

USP keen to facilitate ICT development in the region

The region can have cutting edge digital technology enabling more effective participation in the global knowledge economy, the Vice Chancellor of the University of the South Pacific (USP), Professor Rajesh Chandra, told a meeting of Pacific Regional Information and Communication Technology officials in Tonga.

Professor Chandra said the overall purpose of USP's ICT regional strategy is to bridge the digital divide in the countries of the Pacific region and improve the livelihoods of its entire population.

He called on officials from 20 Pacific Island countries and territories to provide access to affordable or free broadband.

He said it was particularly important to provide cheap broadband to schools, tertiary students and teachers and that education should be made accessible, especially to those in remote areas, using new technologies.

Since 1972, USP has been at the forefront of the use of new technologies for education through the establishment of USPNET and other ICT related developments including distance and flexible learning, training, regional information services, databases and international academic connectivity.

"As the premier provider of higher education to the region, and with a strong track record of using ICTs for human

development, USP is ideally placed to play a strong role in this area," he said.

With the completion of the Japan-Pacific ICT Centre and the upgrade of USPNET, the university will be able to provide opportunities for significant improvements in regional digital development.

"Through strengthened ICT infrastructure, international connectivity, capacity building and advisory services, USP is moving forward its vision of working with various partners to secure a bright and sustainable future for Pacific Islanders," Professor Chandra said.

As the Vice Chancellor noted, the geography of the region creates challenges for becoming part of the digital world.

"But by taking advantage of the opportunities offered by technical advancements, and through having solid policies and plans supplemented by strong implementation schedules, partnerships and coordination, USP's vision, strategic investments, and strong regional commitment have proven that we can bridge the digital divide," he said.



The University of the South Pacific staff with Her Royal Highness, Princess Salote Mafle'o Pilolevu Tuita.

Review looks at improving ICT access for Pacific Island countries

18 June 2010, Nuku'alofa, Tonga ---- According to a review of the Pacific Regional Digital Strategy, some Pacific Island countries (PICs) continue to face difficulties in developing updated ICT policies and legislation because of a lack of capacity and resources.

The review notes that, 'For these countries, subregional solutions may be most appropriate with a focus on introducing measures to improve access to and availability of services from existing providers.'

The review was prepared for the Pacific Islands Forum Secretariat with a view to improving access to ICT, reducing costs, providing higher bandwidth, revising regulatory environments to foster higher levels of investment, and strengthening ICT skills.

The review further notes that 'The expense of international capacity continues to be a major issue. There remains heavy reliance on satellite services for many sparsely distributed, relatively small, regional populations. PICs in general find satellite costs high and are still seeking ways to reduce these costs.' In addition, due to the high costs associated with deploying a submarine cable, international connectivity is scarce among PICs, although a number of projects with additional ventures are either forthcoming or under discussion.

ICT offers a huge potential for social and economic development in the Pacific. To this end, regional

organisations are working to promote the benefits of ICT at both national and regional levels, and in the private sector.

However, the review noted that applications in e-government, e-commerce, e-health and e-education are non-existent or in their infancy in the region. Up to date information on progress in these areas is difficult to obtain, and the accessibility and cost of communications technology have been found to be significant barriers. Many governments and households with scarce resources still struggle to meet basic needs with the result that ICT is not a priority.

The review further notes that infrastructure in the region is still required, yet only a minority of partners engage in infrastructure-related projects, or provide funding assistance. One example of a successful infrastructure project is the Pacific Rural Internet Connectivity System (PacRICS). PacRICS was developed to provide affordable and reliable Internet connectivity to any rural and remote area in the Pacific Islands region.

Media important for ICT development in the Pacific



17 June 2010, Nuku'alofa, Tonga ---The delivery and dissemination of Pacific-oriented information and news in the region should be a priority, especially given the growing use of technology for community, social, economic and cultural development. This was a message given to officials and ministers at the Pacific Regional Information and Communication Technology (ICT) meeting in Tonga.

Presenting a paper on the role of the media in ICT development, the Secretariat of the Pacific Community's Regional Media Centre Coordinator, Larry Thomas, said the media can be engaged in determining whether content is relevant and whether information is accessible, understandable, accurate, affordable and trustworthy.

"The media's ability to simplify information, to interpret and translate information into local languages, to initiate discussion on pressing issues makes it a vibrant and vital partner in developing content and communication in ICT," Mr Thomas said.

ICT and the media play a role in development not only through disseminating information but also through collecting and presenting information to the public.

"Media workers visit communities, villages and isolated areas to collect and compile information pertaining to challenges and opportunities for development, which is in turn distributed extensively," he said.

Mr Thomas said that the media could play a key role in the development of content in ICT.

“We bemoan the fact that there is not enough local or regional content that is interesting, thought-provoking or entertaining, particularly on our own television stations. The question is why? It simply boils down to resources and technical expertise,” he said.

“We do not have enough properly trained and skilled people in television production. We have good technicians but not enough good writers, producers or directors. Of course, there is always the never-ending issue of funding,” Mr Thomas said.

He urged government ICT officials to support the media in its work and forge meaningful partnerships that will benefit people.

“We want our children to have access to content that is relevant, interesting and appropriate, and that can instil important values. More importantly, they need information they can learn from. Yes, we have technology, but without good content, the technology is of limited use,” he said.



Internet protocol version (IPv6)

The ICT officials and ministers at their meeting in June 2010 urged officials to engage with the regional organizations, private sector and civil society to prepare for the transition of critical IP based infrastructure to IPv6 due to IPv4 space exhaustion.

IPv6 is an Internet Protocol version that is designed to succeed IPv4. The main driving force for the redesign of Internet Protocol is the foreseeable IPv4 address exhaustion. IPv6 has a vastly larger address space than IPv4 and will therefore alleviate IPv4's problem of limited capacity for address capability. Due to impending IPv4 space exhaustion it must be stressed that IPv6 deployment must be given prominence to ensure national and international connectivity, and in readiness for always-on and network connected IP devices.

It is therefore very important for Pacific Islands to map out the IPV6 transition and consider issues pertaining to IP address distribution in the region given the change over expected to occur around mid 2011.

Pacific MPs have a role in ICT development

18 June 2010, Nuku'alofa (SPC) ---- At the Pacific Regional Information and Communication Technology (ICT) officials and ministers meeting in Tonga, parliamentarians were encouraged to advocate for legislative changes on ICT development.

In a presentation on the Pacific Legislatures for Population and Governance (PLPG), PLPG Project Officer Alifereti Bulivou said the important role that policy-makers and legislators play in ICT development should be acknowledged.

Mr Bulivou said the PLPG Secretariat works closely with legislators who represent all parties within Parliament (and across party lines) to mainstream population, development and good governance issues.

“It also works closely with Pacific Island legislatures, regional organisations, donors and non-governmental organisations to develop and implement capacity building and institutional strengthening programmes for Pacific legislatures, to enhance the ability of legislators to effectively discharge their law-making, oversight and representational functions,” he said.

Mr Bulivou asked chief executive officers, permanent secretaries, directors and senior officials to consider and acknowledge PLPG's work in the region.

PLPG was formed after the 2009 merger of the Pacific

Parliamentary Assembly on Population and Development and the Forum of Presiding Officers and Clerks.

Mr Bulivou said that at the 3rd General Assembly of the organisation in Rarotonga, parliamentarians supported the Pacific Plan Digital Strategy and reiterated that Forum Leaders recognised that ICT was essential for social development and economic growth, as well as good governance in the region.

The 3rd General Assembly Communiqué recognised that modern ICT plays a vital role in climate change education and awareness; maintaining communication links in times of disaster and enabling timely management of disaster response and relief; and contributing to disaster risk reduction through, for example, the development of early warning systems.

“Item 18 of the Communiqué also recognised the need for Pacific Island countries to adopt and enforce green ICT policy and legislation to ensure the use of energy-efficient ICT and environmentally responsible disposal of electronic waste,” Mr Bulivou said.

Pacific Computer Emergency Response Team (PacCERT)

The ICT officials and ministers at their meeting in June 2010 in Tonga endorsed the establishment of the Pacific Computer Emergency Response Team (PacCERT), to be hosted at the University of the South Pacific's Japan-Pacific ICT Centre.

PacCERT is a newly established body set up to provide technical services in the fight against cyber crime in the Pacific. With the growing dependence of Pacific island and territories (PICTs) on ICT and its increasing pervasiveness in Pacific communities it is deemed necessary for the Pacific region to establish a computer emergency response team (CERT) capability. Currently PICTs have limited ICT capacity and resources to setup their own CERTs. The region pooled their resources and with the assistance of development partners worked toward establishing a regional CERT - PacCERT.

ITU with the support of the Australian Government, commissioned AusCERT to develop a business plan for PacCERT establishment in cooperation with IMPACT and other CERTs and in consultation with regional organizations. The Business Plan outlined the governance structure of PacCERT, identified the roles of the PacCERT and provided a financing plan to ensure the sustainability of PacCERT.

PacCERT will be reporting to the PacCERT Governing Board which comprises of regional organizations (including USP, SPC SOPAC, PICISOC and PITA) and three representatives of PICTs.

Initially PacCERT's services would include:

- Incident response coordination;
- Information security awareness raising (outreach), training and education;
- Alerts and advisories; and
- Computer crime and information security survey.

PacCERT was established to be a trusted point of contact for information and Internet security response affecting the 22 PICTs.



Pacific ICT regional regulatory resource centre (PIRRRC)

The ICT officials and ministers at their meeting in June 2010 in Tonga endorsed the establishment of the Pacific ICT Regional Regulatory Resource Centre (PIRRRC), to be located at the University of the South Pacific's Japan-Pacific ICT Centre. They also endorsed the establishment of the PIRRRC working group that was established at the Pacific ICT Officials meeting in Honiara, Solomon Islands, to progress the governance framework of the Center and report back to PICTs.

In March 2006, the Pacific ICT Ministerial Forum held in Wellington, New Zealand, recognized the importance of pooling scarce resources in the regulation of telecommunications services, and directed officials to approach the World Bank and other development partners with a view to the provision of regulatory and policy capacity development.

In 2008, the World Bank commissioned a study of the options for the establishment of a regional-level telecommunications and ICT resource centre or technical advisory facility to assist telecommunications and ICT policymakers and regulators in the Pacific. The Options Report was completed in December 2008

and recommended the establishment of a PIRRRC to provide an efficient and independent source of advice and information to telecommunications and ICT regulators and policymakers and to strengthen the capacity of regulators and policymakers.

The Pacific ICT Ministerial Forum held in Tonga in February 2009 considered the Centre concept. The Ministerial Communique directed officials to work towards establishing a shared regulatory resource centre for the Pacific Islands Forum (PIF) countries.

The World Bank subsequently agreed to provide seed funding for the establishment of the Centre through the Pacific Region Infrastructure Facility.





The Japan-Pacific ICT centre

The ICT officials and ministers at their meeting in June 2010 encouraged the University of the South Pacific to work with partners to develop appropriate higher education and training programs in ICT policies, regulations and telecommunications management. SPC and USP were also requested to collaborate with partners to ensure that human and institutional capacity building initiatives are developed in accordance with the Pacific Plan and the Framework for Action on ICT for Development in the Pacific to address the capacity constraints in PICTs.

The officials recognised that there is varying skill levels available nationally, and the constraints that limit human resource and institutional development are well known and common across the PICTs- limited access to information infrastructure for training for individuals, schools and organisations; training is limited to very few persons in both the public and private sector; budgetary allocations for ICT training and development are inadequate in comparison to other budgetary components in private and public sector budgets; lack of qualified personnel; retention problems; and the high costs involved in IT (for example training, and equipment). And despite more Pacific islanders being trained in ICT-related fields, human resources and capacity in PICTs remain limited, a situation that continues to make progress somewhat difficult and reliance on external resource and expertise from outside the region.

The Japan-Pacific ICT Centre, located at the USP Campus in Suva, is a result of a project designed to close the gap of the 'Digital Divide' in the Pacific

region and promote the use of ICT in the region to boost economic growth, improve socio-economic development, reduce poverty and preserve regional cultures.

The construction of this new centre costs \$21.5 US million and was solely funded by the Japanese Grant Aid. The project was completed in April 2010 and will be officially opened in early July 2010.

The Centre provides office space for ICT staff at USP (IT Services, Maths, Computing Sciences, Information Systems and Engineering), Pacific Computer Emergency Response Team (PacCERT), Pacific Regulatory Regional Resource Centre (PRRC), and Pacific Islands Telecommunications Association (PITA). It also provides ICT 'incubator' spaces for ICT entrepreneurs to start their ICT business at the Centre. This is for industry use in collaboration with USP.

In April 2010, a meeting of regulators, officials and regional and international organizations was held around the margins of the Asia-Pacific Telecommunity (APT) Policy and Regulatory Forum for Pacific meeting and Pacific Islands Telecommunications Association (PITA) Annual General Meeting in Honiara, Solomon Islands. As a result of that meeting, an ad hoc working group comprised of representatives from Australia, Federated States of Micronesia, Papua New Guinea, Samoa and Vanuatu was established to work with the World Bank in finalizing the proposal for the establishment of the Centre for consideration at the Tonga Ministerial meeting.

The proposed functions of PIRRRRC include:

- Support regulatory entities for training and capacity building;
- Provide advisory services to policy makers and regulators;
- Provide statements of best practice sector policy and laws and regulatory instruments (licenses, interconnection principles, cyber legislation, etc);
- Provide information packages on key policy and regulatory themes;
- Provide sector data and publish annual regional survey; and
- Provide rosters of expertise from other sources.

Acknowledgement



Staff of Ministry of Information and Communication, Tonga

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Secretariat of the Pacific Community (SPC)

Pacific ICT Outreach Programme
Economic Development Division
Secretariat of the Pacific Community
Private Mail Bag, Suva, Fiji
Email: picto@spc.int
Telephone: +679 337 0733
Fax: +679 337 0146
Website: www.spc.int/edd