comments unknown * Provision for variation 10 5 Most of the 'no' responses and amendment relate to Pacific Island Countries (PICs) without licensing arrangements at all * Provision for revocation 10 5 As above and cancellation 7 Minimum notice period 7 1 4 1

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Table 4-2: Variation and revocation of operator licences (15 countries)

In most of the jurisdictions based on English or US legal systems, there is provision for appeals against administrative decisions under general legislation. Only appeals specifically provided for in telecommunication legislation have been included in Table 4-2.

Provision for appeal

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Table 4-3: Legislative Framework – General

Country	Current sector legislation (last 10 years)	Separate regulatory agency – from operators	Separate regulatory agency – from ministries	Name of regulatory or supervisory agency	Legislative provision for competition	Legislative provision for licences	Competition law
Cook Islands	No	No (Planned)	No	Prime Minister's Department	No (Planned)	Yes (Planned)	None
Fiji	Yes	Yes	Yes	Telecommunication Authority of Fiji (TAF)	Yes	Yes	Yes
Kiribati	Yes	Yes	Yes	Telecom Authority of Kiribati	Yes	Yes	No
Marshall Islands	No	No	-	National Telecommunications Authority	No	No	No
Micronesia	No	Yes	No	Department of Transportation, Communication and Industry	No	No	No
Nauru	Yes	No	No	Minister	No	No	No
Niue	No	No	-	Niue P & T	No	Yes	No
Palau	No	Yes	No	Ministry of Infrastructure, Industries and Commerce	No	No	No
Papua New Guinea	Yes	Yes	Yes	NICTA	Yes	Yes	Yes
Samoa	Yes	Yes	Yes	Office of the Regulator	Yes	Yes	No
Solomon Islands	Yes	Yes	Yes	Telecommunication Commission	Yes	Yes	No
Timor-Leste	No	Yes	Yes	ARCOM	No	No	No
Tonga	Yes	Yes	No	Minister and Department of Communications	Yes	Yes	No
Tuvalu	No	Yes	No	Minister	No	No	No
Vanuatu	Yes	Yes	Yes	Reguleta blong Telekomunikesen	Yes	Yes	No

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Table 4-4: Procedures and criteria for issuing licences

Country	Individual and class licences	Eligibility criteria	Reasons for denial	Transparency (publication)	Limitations on licence numbers	Regulations and orders	Comments
Cook Islands	Yes	Yes	Yes	No	No	No	Planned in Bill. Licences to be issued only where necessary.
Fiji	No	Yes	No	No	No	No	Interim licences in place
Kiribati	No	Yes	No	No	No	No	Draft licence prepared
Marshall Islands	Yes	Yes	No	Yes	No	No	Planned in Bill
Micronesia	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Nauru	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Niue	No	Implied	No	No	No	No	
Palau	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Papua New Guinea	Yes	Yes	Yes	Yes	No	No	Date of effect of act is imminent
Samoa	Yes	Yes	Yes	Yes	No	Yes	
Solomon Islands	Yes	Yes	No	Yes	Yes	Yes	Restriction of licence numbers by competitive processes
Timor-Leste	No	No.	No	No	No	No	Drafts exist which would meet best practice if implemented.
Tonga	Yes	Yes	No	No	No	No	
Tuvalu	No	No	No	No	No	No	Monopoly enshrined in act
Vanuatu	Yes	Yes	Yes	Yes	Yes	Yes, policy	Explicitly no limitations on licensees.

Country	Provision for variation and amendment	Provision for revocation (also suspension)	Minimum notice period	Provision for appeal	Comments
Cook Islands	Implicit	Yes	Yes, 14 days	No	Based on bill
Fiji	Yes	Yes	Yes, 30 days	No	
Kiribati	Yes	Yes	Yes, 90 days	Yes	
Marshall Islands	Yes	Yes	Yes, 90 days	No	Based on bill
Micronesia	No	No	No	No	Embedded monopoly
Nauru	No	No	No	No	Did not reply to information request
Niue	Yes	Yes	No	No	
Palau	No	No	No	No	Embedded monopoly
Papua New Guinea	Yes	Yes	Yes, 30 days	Implicit	Act to take effect imminently
Samoa	Yes	Yes	Yes, 14 days	Yes	
Solomon Islands	Yes	Yes	n/a	Yes	
Timor-Leste	No	No	No	No	Embedded monopoly. Best practice regulations have been prepared by consultant
Tonga	Yes	Yes	Yes, 3 days	No	
Tuvalu	No	No	No	No	Monopoly is enshrined in act
Vanuatu	Yes	Yes	No	n/a	Note provision in policy of no presumption of licence numbers being (artificially) limited

Table 4-5: Variation and revocation of licences

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Table 4-6: Licence renewal

Country	Presumption of renewal (if no specific breaches of conditions)	Variation of licence conditions possible at renewal	Early renewal applications	Time targets for renewal process	Comments
Cook Islands	Yes	Yes	n/a	No	Based on bill
Fiji	Yes	Yes	n/a	No	
Kiribati	No	Yes	n/a	No	
Marshall Islands	No	Yes	n/a	No	Based on bill
Micronesia	n/a	n/a	n/a	n/a	
Nauru	Not known	Not known	Not known	Not known	Did not reply to information request
Niue	No	Yes	n/a	No	
Palau	n/a	n/a	n/a	n/a	
Papua New Guinea	Yes	Yes	n/a	No	
Samoa	Yes	Yes	n/a	No	
Solomon Islands	No	Yes	Yes	Yes, 3 months	
Timor-Leste	n/a	n/a	n/a	n/a	
Tonga	n/a	Yes	n/a	No	
Tuvalu	n/a	n/a	n/a	n/a	
Vanuatu	Yes	Yes	n/a	No	

The minimum notice period varied significantly from three days in Tonga to 90 days in Kiribati and the Marshall Islands. In addition, two countries (the Cook Islands and Samoa) allowed for 14 days notice and two other countries (Fiji and Papua New Guinea) allowed for 30 days notice.

The median notice is 30 days and the average of all seven countries is 39 days. Clearly perceptions of what the notice is intended to achieve vary widely.

4.5 Licence renewal

The emphasis in the Pacific countries on encouraging investment in extending infrastructure and building networks and platforms means licensing processes need to include a degree of certainty. In particular, whatever the term of a licence, there will be a need to signal whether the term will be extended through licence renewal on expiry. If renewal is uncertain, or the processes are not transparent or protracted, this will undermine the climate for continuing investment. Even so, licence expiry offers a natural opportunity for the performance of the licensee and the terms and conditions of the licence to be reviewed, and for changes to be made if the licence is to be renewed.

Countries cannot be expected to give that opportunity away or to diminish its value unduly in the interests of maximising investment. There are balances to be struck in this area.

To address the issue and to strike a balance, some countries have established an implicit or explicit presumption that licences will be renewed subject to the same or similar conditions. This is on the proviso that there have not been any specific breaches or continuing failures to perform. However, usually this balance includes the provision that variations of licence terms and conditions are possible on renewal.

Only one country (the Solomon Islands) has made explicit provision for licensees to apply for early renewal of licences up to a year in advance of expiry. It is possible that some other countries might countenance early renewal because the regulators have sufficient discretion to accept such applications. The matter has not arisen to our knowledge, so we simply do not know what would happen in these circumstances.

Table 4-7 sets out the general approaches to licence renewal in the 15 study countries.

Provision for	Yes	No	N/a or unknown	Comments
Presumption of renewal (absent breaches, etc)	5	4	6	Only one 'No' is explicit – the Solomon Islands
Variation of licence conditions on renewal	10	-	5	
Early renewal applications	1	-	14	The Solomon Islands – explicitly
Time targets for renewal process	1	9	5	Only the Solomon Islands has explicit target (of three months) for regulator

Table 4-7: General approaches to licence renewal

It is noteworthy that the only country with an explicit presumption against renewal of licences (the Solomon Islands) has an explicit provision for renewal applications to be considered up to 12 months before a licence expiries, and a related requirement for the regulator to complete the assessment within three months.

There are provisions for appealing the decision as well (see Table 4-5). The provisions form a complete whole to avoid a licence lacuna at the time of expiry. Presumably this arrangement, if used by licensed operators, will ensure a seamless continuity of service for customers and users.

4.6 Institutional capability for licensing

Operator licensing in the Pacific Island countries is not an ongoing activity.

Once a new entrant is licensed and permitted to operate in a market, there may be a long interval before the next new licence issue arises. The ongoing part of the licensing activity is compliance, but this has generally been uneventful. The result of these factors is that, in any administration in the Pacific, there will be little actual activity on which experience and expertise can be built and maintained.

Those country respondents who mentioned the numbers of regulators, ministry or operator staff involved in licensing, always mentioned small numbers. In no case was a person or position identified with all or most of his/her time associated with licensing. Licensing was at best part-time and often shared within a group with a substantial range of other responsibilities. Given the size of the administrative units devoted to regulation in Pacific Island countries this situation is only to be expected.

The institutional capacity and capabilities of regulatory agencies and other groups with similar administrative duties is, therefore, limited in terms of the numbers with expertise and because of the way in which licensing issues arise on an episodic basis. To balance this, many regulatory agencies in the Pacific Island countries have low staff turnover which assists their corporate memory both generally and on licensing matters.

4.7 Regional best practice assessment

A key point to remember about best practice licensing is that it should always strike a balance that best supports the policy goals for telecommunications in specific country circumstances. For example, if the country is able to sustain competition in the provision of mobile services then the licensing regime and the conditions included in licences should emphasise this.

The appropriate way to do this is to ensure that legislation and regulations support competition in a market and ensure that licensees have no entitlements or burdens that do not align with the overall policy thrust.

Another example relates to the need in all Pacific Island countries for investment in new and sustainable infrastructure.

Permitting unlimited entry will almost certainly reduce the market shares in clearly profitable capital city markets and undermine the commercial case for extending infrastructure and service coverage to the maximum commercially possible level. Even so, the market is usually a better determinant of sustainable competition than regulated outcomes. So a balance needs to be struck in the way that the licensing regime operates, either through post-licence issue moratoria on other licences (for a defined period only) or through the imposition of roll-out obligations on all licensees in a particular market.

Although the circumstances of the Pacific Island countries differ in many respects, they have a sufficient degree of similarity when it comes to the imperatives of licensing, and these common imperatives might be summarised as:

- need for infrastructure and network investment;
- need for commitments to roll-out and deployment, and to service provision;
- need for certainty to encourage maximum investment and cost recovery over a longer (rather than shorter) period.

These high-level imperatives lead to many specific second level requirements, such as:

- transparency;
- clear powers and responsibilities;
- independent regulation (independent of political levels of activity and of operators);
- well-defined and fair processes for change and licence renewal.

Table 4-8 sets out the regional best practice along a number of key licensing dimensions in more detail and indicates the exemplar countries where best practice is being implemented or attempted.

Dimension- High Level	Dimension – Second Level	Description of desirable practice	Exemplar(s)	Comments
1. Legislation	1.1 Recency covering current issues	Must have been seriously reviewed and amended in last five years	Papua New Guinea	NICT Act will come into effect imminently (Aug 2012)
	1.2 Separate independent regulator	Independent of political level and operator(s)	Papua New Guinea, Samoa	
	1.3 Competition	Provides for competition where sustainable	Solomon Islands	Requires restriction on licences by competitive processes
	1.4 Licensing	Formal powers given and proper processes required	Papua New Guinea	
2. Service neutrality	2.1 Multi-service or unified licences	Unified licence is one way of implementing a degree of service neutrality	Kiribati and Vanuatu	Kiribati has the licence but has not yet been used since no new operator has entered the market
3. Technology neutrality	3.1 Unified licences	Leaving the technology choices to licensees	-	No example of full technology neutrality in PICs yet.
4. Simple, minimal licensing	4.1 Class licensing	Specific provisions for class and individual licensing	Papua New Guinea, Samoa, Fiji, Tonga, Solomon Islands, Vanuatu and Kiribati	
	4.2 Preferring general (class) arrangements	Maximize class licensing and requiring regulator to minimize individual conditions and licences	-	Implicit for some countries, but no clear exemplar
5. Sustainability	5.1 Limit licence numbers	This differs from legacy monopoly. If licence numbers are to be limited it must be a clear decision of regulator with limits determined by competitive processes	Solomon Islands	This is usually where there is at least some prospect of excessive and unsustainable market entry
6. Transparency	6.1 Liberalization – open entry	No artificial restrictions on entry	Solomon Islands, Vanuatu	Vanuatu's act makes this clear – but would need to be subject to point 5 above on sustainability.

Table 4-8 Regional Best Practice – Licensing

Dimension- High Level	Dimension – Second Level	Description of desirable practice	Exemplar(s)	Comments
	6.2 Eligibility criteria	Clear, objective eligibility criteria to obtain a licence	Papua New Guinea, Samoa	Also Fiji, Vanuatu, Solomon Islands, Tonga and Kiribati
	6.3 Reasons	Reasons for denial of licence application	Papua New Guinea, Vanuatu	Also Samoa, Fiji, Vanuatu, Solomon Islands and Kiribati
	6.4 Publication	Publication of procedures and licences	Samoa, Vanuatu	
	6.5 Regulations	Requirement for detailed processes in regulations, orders, etc.	Samoa Vanuatu	
	6.6 Minimum notice	Minimum notice period for variations/revocation	Kiribati, Papua New Guinea	Also Samoa, Fiji, Vanuatu, Kiribati, Tonga and Solomon Islands
	6.7 Reasonable notice	Reasonable notice for variations/revocation – 30 days or more	Fiji, Kiribati, Marshall Islands, Papua New Guinea	The Marshall Islands plan to include in the bill
	6.8 Appeals	Against variation and revocation decisions	Samoa, Solomon Islands	
7. Renewal	7.1 Presumption of renewal	Presumption of renewal in similar terms if no breaches, etc	Samoa, Vanuatu	
	7.2 Early indications	Ability for licensee to seek early renewal	Solomon Islands	
	7.3 Timetable for renewal	Time target to complete early applications	Solomon Islands	

The expert has deliberately not found that there is a best practice in relation to licensing fees and charges other than that the actual charges should be published. The method of determining those charges that are based on some definition of turnover, gross revenue or net revenue should be clarified in legislation or regulations. This is covered in the transparency dimension in Table 4-8 above.

There is no best practice for the actual percentage of net revenue that might be sought as a licence fee, for example, because the result is dependent on so many country-specific factors, such as:

- the commercial opportunity associated with the licence;
- the other commitments (especially in relation to investment but also of an ongoing nature) imposed on the licensee;
- the purposes to which the fee will be applied, and the quantum of need for those applications;
- service affordability and the impact of fees on tariffs.

The actual choice of fee structures is also a matter that will be dependent on country-specific factors.

In this area there is no best practice, only practice.

Section 4

5 Recommendations for improvement

5.1 Introduction

The Pacific Island countries included in this study have varying potential for developing their telecommunication sectors through competition.

The populations of the countries range from over six million in the case of Papua New Guinea to around 1,400 in the case of Niue. Potential for competition in the provision of telecommunication network services is not tied directly to population as such, but to the ability of service providers to become commercially sustainable given the overall level of demand. Nevertheless, each of the study countries have a requirement to ensure that their population has affordable access to modern, efficient telecommunication services, with as much choice in the matter as the local market will sustain.

Good licensing practice is important in sustaining the best possible outcomes in the telecommunication sector, whether those outcomes are the result of competitive markets or regulated monopoly and duopoly enterprise.

An important conclusion reinforced by this study is that the performance of the sector will be enhanced by the implementation of best practice licensing, whether or not there is competition.

Best practices in licensing should be introduced irrespective of the immediate prospects for competition because the transparency and certainty that results will help all stakeholders to improve outcomes.

It is not surprising that larger Pacific Island economies tended to have had the resources and the opportunity to develop more detailed legislative and regulatory frameworks for licensing in the past. They have tended to also have a market potential that has attracted competitive entry, thereby making improved licensing not only desirable, but necessary.

5.2 Recommendations

5.2.1 Review existing legislation

It is recommended that legislation be reviewed and amended, where necessary, to ensure that the legal and regulatory framework meets best practice. All providers of telecommunication services to the public should require explicit licensing in accordance with published rules, regulations or orders setting out detailed processes and criteria.

These rules, regulations and orders should be developed and published in accordance with legislated requirements for due process by a regulator or regulatory agency that is separate and independent from any and all service operators and from the general activities of any ministry or department. The licensing, and the legislation that supports it, should encourage competitive service provision where this is economically sustainable.

Provision should be made for individual and class licences. The regulator should be encouraged to maximize the use of class licensing processes and to minimize individual licensing processes wherever feasible.

Legislation should aim for achieving service and technology neutrality, and it is for a regulator to determine how far this can be reflected in licensing at any specific time. The regulator should also have the power to limit the number of individual licences issued based on two criteria. Firstly there should be a published study of reasons. Secondly, the holders of either issued or renewed licences are determined using competitive processes as laid down, either in the legislation, or by the regulator in accordance with guidelines in the legislation.

Provision should be made for any presumptions to be made explicit concerning whether the renewal of a licence on similar terms can be reasonably anticipated. This should be up to 12 months before the expiry date so that an existing licensee can decide whether or not to continue with any current or planned investment.

Provision should also be made for fair and equitable processes for varying and revoking licences. This provision should include giving adequate notice in both cases so that any stakeholders and directly affected parties can comment and provide views and information that might assist the regulator's final determination in the matter. If a licence is revoked, explicit provision must exist for enabling an appeal.

There must be a commitment to making all processes and decisions transparent. All aspects of licence administration, including the way that licences have been allocated and charges calculated should be promptly published on the regulator's website and in other effective media.

5.2.2 Develop a model legislation

Pacific Island fora should collaborate on the development of a model legislation that reflects best licensing practices. This would assist all Pacific Island countries to review their current arrangements and consider legislative amendments.

5.2.3 Share information

Further sharing of licensing fee and charging practices, and the rationales behind them, would greatly benefit individual Pacific Island countries. It would enable them to review their own arrangements and determine relevant changes that could lead to improved administration.

Annex A: List of participants

NO	Name	Designation	Country
1	Mr. Save Vocea	Manager, Regional Relations Australasia Pacific, ICANN	Australia
2	Mr. Siaosi Sovaleni	Outreach Programme Coordinator Secretariat of Pacific Communities,	Fiji
3	Mr. Catheney Laukon	Director of Communications, Ministry of Transportation and Communication.	Marshall Islands
4	Mr. Khamla Narith	ICT Manager, Ministry of Justice	Cook Islands
5	Mr. Mitchell Tutangata	Systems Administrator, Office of the Prime Minister	Cook Islands
6	Mr. Apaya Apuahe	Technical Manager, Marshall Islands Technical Corporation	Marshall Islands
7	Mr. Robert Matheson	CEO, ITC, Ministry of Education	Cook Islands
8	Mr. Tutuli Heka	Director, Telecom Niue	Niue
9	Apii Piho	Minister, Government of Cook Islands	Cook Islands
10	Mr. Aporo Kirikava	ICT Manager, Police Department	Cook Islands
11	Mr. Criden Appi	Interim Regulator, Ministry of Transportation and Telecommunication	Nauru
12	Mr. TAKKON Chin	Chief of Department, Ministry of Public Infrastructure, Industries and Commerce	Palau
13	Mr. Kila Gulo-Vui	Director, Regulatory and External Affairs, PANGTEL	Papua New Guinea
14	Mr. Fred Christopher	General Manager, Pacific Islands Telecommunications Association	Fiji
15	Mr. Elvin Prasad	Technical Officer, Ministry of Public Enterprise, Tourism and Numbering	Fiji
16	Mr. Timoti Tangiruaine	Urban Rural Planner, Ministry of Infrastructure and Planning	Cook Islands
17	Mr. Charles Punaha	Director General, Radio Communications and Telecommunications Technical Authority	Papua New Guinea
18	Mr. Henao Iduhu	Secretary, Ministry of Communications and Information	Papua New Guinea
19	Mr. Andreas Pareanga	Internet Customer Support, Telecom Cook Islands	Cook Islands
20	Mr. Frederick Waiti	Director ICT Sig, Office of the Prime Minister and Cabinet	Solomon Islands
21	Mr. Mac Mokoroa	Chief of Staff, Prime Ministers Office	Cook Islands
22	Mr. Donnie Defreitas	Government of Samoa	Samoa
23	Mr Sandro Bazzanella	ITU-EC Project Manager, International Telecommunication Union	Switzerland

NO	Name	Designation	Country
24	Mr. Simeti Lopati Kitiseni	Operator, Tuvalu Telecommunication Union	Tuvalu
25	Mr. Frank O'Carroll	Business Development Director, Digicel Pacific Group	Australia
26	Mr. Jolden Johnnyboy	Assistant Secretary for Communication, Government of MICRONESIA	Micronesia
27	Mr. Tofinga Aisake	ICT Manager, Ministry of Health	Cook Islands
28	Mr. Opetaia Simati	Director ICT, Government of Tuvalu	Tuvalu
29	Mr. Jules Maher	CEO – Telecom Cook Islands	Cook Islands
30	Mr. Loyd Fikiasi	Economic and Legal Advisor, Office of the Vanuatu Telecommunications Regulator	Vanuatu
31	Mr. Colin Yates	Group Head of Fraud Management and Investigations, Vodafone Group Services Limited (Representing PITA)	United Kingdom
32	Mr. Mac Mokoroa	Chief of Staff, Office of Prime Minister	New Zealand
33	Mr. John Crook	Rekuleta, Rekuleta Blong Telekomunikesen	Vanuatu
34	Mr. Robert Mcfadzien	IT Manager, Telecom Cook Islands	New Zealand
35	Mr. Tevita Rokobaro	Senior Engineer, Department of Communication	Fiji
36	Mr. Ronnie Sakai	Systems Service Technician, Office of the Prime Minister	Cook Islands
37	Mr. Ngatama Sakai	General Manager, Telecom Cook Islands	Cook Islands
38	Mr. Bwanouia Aberaam	CEO, Telecommunication Authority of Kiribati	Kiribati
39	Mr. Keith Davidson	Chairman, APTLD	Cook Islands
40	Mr. Jim Marurai	Prime Minister, Government of Cook Islands	Cook Islands
41	Mrs. Gisa Fuatai Purcell	ITU Project Coordinator	Fiji
42	Ms. Kelly Aisling	Legal Counsel, Digicel Pacific Limited,	Australia
43	Ms. Maureen Hilyard	ICT Advisor, Pacific Islands Chapter of ISOC	Cook Islands
44	Ms. Mereseini Rakuika	Chairman, Telecommunications Authority of Fiji	Fiji
45	Ms Elisa Kohlhase	Legal Counsel, Office of the Regulator	Samoa
46	Ms. Pua Hunter	Director, Prime Minister's Office, Government of Cook Islands	Cook Islands
47	Ms. Pamela Joseph	Marketing Associate, Micronesia Telecommunications Corporation	Micronesia

Annex A
NO	Name	Designation	Country
48	Ms. Lizzie Taura	Manager Economics & Legal, Office of the Vanuatu Telecommunications Regulator	Vanuatu
49	Ms. Marianne Berukilukilu	Telecom Engineer, Office of the Vanuatu Telecommunications Regulator	Vanuatu
50	Ms. Meere Karotu	Manager, Telecommunications Authority of Kiribati	Kiribati
51	Mr. Jim Holmes	ITU Expert	Australia

Annex B: Data collection questionnaire

ITU Study of Network Service Provider Licensing in the Pacific – Questionnaire

Country:

1 Website:

If there is a Government or Regulatory Authority website(s) which contains any of the information being sought please identify it (or them): ______ (Please check that any website referred to is working and up to date before including the details in this reply.)

2 Legislation:

What legislation sets out the requirements for licensing of telecommunications network service providers, ISPs etc including the grant of any investment, construction, operating or commercial permission to such enterprises? Please identify the legislation and where it may be accessed electronically. If it is not accessible electronically please send a fax or scanned copy of all relevant legislation to the Project Coordinator. [Also please note that a licence might be called by other names in legislation or regulation – it is the permission or approval to do something.]

3 Regulations:

What regulations have been put into effect pursuant to relevant legislation that set out the requirements for the following:

- Applications for licence?
- Selection of licensees when the applications exceed to available licences?
- Negotiations preceding issue of licence?
- Content of licences?
- Licence restrictions
- Term of licences?
- Renewal of licences at end of term?
- Compliance with licence conditions?
- Suspension of licences?
- Cancellation of licences?
- Any other aspect of licence administration?

Please identify the regulations and where they may be accessed electronically. If they are not accessible electronically please send a fax or scanned copy of all relevant regulations to the Project Coordinator.

5 Responsibility for Licensing

Who is responsible in your country for:

- (a) Formal issue of service provider licences?
- (b) Spectrum licences?

Who is responsible for recommending or making the assessment leading to the issue of:

- (a) Formal issue of service provider licences?
- (b) Spectrum licences?

Types of Licences – Spectrum and Service Provision

Are spectrum licences and service provider licences separated in your country?

How do the two licensing regimes (if there are two) work together?

7 Regulatory Framework and Guidelines

What Regulatory Framework and Guidelines have been published by the Regulatory Authority or other responsible government body in relation to service provider and spectrum licensing and licence compliance in your country? Please identify the Regulatory Framework or Guidelines and where they may be accessed electronically. If they are not accessible electronically please send a fax or scanned copy of all relevant documents to the Project Coordinator.

8 Order in relation to licensing

What Orders of the Regulatory Authority are currently in force relating to licensing? Please identify where they may be obtained in electronic form or else send a copy (or copies) by fax or scanned copy to the Project Coordinator.

{Note that by Regulatory *Authority*, both here and later in this document, it means either the Independent Regulatory Authority if one exists or else that part of a Department or Ministry which is responsible for telecommunications licensing.}

9 Current Licences and Licensed service providers

Are service provider licences in your country unified (sometimes called universal or general, and covering all services) or service specific or multi-service (more than one service but not unified) or a combination of these?

Please list the service providers licensed or authorized to provide:

- (b) Unified (general, covering all services)
- (c) Fixed services
- (d) Mobile services
- (e) Internet services
- (f) International gateway services
- (g) Other telecommunications services

Please identify where each licence may be obtained in electronic form or else send a copy (or copies) by fax or scanned copy to the Project Coordinator.

10 Appeals

Is there provision for or rights of appeal against decisions or orders of the body referred to in Q5 in relation to licensing decisions? If so to which body may an appeal be made?

6

11 Licence Amendments

What arrangements are in place for licence amendments proposed by:

- (c) the licensee
- (d) the licensing authority or Government and how do they work in practice?

If there are legislative amendments affecting licensing, are they applicable to existing licence?

12 Licence Charges and Fees

- (e) Do you charge to assess applications for licence? If not, why not? If so, what are the charges and how were they determined?
- (f) Do you charge licensees for having a licence?
- (g) If the answer to (b) is no, why not?
- (h) If the answer to (b) is yes, are all licensees charged on the same basis of calculation or formula? Please provide a complete statement.
- (i) If the answer to (b) is yes, are the licence charges or fees payable up front, annually or both? Please set out the fee structure (and basis of calculation of fees) that applies.
- (j) Can licensees be exempted or excused from paying licence fees? If yes, please provide details of how this arrangement works, the criteria that apply, and whether any current licensees enjoy such exemptions or forgiveness of fees.

13 Future licensing

Does your administration have plans for amending licensing frameworks to include convergence and technology and service neutrality issues? If so, what are they?

Are there other plans that will change licensing in your country? What are they?

14 Staff resources

How many staff does the Regulatory Authority referred to in Q5 have? How many of these work on licensing issues? {Note that by Regulatory *Authority*, both here and later in this document, it means either the Independent Regulatory Authority if one exists or else that part of a Department or Ministry which is responsible for telecommunications licensing.}

15 Contact:

Please nominate the person who should be contacted to clarify the answers above or for further information.

Name: Position:

Organization:

Phone:

Email:

Bibliography

ADB (2010). *People First Network funded by the ADB*. Available at www2.adb.org/documents/rrps/ban/39452/39452-01-ban-rrp.pdf [accessed 9 April 2012].

Budd, P. (2008). Tonga Telecom Market Overview and Statistics. Available at www.budde.com.au/Research/Tonga-Telecoms-Market-Overview-Statistics.html [accessed 6 May 2012].

ATH (2010). Fiji. Available at www.ath.com.fj/ath-groups [accessed 22 April 2012].

CIA. (2010). 'Tonga' in The World Factbook, 2010. Available at <u>www.cia.gov/library/publications/the-world-factbook/geos/tn.html [accessed 6 May 2012].</u>

Government of Cook Islands (1989). *Telecommunications Act 1989*. Available at <u>www.paclii.org//cgi-bin/disp.pl/ck/legis/num_act/ta1989214/ta1989214.html?query=Cook [accessed 30 April 2012]</u>.

Government of Fiji (2008). *Telecommunications Promulgation of January 2008*. Available at www.paclii.org/fj/promu/promu_dec/tp2008342.pdf [accessed 27 April 2012].

Government of Kiribati (2004). *Telecommunications Act 2004*. Available at www.paclii.org/ki/legis/num_act/ta2004214/ [accessed 26 April 2012].

Government of Marshall Islands (1990). *Marshall Islands National Telecommunications Authority Act 1990*. Available at <u>www.paclii.org//cgi-bin/disp.pl/mh/legis/consol_act/mintaa1990567/mintaa1990567.html?query=Marshall [accessed 6 May 2012].</u>

Government of Marshall Islands (2008). *National Telecommunication Policy*. Ministry of Transportation and Communications, Majuro: Government Printer.

Government of Nauru (2002). Telecommunications Act 2002. Yarren District: Government Printer.

Government of Niue (1972). Niue Radio Regulations 1972. Alofi: Government Printer.

Government of Niue (1989). Communications Act 1989. Available at www.paclii.org/nu/legis/num act/ca1989176/ [accessed 20 April 2012].

Government of Papua New Guinea (1996). Telecom Act 1996. Available at www.ipbc.com.pg/PDF files/Telecommunications%20Act%201996.pdf [accessed 6 May 2012].

Government of Papua New Guinea (2009). National ICT Act 2009.

Available at www.nicta.gov.pg/Legislation/NICTA%20Act%202009.pdf [accessed 6 May 2012].

Government of Papua New Guinea (2010). Telecommunications Licensing Regulations 2010. Available at www.nicta.gov.pg/Legislation/NICTA%20(Operator-Licensing)%20Regulation.pdf [accessed 7 May 2012].

Government of Samoa (2005). Telecommunications Act 2005. Available at <u>www.mcit.gov.ws/Portals/161/Publications/Legislative/acts/TELECOMMUNICATIONS_ACT_2005_</u> <u>Eng.pdf [accessed 30 April 2012].</u> Government of Samoa (2007). *Telecommunications Licence Fee Regulations 2007*. Available at <u>www.regulator.gov.ws/files/documents/telecom-license-fee-regulations-2007.pdf</u> [accessed 30 April 2012].

Government of Solomon Islands (2009). *Telecommunications Act 2009*. Available at www.tcsi.org.sb/images/stories/pdfs/Telecommunications %20Act2009.pdf [accessed 6 May 2012].

Government of Tonga (2000). *Telecommunication Act 2000*. Available at <u>www.legislation.to/Tonga/DATA/PRIN/2000-021/TongaCommunicationsCorporationAct2000.pdf</u> [accessed 6 May 2012].

Government of Tuvalu (1993). *Tuvalu Telecommunications Corporation Act 1993*. Available at <u>www.tuvalu-legislation.tv/tuvalu/DATA/PRIN/1993-</u> 004/TuvaluTelecommunicationsCorporationAct1993.pdf [accessed 23 April 2012].

Government of Vanuatu (2008). *Principles and Objectives of Telecommunications Licensing Policy*. Available at <u>www.trr.vu/attachments/030_Licensing%20policy%20as%20approved.pdf [accessed 23 April 2012].</u>

Government of Vanuatu (2009). *Telecommunications and Radiocommunications Regulation Act 2009.* Available at

www.trr.vu/attachments/article/53/Telecommunications%20and%20Radiocommunications%20Regulatio n%20Act%202009.pdf [accessed 23 April 2012].

IDRC (2006). *Digital Review of Asia Pacific 2007-2008*. Available at <u>www.web.idrc.ca/en/ev-127182-201-1-</u> <u>DO TOPIC.html [accessed 24 April 2012].</u>

ITU (2003a). World Summit on the Information Society. Available at <u>www.itu.int/wsis/index.html</u> [accessed 6 May 2012].

ITU (2003b). World Summit on the Information Society: Declaration of Principles. Available at www.itu.int/wsis/docs/geneva/official/dop.html [accessed 6 May 2012].

ITU (2005). *Trends in Telecommunication Reform 2004/5 – Licensing in an Era of Convergence*. Available at www.itu.int/pub/D-REG-TTR.7-2004/en [accessed 24 April 2012].

ITU (2006). World Telecommunication Development Conference Doha Declaration. Available at www.itu.int/ITU-/wtdc06/DohaDeclaration.html [accessed 10 April 2012].

ITU (2010). Policy Guidelines on Convergence. An outcome of the ITU-EC for Sub Sahara Africa (HIPSSA). Available at www.itu.int/ITU-D/projects/ITU_EC_ACP/hipssa/Activities/SA/docs/100322_ITU-SADC_Deliverable_3_Convergence-Policy_DRAFT-v2.0.doc [accessed 6 May 2012].

World Bank (2010). *Project Appraisal Proposal to Solomon Islands*. Available at <u>http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2010/03/15/000333037_2010031523</u> 5525/Rendered/PDF/530540PAD0P113101Official0Use0Only1.pdf [accessed 25 April 2012].

WTO (2012). Service Agreement: GATS Telecommunications Annex. Section 4. Available at www.wto.org/english/tratop_e/serv_e/12-tel_e.htm [accessed 26 April 2012].

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