

PICISOC Board Report – PANOG 12 **Etuate Cocker (Board Member)**

Pacific Island Telecommunication Association (PITA) was established as a Special Interest Group (SIG) to address Telecommunication issues in the region that are faced by technical members, working on organisations responsible for connecting islands to the Internet. Over the years, PITA with the assistance of Team-Cymru (www.team-cymru.org/) and APNIC hosted several high quality trainings through workshops at the Pacific Network Operators Group (PACNOG) conference. This year (2012), the board agreed that there is a need for members to participate actively on SIGs event to strengthen ties. This report discuss activities that has been initiated as a way of gaining insights to PACNOG meetings, and utilising resources from this group to improve the board's outreach. The presence of the board at PACNOG12 was made possible by ISOC – PITA fellowships that enabled PACNOG members (with exception of PICISOC board) to attend the conference.

The conference started with presentations from Fred (PITA manager) whom discussed key issues of Internet connectivity in the region as well as updates on PACNOG conferences. Other members that attended and presented were government representatives, educational providers, researchers and Internet Service Providers (ISP). In my opinion, the most interesting aspects of these presentations were the focus on issues such as the need for affordable long range communication media that could be used for inter islands/offices communication. An example is the case study presented by PITA fellow from PNG University of Technology on which they are currently using expensive satellite connectivity for inter branch communications. Unfortunately there were fewer satellite providers present at the conference to provide a possible solution.

Telecom PNG also presented on new developments on their Next Generation Networks (NGN) on which they are now running two fibre cables to and from Sydney. I also approached colleagues at ISPs in the Solomon Islands and Telecom PNG to find out challenges in day to day tasks of connecting users to the Internet. The major issue being identified is that most engineers are finding it hard to sanitize Internet traffic for legitimate use. This mean that most of the traffic that they are seeing are malicious traffic and often fill up Internet user's data cab causing complaints regarding the need to improve speed and services. This issue is common in most ISPs in the Pacific and there is really a need to improve connectivity.

At first I approached several ISPs in the Pacific to take part in my network coded TCP research. Most of the ISPs did not understand the need to take part and simply denied my request. The presentations I made were similar to what was presented in PACINET with minor changes to results of data collected, and elaborations on how efficient this new technology is in improving throughput for issues with congested links. This enhances further

collaboration between me and other PACNOG members and possibility of working closer with this community to improve Internet connectivity.

As part of what we intent to improve, I also distributed PICISOC pins and business cards to PACNOG members interested in being member of PICISOC and to contribute to discussing issues that may be of interest to other PICISOC members. We try to explain what PICISOC is and how the PACNOG community can engage in technical discussions at the mailing list.

Lastly, there were two workshops at the conference and these were IXP and network security. I attend the IXP workshop and have proved it to be a source of information for enhancing learning through best practices on managing day to day tasks. This include improving network convergence, route filtering, troubleshooting techniques for verifying issues related to dynamic routing protocols (OSPF and BGP) and installation and management of Internet exchange points. The IXP installation component was the focus of this track with PNG having the possibility of installing a local IXP. Furthermore, a representative from Vanuatu government was at the conference and will be the first Pacific island to install an IXP. On the other hand, the security workshop was a source of information for network forensic tools and best practices on DNS and management of IP addresses.