



PACIFIC ISLANDS PARTICIPATION IN THE WORLD SUMMIT ON INFORMATION SOCIETY – PREP COM2

ICT – Issues & Options for Pacific Island Countries



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EXECUTIVE SUMMARY

This Report forms one of the key outcomes of the Pacific Island Countries and Territories (PICTs) involvement in the World Summit on Information Society Preparatory Conference 2 (WSIS PrepCom-2) Tunis Phase, at Geneva Switzerland, February 17-25, 2005. A joint initiative by the South Pacific Applied Geoscience Commission (SOPAC), Secretariat of the Pacific Community (SPC) and Pacific Islands Forum Secretariat (PIFS) enabled daily briefings of WSIS PrepCom-2 proceedings to be disseminated widely in the region to inform and step up regional awareness.

Information and Communication Technologies (ICT) and the Internet have significantly changed people's interactions, communications and work and it is this unique phenomenon that drives the global efforts dedicated to its development. The PICTs have been partners to other nations in setting up global frameworks for ICT and Internet development. At times PICTs involvement in the WSIS process lacks consistency but it is critical for PICTs to continue this involvement to ensure global players consider their concerns.

The ICT sector in most PICTs is a developing and dynamic industry where no status quo exists. It is a public good therefore each citizen has access entitlements. Markets are small and mostly commerce-centred, competition is almost non-existent, and a large part of funds are privately owned. Cost of services and capital investments are usually very high. Users and their degree of competency vary depending on age, gender, and individual skills.

Building an Information Society in the region is challenged by various constraints such as:

- poor access due to inadequate ICT infrastructure, high service costs particularly in remote areas, limited user competency, and lack of local content and material;
- limited financial mechanisms available and unattractive investment conditions;
- lack of appropriate policy and regulatory framework;
- limited technical capacity and capability;
- lack of awareness and appreciation for the role of ICT in social and economic development; and
- inadequate attention towards preserving information with cultural values.

The following recommendations provide suggestions for a way forward, which can only be achieved through serious commitments and continuous investment of time and resources.

Recommendations

1. Step up PICTs' participation level in the global WSIS process through improved representation (such as high-level PICT delegations) and active contribution to the global discussion which will raise the global ICT community's awareness of PICT issues;
2. Integrate ICT development with existing and planned economic and social advancement particularly at national and regional levels;
3. Improve ICT and Internet access by: strengthening the existing infrastructure (to connect rural and remote island communities, women, the disabled, and youths); and increasing local content to reflect PICT cultural and traditional practises;

4. Improve the existing financial mechanism at national and regional levels by reviewing existing public and commercial institutions' grants and loan schemes and setting up of new ones. Public-private partnership where appropriate action must be supported. A special Regional Fund dedicated to ICT and Internet development in PICTs may be established to ensure that funding ICT development is sustainable;
5. Strengthen PICT ICT and Internet capacity at national and regional levels. Capacity building programmes may target, but not be limited to, policymakers, technicians, and conventional users. Sharing of ICT expertise, experiences, and knowledge among PICTs must be strongly encouraged;
6. Reinforce existing national policy and regulatory framework to: promote ICT development to encourage new players (such as foreign private investments) entering the national or regional market; and increase market competitions. Policies advocating good governance must also be put in place.
7. Increase PICTs public awareness and appreciation of ICT and Internet services, in particular, its contribution to social and economic development in the region. Special effort must be given to educate PICT leaders which will encourage them to 'champion' ICT initiatives at national and regional levels;
8. Encourage and support cooperation and collaboration between and within PICTs, including regional and international agencies. Cooperation may not be restricted to technical interests rather it should be at all levels and for all purposes; and
9. Strengthen preservation of cultural heritage and historical information to ensure that future PICT generations appreciate and learn from the historical development of ICT and Internet technologies.

1. BACKGROUND

Information and Communication Technology (ICT) and Internet development has swept across the Pacific Island (PI) region and changed the way communication used to function. Its impact in the region has captured momentum at all levels of development as the region continues to persist with developmental goals such as poverty alleviation; greater access to health services; and education for all, to raise living standards to acceptable levels.

This report is the outcome of a recent initiative by PI regional agencies, mainly the South Pacific Applied Geoscience Commission (SOPAC), Pacific Islands Forum Secretariat (PIFS), and the Secretariat for the Pacific Community (SPC), to improve the region's participation at the World Summit on Information Society (WSIS) process, and subsequently contribute to stepping up awareness and appreciation at global, regional, and national levels of the role of ICT in Pacific Island Countries' (PICTs) development.

This Report attempts to outline and highlight an array of issues PICTs grapple with in their effort to build an Information Society and by the same vein, alleviate poverty in the region. Some options and opportunities are suggested throughout this Report intending to encourage PICTs to take ownership of their national ICT and Internet development. It is anticipated that this Report will assist leaders, policy makers, technicians, and users of ICT and the Internet to make informed decisions involving ICT and Internet development in their respective countries.

2. ICT & GLOBAL EFFORT

ICT has largely been responsible for the digital revolution, which has changed, the way people think, interact with each other, work, and communicate. In addition, ICT has created new ways to build knowledge, educate people, and disseminate information. It has restructured the way the world conducts economic and business practices, how governments operate and engage politically. It has provided for the speedy delivery of humanitarian aid and healthcare, and a new vision for environmental protection. It has even created new avenues for entertainment and leisure. As access to information and knowledge is a prerequisite to achieving the Millennium Development Goals (MDGs), it has the capacity to improve living standards for millions of people around the world. Moreover, better communication between peoples helps resolve conflicts and attain world peace.

While the digital revolution has extended political, economic and social frontiers, a large section of the world population, mainly the poor and remote area inhabitants, are not connected. Recognizing that the digital divide has separated the rich from poor, north and south, a global effort is now underway to bridge this gap.

The World Summit on Information Society (WSIS) was convened to engage world leaders in a global discussion in an attempt to bridge the digital divide and resolve issues of building an Information Society. WSIS has found itself at the heart of the UN agenda and a host of UN-related agencies, national governments, business communities, and civil societies are involved in the process. A daily account of the proceedings for WSIS PrepCom-2 Tunis Phase can be viewed on: www.sopac.org/wsisis

PICTs, often supported by UN fellowships and national funds, have also engaged in the WSIS process through participation in regional and international meetings to discuss various ICT and related issues which includes setting frameworks which will guide global ICT and Internet development initiatives. A global framework, by way of Declarations of Principles and Plans of

Actions, was developed during the WSIS process and it will be tabled for adoption at the World Summit in Tunis, November 2005.

It is imperative that PICTs continue to actively participate at the forthcoming WSIS PrepCom 3 Tunis Phase (in September 2005) to ensure issues pertinent to ICT and Internet development in PICTs are reflected in the WSIS global Plan of Action. At the world summit in November 2005 at Tunis, a high-level delegation from PICTs may be more appropriate to participate. Noting that participation at the first summit in Geneva 2000 was limited to less than a third of the PICTs, it is strongly encouraged that participation at the Tunis Summit be stepped up if PICTs wish to influence the global process.

As a result of PICTs involvement in global efforts to address ICT issues, PICTs formulated in 2001 a regional Strategic Plan, known as PIIPP. Key features of the PIIPP highlight four principles addressing issues relating to human resources; infrastructure development; cooperation between stakeholders; and appropriate policy and regulations. It is critical that PICT leaders adopt the PIIPP as a guideline clearly outlining ICT and Internet development priorities. It is also most critical that the PIIPP is operational and action-oriented.

3. ICT SECTOR IN THE REGION

The ICT sector in the Pacific is a developing industry. Unlike other industries, the ICT sector virtually has no status quo due to the dynamic nature of technology transformation. As a result of the adoption of new technologies the region enjoyed cost reductions of goods and services including expansion of technology choices and development solutions. It has also enjoyed increased opportunities for local communities and entrepreneurs in the dynamic participating actively in emerging social and economic processes.

ICT and the Internet are perceived as public goods which must be accessible to all, and the consumption of which does not diminish the quantity available to others. It is a unique and very powerful tool and if utilized appropriately it will: increase productivity; generate economic growth; and create jobs consequently improving quality of life for PICTs. The abilities of ICT and Internet technologies to store, disseminate, and retrieve large quantities of information within seconds account for its common attraction to users of all ages, economic, social and cultural backgrounds. Perhaps the most significant feature of ICT and Internet technologies remains with its ability to connect and link a large number of people across frontiers and political boundaries to dialogue about common causes. This trans-boundary nature, however, also gives rise to cyber crimes that sees no limits or boundaries.

Use of ICT and Internet technologies attracts a wide-ranging group of users varying from technicians, to women, youth and the disabled, most of which reside in commercial centres where ICT and Internet centres are available. A user's capability depends on several factors such as skills at using the computer and its related programmes; and knowledge of a second language. Therefore, users' profiles for ICT skills and knowledge can therefore range from competent users (such as computer technicians) to schoolchildren with limited skills.

In terms of geographical spread, only a small number of users have access to some form of ICT and Internet services from remote and rural areas. In addition to remoteness, most users in such regions have limited knowledge of a second language and therefore are unable to use ICT and Internet technologies.

ICT and Internet service providers in the region are limited in most island states and in most instances no competition exists because service providers are sole monopolies of public or

private-owned institutions. Limited competition at times gives rise to high user costs where users often take on the costs of providing the service. ICT and Internet services largely are concentrated in commercial centres in the Pacific due to the absence of appropriate supporting infrastructure such as transportation modes that allows ICT and Internet services to reach the remotest and most isolated communities. Furthermore, the absence of secure financial mechanisms in the region also contributes immensely to hampering the efforts of PICTs in improving ICT and Internet services. As a result a significant part of the population remains unconnected.

New players or service providers are commonly private national entities, often in partnership with foreign investors and in rare instances, in partnerships with public entities, therefore much of the development in ICT are private sector profit-driven. Upfront costs involve large capital investment on Internet infrastructure and only private sector entities are motivated to invest.

Exit of service providers are also common in the region due to high costs of service delivery and small market dynamics working against their long-term survival.

4. ISSUES AND OPTIONS FOR PICTS

Building an Information Society in the Pacific region has been a recent preoccupation of most island states and such preoccupation has encountered a host of issues contributing to undermining satisfactory progress. The following outlines a set of key issues which has hampered PICT efforts in moving towards a Digital society:

4.1 Access

Access to ICT and Internet technologies is not restricted to availability of services only but it also encompasses the concept of users' ability to use ICT technologies effectively. While a large number of people in the PICTs may have access to ICT and the Internet services, a significant number of PICT residents remain unconnected due mainly to the reasons outlined in previous chapters.

Notably, PICT populations are predominantly rural, where villages are scattered in mountainous regions and small isolated islands that are difficult to reach by common means of transportation. These areas are often disadvantaged in terms of small market syndrome, limited available disposal incomes, access to good education, and poor modes of transportation. Therefore costs for providing ICT and Internet services to these remote regions are often high and these remote communities' dwellers simply cannot afford to pay such high costs.

To extend ICT and Internet services to remote areas, serious public investment, including public-private partnerships, in ICT and Internet service infrastructure must be integrated with related developmental programmes for health and education at community levels.

ICT and Internet services must also be localised where content is largely cultural information in local languages which will encourage people to use it effectively. It will also broaden the scope of users currently accessing the Internet.

4.2 Financial mechanisms

Financing is an integral part of, and the most challenging undertaking in, ICT and Internet development in the region. Most PICTs are small economies with small markets largely unattractive to foreign investors. Local infrastructures are often inadequate to support ICT and Internet development. To a large extent, financing of ICT and Internet development in most PICTs relies heavily on donor/foreign private investment through various financing schemes (grants, loans etc). In places where ICT service providers are government-owned, insufficient public funds are allocated for ICT and Internet development.

At national and regional levels, available financing schemes for social services are commonly available. In most instances, ICT and Internet development competes with social service sectors such as health, education, water, and national security for limited public funding.

Continued foreign investment must be encouraged at all levels and PICTs must be active in seeking financing opportunities provided by regional and international programmes, although at times releasing funds from such programmes can be time consuming. Sufficient public funds must also be allocated to support ICT development and the PICT must be committed to this objective if serious ICT development at national and regional level is to be realised.

Some PICTs are LDC status (such as Samoa, Solomon, Vanuatu etc.) and each PICT enjoys the technical and financial support available through regional and international developmental programmes delivered by UN and related agencies. These PICTs must note that in the not so distant future, their LDC status will change through graduation to developing countries status. Therefore PICTs must be creative and innovative in terms of financing ICT and Internet development to ensure that financial mechanisms available are sustainable.

Options worthy of PICTs consideration and strongly encouraged include public-private financing and foreign-national partnerships at national, regional and international level. There are many examples of such arrangement elsewhere in the Northern developed countries and from which PICTs may learn many lessons from the successes, or lack thereof, of these partnerships.

Furthermore, the concept of the WSIS Digital Solidarity Fund (DSF) may be considered as an appropriate model with some minor adaptation for the PICTs. International and regional agencies, private or public, may be encouraged to contribute to a common PICT Regional ICT Fund (RICTF) for ICT and Internet development.

Other alternatives for PICTs may also include securing an arrangement with the DSF administrator to ensure PICTs receive an annual fixed share of the funds. This can be achieved through negotiations as a regional body rather than independent states and secured by a Memorandum of Understanding which will allow PICT to utilise DSF funds effectively. Financial control measures must also be part and parcel of any new financial mechanism set up for ICT and Internet development in the region.

4.3 Policy and Regulatory framework

Good regulatory frameworks are absolutely necessary for building an Information Society in the region primarily in terms of addressing developmental requirement and governance issues. ICT and Internet development in the region depends largely on: an enabling environment attractive to investment; a level playing field and fair competition; open entry; and market-oriented regulations.

ICT and Internet development in most PICTs has been challenged by the absence of enabling environments with suitable conditions. However, some PICTs are currently implementing policy reforms to encourage social and economic growth resulting in open markets where private service providers (particularly in the mobile phone market and Internet services) compete with public-owned enterprises and experience has shown that such competition has reduced costs of services and expanded end users' choices. PICTs are encouraged to continue looking for innovative strategies that encourages growth of the ICT and Internet sector in their respective countries. In PICTs where monopolies continue to dictate ICT and Internet performance may wish to consider merits of opening their market to competition if possible. Such changes may require policy reforms and regional and international agencies may play an important role in guiding the process.

Good governance, primarily Internet governance, has been a topic at the forefront of regional and national discussions due to rising Internet and related crimes. PICTs are concerned about cyber crime that threaten national security; invades privacy; encourages illegal trade; and fosters terrorism. Furthermore, PICTs recognise that Governments play a key role in Internet governance given ICT and Internet governance are in the domain of public policy.

However, most PICTs do not have appropriate regulatory instruments nor technical and administrative expertise necessary for countering Internet and ICT-related crimes. These PICTs find themselves targets of cyber crime. Various options for countering Internet and related crimes may be considered. A multi-stakeholder partnership approach to Internet governance must be adopted, where Governments, private sector, civil society, and regional and international agencies, work together to counter cyber crime in PICTs. Regional and international agencies, such as the UN and related agencies play a key role in strengthening PICTs technical and management capacity through extensive open consultations and training programmes for policy makers, managers, technicians, and users.

The institutional framework for ICT and Internet development in the region, like other sectors, is multi-entity where roles and responsibilities rest with various government institutions or public owned enterprises rather than a single agency. While this integrated approach promotes multi-stakeholder collaboration, it often falls victim to conflict of interests between agencies; coordination becomes complex and inefficient; and efforts are duplicated, thus resulting in inefficient use of limited available resources. Partnerships between public, private, and community sectors at national and regional level must be strongly encouraged to ensure that the integrated approach towards policy development and implementation is maintained. PICTs must feel free to share experiences with, and learn lessons from, each other.

Lack of clear policies or direction for developing ICT and Internet technologies at national and regional levels has been a concern in recent years for PICTs. At regional level, a Digital Plan has been formulated in which five major areas of priority has been stipulated. This Plan is in draft form and its formal adoption is unknown. At national level, while a few PICTs have not had the resources to develop national ICT Plans, most PICTs have formulated national ICT Strategic Plans, linked directly to the draft regional Digital Plan. Some PICTs have shown progress with regards to implementing their national Plans while others have insufficient resources (such as funding, expertise, and equipment) to implement their Plans. While it is critical that PICTs continue to allocate part of its limited national resources to implementing these national Plans, regional and international agencies also play a key role in providing technical and financial support to PICTs. Past experience has shown that PICTs need continuous and strong support from external sources.

4.4 Capacity and Capability

Building an Information Society in the region largely depends on PICTs capacity and capability to address developmental issues such as policy requirements, technology knowledge transfer, and users' protection.

Shortage of human resources in the PICTs has raised serious concerns about the sustainability of ICT and Internet development. There remains a shortage of expertise in the areas of ICT and Internet policy development, management, and technical related fields. In most instances, where in the region national offices have been set up to take the responsibilities for ICT development, often these national offices operate with less than five personnel and in some cases; these personnel have responsibilities besides ICT. In most cases, national offices do not have the appropriate expertise and resources to pursue ICT developmental goals. Therefore at times, most PICTs are prevented from participating effectively in regional and international ICT and Internet forums (such as WSIS).

In the region, Users of ICT and Internet technologies are also considered relatively limited to due to language barriers, lack of computer technology know-how, limited technical skills and so on. National efforts in capacity building have improved public and community knowledge but such efforts need to continue.

External support continues to be essential for developing the capacity and capability in PICTs and regional and international agencies may play a key role in bringing PICTs together (through training programmes, workshops, meetings etc) to share knowledge and experiences. Capacity building programmes must also target remote area inhabitants to ensure they too have the base skills and knowledge to use ICT and the Internet effectively. Great consideration must also be given to localising ICT and Internet materials, particularly developing programmes in local languages, increasing content of cultural heritage such as folklores and customary practises.

Regional agencies, such as the Pacific Islands Forum Secretariat, SOPAC, SPC and others have played a key role in building capacity in the region through training programmes, policy reviews, multi-stakeholder consultations to name a few. However, more effort is needed.

4.5 Participation and Awareness

Participation and awareness of all stakeholders in ICT and Internet development is critical to achieving a balanced approach. Lack of participation in policy formulation and decision making regarding ICT and Internet development, specifically governance, often account for part of the problem slowing down ICT growth in the region. In addition, a large number of people in the region have little appreciation for the role of ICT and Internet technology in building knowledge and reducing poverty.

Involvement of civil society groups, business community, and all stakeholders in policy formulation and decision making relating to ICT development as well as Internet governance must be encouraged to ensure that ICT development processes are transparent, inclusive, multi-stakeholder, and consultative.

At the global level, participation at regional and international fora in which PICTs are able to influence the process, secure support for regional ICT development programmes, and align themselves to nations with common interest.

4.6 Preservation of Information

Significant efforts and focus have been invested in building an Information Society and resolving issues associated with the process. While it is vital that the region moves into the digital era, it is equally important that attention is given to preserving information in PICTs through electronic or conventional means to reduce risks of losing evidence of cultural heritages.

5. WAY FORWARD

ICT and Internet technologies indeed are unique tools and their application and development will be more meaningful when it is integrated with social and economic development aimed at reducing poverty and advancing a 'knowledge-based' Pacific society.

Strategic alliances, where it is absent, must be encouraged or reinforced within and between PICTs in which all must work towards common goals of developing ICT and Internet services; combating cyber-crime; sharing information; and facilitating the trade of ICT goods and services within the region. Such strategic alliances may also extend to include partnerships with other neighbouring regions. Investment in ICT infrastructure is a major undertaking and partnerships between private and public entities must be stimulated which will allow sharing of ICT development costs and responsibilities.

PICT public entities, including regional agencies, must focus on core roles critical to building a PI Information Society. Most often public and regional entities tend to engage in activities that add little or no value to ICT development therefore limited available resources are wasted and efforts are duplicated. ICT development priorities and direction must be clear and PICTs must first and foremost strengthen existing infrastructure and continue developing national capacity.

In summary, PICTs must invest resources, time and effort in national initiatives additional to engaging in regional and international programmes. Priority for ICT development must always start at home.

6. RECOMMENDATIONS

1. Step up PICTs' participation level in the global WSIS process through improved representation (such as high-level PICT delegations) and active contribution to the global discussion which will raise the global ICT community's awareness of PICT issues;
2. Integrate ICT development with existing and planned economic and social advancement particularly at national and regional levels;
3. Improve ICT and Internet access by: strengthening the existing infrastructure (to connect rural and remote island communities, women, the disabled, and youths); and increasing local content to reflect PICT cultural and traditional practises;
4. Improve the existing financial mechanism at national and regional levels by reviewing existing public and commercial institutions' grants and loan schemes and setting up of new ones. Public-private partnership where appropriate action must be supported. A special Regional Fund dedicated to ICT and Internet development in PICTs may be established to ensure that funding ICT development is sustainable;

5. Strengthen PICT ICT and Internet capacity at national and regional levels. Capacity building programmes may target, but not be limited to, policymakers, technicians, and conventional users. Sharing of ICT expertise, experiences, and knowledge among PICTs must be strongly encouraged;
6. Reinforce existing national policy and regulatory framework to: promote ICT development to encourage new players (such as foreign private investments) entering the national or regional market; and increase market competitions. Policies advocating good governance must also be put in place.
7. Increase PICTs public awareness and appreciation of ICT and Internet services, in particular, its contribution to social and economic development in the region. Special effort must be given to educate PICT leaders which will encourage them to 'champion' ICT initiatives at national and regional levels;
8. Encourage and support cooperation and collaboration between and within PICTs, including regional and international agencies. Cooperation may not be restricted to technical interests rather it should be at all levels and for all purposes; and
9. Strengthen preservation of cultural heritage and historical information to ensure that future PICT generations appreciate and learn from the historical development of ICT and Internet technologies.

ACRONYMS

ICT	Information and Communication Technology
DSF	Digital Solidarity Fund (WSIS)
LDC	Least Developed Country
MDG	Millennium Development Goal
PI	Pacific Island
PICT	Pacific Island Countries & Territories
PIFS	Pacific Islands Forum Secretariat
PIIPP	Pacific Island ICT Policy and Strategic Plan
RICTF	PIC Regional ICT Fund
SOPAC	South Pacific Applied Geoscience Commission
SPC	Secretariat of the Pacific Community
WSIS	World Summit on Information Society
DSF	Digital Solidarity Fund
MDG	Millennium Development Goals
UN	United Nations

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