1.0 Introduction

1.1. The 4th Meeting of Policy and Regulatory Forum for Pacific (PRF-P) was held from 6 to 8 July, 2011 in Nadi, Fiji. The Asia-Pacific Telecommunity (APT) organized the Forum in collaboration with the Government of Fiji, FINTEL and Pacific Islands Telecommunications Association (PITA).

1.2. A total of 60 participants representing APT Members, Associate Members, and Affiliate Members attended the event.

2.0 Opening Session

2.1 Opening Address was given by Mr. Toshiyuki Yamada, Secretary General, APT. He welcomed all the distinguished delegates to the Policy and Regulation Forum for Pacific. He thanked the Government of Fiji, FINTEL and PITA for their efforts and excellent arrangements. He noted that in recognizing that the Pacific has its own unique issues, APT organized a separate Policy and Regulation Forum for the Pacific region. He mentioned that with the introduction of competition in many countries, prices for the provision of telecommunications services had lowered. However, penetration levels for both mobile and broadband are still low in the Pacific. These together with the speed and capacity of internet need to be improved and many challenges remain. He also mentioned the direct correlation between broadband penetration and the economy of a country. One of the objectives of this Forum is to follow-up on the implementation of the “Plan of Action” and he encouraged delegates to think carefully and prepare for the discussion on how to progress the implementation of the relevant actions. The full text of the address is attached in Doc. No. PRF-P/4/37.

2.2 Opening Address was delivered by Mr. Fred Christopher, PITA Manager on behalf of Mr. Ivan Fong, President of PITA. He welcomed the delegates to Fiji and thanked APT arranging the Forum for policy and regulation for the Pacific. He also thanked the Government of Fiji for hosting the forum. In his speech, he mentioned that there are issues that may not be effectively addressed by
the free market. In such situations, regulatory policy is key to setting a good balance for the needed growth and socio economic development.

He also mentioned new factors in Policy and Regulation including cloud infrastructure, technology convergence, national broadband infrastructures, ICT for climate change and education, and cyber security and cybercrime. These stressed the importance of the Forum where countries can work together to exchange information, develop ideas and share best practices for themselves. The full text of the address is attached in Doc. No. PRF-P/4/38.

2.3 The inaugural address was delivered by Honourable Aiyaz Sayed-Khaiyum, Attorney General and Minister for Public Enterprises, Communications, Civil Aviation, and Tourism, Fiji. In his address, he mentioned that in the Pacific, the economy of scale is low and the level of human resource and access to capital infrastructure is limited. He mentioned that despite the difference, Pacific islands nations can learn from similar experiences from metropolitan countries. He also mentioned the liberalization in Fiji that recently took place and for which regulation and laws need to be put in place. He stressed the importance of the development of policy for each individual demographic situation together with the regional approach to ICT development. He also stressed the importance of the collaboration between the industry and regulator to address issues.

2.4 Mr. Toshiyuki Yamada presented a token of appreciation to Honourable Aiyaz Sayed-Khaiyum, Attorney General and Minister for Communications, Fiji for inaugurating the event.

3.0 Session 1

Adoption of Agenda

3.1 The agenda and the programme of the PRF-P was adopted.

Session 1: Review of Telecommunication Status in the Pacific

Chairman: Mr. Toshiyuki Yamada, Secretary General of APT

3.2 Follow Up on the Bali Plan of Action was presented by Mr. Stuart Davies, Telecom Expert, APT (Doc. No. PRF-P/4/18).

The presentation went through the Bali Plan of Action and Action items that are related to the PRF-P.
Q&A
- PNG requested that there should be coordination among many organizations and stakeholders in the region such as SPC, ITU, and APT in the effort to implement the action plans.
- Mr. Davies responded that APT makes a significant effort to coordinate with other organizations in the region.

3.3 Perspectives on Telecommunication Reviews was presented by Mr. Fred Christopher on behalf of Mr. Ivan Fong, President of PITA (Doc. No. PRF-P/4/23)

The presentation gave an overview of challenges in the Pacific, the environment in the Pacific and how the development of ICT was impacting the region. It also discussed the challenges faced by operators and regulators including the development issues in the Pacific. Mr. Fong advised that he thought the most important issues in the region at this time are Disasters, Continuity, and Risk Reduction.

3.4 World Bank support for ICT Development in the Pacific: Experiences and Looking Ahead was presented by Ms. Natasha Beschorner, Senior ICT Policy Specialist, Global Information & Communications Technology Department, World Bank. (Doc. No. PRF-P/4/20)

The presentation highlighted the global significance & trends of ICT development such as machine-to-machine communication, broadband, and mobile applications. The correlation between the broadband investment and the economic growth was stressed. Remaining ICT challenges were raised. It provided some information on World Bank support including assistance to governments, country projects, Pacific ICT Regulatory Resource Centre, and the Pacific Regional Connectivity Program, the first phase of which includes Tonga-Fiji submarine cable connectivity. It also touched on broadband demand of the Pacific. Lastly, it provided a forward looking view in the area of policies and regulations, i.e. spectrum reform, unified licensing, and open access to infrastructure, infrastructure investments through direct investment or partnership, and demand aggregation of the Pacific.

4.0 Session 2: Capacity Building for the Pacific Islands
Chairman: Mr. Sean Weekes, Director, Information Communication Technology, Nauru Island

4.1 Pacific ICT Regulatory Resource Centre was presented by Mr. Henao Iduhu, Secretary for Communications, PNG (Doc. No. PRF-P/4/22)

The presentation provided the background of the Pacific ICT Regulatory Resource Center (PIRRC). It talked about the regulatory challenges and the
establishment of the resource center in response to the challenges. It also listed out benefits of the center and advised on the next steps.

4.2 Pacific ICT Regulatory Resource Centre and its Business Plan was presented by Natasha Beschorner, Senior ICT Policy Specialist, Global Information & Communications Technology Department, World Bank. (Doc. No. PRF-P/4/21, PRF-P/4/24)

The presentation talked about the establishment of the PIRRC and the next steps forward including the funding.

Q&A

- Samoa wanted to know how to overcome the problem in the event that the regulator in each country did not provide the information to the center.
- Mr. Henao Iduhu responded that PIRRC would not bypass the regulator in each country and hoped that the regulator would provide the information to the center. The center would perform as an independent regulator with high level of confidentiality.
- Mr. Box wanted to know the steps the PIRRC undertook to overcome the cost recovery problem of the center.
- Mr. Iduhu responded by encouraging Island countries to pay the membership fees with the intention that the center would become self-sustainable.

4.3 Strengthening Parliaments in Pacific ACP Countries was presented by Mr. Siaosi Sovaleni, Pacific ICT Outreach Programme, SPC (Doc. No. PRF-P/4/25).

The presentation introduced the structure of SPC and the Regional Institutional Framework (RIF). It touched briefly on the ICT Access for the Poor project. It also outlined the training provided by the Academy. It explained the challenges faced and the approach taken by the regions Parliaments in ICT Capacity Building. It also gave an update on the SPC National and Regional activities and the activities to come.

4.4 Building Capacity and Capabilities in the Pacific Tele-community: an Agenda for the future was presented by Dr. Esther Batiri Williams, Deputy Vice-Chancellor (Administration & Regional Campuses), Office of the Vice-Chancellor, the University of the South Pacific (Doc. No. PRF-P/4/26).

The presentation covered the activities of University of South Pacific (USP) in the area of ICT human Capacity Building in the Pacific region including programs and courses offered and the implementation strategy of the program with its partners such as ITU and SPC. It also briefly touches on the
role of Japan-Pacific ICT Center and the partnership of USP and JICA in capacity building.

4.5 Chairman then summarized the session.

5.0 Session 3: Policy and Regulation issues on Internet
Chairman: Ms. Elizabeth Powell, Permanent Secretary of Public Enterprises, Communications, Civil Aviation and Tourism, Fiji

5.1 PacCERT was presented by Mr. Siaosi Sovaleni, PacCERT Board Member (Doc. No. APT/PRF-P/4/30)
The presentation outlined the background, the structure, expected service, current status, the operation, and the sustainability of PacCERT. PacCERT’s goal is in line with the APT Bali Plan of Action, Objective B: Strategy 1 of combating cybercrimes and enhancing cybersecurity. In the Noumea Ministerial decision, ITU is requested to support cyber security and child online protection initiatives in the region and continue to support the operations of the Pacific Computer Emergency Response Team (PacCERT). The support of ITU to PacCERT is ongoing.

Q&A
- Nauru queried on the sustainability and the funding of the initiatives.
- Mr. Siaosi replied that the support from stakeholders such as ITU and World Bank for the initial years of operation was sought. The contribution from members could also contribute to the sustainability.
- Ms. Powell commented that there should be an assessment on possible economic impact of not having PacCERT. She mentioned that should there be such assessment, the attempt to find funding to the PacCERT would be much easier.
- Mr. Siaosi suggested that USP could help in conducting research on this aspect.
- Dr. Williams mentioned the assistance from Australia and New Zealand in the inception stage of the PacCERT. She also added on possible funding from ITU and World Bank.
- Mr. Punaha suggested considering merging PIRRC and PacCERT in order not to duplicate the effort. Mr. Iduhu added that the two centers were established to address different issues. The avoidance of duplicated effort had been taken into account during the establishment of the centers.

5.2 New gTLDs – New Internet Extension was presented by Mr. Save Vocea, ICANN (Doc. No. PRF-P/4/07).
The presentation covered the basics about the new generic top level domain (new gTLD) program and how ICANN arrived at some key policy decisions that were discussed in the Supporting Organisations constituency.

Q&A
- Mr. Holmes queried in case one registered domain with roman characters, whether one would receive the corresponding non-roman characters such as Cyrillic character in case of .ru.
- The speaker responded that it depended on how the relevant ccTLD registrars managed it. There are cases where the applicant can obtain the corresponding IDN on one registration such as in Thailand.
- Solomon Islands queried whether gTLD could include alphanumeric character.
- The speaker responded that any characters could be included depending on the applicant.

5.3 Governmental Policy and IPv6 Adoption: Strategic Linkages was presented by Ms. Miwa Fujii, APNIC (Doc. No. PRF-P/4/12)

The Asia Pacific Network Information Centre (APNIC) is a regional body that is in charge of the fair distribution and responsible management of Internet Protocol (IP) addresses. The objective of this presentation was to provide the most up-to-date information on the status of IPv4 address exhaustion and explain the importance of IPv6 network deployment to policy makers and regulators in the Pacific region. The presenter also sought their understanding to support and facilitate industry transit to IPv6.

IPv6 deployment is picking up speed in many parts of the world; yet Internet traffic over IPv6 is significantly less than IPv4. Close attention is needed to further increase the rate of IPv6 adoption. The development of the Internet, including the challenge of IPv6 deployment, has been undertaken in a multi-stakeholder environment. Governments play an essential role as important users of the network and who could also to provide incentives to industry to encourage IPv6 deployment.

Q&A
- On the query regarding the case that some ISPs auction their IPv4 addresses, the speaker responded that during 2008-2009, a new policy was developed allowing transfer of the unutilized of IPv4 addresses to a new entity. This transfer must be informed to APNIC.
- The speaker added that APNIC could disclose which ISP in each country has implemented IPv6; however, implementation of IPv6 in the backbone did not necessarily mean that the IPv6 would be available on the national network.
- The speaker suggested that it was most likely that the dual stack network would need to be deployed in all transition networks at some point in time. She mentioned that for the transition, the tunnelling methodology, which is similar to VPN, would bring down the performance. She suggested that during the bootstrap period, the dual stack and some tunnelling methods may be required.

6.0 Session 4: Update on Pacific Islands Regulation Activities

Chairman: Mr. Henao Idahu, Secretary for Communications, PNG

6.1 Responses to the Great East Japan Earthquake in ICT area was presented by Mr. Hirotsugu Kohara, Director for International Policy Coordination, Global ICT Strategy Bureau, MIC, Japan. (Doc. No. PRF-P/4/28)

The presentation shared the lessons learned in the ICT area. The response to the great East Japan earthquake had changed the future ICT and communication needs in Japan. Twitter has emerged as a new and valuable means of communication during the disaster. Internet has become a lifeline in Japan. The presentation also explains the utilization of ICT in response to the disaster and the types of safety confirmation services deployed.

6.2 Disaster Communications Plan was presented by Mr. Richard Misech, CEO Palau National Communications Corporation (PNCC) and Chairman of the PITA Disaster Management Working Committee (Doc. No. PRF-P/4/29).

The presentation gave a brief overview on the disaster management in the Pacific in regards to the environment, threats, and relevant organizations.

Consisting of small Islands in a large ocean expanse, the Pacific Islands have greater risks from various types of natural disasters, e.g., Tsunami, Rising sea levels, Tropical cyclones, etc. Currently, there is a Community Resilient Programs (CRP) under SOPAC which provide community based Disaster Risk Management (DRM) & Disaster Management Framework (DMF). The role of telecommunication (and PITA) is being the first respondent for safety of lives and assessments, Public & Business communications continuity and Alert & Monitoring. In the Pacific, many countries have national policies for Disaster & Emergency Management. The Pacific region relies more on space applications & technologies for Alerts/Monitoring, Response & Mitigations.

The presentation touched on the PITA Regional Plan in terms of Response/Mitigation, Preparedness, and Deployment. Lastly, cooperation for Disaster Management is encouraged.

6.3 TAF – Creating an environment to be the key driver of economic growth for Fiji was presented by Ron Box, CEO, TAF, Fiji (Doc. No. PRF-P/4/13)
The presentation explored the TAF CEO’s objectives, the inter-related roles of the Ministry of Communication, Fiji Commerce Commission, TAF, the Consumer Council and the challenges and steps forward.

6.4 **The converged Regulator** was presented by Mr. Charles Punaha, CEO, NICTA, PNG (Doc. No. PRF-P/4/16).

The presentation talked about the National ICT Act reforms in Papua New Guinea and their impact. It discussed the institutional arrangements forming NICTA as a converged regulator, operator licensing regime, radiocommunication licensing regime, wholesale & access and universal access regimes. It also highlights the benefits of converged regulator and challenges going forward.

6.5 **Multi-Sector Regulation – The Samoan Experience** was presented by Mr. Donnie De Freitas, Regulator, Samoa (Doc. No. PRF- P/4/15).

Samoa is one of the few Pacific Countries that is in the process of instituting a multi-sector regulator. The present Office of the Regulator (OOTR) currently has responsibility for regulating the Telecommunications sector, Broadcast and Postal Services and in discussion to add electricity and water regulation. The presentation previewed a firsthand experience of multi sector regulation in a small island state, the particular challenges, opportunities presented and a frank portrayal of the issues.

The document highlighted the need for an appreciation of the real issues involved in the regulating the different sectors and why there is need for an overarching Public Utilities Legislation before attempting such an approach.

**Q&A**

- Mr. Punaha shared the experience in PNG that the ICT sector financed the regulation of other utilities in the country.

- Mr. Holmes mentioned the Samoan Telecommunication Act was a good template for legislation in the Pacific. He mentioned that Samoa had copied the Act for other sectors such as broadcasting. He had a view that this did not always work. He advised that the Broadcasting Act had been taken back for amendment due to the mentioned fact.

- Mr. De Freitas replied that there were some amendments of the Telecommunication Act and requested that if any country wished to copy the Act, they should consult Samoa first. He mentioned that one needed to adapt some clauses when trying to copy the Telecom Act to the broadcasting sector.
7.0 **Session 5: International Connectivity for the Pacific Islands**  
*Chairman: Charles Punaha, CEO, NICTA, PNG*

7.1 **International Connectivity – the Pacific Scene** was presented Mr. by John Hibbard, CEO, Hibbard Consulting Pty Ltd., Australia (Doc. No. PRF-P/4/10).

Broadband Internet is the key to the economic development and social wellbeing of a country. Effective broadband requires an abundant and less expensive connection to the global internet. Submarine cables are the key and this presentation provides an update on the submarine cable status in the Pacific and identified some of the issues that Regulators face.

**Q&A**

- Dr. Horton queried from the perspective of regulator on the existence of the cable protection in the Pacific. The speaker responded that the cable protection in Australia and New Zealand had become the model of the world, which even the US had looked into.

- On the query regarding the life expectancy of the cable, the speaker responded that the technical life expectancy was 25 years but this was conservative figure, realistically, the cable could last for up to 35 years. The economic life expectancy is, on the other hand, 15 years. With the advancement of technology, which increases the capacity of the cable through the terminal equipment, has extended the life to 25-30 years. He also agreed with the comment that the cost of laying out new cables is cheaper than the maintenance/upgrade of an old cable.

7.2 **International Connectivity & Deregulation** was presented by Mr. Samuela Samuta, Fintel (Doc. No. PRF-P/4/33)

The presentation explained the legislation mechanism and what happened with the deregulation of international connectivity in Fiji, which has resulted in the reduction of price to the consumer.

7.3 **Pacific Regional Connectivity: Progress and Prospects** was presented by Ms. Natasha Beschorner, Senior ICT Policy Specialist, Global Information & Communications Technology Department, World Bank (Doc. No. PRF-P/4/32)

The presentation outlined the bandwidth demand and internet constraints in the Pacific. It gave examples of demand, current access and cable options in some Pacific countries. It also touches briefly on the Pacific Regional
Connectivity Program and possible World Bank support including steps to implement.

7.4 Chairman summarized the important points of all presentations.

8.0 Session 6: Policy and Regulation for the Consumer
Chairman: Mr. Samuela Samuta, Fintel, Fiji

8.1 Issues in Telecom and ICT Sector in Fiji: A Consumer Perspective was presented by Ms. Premila Kumar, CEO, Consumer Council of Fiji (Doc. No. PRF-P/4/17).

Consumer empowerment and protection are critically important to deal with the endless consumer exploitation in the telecom and ICT sectors. Rapid changes in the Telecom and ICT sectors have resulted in several problems for consumers as policies and regulations are prone to “implementation deficit”. This presentation argued that a policy is only effective if consumers are aware of the policy or are involved in policy making to assist regulators in identifying systemic issues in the industry.

Q&A

- Nauru asked if there was any regional approach in consumer protection. The speaker responded that consumer council had partnered with Consumer International and was looking for source of funding such as the EU. She added that at present, Fiji was the only country in the region that was active in the area.

- Mr. Box queried on how to empower consumer and who should empower the consumer.

- The speaker replied that everyone had the responsibility including TAF, education sector, etc. She suggested the best possible way was to have the operator communicate to the consumer.

- Vanuatu added that in Vanuatu the consumer guideline was drafted and the consumer group was formed. He mentioned that this would make consumer more powerful when going to operator. He stressed the vital role of consumer group.

- By giving examples in PNG, Mr. Punaha raised two issues on the empowerment of consumer in the aspect of the right to choose the operators and the control of content such as pornographic sites and the
improper advertisement of unhealthy services that one should be mindful of.

- Dr. Horton commented that one should focus on the industry to take some role in modifying behavior and defining the benchmark. This is to be recognized by regulator.

- Mr. Davies pointed out that the international telecom user group could be a good point of contact for collaboration and that the telecom user groups in Australia and New Zealand were quite vocal and active in the area.

8.2 **Competition Policy and Law in Fiji** by Dr. Mahendra Reddy, Chairman, Fiji Commerce Commission (FCC), Fiji (Doc. No. PRF-P/4/09)

Small island countries are gradually attempting to deregulate their economy in order to provide flexibility to its firms operating in an ever changing and challenging global market. During this process, regulators and policy makers have found themselves under immense pressure from the private sector on the nature and degree of regulation of commerce activities. The private sector argues that an economy left to the market will reduce burden on state, improve efficiency and growth in the economy and thus contribute to the country’s developmental objectives. However, there are others who argue otherwise. They believe that Competition law and policy can play an important role in the wider advancement of developing countries. Competition policies aim at ensuring that competition in the market place is not restricted in a way that is detrimental to the society. The presentation demonstrated why a vigilant regulator such as Fiji Commerce Commission is a must for small economies and how firms could distort a competitive market solution via their conduct.

8.3 **Consumer Issues** was presented by Mr. Kapila Chandrasekera, Telecom Users Group, Fiji (Doc. No. PRF-P/4/34).

The presentation discusses various consumer issues including Network Access, Interconnection, Access to Land/ Power, Net Neutrality, Data Privacy & Libel, and Acceptable Use Policy. The speaker emphasized the need for balance on all aspects of regulation and market forces.

9.0 **Session 7: Policy and Regulation for Business**

*Chairman: Mr. Donnie De Freitas, Regulator, Samoa*

9.1 **Mobiles for Development and greater Financial Inclusion** was presented by Mr. Tillman Bruett, Regional Financial Inclusion, Advisor and Project Manager, Pacific Financial Inclusion Programme, UNCDF (Doc. No. PRF-P/4/35).
The presentation introduced the concept of Mobile Money and what it can do for clients, business, and government. It also touched on the Mobile Money ecosystem, the partnership and how it can help the financial inclusion in the Pacific.

**Q&A**

- Mr. Holmes wanted to know why the Pacific was not a suitable place for Mobile Money. The speaker responded that this was a high volume, low margin, and low transaction fee business; therefore, the incentive to be involved is low. The volume in the Pacific is low due to the low and sparse population.

- On the situation of regulation of Mobile Money in Fiji, the speaker responded that the Reserve Bank of Fiji is at the forefront in Mobile Money and it is permissive of the service. The Mobile Money service is already in Fiji, Tonga, and Samoa and will be soon in Vanuatu and PNG.

9.2 **Digicel Mobile Money** was presented by Mr. Stephen Breen, Digicell (Doc. No. PRF-P/4/36)

The paper talked about Digicel Mobile Money and various aspects of the project implementation in the Pacific.

**Q&A**

- Nauru asked how much this system roughly cost. The speaker responded that the software and platform cost around 2 Million USD. Currently, there is a hub in Fiji that can run 5 up to markets.

- Vanuatu queried on the experience regarding the technology involved, consumer problem, and the interaction between banking and telecom regulators.

- The speaker responded that the system ran on USSD so it worked in 2G, 3G, and 4G. The system was designed for low-end handset for the purpose of financial inclusion. In Fiji, for example, the service offered is an opt-in service with self registration by the customer and Digicel had enough customer detail to meet the requirement of the reserve bank regulation in opening the account.

9.3 **NGN Regulatory Challenges** was presented by Mr. Patrick Emery, ACMA (Doc. No. PRF-P/4/27)
Most telecommunications regulatory arrangements are underpinned by technical and commercial assumptions based on legacy network architecture. This includes the coupling between service and application layers, and the concentration of intelligence in the network. Next Generation Networks (NGNs) challenge these assumptions, and therefore placed pressure on existing regulatory concepts and approaches. For example, NGNs raise particular regulatory and associated policy issues in relation to quality of service, numbering and privacy and jurisdictional issues. The challenge for regulators is to identify these regulatory pressures, and adapt the legacy regulatory processes to the emerging NGN environment.

**Q&A**

- Mr. Holmes queried regarding the NGN on the aspect of the emergency service requirement, USO, and interception. The speaker responded that with the NGN, the geographical based numbering is diluted. On the interception question, while this is possible, there is the possibility to do the encryption at the higher layer and therefore make interception very difficult. As for the USO, this is covered in the NBN.

- On the issue of taxation of transactions for Mobile Money, the speaker responded that most of the countries did not impose tax on it. The operator will be taxed on revenue generating from the service.

- On the question of transaction fee for different amount of money transfer, the speaker responded that this depends on market to market. Currently, paying bills via Mobile Money is cheaper than other channels.

- On the security of customer information in Mobile Money and complaints from the consumer, the speaker responded that the system is secured through high grade hardware and software. On the issue of complaints, the major complaints came from the consumer pushing the wrong number and the password problem.

10.0 **Session 8: Closed Regulator Discussion**

*Facilitator: Mr. Patrick Emery, ACMA, Australia*

**Topics:**

- Service and Technology Neutral Licensing
- Benchmarking of retail and wholesale rates
- Role of Social Network
- Regulator’s Role in relation to content
- Others
10.1 This session was a round-table discussion with the candid exchange of views and experience sharing among the regulators in the Pacific on the topics which are of interest in the Pacific region:

10.4 The lively general discussion including questions and answers was conducted. As outcomes of the discussion, the following comments and suggestions were made:

10.4.1 The participants agreed that Pacific regulators should continue to exchange information and regulator experience topics of mutual interest. It was agreed that future discussion and dialogue should be appropriate for particular topics. For example:

(1) Regulators should identify topics that could be studied by the Pacific ICT Resource Centre. Initial topics identified at the meeting were retail and wholesale benchmarking, submarine cable protection, IPv6 transition strategies, availability of training and capacity building and consumer issues (especially strategies to empower consumers and encourage operators to take a responsible approach to responding to consumer complaints). It was agreed a letter be sent to the PIRRC outlining topics for initial PIRRC consideration.

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<th>Decision No. 1 (PRF-P/2011/1)</th>
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<td>APT is to send a letter outlining topics that are relevant to the PIRRC for initial consideration and copy to Members.</td>
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(2) Pacific Regulators should discuss issues of mutual interest that are important topics of discussion in other forums. Examples include the future of the International Telecommunication Regulations (which will be discussed at the World Conference on International Telecommunications (WCIT-12) in 2012) and measures to prevent the hijacking of telephone numbers (which was subject of Resolution 61 at the 2008 World Telecommunication Standardisation Assembly (WTSA-08)).

(3) Pacific Regulators should exchange experience on issues of mutual interest, with a view to developing a common operational and tactical approach to dealing with regulatory issues. Because of the confidential nature of these discussions, this forum should be restricted to regulators. Examples of topics that could be discussed include the behaviour of operators, and common approaches that can be taken by regulators to dealing with operators supplying services in different jurisdictions in the Pacific.
10.4.2 It was also agreed that regulators should provide notification to other Pacific regulators when public consultation is being undertaken. This can be achieved by establishment of an e-mail reflector.

10.4.3 Other issues that were discussed include:

- The PIRRC can be the central point of compiling the information such as the regulator’s web sites together, information on training course, etc.
- Network externalities and settlement sharing between developed and developing countries
- International roaming
- Mobile number portability
- Mobile Broadband and universal service
- Infrastructure sharing
- Digital dividend of 700 MHz band
- Content regulation and strategies to deal with content regulation issues, including working with other regulators and the use of general code of conduct developed by service providers and accepted by the regulator.
- Counterfeit product/equipment being supplied into the region.
- Capacity of the regulator to seek penalties, including in lieu of a formal prosecution.

Day 3 : 8 July 2011

11.0 Session 9: Telecommunication Policy and Strategy for the Pacific Islands – Part I
Chairman: Mr. Richard L. Misech, General Manager, PNCC, Palau

11.1 Regulation and Changing Times was presented by Dr. Bob Horton, Board Member of NICTA, PNG (Doc. No. PRF-P/4/08)

11.2 A Plan for the future encompassing Broadband and Universal Service was presented by Dr. Bob Horton, Board Member of NICTA, PNG (Doc. No. PRF-P/4/08)

The two presentations addressed the changing role of regulation with a particular emphasis on the challenges of broadband policy formulation and implementation. Both developed and developing countries were considered and the influence of these factors on universal service

11.3 Funding Universal Service was presented by Mr. Jim Holmes, Director, Incyte Consulting (Doc. No. PRF-P/4/05)
This presentation examined the evolution of US funding and whether a new paradigm is forming taking account of broadband and other service imperatives. Particular attention was given to funding arrangements in the Pacific. Although divergent strands of practice could be identified, finding overall evidence of a new paradigm is much harder.

**Q&A**

- PNG shared the experience on the issue of accumulation of USF and the difference level of levy imposed. In PNG, the Treasury Department determined it to be 2.5% whereas the industry preferred it to be 1.5-2%.

- Vanuatu explained the principle it deployed to determine the level of levy of USO.

- Mr. Box wanted to know how the Pacific countries should handle the payphone issues. Mr. Holmes responded that one should examine who were using it and whether they were local people. There are various sources of funding. It can be put onto the USO. The government can also fund it in many other ways. He gave examples of countries where this was funded through the community funding such as the US and India. One might also consider subsidizing people to use mobile phones which is cheaper.

- Chair requested that the USO to be the topic of further discussion in the future.

11.0 **Session 10: Telecommunication Policy and Strategy for the Pacific Islands – Part II**

*Chairman: Ms. Lizzie Taura, Manager, Market, Competition & Legal Affairs, Telecommunications & radiocomm Regulator (TRR), Vanuatu*

12.1 **The converged licensing** was presented by Mr. Jim Holmes, Director, Incyte Consulting (Doc. No. PRF-P/4/04)

Licensing has come a long way from the technology and service specific individual licences that reflected a high degree of central command and control about what was to be provided and how. The presentation discussed the imperatives for and types of licensing simplification and convergence – a process often referred to as unified licensing. Special mention was made of the Asia Pacific situation and some exciting developments in our region.

**Q&A**

- Mr. Davies requested a comment on MVNO licenses. The speaker responded that this was very rare in the Pacific but it was being used to boost the competition where the volume is not high.
- Ms. Fujii asked what the driving force for the evolution of licenses was. The speaker responded that the content of the license on the vertical axis and the control level on the horizontal axis are the drivers.

- Nauru asked if there was any MVNO riding on Digicel in other parts of the world. The speaker responded that this existed only in Nauru.

12.2 Pacific Benchmarking Update was presented by Ms. Noelle Jones, Principal Consultant, Network Strategies, New Zealand. (Doc. No. PRF-P/4/14)

In general, internet penetration in Pacific Island countries is increasing slowly. Globally, Internet penetration is typically significantly higher in other small island developing countries. Current fixed broadband penetration in Pacific Island countries remains low. Internet affordability is clearly an issue in the Pacific. The presentation provided the benchmark on price of internet and mobile services among many Pacific Island countries.

Q&A

- Mr. Holmes asked about the facility for benchmarking for the Pacific as a procedural improvement.

- The speaker responded that obtaining information in Pacific is difficult. She suggested the PIRRC to conduct training on the benchmarking and learn about benefits and pitfalls of benchmarking.

- Dr. Horton asked for clarification on the reason for difference between the Caribbean and Pacific.

- The speaker responded that the Caribbean consisted of many separate nations with differences. Jamaica, for example, has high population whereas countries like St. Lucia and the eastern Caribbean do not have the economy of scale. The income of the region also varies drastically. For example, Bahamas, which has high influx of visitors, cannot represent the situation of Caribbean.

- Mr. Box suggested the APT to collect range of issues raised during the forum that are relevant to PIRRC and write to PIRRC and copied to Members.

12.3 Internet (broadband) Speed when accessing the Internet was presented by Mr. Jim Holmes, Director, Incyte Consulting, Australia. (Doc. No. PRF-P/4/06)
This presentation looked at the importance of broadband speeds and the ways in which limitations arise for broadband usage and the possible solutions that are available to address those problems. The difference between claimed and delivered speeds was discussed.

Q&A
- Mr. Horne from Vanuatu wanted to know if there is any standard for simple websites available as more and more websites are becoming very complex and bandwidth hungry and these websites made the task more difficult.

- Dr. Horton replied that there was study within ITU reported that the human physiology can absorb the information up to 9 Mbps. This is fundamental and natural barrier but machine to machine communication may require more bandwidth in the future.

- Mr. Holmes suggested that the standard of simple website could be a topic for the PIRRC to look at.

13.0 Session 11: Future Outlook

Chairman: Mr. Haggai Arumae, Director, Market Intelligent & Competition, Telecommunication Commission, Solomon Islands


The presentation provided an overview on the ICB4PAC project and its methodology. The Global ITU-EC-ACP Project is a platform for regulatory harmonization. It linked substance of policy and regulation to human & institutional capacity building. The speaker advised that it was important to always maintain dialogue with the countries and to get their agreement. The presentation reported on the progress of the projects and listed out the success factors of the project.

Q&A
- Mr. Holmes sought clarification on the termination date on the budget for the programme.

- The speaker responded that the project was supposed to finish in September 2011 and that the ITU and EC were currently finalizing the budget for the 2nd phase.
13.2 ICT Policy and ODA in ICT Fields of Japan was presented by Mr. Yoshihisa Takada, Institute for Media and Communications Research, Keio University, Japan (Doc. No. PRF-P/4/11).

The presentation gave an overview of ICT Policy in Japan including national ICT strategies, the new broadband super highway initiative and associated competition policy in Japan, an outline of the amendment for the Broadcast Act and the attractiveness of ISDB-T. It also touched on Japan’s economic cooperation and ODA.

13.3 APT Preparations for WRC-12, WTSA-12 and WCIT-12 was presented by Mr. Stuart Davies, Telecom Expert, APT (Doc. No. APT/PRF-P/4/19)

The presentation provided information the APT’s preparation activities for WRC-12, WTSA-12, and WCIT-12. It explains the structure of the APT preparatory groups, the future meetings of the preparatory groups, and issues identified by the meeting for its consideration. The PICs were urged to be involved in the preparation process.

Q&A
- Dr. Horton commented on the WRC-12 that the issue of C-Band would come up again in WRC-12.

14.0 Summary of the Forum
Chairman: Mr. Stuart Davies, Telecom Expert, APT

14.1 Panel Discussion: The Way Forward
Facilitator: Mr. Patrick Emery, ACMA, Australia
Panellist:
- Mr. Jim Holmes, Director, Incyte Consulting, Australia
- Mr. Bob Horton, Board member of NICTA, PNG
- Mr. Ron Box, CEO, TAF, Fiji
- Mr. Sean Weekes, Director, Information Communication Technology, Nauru
- Mr. Richard L. Misech, General Manager, PNCC, Palau
- Ms. Ashika Singh, Regional Coordinator, Consumer Council of Fiji, Fiji

Topics:
- Universal Service
- Future Form of Regulators
- Needs for Broadband Policy
- Future Direction of Mobile
- Needs of the Pacific
14.2 The session consisted of general discussion from the panelists on the relevant issues for the Pacific region with the panellists being key stakeholders of the topics.

14.3 As a result of the discussion, the following comments and suggestion were made:

**USO and Needs of Broadband Policy**

- There should be annual monitoring of target and review on the amount of levy. In setting the National broadband policy, the ceiling of the levy has to be established. USO has to change in the future.
- Current Universal Service which is voice centric is not worth doing anymore. Future Universal Service should not be voice-centric and fixed centric. The Universal Service has to be changed to reflect the trend of mobile and broadband.
- The consumers do not have a good understanding on broadband. The Term or Reference of the service has to be very clear and simple.
- There has been the exponential rise in mobile broadband penetration

**Future Form of Regulators**

- On the issue of skills and human resource of regulator in the Pacific, this cannot be done alone but there should be the sharing of expertise and knowledge. The PIRRC can be one opportunity but the cost needs be controlled.
- The trend is to have single converged regulator and we are looking at converged regulation including the integration of competition regulation. This can be a single point of contact for the consumer related organizations.
- Policy has to be developed with expertise. An ICT commission should be set up to deal with policy development, market development, and regulation in the sector to help develop the policy before passing to the Ministry. Given the limitation of staffing in the Pacific, this could be a long term aim.
- From the consumer perspective, one needs clear direction to know who is in charge of what, as sometimes there are many organizations/ regulators involved.
- The areas and functions to handle consumer complains, competition, pricing and all areas related to ICT sector should be converged. These areas need expertise and the government does not have enough funding to recruit experts. The sector regulator collects money from the operators so it is self-funding. It should then take the role of dealing with all functions (converged function) related to the sector.
- With multi-sector convergence, as ICT sectors are thriving, ICT could end up with the ICT sector subsidizing the other sectors.
- Multi-sector regulation is a donor-driven and a political decision. One should let other sectors to develop first before looking to the multi-sector regulation.

**Future Direction of Mobile**

- Spectrum planning is important for long term solution and a regional approach should be taken. The regulator should ask the supplier to provide knowledge and roadmap of the technology to help with spectrum planning.
- Fixed communication (PSTN) still has some role and should still work with the mobile communication.
- There should be proper tools for monitoring spectrum, tools for proper spectrum costing and benchmarking needs to be worked through. Spectrum planning at the central level should exist. The PIRRC could have some contribution in this area.
- Spectrum licences should be charged appropriately. Do not give away the spectrum cheaply as the technology has evolved with higher spectrum efficiency and therefore could have a higher licence fees.
- Things that are coming along include the Ka-band, refuelling of satellites which extends lifetime of satellite from 15 years to 25 years. The economics will be changed as a result of this.

**Needs of the Pacific**

- The collusion of operators puts pressure on the regulator. There are two levels of collusion, explicit collusion and tacit collusion. The tacit collusion is difficult to prove. The competitor can do this by studying the competitors’ website. To combat the collusion, the more players (competitors) there are, the less collusion there can be. ISPs are not collusive as there are many of them. If the collusion has anti-competitive aspect that could harm consumer, the regulator, as the champion of consumer, should then intervene. Anti-competitive collusion is avoidable and can be stopped.
- Economic regulation shall also be looked at in the converged regulation.

14.4 **Summary of the Forum**

14.4.1 Mr. Davies summarized the forum and reported the forum of the key outputs which are:

- Discussion on PIRRC
- Discussion on PacCERT
- Discussion on New gTLD
- Discussion on IPv6
- Lessons learned from the Great East Japan Earthquake and Tsunami
- Discussion on PITA’s disaster communication plan
- Discussion on new regulatory environment (3 presentations: TAF, NICTA, Samoa)
- International Connectivity focusing on submarine cable
- Liberalization of international gateway
- World Bank’s activities on Pacific Regional Connectivity
- Consumer perspective of telecommunication services by Consumer Council of Fiji
- Competition Policy
- Carrier’s response of consumer issues by TFL
- Presentations on Mobile Money
- NGN Regulatory Issues
- Closed Regulator Session
- Future regulatory requirement
- Universal Service
- Converged Licensing
- Broadband Speed for the consumer

14.4.2 The forum has discussed and provided input for the work activities for relevant items of Bali Plan of Action. For detail, please refer to Doc. No. PRF-P/4/39.

15.0 Closing Session

15.1 Mr. Shivnesh Prasad, Acting Director Communications, Ministry of Communications, Fiji, on behalf of Government of Fiji, delivered the closing remarks.

15.2 Mr. Toshiyuki Yamada, Secretary General, APT delivered his closing address. He reported the meeting that Mr. Charles Punaha was elected as the Vice Chairman representing the Pacific region in the APT’s Policy Regulatory Forum (PRF). He invited the delegates to participate in the coming APT Workshop on Future Trends of ICT for Pacific Policy Makers to be held during 28-30 September 2011, in Tokyo, Japan. He also mentioned the training programmes provided by APT to the Pacific would be reviewed taking into account the need of Pacific region. He thanked PITA for co-organizing the meeting and Government of Fiji and FINTEL for hosting the forum. He also thanked all participants for the active participation and the speakers and panellists for their contribution. Finally, he wished all participants a pleasant journey back home.

15.4 Mr. Yamada then declared the forum closed.