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PACIFIC ISLANDS INPUT
to the
WORLD SUMMIT ON THE INFORMATION SOCIETY

submitted by the
Pacific Islands Forum Secretariat

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This Pacific Islands Forum Secretariat is an intergovernmental organisation that represents 16 member countries of the region and chairs the ICT Working Group of the Council of Regional Organisations of the Pacific, which has the intergovernmental mandate to co-ordinate ICT planning among regional organisations.

The CROP ICT Working Group comprises the Forum Fisheries Agency, Pacific Islands Development Program, Pacific Islands Forum Secretariat, South Pacific Applied Geoscience Commission, Secretariat of the Pacific Community, South Pacific Regional Environmental Programme, South Pacific Tourism Organisation, and the University of the South Pacific.

Collectively these organisations represent the following 22 Pacific island countries and territories: American Samoa, Cook Islands, Federated States of Micronesia, Fiji, French Polynesia, Guam, Kiribati, Marshall Islands, Nauru, New Caledonia, Niue, Northern Marianas, Palau, Papua New Guinea, Pitcairn Islands, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu, and Wallis and Futuna.

PACIFIC ISLANDS REGIONAL INPUT PAPER

ASIAN REGIONAL CONFERENCE FOR THE
WORLD SUMMIT ON THE INFORMATION SOCIETY
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submitted by the
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1. SUMMARY

Pacific island countries, through a series of regional initiatives and events stretching back over the past five years, have thoroughly considered the role of information and communication technologies (ICT) in their social and economic development. (See Annex 1: Recent Pacific Regional High Level ICT Events) The regional vision that has emerged and been endorsed at ministerial level is: *ICTs for Every Pacific Islander*.

In support of this vision, there are three main messages from Pacific island countries regarding the application of information and communication technologies (ICTs) for social and economic development:

- There is tremendous potential to make rapid advances in the sector, but the region is faced with fundamental constraints to that development
- Pacific island countries have structured an integrated framework for development, including policies, strategies, and action plans at the national and regional level
- The regional development framework has been prioritised, and provides guidance for bilateral and multilateral development assistance

Potential and constraints

ICTs hold one of the most important keys to creating a better future for the Pacific, and there have been marked improvements in many areas in most countries. As recently as 1995 faxes were a novelty, and there was no such thing as email or web browsing for most people of the Pacific. Now Internet access is an essential service, people cannot work without email, and users expect their mobile phones to roam across all countries seamlessly. In a context of small islands dispersed over vast ocean distances, facing limited natural resources and high transportation costs, better information and more efficient and affordable access are essential to connect island communities to the rest of the world.

However, Pacific island countries face severe constraints to development. It is evident that the high costs of access and equipment are major barriers to increased use of ICTs. Other barriers include limited international bandwidth, outdated regulatory frameworks, unreliable power supplies, and limited human and institutional capacity for sector

development combined with Isolation and small populations. Sector reform is proceeding, but slowly, and development is not as rapid or as complete as it will be as these constraints are overcome. These constraints are common across the region.

An integrated planning and policy framework

To complement national initiatives in strategic planning and policy, a set of planning and policy documents developed at the regional level over the past year and a half comprises an integrated framework for future development of the sector. These documents, which are available at www.forumsec.org.fj/divisions/infra/, include:

- Forum Communication Action Plan: Ministerial decisions about what the region will pursue for development of the ICT sector
- Pacific ICT Policy and Plan (PIIPP): a framework to implement Ministerial decisions by coordinating regional activities and offering guidelines for national activities.
- Pacific I4D Initiative: the Type II partnership initiative developed for the World Summit on Sustainable Development, proposing partnerships and resources for implementation

Priorities for development

Pacific island countries are well aware of the potential for ICT to accelerate development in many sectors, and are ready to move to implementation. Their priorities, identified by the most recent Forum Communication Policy Meeting and associated Interagency Planning Meeting in April 2002, are:

- tele-health
- human resources development through distance learning
- development of national policy and regulatory frameworks
- Improvements in universal access through community telecentres

Development partners, both bilateral and multilateral, have been very involved and generous supporters of ICT development in the Pacific region. Projects for remote connectivity in tertiary education, national ICT strategy support, and national regulatory framework development continue to make significant differences in the region's development prospects. Future projects in tele-health, e-governance, multipurpose community telecentres, to name only a few, will continue to depend on external support from development partners for some of their investment requirements.

A unique region for special consideration

The Pacific region is unique in two respects. First are the characteristics of Pacific countries themselves, particularly their small scales, large distances, and dispersed economies and societies. Second is the advanced and integrated nature of planning and policy in the region and in each country and in the region. Combined, these aspects make a powerful case for special consideration for regional development.

2. OVERVIEW OF THE STATUS OF THE PACIFIC ICT SECTOR

Pacific island countries span the equator and the international dateline, across 30 million square kilometres of ocean, with a total population of less than 8 million. The socio-economic characteristics of these countries vary widely, perhaps more so than in any other region of the world. Generalisations about Pacific island countries (PICs) are therefore not very useful. Understanding each country's unique situation is the key to ICT sector analysis, planning, and policy development across the region.

National populations range from 1,500 in Niue to 5 million in Papua New Guinea, with the proportion of people living in remote rural areas ranging from zero in Nauru to nearly 90% in Solomon Islands. Income levels differ by a factor of ten, with per capita GDP figures ranging from US$700 in Kiribati to over US$8,000 in Palau. Educational attainment ranges from sub-primary to post-graduate degrees earned at regional universities and abroad. Variations in these characteristics are typically wider within countries than between countries. (See the Summary Data on ICT Status at Annex 2)

National ICT infrastructure is developing rapidly, but in most cases lags behind many other parts of the world. Although email has been available for about ten years to a few institutional users through such services as PEACESAT and the University of the South Pacific's wide area network, true Internet access has become available only recently, beginning first in 1995 in Fiji and most recently in 2000 in Tuvalu.

Telephone penetration is generally good in urban areas, but generally very poor in rural areas. Although urban teledensities ranging from about 20 to 60 per hundred population are low by global standards, when household sizes and social patterns are taken into consideration nearly all urban residents have access to telecommunication services. Rural teledensities however range from one half to one tenth of those in urban areas.

Mobile phones are increasingly common, but in most countries do not yet approach the levels of usage seen elsewhere. However, the introduction of prepaid cellular has led to an explosion of growth in mobile customers in some countries and in Fiji, mobile subscribers exceeded fixed line subscribers in 2002. Four Pacific countries have digital mobile phone services, the remainder offer only analog, and one country does not offer any mobile services. Only users in Tonga have a choice of carriers for telecommunications, while all other countries are served by monopoly providers for both domestic and international services.

Approximately 25% of Pacific islanders have regular access to ICTs, primarily through their workplaces, a few secondary and tertiary educational institutions, and a few public centres and Internet cafes. The number of Internet subscribers ranges from about 1 in 5 in Niue (where access is free) to 1 in 1000 in Solomon Islands. Users in only three Pacific counties (Papua New Guinea, Samoa and Tonga) have a choice of Internet Service Providers; while users in all other countries are served by monopoly ISPs.

For residential Internet access, only Tonga offers broadband services to users, while all other countries rely on dial-up services via the publicly switched telephone system. For business and institutional users, most carriers offer Internet services and virtual private networks via leased lines of varying bandwidth. For international services, only Fiji and Papua New Guinea have submarine cable links to metropolitan countries. All other Pacific island countries rely exclusively on satellites.

However, difficult rural topography and small populations dispersed on outer islands mean that few people outside of national capitals can make a phone call, let alone access the Internet. Nearly all Internet users are located in capital cities and a handful of secondary urban areas. There are exceptions - for example, Cook Islands has telephone access to all its outer islands – but for the most part modern ICTs are an urban phenomenon.

Furthermore, due to vast distances, small markets, and the lack of economies of scale, improvements are slow and extremely expensive. Whereas users on main islands can be reached via conventional means, those on outer islands and in remote rural areas typically rely on HF radio and in a very few cases on satellite links to their capitals. Fiji and FSM are introducing wireless access to rural areas to expand coverage of rural areas on main islands, but in other countries wireless applications are uncommon.

In terms of affordability, Pacific islanders typically face connectivity charges that are among the highest in the world. Subscription and usage charges for dial up access to the Internet range from US$3 to US$175 per month, with an average of US$50. On an annual basis this amounts to one quarter to one half of the average annual per capita GDP in many countries and is clearly unaffordable by the majority of people. The price of full-time Internet access via a 64 Kbps leased line varies much more widely than does that of dial-up access, from US$700 to US$5000 per month. These prices are on average 5 times higher, and range to as much as 20 times higher, than in APEC developing countries.

Institutional use of the Internet is slowly catching up with the rest of the world, exemplified by official agency web sites offering reports and information, a growing on-line presence for banks and tourism operators, limited on-line retail activity, and distance education offered through the University of the South Pacific. Nevertheless, it is not uncommon for government departments to lack access to basic email, and to continue to rely exclusively on fax and phone services.

There is growing awareness of the need to ensure men and women, girls and boys, are included in the development and use of ICTs to prevent social and economic exclusion and facilitate universal access for every Pacific islander. However, there are as yet no detailed gender analyses available on issues of access, application and participation. It is widely recognised that additional resources, education, and capacity building will need to take place simultaneously across schools, non-formal community programmes, formal education and training institutions, and workplaces to increase gender equity.

The future development of the sector faces similar constraints to those experienced in the wider public and private sectors. Most importantly, there are very limited human and institutional resources in the ICT sector in Pacific island countries. Human resources in this instance are not limited to IT personnel and professionals, but also to any person utilising modern ICTs. Training opportunities are limited in nearly all countries. Furthermore, in-country retention of trained personnel is a very serious and increasing problem.

Despite these constraints, however, the most notable fact about the Pacific island countries is not how far they still have to go, but how far they have come in a very short period. Compared to the situation in 1995, when Internet browsing was not even possible in most countries and most government departments still relied on mimeograph machines, the existence by 2000 of well-functioning government LANs, vibrant competition among ISPs in a few countries, and ready access to up-to-date hardware is remarkable. It now remains to extend the benefits of ICTs to social and economic development across all sectors in the region.

3. PRINCIPLES AND STRATEGIES: THE REGIONAL FRAMEWORK

The effects of technology convergence and the evolution of the international operating environment mean that traditional institutional and policy approaches to communications have had to adapt to rapid and sweeping change everywhere in the world. This is even more so in Pacific island countries, which typically begin from base of incomplete and outdated legislative and regulatory frameworks combined with monopolistic operating environments.

The development of national ICT policy and governance structures has begun in most Pacific island countries and will require some time and effort before they are final. The processes that are in place to develop these frameworks, however, are already guiding further development of the sector. Through national and regional technical assistance programmes that currently finalising national policies and strategies, progress has been rapid over the 2001-2002 period.

At the national level, Pacific island countries are currently developing national ICT policies, strategic plans, and regulatory frameworks favourable to the development of the Pacific information economy through national and regional projects supported by ITU and UNDP:

- National strategies are being developed under the e-Pacifika programme implemented by UNDP / UNOPS.
- Policy and regulatory environments are being created through the Pacific Governance Project (PGP), supported by the ITU Regional Office for Asia and the Pacific.

The regional framework consists of a set of planning and policy documents developed as an integrated framework for future development of the sector. These documents include:

- Forum Communication Action Plan: Ministerial decisions about what the region will pursue for development of the ICT sector
- Pacific ICT Policy and Plan (PIIPP): a framework to implement Ministerial decisions by coordinating regional activities and offering guidelines for national activities.
- Contacts and documentation on regional planning and strategy may be found through the ICT Working Group of the Council of Regional Organisations of the Pacific at http://www.forumsec.org.fj/division/infra/infrastructure.htm.

At their meeting in April 2002, Pacific Islands Forum Communications Ministers encouraged the creation of flexible policy and regulatory environments favourable to the development of the Pacific information economy, and also recognised the urgent need in some cases to strengthen government ministries to enable them to more effectively develop national policies for telecommunications development.

At the national level, those are the aims of the Pacific Governance Project (PGP), which is assisting Pacific island countries to catch up to the sweeping technological changes that have taken place in recent years. The PGP, which is being implemented by the ITU Regional Office for Asia and the Pacific, is providing expert services to develop national policies and regulatory frameworks for each of the fourteen participating countries. Project resources include an Internet portal for regulators (www.itu.or.th/governance03) and online materials for continuing professional education in the areas of telecommunication policy, regulation and legislation.

Pacific island countries are also currently developing national strategies under the *e-Pacifika* programme financed by Japan and implemented by UNDP and UNOPS. The programme has three goals. First, it is intended to raise the level of awareness among leaders and decision-makers about the effectiveness of ICTs to cope with the emerging global issues such as environmental conservation, education, and health management. Second, each country will formulate adopt a national ICT strategy. Finally, *e-Pacifika* will assist countries to develop and implement concrete ICT programmes and projects based on the policies and strategies that are formulated through national workshops.

National policies for all countries participating in the project will be completed during 2002-2003, and implementation of pilot projects will begin during 2003, with some external support expected. The project web site contains further details and includes reports from country planning workshops (www.undp.org.fj/RAS-99-064.htm).

At the regional level the ICT Working Group of the Council of Regional Organisations of the Pacific, chaired by the Pacific Islands Forum Secretariat, has led the development of the Pacific Islands Information and Communications Technologies Policy and Strategic Plan (PIIPP). The PIIPP is a regional approach to planning and co-ordination that complements national strategies through detailed goals, objectives, and implementation activities. It received Ministerial level endorsement in April 2002.

The PIIPP serves as both a regional policy, in areas where international co-operation is required, and as a guide for national action, in areas for domestic implementation. It is organised as follows:

? The regional policy has four Guiding Principles on human resources; infrastructure development; cooperation between stakeholders; and appropriate policy and regulation. These are the region's goals.

? Policies are stated for each guiding principle, intended to set the rules by which specific strategies and actions will be designed to achieve the goals. They are long-term, but may be reviewed and changed every 3-5 years if necessary.

? The regional strategic plan consists of strategies for each policy, intended as the general means by which the goals will be reached. They are medium-term, but may be reviewed and changed on a 1-3 year cycle as required.

? Activities under each strategy in the plan are the specific means by which strategies are implemented. They should be monitored continually and modified annually if needed. Each activity has an identified actor(s) and a proposed time line or milestone.

Guiding Principle on Human Resources: ICT will be used to inform and connect Pacific Island populations and ensure that they benefit from flexible and appropriate education and training.

Pacific island countries are characterised by their remoteness, dispersed populations, and limited human resources and institutional capacity. As a result, opportunities for participation in sectoral applications are limited. Improvements in access, awareness, human resources development, and usage are required for populations of PICTs to take their full place in the global knowledge society. Regional policies to achieve this goal are:

? Awareness of ICT and computer literacy at all community levels will be promoted and developed while safeguarding existing social and cultural values.

? PICTs will develop and retain a knowledgeable ICT workforce that will be able to contribute to the maintenance and further development of ICT.

? ICT strategies will be developed and/or strengthened in a flexible manner to facilitate human resource development, capacity building, and reduce professional isolation of Pacific Islanders at all educational levels and especially in rural and remote communities.

? Everyone will have equal opportunity access to ICT without barriers with special regard to women, the disadvantaged, the disabled, under represented minorities, and those in rural and remote communities.

? Recognising the value of information, Pacific people will have the opportunity to contribute to the global community through the promotion of the rich Pacific cultural identity and diversity.

Guiding Principle on Infrastructure Development: Appropriate ICT infrastructure will be developed to support development for Pacific islands.

Access to basic telecommunications and the Internet is generally more expensive in the Pacific Island Countries and Territories (PICTs) than in other parts of the world. These higher costs have negative impacts on development of essential services such as education, health, and greater economic opportunities. Regional policies to achieve this goal are:

? Regional and national ICT networks and support infrastructure will be reliable, secure, fast, cost effective and adaptive.
? PICTs will encourage private sector investment in ICT infrastructure and promote competitive markets for ICT service provision, where appropriate.
? PICTs and regional organisations will co-operate to promote a regional approach to consideration and adoption of global ICT standards.
? Regional and national institutions will work with service providers toward practical Universal Access to ICT.
? PICTs and regional organisations will co-operate to improve access and lessen the financial burden that development of ICT imposes on governments, non-government organisations and businesses.

Guiding Principle on Co-operation between Stakeholders: Easy access to information through ICT will strengthen co-operation between stakeholders to ensure good governance, to develop the private sector and to improve service delivery.

Development of new methods in commerce, education, and public administration in PICTs is inhibited by limited human resources and institutional capacity and the high cost of information management systems. Co-operation between the three spheres of social, economic, and civil activity is essential to overcome these constraints. Regional policies to achieve this goal are:

? Governments and regional organisations, the private sector and NGOs including religious groups will expand their use of ICT for interaction with their stakeholders, dissemination of information, and promotion of the principles of good governance and sound business planning.
? Development of community access to local content will be encouraged for all fields of information.
? ICT action plans will be actively monitored to identify their impact on national and regional development.
? Governments and regional organisations, the private sector and NGOs including religious groups will be encouraged to adopt appropriate management information systems for effective decision-making.
? Governments and regional organisations, the private sector and NGOs including religious groups will actively co-operate to acquire and maintain ICT resources in order to optimise the overall regional development investment.
? Governments and regional organisations, the private sector and NGOs including religious groups will actively co-operate to ensure that ICT policies are integrated in the development policies of all other relevant sectors.

Guiding Principle on Appropriate Policy and Regulation: ICT policies and regulations will facilitate development of the sector and be appropriate to the people and cultures of the Pacific islands.

ICT and related legal and regulatory frameworks in most PICTs are outdated, insufficient or non-existent to meet the challenges and opportunities made possible by rapidly developing technologies. Adaptation is needed urgently at the national and regional levels, based on a sound technical understanding and a realistic assessment of fundamental benefits, to ensure that the greatest possible economic and social benefits are gained from new developments while protecting social and cultural values. Regional policies to achieve this goal are:

- Regional and national institutions will co-operate in the development of ICT regulations that are consistent with international and national laws, regulations, technical standards, and obligations.
- Appropriate ICT and related regulatory frameworks will be developed that benefit the specific cultures, customs, and economies of the people of the Pacific.
- ICT and related regulatory frameworks will be developed, based on legislation, to address socially undesirable activities.
- ICT and related regulatory frameworks will promote open and non-discriminatory access to publicly accessible networks where appropriate.
- National ICT and related regulations will balance and protect community and individual interests, including privacy issues.
- PICTs and regional organisations will take a pro-active approach to representation and advocacy in regional and international fora in order to promote partnerships to resource the development of ICT for all Pacific islanders.

Policy and regulatory development processes in the Pacific will necessarily be different from experiences in more development countries. It is clear that what works in larger economies will not necessarily work in smaller economies. Policy objectives need to be realistic and well understood. Consultation needs to be tailored to local circumstances as it is essential that general consensus for reform is achieved. Although there is considerable external help being provided by several multilateral organisations to the region in formulating policy options, it is essential that the reform process continue to be driven locally.

4. PRIORITY ISSUES FOR THE DECLARATION AND PLAN OF ACTION

The Pacific Islands Regional ICT Consultation (PIRIC) was held in Fiji from 9-11 April 2003 to prepare Pacific island countries and organisations to participate effectively in the World Summit in the Information Society by ensuring that the unique contributions and needs of Pacific island states are recognized throughout the preparatory process and supported in declarations and action plans.

More than 80 representatives of governments, communication and information service providers, NGOs, and civil society entities active with information society issues

attended from 12 countries and 17 regional intergovernmental and non-governmental organisations.

Inputs to the consultation included national strategies, the Pacific regional framework documents (Forum Communication Action Plan and Pacific ICT Policy and Plan), documentation from the Asia Pacific Regional Conference, the draft WSIS framework, and papers provided by participants.

National and sectoral working groups analysed the WSIS draft Declaration of Principles and Action Plan in the context of these existing Pacific national and regional strategies to understand opportunities and priorities through the following activities:

- Review and comparison of existing national, regional and global policy and planning frameworks
- Recommendations on ICT development issues
- Consideration of implementation mechanisms including multi-sectoral partnerships for development
- Preparation of a "guidance document" to be used in national-level briefings and preparations in capitals

Analysis and documentation was done in small interactive working groups. In order to ensure both the widest and deepest possible cross-sectoral analysis, two types of working groups were formed:

- "Neighbour" groups matched neighbouring countries and those in similar circumstances to allow wide cross-sectoral consideration of each issue
- "Stakeholder" groups matched experts within sectors to allow deep consideration of specific issues across all countries of the Pacific.

Neighbour groups		
Palau and Federated States of Micronesia	Fiji and Samoa	Niue and Tonga
Solomon Islands and Papua New Guinea	Tuvalu and Republic of the Marshall Islands	New Caledonia, French Polynesia, and Cook Islands

Stakeholder groups			
Broadcasting and media	Culture, archives, libraries	Awareness and education	Gender issues
Public services (e-government, health, environment, etc.)	Access and infrastructure	Public policy	

Analysis of the WSIS draft Declaration of Principles

In comparing Pacific islands national and regional strategies to the WSIS framework, participants made suggestions on how the draft Declaration of Principles could be improved to strengthen linkages and ensure complementarity with national plans. Priority issues were identified as follows:

A. Building the information society: a new global challenge

- The first paragraph in the Preamble should explicitly include reference to Article 19 of the Universal Declaration of Human Rights.
- The concept of "knowledge societies" should be emphasised instead of "information societies" or "global societies" or ICTs as technology only, particularly with respect to the cultural and linguistic heritage and diversity of the Pacific islands region.
- There is a need to emphasize that the "new technologies" shall also embrace the relevant "old technologies", such as traditional media.
- The Principles should also acknowledge the diversity of cultures within multicultural societies and include 'indigenous' and 'traditional' issues.
- In recognition that rural development is not just in villages, policies and language should be consistent with national and regional reality of the Pacific islands region.
- Paragraph 2: include explicit reference to the unique challenges of Small Islands Developing States, as in the paragraph from the Tokyo Declaration : "we recognize . . . environmental hazards . . . HR constraints . . . remote location".
- Paragraph 4: also include a reference to SIDS, add "due to the disparity in resources", and remove "that the information and communication revolution is still in its infancy".

B. Common vision of the information society

- Paragraph 9: Use the term "evolving societies" instead of "high societies".
- Paragraph 10: In item number 3, "adherence to international undertakings" should be changed to "the consideration of" and "with respect to the use of ICTs" changed to "trust and norms as they relate to the use of ICTs". An additional bullet point should be added to address sustainability.
- Paragraph 11: Should include reference to the disabled after women, and should add "including those resulting from geographical challenges" after digital divide.

C. An information society for all: key principles

- Paragraph 13: Change paragraph to read "averting emergence of new forms of exclusion, particularly relating to publicly available info"

3. The role of government, business sector, civil society

- Paragraph 28: Replace the entire paragraph with the following generic statement: "Government's role is mainly governance in terms of policy and regulation of the

ICT sector but in many developing economies government has an immediate primary responsibility to act as essential catalyst and enabler for ICT development."

4. Capacity building

- Human resources – brain drain, training of trainers in rural areas, the need to keep updating knowledge/skills so (the latter) does not become obsolete.
- To be more awareness on All sectors- especially for general everyday uses.

6. Enabling environment

- The use of appropriate data management should include patent-free software

8. Cultural identity

- Paragraph 51: ADD " . . . and community development in the information society".
- Women & communities should be engaged more in media and content work

10. International co-operation

- Regional ICT technical expertise and resources should be pooled for Pacific island countries' information and use.

Analysis of the WSIS draft Action Plan

In comparing the action plan components of Pacific islands national and regional strategies to the WSIS framework, participants made suggestions on how the draft Action Plan could be improved to strengthen linkages and ensure complementarity with national plans. Priority issues were identified as follows:

General Comments

- There should be a general statement in the beginning regarding conventional media.
- With respect to gender, there should be special references to the Beijing Platform for Action and the Tokyo Declaration.
- Women should be more proactive in management of ICTs and participate more effectively.
- With reference to the use of benchmarks, it is more appropriate to use the number of people instead of measures of technology.
- Access in remote areas would benefit from the use of existing institutions such as libraries, community centres, etc.
- The Pacific islands region should pool technical expertise.

A. Issues

2. Access to information

- Women's access should be addressed, especially by way of education and training on how to use ICTs and not just about getting computers and Internet.

3. The role of government, business sector, civil society

- The use of appropriate data management should include patent-free software

4. Capacity building

- It is essential to create favourable environments to recruit, train, and retain ICT professionals.

6. Enabling environment

- The market environment in most small island countries is insufficient to generate funding support for infrastructure development and locally relevant content.
- It is essential to remove institutional impediments and legal obstacles in the areas of forced monopolies, power supplies, and rural credit as these are the foundation requirement to use ICT.

B. Objectives

- With respect to benchmarks, the target dates are unrealistic for most Pacific island countries.
- Benchmarks for universal access should be defined to include basic telecommunications, not only Internet access

C. Strategies, programmes, implementation

- Paragraph 46: There needs to be an emphasis on multi-sector partnerships. As written the roles seem to be in isolation.
- Paragraph 46: ADD "Governments, the financial sector, civil society……"
- Paragraph 47: ADD "and society" at the end of the first sentence to emphasise the role of government in societal issues not just the economy.
- Paragraph 53: ADD "……showing application and best practices."

D. International Cooperation

- Paragraphs 54 / 56: There should be specific reference to the specific circumstances of Small Island Developing States, possibly through inclusion of Paragraph 11 of the Tokyo Declaration.
- Paragraph 55: Revise the second sentence to read "This will require innovative national, regional and international partnerships.

E. Follow up

- Paragraph 55: Revise the second sentence to read, "This will require innovative national, regional and international partnerships."

- Paragraph 59: ADD "This should include financial support for the preparation of strategic plans and development projects at the national, regional and international levels."

5. PRIORITIES FOR IMPLEMENTATION

Putting plans into action are the aims of the Forum Communication Action Plan, which contains Ministerial level decisions regarding the overall strategic direction for ICT development, and the *Pacific I4D Initiative*, which is the Pacific region's umbrella mechanism for co-ordinating external assistance directed at ICT for sustainable social and economic development.

Pacific island countries and their regional organisations have prioritised four main areas for immediate action. These are tele-health, human resources development, universal access through community telecentres, and continued development of regulatory frameworks. In addition, e-government is rapidly becoming a key initiative at the national level for many Pacific island countries.

Tele-health

The need for modern health care from anywhere in the Pacific is an obvious application for the Internet, which is changing the health sector through access to global information resources, distance education, and remote consultation.

The Pilot Telehealth Project (PTP), co-ordinated by the Fiji School of Medicine and the Pacific Islands Telecommunications Association, will offer remote consultation and diagnosis, community health information, and continuing professional education to doctors, nurses, and patients anywhere in the Pacific. Using this technology a primary healthcare provider in a remote setting is able to transfer clinical information and images to specialist providers in an urban setting. The specialists then review this material and render an opinion, perhaps after requesting additional information via email or through a web-based platform. In this way a dialog can be established between a remotely placed provider and specialist providers regarding particularly challenging cases.

Rather than live videoconferencing as is used in more developed countries, the PTP will use store-and-forward technologies to transfer narrative information via web pages and electronic mail, with the capacity to attach high-quality still images (e.g. radiographs, electrocardiograms, patient photographs, etc.) as attachments. The PTP is in its final development phase and nearing completion. It will be implemented over the Internet where possible, and via satellite network where telecommunications is problematic.

In addition to interactive applications for consultation and diagnosis, there are many email discussion lists in the region. A prominent example is the Pacific Public Health Surveillance Network run by the Secretariat of the Pacific Community (SPC) to co-ordinate communications and provide access to resources through email and a web site

(www.spc.int/phs/PPHSN). This site also features information on other telehealth resources in the Pacific.

Human resource development

One of the most tangible benefits for developing countries from ICT has been in education and distance learning. The advantages of distance learning in the Pacific are obvious, given the remote locations and small populations of most countries. Now, the Internet has the potential to make available first-class educational resources to people at any location at any time.

The University of the South Pacific has been engaged in distance education since 1974, first through post and radio communications, and later through telephone conferencing and email. In the year 2000, a wide-area network called USPNet was created with funding from donors and member countries that offers real-time lectures, online collaboration, access to resources, and videoconferencing via satellite through USP centres in 12 countries. This access is two-way: it is possible for students and academics from USP and its partner institutions in the United States, Japan, and Australia to access courses and materials from any of the institutions involved.

Distance learning at tertiary level is further advanced in the US-affiliated islands of the north Pacific, through the efforts of PEACESAT and Pacific Resources for Education and Learning (PREL), through videoconferencing and data networks. Countries throughout the region are looking closely at these successful implementations of satellite access for their own adaptation.

E-learning at levels below tertiary mainly involves using the Internet for information to complete assignments, but this is mostly limited to urban students in better-off areas. Some secondary schools, but few primary schools, have computer labs with limited Internet access but they are not common. Proactive approaches to encourage greater uptake include an offer by the telecommunications company in Vanuatu for free Internet access to any school that is able to provide its own hardware and the successful creation of school labs by the education department in the state of Yap in the Federated States of Micronesia that provide Internet access to students during the day and the wider community after hours.

Universal access through community telecentres

Telecommunication infrastructure is regarded as one of the fundamental factors for economic development, but in the Pacific environment it takes on an even more crucial role. Telecommunication infrastructure is a lifeline for the scattered Pacific island nations. Pacific islands countries are committed to extending telecommunication and ICT services to under-served and remote areas. As a result, the concept of universal access to several forms of ICTs in addition to telephone calls is becoming increasingly accepted.

The establishment of community telecentres to bridge the digital divide within countries has been identified as a top regional priority. A partnership approach led by the ITU proposes to plan, establish and operate multi-purpose community telecentres on remote islands and in under-served urban areas. Operational telecentres in each of the participating countries will offer services determined by the local communities, and set up to operate on a self-sustaining basis; requiring planning and business expertise. This initiative will allow access to Internet information in rural areas, establishment of e-mail centres, and access to education links throughout the Pacific islands.

Connectivity for civil society has driven one of the most innovative email applications. In Solomon Islands, electronic mail is being offered to people in some of the most remote and challenging conditions in the Pacific, where civil unrest has decimated the administrative capacity of the country since mid-2000. The People First Network is an email service and Internet support infrastructure that facilitates communications and information for remote provinces and outer islands.

The network features low-tech email via HF radio run by volunteers, an Internet Café in the capital, and a proto-portal web site (www.peoplefirst.net.sb). It provides a manual messaging service for rural people who cannot use computers, community and national news services, and access to official information. The rural email stations use a simple, robust and well-proven technology, based on short-wave radios, low-end computers, and solar energy. PFnet is also field-testing low-earth orbit (LEO) satellites, using spare bandwidth donated by several large corporations through VITA

The effect of rapid growth in the numbers of Internet-literate people is already cascading to remote areas as rural email stations are commissioned. The Pfnet service has been used by local NGOs campaigning for better governance, by large numbers of young people reaching the global information highway for the first time, and by rural entrepreneurs who have acquired "hotmail" addresses and, with on-demand training from the staff, have been using this to communicate directly with potential investors and partners. Widespread uptake in other Pacific island countries can be expected as access expands to rural areas.

e-government

The Internet was originally created for the distribution of official information, and this is still one of its more important functions. People and organisations in all sectors use it daily for news, individual and group communication, distribution of documents, and access to government services.

Several Pacific island are planning initiatives to make government information freely available via their web sites, but none have yet reached the operational stage. Although many Pacific island governments operate wide area networks, public access to anything beyond basic information (such as directories) is not common.

Most e-government proposal have in common an emphasis on the need for a complete transformation of processes to improve service delivery, and for complete Internet compatibility for public access, based on the existing government WAN. For example, discussions have begun in several countries about ways to put Customs and Revenue departments on line, to streamline tax and duty procedures and clearance of imports. And a number of Pacific counties are studying the implementation of electronic port manifests to expedite ship-borne exports.

6. CONCLUSION

Access to the Internet by government, public, and business is essential for economic development. A rapidly increasing proportion of information and services is being provided electronically in the region and around the world, and full participation in many sectors is impossible without reliable and affordable access.

Although this is obvious in all developing countries, it is particularly relevant to Pacific island countries that face extremes of high costs, vast distances, and small scales. There are three main areas in which ICTs will transform current practices and generate major and rapid impacts: education, health, and public administration.

These developments will only take place provided the right environment is created and the necessary resources are mobilised. This contribution to the evolving global framework is offered in a spirit of improvement. Pacific island countries have a strong belief in the potential of ICT for development, and look forward to a WSIS Declaration and Plan of Action that will bring that development closer to reality.

To further facilitate a positive contribution by the Pacific islands region, it is recognised that in-person participation by national delegations in the preparatory process, including the Intersessional Meeting, the Preparatory Committee meetings, and the Summit itself, is extremely important. Only through participation can Pacific island countries ensure that their concerns are accurately reflected in the proposed Declaration of Principles and Action Plan. Resources for participation are scarce, and it is hoped that the WSIS Executive Secretariat will play a catalytic role in mobilising the necessary resources.

– ENDS –

ANNEX 1: RECENT PACIFIC REGIONAL HIGH LEVEL ICT EVENTS

Meetings held at intergovernmental level over the past 5 years within the Pacific islands region include:

1998 Forum Economics Ministers Meeting
issued Guidelines on Telecommunications Policy
requested the first Forum Communication Policy Meeting

1999 Forum Communications Policy Meeting
produced the first Forum Communications Action Plan

2000 Asia Pacific Telecommunity Ministerial Meeting
produced Tokyo Declaration and Strategic Action Plan
attended by 11 or 12 PICs at minister or PS level, PITA

2001 Okinawa Seminar on IT for Development in the Pacific
follow up to Japan/Pacific Islands Leaders Meeting and G-8 summit
produced recommendations in 6 substantive areas
attended by 12 PICs primarily at PS level, 2 ministers

2001 Pacific ICT Needs Assessment and Strategy Planning Workshop
produced first draft of Pacific Islands ICT Policy and Strategic Plan
attended by 22 Pacific island countries and terriitories

2002 Forum Communications Policy Meeting
updated the Forum Communications Action Plan
endorsed the final Pacific Islands ICT Policy and Strategic Plan

2002 Asia Pacific Telecommunity / Council of Regional Organisations of the Pacific Interagency Programming Meeting
prioritised the activities in the Pacific Islands ICT Policy and Strategic Plan

The ICT Working Group of the Council of Regional Organisations of the Pacific, which has the intergovernmenal mandate to coordinate ICT planning among regional organisations, comprises the Forum Fisheries Agency, Pacific Islands Development Program, Pacific Islands Forum Secretariat, South Pacific Applied Geoscience Commission, Secretariat of the Pacific Community, South Pacific Regional Environmental Programme, South Pacific Tourism Organisation, and the University of the South Pacific.

Collectively these organisations represent the following 22 Pacific island countries and territories: American Samoa, Cook Islands, Federated States of Micronesia, Fiji, French Polynesia, Guam, Kiribati, Marshall Islands, Nauru, New Caledonia, Niue, Northern Marianas, Palau, Papua New Guinea, Pitcairn Islands, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu, and Wallis and Futuna.

ANNEX 2: SUMMARY DATA ON ICT STATUS

	Cook Islands	Federated States of Micronesia	Fiji	Kiribati	Nauru
Country Code Top Level Domain (ccTLD)	ck	fm	fj	ki	nr
National population	14,300	118,100	824,700	90,700	11,500
Rural population, % of national	41	63	54	63	0
Gross domestic product per capita (US$)	4,950	2,070	2,680	700	3,900
Key economic sectors	Tourism Pearls	Fish Tourism	Garments Tourism Sugar	Copra Fish	Phosphate
Literacy in English	99		94 / 89	92	93 / 96
Computer ownership per 100 inhabitants			5.5		
Telephone lines per 100 inhabitants: national	45	10	10	-	-
Telephone lines per 100 inhabitants: urban	55	-	20	8	-
Telephone lines per 100 inhabitants: rural	35	-	-	4	-
Internet hosts per 10,000 inhabitants	1	1.4	6.6		
Internet subscribers	1,100	1,800	6,000	510	
Cell phone subscribers per 100 inhabitants	9.5		9.7		
National bandwidth to/from the country	2 M (in) 256 K (out)		8 Mb	512 K	

Note: Data are presented on 14 independent and self-governing countries only, but a total of 22 Pacific island countries and territories make up the Pacific island region.

Sources: Data on population, GDP, economic sectors, and literacy from World Bank (2002), *Pacific Islands Regional Economic Report*, 2002 and Secretariat of the Pacific Community (www.spc.int). All other data from Pacific Islands Forum Secretariat unpublished surveys.

	Niue	Palau	Papua New Guinea	Republic of the Marshall Islands	Samoa
Country Code Top Level Domain (ccTLD)	nu	.pw	pg	mh	ws
National population	1,900	19,100	4,790,800	51,800	169,200
Rural population, % of national	65	29	85	35	79
Gross domestic product per capita	3,710	8,030	1,200	2,210	1,060
Key economic sectors	Government	Tourism	Petroleum Mining Timber Fish	Fish Copra	Fish Tourism Garments
Literacy in English	99	97	81 / 63		98
Computer ownership per 100 inhabitants					0.6
Telephone lines per 100 inhabitants: national	-	39	12	15	6.8
Telephone lines per 100 inhabitants: urban	66	-	-	-	17
Telephone lines per 100 inhabitants: rural	25	-	-	-	2
Internet hosts per 10,000 inhabitants			0.9		
Internet subscribers	200	1,700	24,600		3,000
Cell phone subscribers per 100 inhabitants		10	0.2		1.9
National bandwidth to/from the country	64 K	2 M / 3 M	2 M		2 M

	Solomon Islands	Tonga	Tuvalu	Vanuatu
Country Code Top Level Domain (ccTLD)	sb	to	tv	vu
National population	447,900	100,200	9,900	199,800
Rural population, % of national	87	68	58	79
Gross domestic product per capita	340	1,870	1,160	1,230
Key economic sectors	Timber Fish Palm, copra	Agriculture Fish Tourism	Government	Copra Tourism Agriculture
Literacy in English (male / female)	56		98	60
Computer ownership per 100 inhabitants	4.6			
Telephone lines per 100 inhabitants: national	1.5	8	8.6	3
Telephone lines per 100 inhabitants: urban Telephone lines per 100 inhabitants: rural	10.8 0.2	23 3	13 3	12 -
Internet hosts per 10,000 inhabitants	8.5			
Internet subscribers	600	1,200	250	2,000
Cell phone subscribers per 100 inhabitants	0.3	0.2	n.a.	0.2
National bandwidth to/from the country	320 / 512		128 K	