要請書(写)

MINISTRY OF FOREIGN AFFAIRS & EXTERNAL TRADE
P.O. BOX 2220, GOVERNMENT BUILDINGS
SUVA, FIJI

Tel: 3309 662

Fax: 3301 741

NOTE NO. 636/2002

The Ministry of Foreign Affairs and External Trade of the Government of the Republic of the Fiji Islands presents its compliments to the Embassy of Japan and has the honour to endorse and submit the following project under the Japanese Grant Aid Programme;

1. University of the South Pacific (USP) Information and Communication Technology Center.

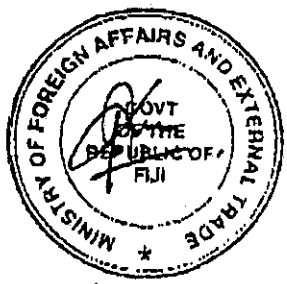
The Ministry of Foreign Affairs and External Trade of the Government of the Republic of the Fiji Islands avails itself of this opportunity to renew to the Embassy of Japan the assurances of its highest consideration.

Embassy of Japan
Dominion House (2nd Floor)
SUVA

8 October, 2002

Cc: HE Ratu Tevita Momoedonu
Ambassador
Fiji Embassy
Japan

Mr. Naipote Katonitabua
Ministry of Finance & National Planning



Project Proposal for Centre for ICT at the University of the South Pacific

14 August, 2002

... University of the South Pacific (USP).

A mission statement for the Centre would be: USP's Centre for ICT will significantly improve the socio-economic development of the region by being the main source of research, education, training, consulting and knowledge about information and communication technologies. A particular focus will be on the impacts and applications of those technologies in the South Pacific.

A core group, consisting of a small permanent staff plus USP's Maths/CS department, Information Technology Services, a Leaning Technology Centre and one other unit will work closely with one another and with other departments of the university on inter-disciplinary projects involving the impacts and applications of ICT. The group will also work with regional organizations, UN agencies and NGOs to leverage the work those organizations are already doing in the region.

Funding is needed for initial staffing, a building and equipment to establish the Centre. Over time, it is expected the Centre will sustain itself using research grants and several other fee-based services.

2.0 Description

The proposed Centre can be described in terms of several long-term (5-8 year) objectives, as follows:

- The Centre is perceived by people, both within and outside the region, as the main source of information, research, education and training for ICT in the South Pacific. It is a leader in this area and a model for other developing countries and regions.

- it is especially known for understanding the impacts and applications of ICT on socioeconomic development in the region and for raising awareness with the right policy and decision makers. It has a reputation of significantly influencing public policy.

- Within the region, governments, industries, students and regional organizations look first to the Centre for their ICT needs: from policy development, to application of ICT to solving their problems, to world-class degrees and diplomas in ICT fields, to consultants and to introductory ICT courses at the community level.

- Outside the region, NGOs, UN agencies, donor countries and other international organizations believe the Centre provides their main source of data, research and knowledge about ICT for the South Pacific.

- increased economic growth
- improved socioeconomic development including poverty reduction, gender equality and monitoring of the environment
- preservation of regional cultures and increasing the knowledge of those cultures outside the country and region
- increased competitiveness as reflected in improved trade outside the region and trade among countries within the region
- increased numbers of ICT graduates and professionals
- improved government regulatory, trade, cultural, gender and other policies

- The Centre knows what other developing countries are doing in ICT policy development, education, training, network access projects, application of ICT to organizations/industries. It selects the best of these developments and it has a good "track record" of applying these projects to the South Pacific.

- Several ICT projects supported by the Centre in the region are used as models in other developing countries and regions.

- The Centre knows what the latest information and communication technologies are and what may come next. It understands the impacts of those technologies and looks for ways to best apply them to the region. It may even provide input to industrialized countries on needs so as to effect development of new technologies.

- It has an international reputation for offering up-to-date courses, certificates, diplomas and degrees in ICT. (Student enrolment in these courses is expected to grow 10% annually.)

- A Learning Technology Centre applies the latest technologies to improve education and training.

- Its consultants are regularly called on to advise governments, businesses and other organizations on impacts and applications of ICT

- It regularly sponsors ICT conferences and its researchers, consultants, trainers and other staff are frequently called on to speak at regional and international ICT conferences.

- The Centre's knowledge of ICT is frequently reflected in degree courses in fields such as economics, geography, culture, sociology, education, tourism, business and management. Students in these courses are taught how to apply ICT in their future careers.

...s, UN agencies, etc to both receive and provide the latest information about ICT's impacts and applications.

- It is the main repository of data about ICT in the region and maintains the necessary databases and websites to support its own activities and those of other organizations.

- USP itself effectively uses the latest technologies for student and staff support.

Clearly, these goals will take significant time, funding and other resources to achieve. Equally clear is that a multi-disciplinary approach is needed and that the groups of individuals who are part of different organizations must work closely with each other and with outside organizations. Professors, lecturers, researchers, trainers, ITS staff, conference staff, must work closely with each other to share their knowledge on common projects. To attract this broad range of qualified professionals, the Centre must be very visible from the beginning and must be able to support projects that are both challenging to the staff and provide major benefits to the region.

The Centre for ICT is not just a physical structure. It is much more. It becomes a place where professionals from different organizations interact daily as members of teams working on a broad range of projects. It is a place where international, regional and national conferences are held. It houses the latest in ICT hardware and software for shared use in research, education, training, conferences and other ICT projects. It provides the visibility needed to attract the necessary professionals and to help build its reputation.

3.0 The Need for a Centre for ICT for the South Pacific Region

The recent rapid advancement of the Internet and other information and communication technologies poses both a challenge and an opportunity for the peoples of the South Pacific islands. As industrialized countries learn to use these technologies to create for themselves more productive and integrated economies, there is an unfortunate possibility that the South Pacific countries will be left behind. This is sometimes referred to as the "Digital Divide". On the other hand, if we can apply these technologies to solve the inherent geographic problems of small markets and large distances between countries, there is a definite possibility the region can improve economically and become an active member of the information society.

What is required to take advantage of this opportunity? Clearly, the education of highly qualified ICT professionals is required, but that is only the beginning. ICT pervades all professions so all university students must become familiar with how to effectively apply ICT. Beyond that, ICT affects more than university graduates and students. Ways must be found to expose the advantages of ICT to secondary

can best be used to address the unique problems of the region; for example, to use ICT to find information and markets globally, thus reducing the impact of small markets and large distances between countries. In small economies, only a few small successful projects are needed to significantly improve the standard of living. Research into the potential impacts of ICT on the unique cultures of the South Pacific as well as how these technologies might be used to preserve and enhance those cultures is also needed.

It has been pointed out in other sources that there are many "digital divides". A unique feature of the South Pacific is the existence of a divide between countries in the eastern part of the region and those in the west. There are, for example, significant differences in the percentage of people who have satisfactory access to education, healthcare as well as computers and the internet. The Centre has a unique opportunity to find ways to bridge this regional divide.

Several international organizations and countries have funded various ICT projects in the South Pacific ranging from addressing regulatory and infrastructure issues to providing basic IT training. However, no one organization tracks these projects or has a good understanding of the scope of all of these projects. Websites and databases that are focused on the ICT needs and projects in the South Pacific, with links to websites of other organizations are needed. More importantly, experts are needed who have a good understanding of a broad range of ICT matters for the region.

Finally, the Centre must be able to provide support and services to all the countries of the region, many of which are quite small, varied and separated by large distances. Local economic, social, cultural and other needs must be understood and the impacts and applications of ICT applied locally. This requires what might be called a "distributed Centre".

4.0 Why USP ?

USP offers tertiary education at its three campuses (Fiji, Samoa and Vanuatu) and, via distance-learning, at its Centres and Sub-centres located in all twelve member countries. These USP Centres serve as the main interface between USP and the governments. They also provide Continuing Education courses in several areas, including information technology. In addition USP has run training programs for several years in many areas, either directly from the university's institutes and academic departments or though USPSolutions. It may be said that from its inception in 1968, USP has been successfully bridging an "education divide" in the region.

The Centre for ICT is very consistent with the Mission Statement of the University, which is: "The objectives of the University shall be the maintenance,

Pacific."

With the generous assistance of Japan, Australia and New Zealand, along with support from its member countries, the University established and operates USPNet, a closed, satellite-based system providing audio, video and data communication between all USP campuses and Centres.

USP is uniquely positioned to meet the goals of a Centre for ICT. For example, one of the goals of the Centre for ICT is to train secondary school teachers on how to use ICT in their work. This can be done in several ways: the Centre can run training programs for current teachers and, at the same time, ensure that ICT is incorporated into Education degree programs for new teachers.

USPSolutions currently handles contacts with outside agencies for training and consulting. It has established links to USP's Schools, Departments and Institutes to enlist the skills needed for its training and consulting practices. It is also responsible for USP's guest housing that relates well with the Centre for ICT's conference component.

5.0 Overview of Centre for ICT

As indicated earlier, the Centre has a range of functions. However, the success of the Centre is dependent of the various groups working together on a daily basis, sometimes as members of the same team. For the Centre to meet is goals and to be successful, the whole must be greater than the sum of the parts.

5.1 Research

Research projects would be done in several areas as follows:

5.1.1 Needs Assessment. The first element of the Centre's research will be ICT Needs Assessment studies to identify and prioritize research and training projects. Country surveys, contacts with NGOs and other agencies, web searches and the knowledge of USP staff will be used. Information about Regional Needs and/or the methods used elsewhere to understand the needs may be found through contacts and web searches outside the region.

5.1.2 Baseline Research

Studies of the current use of ICT will start with what is already available and will build from that information (The information gathered would be added to the Centre's data bases or web pages.) Example: Information about the ICT capacity and "e-readiness", which includes information on the extent of telephone lines, PCs, internet access and pricing are available for some of the region's countries through organizations like the Pacific Island Forum Secretariat, International Telecommunications Union (ITU) and ESCAP (see Annex 1). Once collected, it

of students ... first be done, followed by surveys as needed. Results current sources would be added to the Centre's data base or web sites. A much broader example would be to attempt to quantify the gap between the region's ICT capability and that may be to attempt to quantify the gap between the region's ICT capability and that of New Zealand or Australia. Baseline research will also include understanding what organizations have ICT data about the South Pacific and establishing contacts with them.

5.1.3 **Research required for ICT training seminars and workshops**

Development of the Centre's training seminars and workshops will also require an understanding of what already exists in terms of training materials and trainers. Following that, materials for the particular group of trainees (audiences) would be collected or created. Case studies of where ICT was applied to that particular audience would be searched out and incorporated, if appropriate, into the training materials.

Examples: For a workshop planned for a government ministry of Finance, were there similar workshops run in other countries? Are training materials available and are they appropriate? Would it be appropriate and less expensive to pay for the trainers of the sessions(s) that have already been held to give the Centre's workshop (or "train-the-trainer" workshops held)? What lessons can be learned from the past experiences?

5.1.4 **Research on the Regional Impacts of ICT**

This area covers both positive and negative impacts of ICT. Research projects will cover several areas. Some examples: What has been the impact to date of the gap in use of technologies on the economic development of the region (or some countries of the region)? What will be the impact if the gap increases or if it decreases? In the area of Culture, how have the Cultures of the region been impacted so far? What are the potential additional impacts? What has been done to protect cultures? How have other cultures of the world been impacted? A third example might be to identify the impacts of ICT on regional government's transparency and the privacy of its citizens. What are to potential positive and negative impacts? What has been the experience in other countries (both industrialized and developing)? As a final example here, what are the evolving technologies and how might they impact the region.

5.1.5 **Research on Policy Development**

Experience has shown the importance of changing Government policies to support the use of ICTs. The most frequently noted is the necessary changes to Telecommunications regulatory policies. Policy changes are also need in trade, education, taxation, health, security, privacy, copyright, and other areas. The Centre's research in this area will include understanding the current policies (by country), what changes have already been made, what changes have been made in

especially true for governments. A government's national ICT Strategy may include plans for policy changes. Another area of the strategy might be broad outlines on how the government plans to use ICT in its own ministries and departments. The Centre for ICT's research will include understanding of the status of each country's ICT Strategy and its implementation of that strategy. The Centre would also become a liaison point with all regional governments, enabling them to learn from each other about policy changes. (See Annex 1 for a brief description of some organizations that are currently assisting in Regulatory Policy and national ICT Strategy development.)

5.1.6 Research on the Response and Application of ICT

Closely tied to the above section describing research on Impacts of ICT is related research on what has been and can be done to minimize the negative impacts and optimize the positive effects. What has been done in the region already? What has been done in other countries? For example, in the area of culture, current websites such as the Kavabowl Forum that provide regional chat-rooms can be expanded to include materials on cultural preservation. Another example in culture is where there are examples of both the Aborigine peoples and the displaced peoples of Latin America using technology to better organize themselves not only to preserve their Cultures but increase awareness by others. What was done and can it be applied to, or modified for, the South Pacific region? Related research might be to determine how ICT could be used to further link the Polynesia Culture with the Maori culture of New Zealand. Similar research work would be done in the areas of gender, the environment, and, more broadly, poverty alleviation. In each case, research will include identification and application of projects done elsewhere and what lessons can be learned; for example, about the ESCAP project in South Korea to train college women to design web-pages? In the area of economics, how can ICT be better used to increase trade within the region, with countries outside the region or to improve the efficiencies of governmental departments concerned with trade? Here again, research will start with understanding what has already been done in the region and what has been done in countries outside the region and to determine if those projects can be applied elsewhere.

5.1.7 Technology Research

Research into new technologies would be undertaken by the Computing Science staff to understand them well enough so that colleagues in the Centre can begin to understand potential societal impacts and uses. .

5.2 Education

The main elements of this component are the computing science degrees, diplomas, certificates and courses offered by USP's Maths/Computing Science Department. Using recent trends, enrolments in these programs is expected to

courses to be offered from other universities via broadcast and interactively through the internet. The Centre will ensure that graduates have internationally recognized quality degrees in Computing Science. The Centre will also work with other academic departments to ensure that impacts and applications of ICT are properly incorporated into their courses.

5.3 Training

The Centre will provide training in many forms:

- Awareness training sessions: these will usually be in the form of one to two hour presentations to individuals or small groups on the impact and applications of ICT. For example, presentations would be given to government officials in various ministries on what the technologies can do, what the impact might be on their areas of responsibility and include some high level recommendations on actions that can be taken.

  Examples: Customized presentations to Ministers and Permanent Secretaries of Planning, Education, Trade, Tourism or Culture on the potential impacts and applications of ICT on their areas of responsibility and what actions they should take. These would be further customized to specific countries based on their current needs and knowledge of ICT. Another example would be to hold meetings to explain how ICT can expand markets, which in turn can improve the economies and help reduce poverty.

- Presentations at conferences and symposiums: These are presentations to larger groups at meetings generally held over several days. The presentations will most often be somewhat more general because the larger groups will have people with different levels of knowledge about ICT.

  Examples: Presentation of Case Studies of how other developing regions have used ICT to improve trade; Presentation on the real and potential negative impacts that ICT has already had on the cultures in the region and case studies of how ICT has been used to preserve cultures. A presentation on how to manage the organizational and process changes needed to optimize the use of ICT with emphasis in employee concerns.

- Workshops: These will be held over several days. Attendees at a workshop will have similar backgrounds and job responsibilities. Case studies will be studied in detail. Activities will be interactive with attendees working in small groups on exercises. Some exercises will include creation of implementation plans on how ICT can be used in their individual work environments.

  Examples: A three day workshop for secondary school teachers, on ICT technologies, how to use them and, using case studies, how to incorporate

ministry to improve their efficiency and customer service with ICT. develop detailed plans Case studies from similar ministries in other countries (both industrialized and developing) would be used; a two day workshop for industry on how to manage change, especially change resulting from the introduction of ICT.

5.4 Conference Centre

The Centre will also sponsor national, regional and international conferences on ICT. Conference speakers will include researchers and trainers from the Centre, other USP departments as well as outside speakers with regional and international reputations. One major attraction will be the Centre's unique research on the impacts and applications of ICT on the South Pacific region. Examples: A three-day conference for counties in the region about the real and potential impacts of ICT on their cultures. Speakers and attendees would also include UN, Regional agencies, NGOs and donor countries with the goal to identify and fund new programs to preserve cultures.

5.5 Consulting

Staff members of the Centre will provide ICT consulting services for governments, businesses and other organizations throughout the region. At times, staff members from USP's academic departments and institutes will also serve as consultants. Consulting engagements ranging from several days to multiple weeks will enable consultants from the Centre to work with client departments to create plans on how organizations can best use ICT. Over time, consulting is expected to be a major source of revenue for the Centre. Some of the strengths of the Centre for consulting business are:

- access to research and Computing Science staff and to information contained on the Centre's data bases
- access to information about other ICT projects in the region
- ability to use the Centre's training capability as part of a packaged consulting offering
- access to the latest ICT technology
- the reputation of the Centre
- the presence of USP's Centres in all member countries.

Examples: A three week consulting engagement with a government department to identify their businesses processes and workflows and how they can been improved using ICT. A two week engagement with a small garment manufacturer to improve one or more parts of its business.

5.6 Other Services

5.6.1 Certification and Testing Services

certification for their work areas. In addition, there will likely be other ICT related testing needs that can be met by the Centre.

5.6.2 **Internet Service Provider**

The University is seriously considering the possibility that the Centre would provide Internet services to the general public in some countries of the region. USP students and staff currently access the internet, some using USPNet and it is technically feasible to extend that service to the general public through USP's Centres. There are two important considerations. Currently, the university's agreements with member countries and other USPNet donors limit the use of USPNet to university staff and students purposes. Also, Telecom organizations in most member countries are fully or largely owned by the governments who may not appreciate competition for internet services. However, the following rationale can be proposed: Member countries have already accepted the general concept of an open, competitive telecommunications environment. (This, by the way, will be one of the regulatory policies that the Centre for ICT will strongly support.) Some countries may respond however, that their ISP market is so small that competitors are unlikely to invest in infrastructure and organization to enter it. In response, USP's Centre for ICT will have an existing infrastructure, organization and a good reputation for providing Internet access. Thus, an internet access service offered by the Centre for ICT would both support member counties' migration to an open telecommunications environment while also providing revenue to the Centre for ICT. (Note: JICA's experience with IT Centres in Asian countries that include provision of internet services would be very helpful in setting up this service.)

5.6.3 **Access to PCs and the internet**

All USP Campuses and Centres have IT labs for students and staff to work both offline and on-line. The Centre for ICT would open this up to the general public on a fee-paying basis. Since the infrastructure and organization already exists, this would be a relatively simple thing to do. This would also create a major opportunity for the Centre for ICT and the whole university to encourage non-university students to enroll in classes, training sessions, etc.

5.7 **A regional, distributed Centre for ICT**

One of the unique characteristics of USP is its presence in all member counties through its regional USP Centres. The Centre for ICT will leverage this organization in many ways. The responsibilities of each USP Centre will be expanded to include the role of being the local arm of the Centre for ICT. By having a local presence in each country, USP Centres will provide contacts with local government officials and business leaders to understand the ICT environment in each country. This will be very helpful for the research done by the Centre for ICT. The Centres will be a key source of knowledge about the country. Centres will continue to offer ICT courses both face-to-face and by

... physical structure and main organization based at the Laucala campus.

5.8 Regional ICT data bases and Websites

In the early stages of the Centre, databases will be set up so that ICT information is added as it is collected and created. This information would include research, training or consulting findings. ICT information produced by other organizations will be accessed via web sites or shared in other ways. The Centre will develop its own web pages so that other organizations can access it easily. Other departments of the University will access the data for their own research and study. Over time, these data bases and web sites will become the primary source of data about ICT in the Region.

6.0 Core Organizations of the Centre for ICT

As mentioned earlier, the success of the Centre for ICT depends on a very close working relationship between key groups within the university. Members of the organizations will work as teams on a range of projects. The different departments will also need frequent access to the same state-of-the art ICT equipment. The organizations that make up the core of the Centre will need to be located in the same physical building. The Centre will become a single logical entity although the core departments and units may have different organizational reporting structures. This core organizations consists of the full-time staff of the Centre, Maths/Computing Science, Information Technology Services, a Learning Technology Centre and the Geographical Information Systems unit. This section describes these groups and indicates how they will work together to achieve the goals of the Centre.

6.1 Full-time Research, Training, Consulting, and Conference staff

There will be a relatively small number of staff members who work full time on the activities of the Centre. They will identify potential projects, will frequently be project leaders and will provide key linkages between Centre projects. Frequently, but not always, they would be the ones who give conference presentations. Centre leadership, business development and administrative staff would be part of this group.

6.2 Maths/ Computing Science Department

Teaching staff will provide the Computing Science certificates, diplomas and degrees that make up the Education component of the Centre. This staff will also ensure that courses covering the latest technologies are available. The staff will be aware of what future employers require (in the region and in Australia and New Zealand). New face-to-face and extension courses will be developed, acquired or accessed from other sources via satellite networks or the internet. Staff will provide the technical expertise in Computing Science that is required for some

Examples: How can a standard software application be modified to meet the specific needs of a country or the region? What new technologies are available and can possibly be modified to enable telephone and IT access to more people in the region's remote areas and outer islands? What special education programs in ICT have been created in other developing regions?

The Centre for ICT will also serve to attract and retain qualified Computing Science staff (A shortage of teaching staff has been a problem in the past at USP and other Universities). Graduate students will also take part in the Centre's research and training projects and that will be a major attraction for potential students to enter USP's post-graduate Computing Science degree programs.

6.3 **Information Technology Services (ITS), including USPNet**

This organization currently supports USP's telephony, data and satellite (USPNet) networks as well as USP's computerized administration system called Banner. ITS provides both staff and student support services including basic IT training and help desk support. It supports the USP Centres by maintaining USPNet and obtaining and maintaining telephony and IT end-user and network equipment. The ITS organization will be an important component of the Centre. It will use the latest equipment to support USP staff and students, including the Centre for ICT. It will share advanced technology equipment with Computing Science and work with the CS staff to identify and select the best way to improve service to the customers. It will run the public-access IT lab business as an extension of its current support of staff and students and, most likely, the Internet Service Provider (ISP) business if that business becomes part of the Centre. ITS staff will assist with the Centre's training component, especially for basic IT training since they currently do that for USP students and staff. USPNet staff will continually upgrade the satellite, telephone and local area networks to meet the growing demands of students, staff, trainees and the general public. USP's extensive data and satellite networks will serve as a testing ground for new technologies and will be case studies for other developing regions. ITS staff will provide the logistical support and also participate in the Centre's Conferences. The Centres activities will enable ITS to continue to attract and retain highly qualified staff.

6.4 **Learning Technology Centre**

As part of the Centre for ICT, the university plans to develop a Learning Technology Centre by expanding the activities of the current Media Centre. Research will be done into the best methods of using technology to improve both learning and teaching. The results will be applied to the Centre's education and training activities and to other teaching units of the university. This organization will also provide support for the Centre's graphics, audio, video and USPNet needs.

data and information--the type of information usually seen on maps. For example, tourist organisations use GIS to analyse the travel habits of different tourist groups and the distribution of different tourism resources to plan the location of new tourist facilities. Staff in marine sciences use GIS to store and analyse data about ocean sediments and sewage pollution. Forestry departments use GIS to plan and monitor the growth, harvesting and replanting of valuable forest resources. Power and sewage utilities use GIS to plan, monitor and repair large networks of electrical lines and sewers. USP's Geographical Information Systems (GIS) unit is part of the Department of Geography and already is well known in providing and supporting technologies for the benefit of the region. This unit will likely be used in many of The Centre's research, training and consulting projects.

7.0 Related USP Organizations

The Centre for ICT will be dependent on other USP organizations to meet its goals. Indeed, the ability to tap into the University's skills and experience is a major reason why such a Centre is possible. The staff of the Centre will form networks with these organizations to build teams to accomplish its various activities.

7.1 Schools and Departments

Many of the Schools and Academic Departments of the university are major sources of expertise for the Centre. Academic staff and, in some cases, graduate students, will be members of research, training and consulting teams and they will give presentations at conferences. It is important to note that this relationship between the Centre and the academic departments is bi-directional. The knowledge collected and created by the Centre will be transferred to the academic departments. For example, one of the activities of the Centre will be to train current secondary school teachers on how to apply ICT to their everyday teaching responsibilities. The Centre will work with USP's Department of Education and Psychology to include that knowledge in its own research and with teachers' colleges in the region to incorporate the knowledge in courses for new teachers.

7.1.1 School of Social and Economic Development (SSED)

The SSED academic staff is well known for its understanding of the social development of the countries of the region. In some cases they also have the technical skills in ICT to be leaders on research, consulting or training activities. For example, the department of Accounting and Financial Management has responsibility for the University's degree programs in Management Information Systems. In other cases, SSED's Centre for Development Studies focuses on social change in the area and its staff is already seeing the impacts of ICT. Some of the research done by the Centre for Environment and Sustainable

serving as researchers, consultants and trainers on the Centre's projects. For example, those departments do research in economic development, governance issues and social transformation.

7.1.2 School of Pure and Applied Science (SPAS)

The Electrical and Mechanical engineering disciplines within the Engineering Department of SPAS have a somewhat obvious links to the technical component of the Centre. The staff would provide the hardware expertise when needed; including an understanding of the latest technology, designing networks, and consulting for Centre projects. (The Maths/Computing Science Department is part of the core organization of the Centre for ICT.)

7.1.3 School of Humanities (SOH)

As mentioned earlier, the academic staff in Education will be team members on research and training projects on the use of ICT in secondary school and other fields of education. Also, course offerings in Education will be updated to incorporate the latest applications of ICT. Other academic staff in the School of Humanities will be a major source of expertise for research and training projects on the impacts and applications of ICT on cultures of the region.

7.1.4 School of Law (SOL)

USP's Law School is based at the Vanuatu campus and the staff will include the latest ICT regulatory and policy matters in their courses.

7.2 USP Solutions

Several activities of the Centre for ICT are extensions to services currently provided by USPSolutions. For example: Contracts between USP and outside agencies for consultancies, research, training; testing, guest housing are all activities of both USP Solutions and the Centre for ICT. USPSolutions will handle the contractual arrangements between the Centre and its clients. It will provide the logistical support for the Centre's conferences. Its experience with running (non-ICT) training programs will be very useful to the Centres ICT training component. The Centre's staff and equipment resources will allow USP Solutions to provide enhanced services to its own clients. USPSolutions currently maintains contacts with USP's Schools, Departments and Institutes to enlist the skills they need for their research, training and consulting contracts. This process can be easily expanded to cover the ICT area. USPSolutions' knowledge and experience about non-ICT consultancies and training will be very useful to the Centre. (There are significant advantages for including USPSolutions as one of the Centre's core groups. This should be discussed further.)

7.3 University Extension and USP Centres

One of the responsibilities of USP's Extension Centres will be to serve as the local in-country presence of the Centre for ICT. In research, they will provide

team members on Centre for ICT projects. Public access to PCs and the internet may be offered. The University Extension organization will work with the Centre for ICT staff to ensure that extension courses in Computing Science and other subjects reflect current knowledge about ICT.

7.4 USP Institutes

These organizations will contribute to the Centre for ICT's work in the areas on Marine Science, environment, education, law, and culture. Centre projects that focus on each of these areas will call upon the expertise in the institutes for research and training skills. Each of these Institutes work in areas that are impacted by ICT and their work with the Centre for ICT will help their staffs to understand the latest technologies, their impacts and applications.

7.5 USP's Computer Store – Clarendon

The university's Computer Store, called Clarendon, supports the general public as well as university staff and students. The Centre for ICT will use Clarendon for hardware and software needs related to its projects. The Centre's consulting engagements can recommend Clarendon when appropriate and "package deals" may be possible. The university's recent experience in setting up the computer store organization will help with organizational decisions about the Centre' commercial activities.

8.0 USP Organizational Considerations

The USP organizations referred to in the sections above will continue to perform their current responsibilities in addition to working with the Centre for ICT. As the need arises and justification is made, these organizations may expand their staff to support the Centre. Organizations that are part of the core Centre for ICT will physically move to the new building to enable them to work closely with each other and with the other units that make up the core of the Centre. For example, the Maths/Computing Science department will continue to be part of the School of Pure and Applied Science (SPAS) and ITS will likely remain with its current reporting structure. The Centre's full time staff will have a similar reporting structure as USP institutes.

9.0 Requirements

9.1 Staff

The number of full-time Centre staff is expected to remain relatively small with "virtual" teams created among the Centre's core organizations and other USP organizations such as Schools and Departments in SSED. A Director, researcher and administrator will be needed from the start of the project with 3-5 staff added over time as projects expand and Centre revenues increase. Other organizations that make up the Centre's core group may expand over time as they do more work

for ICT. Again, some of these activities will be self-funded.

9.2 Building

The Centre for ICT building will house the core groups of the Centre for ICT (Full-time staff, Maths/Computing Science Department, Information Technology Services (ITS), Learning Technology Centre and the GIS unit). This will enable them to have the close interaction necessary to achieve the goals of the Centre. In addition, the building will have the Centre's Conference Centre, meeting rooms, lecture theatres, classrooms and laboratories for students and researchers. USP servers, network and some telephony equipment (part of ITS) will be housed in the Centre and a small amount of space will be needed for the ICT Database and web servers. Graphics, audio, video support, USPNet and other equipment will be relocated from the current Media Centre. Please refer to Annex 2 for additional building information and estimated costs.

Some USP regional centres may need additional training and lab space to carry on their work related to the Centre for ICT. Funding requests will be made separately through other USP member countries for these needs.

9.3 Equipment

Most of the equipment currently in use in the Computing Science laboratories, Information Technology Services, Media Centre and GIS will be used in the Centre but some upgrades will be needed. In addition, the Centre should be equipped with state-of-the art equipment for use by CS students and staff, researchers and for pilot projects at the university. Additional hardware and software applications will be needed for the Accounting and Financial Management department which has the Management Information Systems (MIS) teaching responsibility for the university. The Conference Centre will need up-to-date audio, video and conferencing facility and will be linked to the USPNet and other satellite facilities. Please refer to Annex 3 for more details and estimated costs.

10.0 Timeline and Funding

Stage 1:

During the initial stage, a full-time Director, researcher and administrator will be hired to start the Needs Assessment work, build relationships with USP and outside organizations and establish approved short and long term plans for the Centre. As needs are understood, a small number of research projects will begin with a goal of starting to build the reputation of the Centre. Construction will start on the Centre's building with the Director being the contact point between the University and the vendor. Decisions about equipment will be made.

funding of staff may become available.

Stage 2:
The second stage will see research and training teams being formed with members coming from the core and USP organizations. Some core groups may require additional staffing as the Centre generates additional projects. The core Centre organizations will occupy the new building and begin sharing the new equipment and working closely with one another. The ICT databases and Websites will be established for use by USP and regional organizations. The Centre will begin sponsoring conferences and core and "virtual" Centre staff will make presentations at outside conferences, thus building the Centre's reputation. The Centre will start offering computer time to individuals and groups outside USP on a fee basis to begin generating revenue. This will also be piloted at a few USP Centres in the region.

Especially during this phase, the relationships between the different USP, regional and worldwide organizations will grow closer. This will enable the Centre to optimize the results of other ICT projects elsewhere in the world and at the same time enhance the Centre's reputation.

Funding:
The research projects, conferences and PC lab fees will generate enough revenue to cover some of the on-going costs. Fees may be charged for some training workshops (e.g. with industries). Research grants and funding from various sources for special projects will cover other costs.

Stage 3:
In this operational stage, the Centre will offer the full range of ICT related services described earlier. Research and Training projects will be expanded as needs are identified. The Consulting and ISP businesses will be formed and the Centre's databases, websites (including links) will be expanded. The full-time staff may have some limited growth as needed and funding becomes available. As new Information Technologies are developed elsewhere (e.g. knowledge management, collaboration products, newer uses of wireless), the Centre will react by learning and teaching these technologies but especially, understanding the impacts and uses of these technologies for the South Pacific.

Funding:
Donor funding will be required early in this stage but it is expected that the Centre will become self-sustaining later in the stage with revenues coming from research grants, training, consulting, PC lab, Conference fees and ISP revenues.

Annex 1 Relationship to Non-USP Organizations

A. **Pacific Islands Forum Secretariat**

The Forum does extensive work to encourage Telecom regulatory policy changes and monitors ICT infrastructure parameters such as the fees charged in each member country for internet access. It encourages countries to reduce these fees as a means of economic development. The Centre will not duplicate this work; rather it will use the Forum's work as input to its own research and training. In April,2002 the Forum sponsored a meeting of Telecommunications Ministers from all countries in the Region. That meeting endorsed a report calling for actions on a broad range of ICT matters, The proposed Centre for ICT is consistent with and supports the recommendations in that report.

B. **The Secretariat for the Pacific Community (SPC)**

SPC maintains population and other data about the region. It has proposed a project to upgrade Geographic Information Systems (GIS) use by countries in the region. Another proposed project is to collect and maintain regional statistics by working with the statistics departments in each country. The Centre will create and maintain ICT data bases for it's own research and will make arrangements with SPC to share, link to, or transfer ICT related data.

C. **South Pacific Applied Geoscience Commission (SOPAC)**

SOPAC is a major user of the Graphical Information Systems (GIS) software application and USP's geography department has a well-known GIS unit. The Centre for ICT can work with these organizations to apply ICT to environmental issues such as tracking forestry projects.

D. **UN Agencies (ITU, UNDP, ESCAP, UNESCO)**

- **International Telecommunication Union (ITU)**

The ITU mostly focuses on ICT infrastructure, sponsoring projects to improve telephone and data networks and train telecommunications technicians in the some countries of the region. ITU frequently works through regional Telcom associations. The Centre for ICT plans to focus on the impacts and applications of ICT and less so on the infrastructure issues but will use the ITU work and input to its activities.

- **United Nations Development Program (UNDP)**

UNDP is starting a project to conduct workshops to assist counties of the region in creating their national IT Strategies. USP will monitor this activity and the Centre for ICT will coordinate it's own work with the results of these workshops. The Centre's focus on training people on the applications of ICT will prove to be quite helpful in implementing recommendations made in the national IT strategies.

... examples, ESCAP has a project in South Korea to train women college students in designing web pages to improve their possibilities of employment. ESCAP is starting another project to assist South Pacific Island countries to use ICT to improve trade and investment. These are the types of projects that the Centre for ICT will learn from its own work and will add the knowledge gained to its database and web pages.

- **United Nations Economic and Social Council (UNESCO)**
UNESCO has projects in Asia Pacific to train secondary school teachers on ICT. The Centre for ICT would understand these projects and perhaps start of similar project in this region. UNESCO's work also covers cultural areas.

E. **Asia Development Bank (ADB)**
The ADB is currently surveying the countries of the region to assess their ICT infrastructure and projects and to identify needs and potential new programs.

F. **Telecom Companies and Associations**
There would be benefits to all parties for the Centre to have close working relationships with the local Telecom companies in the countries of the region. Joint projects to implement new technologies may be possible and the Telecom's are a source of users for some of the Centre's services. For example, USP's GIS unit has received funding from Telecom Fiji for equipment to train people on GIS. Telecom Fiji was encouraged to provide this funding because it needs more staff knowledgeable about GIS. The membership of the Pacific Island Telecommunications Association (PITA) includes Telecommunications companies of USP's member countries.

G. **The G8 DOT Force and the UN ICT Task Force**
USP's proposed Centre for ICT is very consistent with two major world – wide initiatives for ICT in developing countries; namely the G-8's Digital Opportunity Task Force and the United Nations ICT Task Force.

The Digital Opportunity Task Force (DOT Force) started at the Group of 8 Industrialized countries (G-8) summit meeting in Kyushu-Okinawa in July, 2000. An initial report describing a framework for addressing the issues was approved by the G-8 Heads of State in Genoa in June 2001. The report also called for the DOT Force to continue for another year and a final report was issued in Kananaskis, Canada in June 2002. The final report identifies how work can be continued by other organizations now that the G8 DOT Force no longer operates.

members have been working closely with the DOT Force to ensure that much of the work of the DOT Force is carried on. The UN ICT Task Force is sponsoring a World Summit on the Information Society - WSIS (Geneva 2003 and Tunis 2005).

Relationship to the Proposed Centre for ICT at USP.

The DOT Force was organized around six implementation teams, one of them being Human Capacity Building- Developing Skills for the Information Society. The Government of Japan is one of the members of this implementation team. One of the recommendations was to establish regional centres of expertise as focal points for information and training at all levels of ICT. This is also a main goal of USP's proposed Centre for ICT.

The UN ICT Task Force is organized around Working Groups. The Working Groups align well with the DOT Force Implementation Teams in order to ensure efficient information transfer. One Working Group is responsible for "Human Resource Development and Capacity Building". Once again, USP's proposed Centre for ICT is right in line with one of the goals and initiatives of the UN ICT Task Force.

Additional Information can be obtained from
http://www.dotforce.org
http://www.unicttaskforce.org/

Annex 4 Building Information and Estimated Costs

The Centre for ICT building will provide an integrated work environment to enable the core groups of the Centre to meet its goals. Common areas and space needs for the different groups are identified below.

Common Areas : (Est. 5119 sq. metres;)
- A Research Laboratory
- Two Lecture Theatres
- A Conference Centre for 200 persons
- Two Video Conferencing Facilities (for Distance Education and the Conference Centre)
- A Conference Room
- A Post-Graduate Centre
- Three Training/Tutorial Rooms
- Three Classrooms
- Three laboratory/workrooms

Full-time Centre Staff (Est. 144 sq. metres;)
- Staff offices

Maths/Computing Science (Est. 1355 sq. metres; $F)
- Eight IT (PC) student labs
- Two tutorial rooms
- Staff offices (includes growth to support continued 10% annual increase in enrolments)
- One workshop/storage

Information Technology Services (Est: 886 sq. metres; ...
- Staff offices
- workshop
- stores

Learning Technology Centre (Est: 884 sq. metres;
- Laboratory
- Broadcasting
- Staff offices
- Workshop
- Stores

Geographical Information Systems (GIS) unit
- staff offices

(estimates grouped with Maths/Computing Science)

Furniture/Fittings, AC/Telephony/Generators: (Est.)

Site Preparation and Overall Services: (Est.)
- Demolition, Site Development
- Contingency on Construction
- Aggregate Fees
- Disbursement

The total size is estimated to be 10065 square meters with an estimated building cost of $F Additional information about these space requirements will be provided when needed. (See Annex 3 for Equipment costs totaling F$)

Some USP regional centres may need additional space for training and IT labs to carry on their work related to the Centre for ICT. Funding requests will be made separately through other USP member countries to meet these needs.

This annex summarizes the equipment that will to be needed to support the activities of the Centre for ICT. Additional information about equipment requirements will be provided as needed.

- Video conferencing equipment, Audio/Video and graphics support equipment
- Research Laboratory: Experimental / pilot equipment for projects
- Training: PCs for training rooms and staff; software; training materials
- Regional ICT Database: Servers and software
- Maths/Computing Science: IT equipment for expanded laboratories
- Learning Technology Centre: research hardware and software
- Department networks for ITS, Learning Technology Centre and GIS
- Relocation of equipment and cabling
- Application software for Computing Science, SSED (e.g. Accounting and Financial Management

Estimated cost: $

Separate requests for funding of additional equipment required by USP Regional Centres to support the activities of the Centre for ICT will be made though other USP member countries as needed.

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