

# SAMOA'S NATIONAL STRATEGIC PLAN

# FOR INFORMATION AND COMMUNICATION TECHNOLOGY (ICT)

2004-2009

Transforming Government, Business and Civil Society

Part I: General Introduction and Executive Summary

# **FOREWORD**

I am delighted to present Samoa's National Information and Communication Technology (ICT) Strategic Plan -1 August 2004 - 31 July 2009. This is Samoa's first ever ICT strategic plan developed for Samoan peoples. The Government aims to roll out ICT to the entire country together with capacity building to ensure that every Samoan, including women, youth and people with disability will learn how to use ICTs to their advantage. Specifically, the Government aims to integrate ICT to the delivery of existing public and private services ensuring that Samoan people have the opportunity to participate in the Information Society. In order to achieve these goals I am personally committed to the implementation of this strategy.

Information and communications technology (ICT) is recognised as an increasingly powerful tool for participating in global markets, promoting political accountability, improving the delivery of basic services, preserving our Culture and Heritage, and enhancing local development opportunities. ICT has also been recognised as the medium that promotes economic growth and social opportunity; but at the same time it renders many traditional economic approaches less viable.

ICT can also serve as a critical enabler to achieve many of the development goals agreed to by world leaders at the UN Millennium Summit and the World Summit of the Information Society. By making ICT an integral part of development co-operation, Samoa and her partners can address economic, cultural, political and social divides more effectively. But without innovative ICT policies, support and financial assistance, the people of Samoa, will find it hard to move to the next level of development, as witnessed by the developed countries and most developing countries of the world.

The government of Samoa is committed to moving Samoa towards the knowledge economy and the information society. However, there are key issues that hinder the development of ICT in Samoa including the high cost of implementing ICT strategies and Internet access, limited ICT skills and knowledge, lack of rural connectivity, availability of local content, and a the poor quality of existing infrastructure.

During the period of the Strategy, the Government will:

- appoint the Ministry of Communication and Information Technology (MCIT) to implement the strategy
- approve a new Committee to oversee and provide a high level approval for the implementation
- target services to women, youth, people with disability, to achieve the vision of "ICT for All"
- integrate ICT to all public services especially Education and Health
- promote the integrated approach and multisector partnership
- contribute to the development of ICT community service providers in partnership with the private sector
- design and develop specific ICT based services and programmes that target village and church leaders through the inclusion of unique Samoan cultural values, beliefs and principles in rolling ICTs out to the communities
- establish an integrated workplan and relationship between MCIT and the Electricity Power Corporation (EPC) and between the MCIT and SamoaTel as well as the Samoa Broadcasting Corporation to address the issues described by the local people that the roll out of ICTs to the rural villages will be hindered by the sporadic nature of the electricity supply, the quality of telephone lines and services, and contents on the television.

The Government is committed to harness the potential of ICT as a tool for transforming our societies, letting ICTs play their role as catalyst for social, cultural, political and economic growth. And for this reason, Cabinet elected the Committee to develop the national ICT strategic plan presented herewith. Consultations with all sectors especially at the village level were held and the Government is proud to present this national ICT strategic plan.

I would like to thank the many people who have contributed to the development of the National ICT Strategy and ask you all to work with us as we implement this strategy.

Soifua. Hon. Palusalue Faapo II Minister – Ministry of Communications and Information Technology

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# **EXECUTIVE SUMMARY**

#### **Our Vision**

"ICT for ALL"

To harness ICT as an enabler of social and economic development for Samoa.

#### **Mission Statement:**

To ensure all sectors of the community and Government have access to high quality, affordable, safe, secured & appropriate ICT services to ultimately sustain high standard of living in Samoa, and thereby helping to reduce hardship and poverty.

#### **Preamble**

The Government of Samoa has recognised that Information and Communication Technology (ICT) is the key for national survival and development in a rapidly changing global environment. This information revolution challenges us all to adopt, and devise bold and courageous initiatives to address a host of vital socio-economic issues such as reliable infrastructure, skilled human resources, open government and other essential issues including ICT capacity building. In addition, an ICT policy built on reliable human resources and infrastructure constitutes the fundamental tool and means of assessing, planning, monitoring, managing development change, and for achieving sustainable growth.

The Government has also recognised that ICT is the tool that can provide Government. businesses, NGOs and civil society with effective, efficient and transparent processes resulting in better social service to all citizens. These processes and procedures enhanced by ICT will allow the Government to achieve its strategic goals of "every Samoan to enjoy an improved quality of life premised on sustained economic growth...." (Statement for the Development of Samoa (SDS) 2002 - 2004) which will in turn help achieve the overarching strategy of "poverty reduction" as identified in Millenium Development Goals (MDGs) and the strategic goal of the World Summit of the Information Society (WSIS). As such, consultations were conducted with all sectors and representatives of every village to ensure that the issues that hamper these developments and strategies to address them, have been captured in this National ICT Strategic Plan. The Government is committed to moving Samoa towards the Information Society and the knowledge economy. This is evident in Samoa's active participation in the World Summit of the Information Society, Summit for Sustainable Development and the Millenium Development Goals, which are the key global declarations, addressed in this strategy.

It is for the ICT issues as mentioned above that the Heads of States and Heads of Governments at the World Summit of the Information Society (WSIS) signed the Declaration of Principles and an Action Plan. The strategic goal is "to build a peoplecentered, inclusive and development-oriented Information Society, where everyone can

create, access, utilize and share information and knowledge, enabling individuals, communities and peoples to achieve their full potential in promoting their sustainable development and improving their quality of life, premised on the purposes and principles of the Charter of the United Nations and respecting fully and upholding the Universal Declaration of Human Rights".

One of the strategic goals of the WSIS is to ensure that all countries develop a National ICT Strategic Plan to ensure that they participate in the emerging global reality and thus avert becoming a victim of the digital divide.

This Strategy recognises **gender equality as a cross cutting principle.** It is the belief of the Government of Samoa that if there is appropriate attention paid to gender equality and women's perspectives, these perspectives will add richly to the concept of an information society and enable the achievement of operational goals. Without a gender dimension, ICTs will not serve human development needs. To ensure that gender perspectives and women's rights are taken seriously as core principles of this strategy, the Presidents of the Women's committees throughout Samoa were invited to a consultation of the strategy. Their recommendations have been incorporated into the strategy. Women's committees will also be included in the implementation phase.

While there is no specific section on Gender Equality and women's rights, youth and people with disability, the implementation of this strategy will ensure that all projects will give priority to these very important sectors.

#### 1 Introduction

- 1.1 Modern information and communication technologies (ICTs) fundamentally change all social relationships with the establishment of a new information society. New technologies change not only the modes of production of goods and services but also create new opportunities in execution of civic rights, personal self-actualisation, obtaining knowledge, education of the new generation, preserving culture for future generations and spending leisure time. In an information society, distances reduce, good governance emerges, globalisation occurs, corruption reduces and unprecedented opportunities for development of countries and regions are created. Samoa does not want to be left behind.
- 1.2 While ICT development in Samoa has increased dramatically in the last 5 years, such developments concentrate around the main business centres such as Apia and Salelologa.
- In some of the rural villages, there is still no ICT access especially those of the modern ICTs such as the use of email and the Internet. Radio is the most common medium of ICT in most villages followed by the television. In terms of the telephone, about 55% of the villages have basic telephone access. Some rural villages have only one telephone for the whole village, which is often situated at the Women's committee house and managed by the women's committees. Only a few rural villages situated at the most remote parts of Samoa have no access to a telephone; they have to travel to nearby villages to use the telephone. This situation is likely to change dramatically because of the fibre optic project and wireless technology to enable access of the remotely located villages.
- 1.4 The use of tele-centers in rural villages has yet to be piloted or implemented in Samoa. There is a lack of skills and knowledge of most people in rural villages to use the modern technologies and it is the aim of this strategy to bridge this divide. Recent ICT developments for connectivity in other developing countries which include School Net, Distance learning, Health Net, Agrinet etc are still to be developed in Samoa.
- 1.5 The Government is confident that the people of Samoa have been well consulted about this Strategy.
- Three consultations were held for discussing the National ICT Strategic Plan. The target audience for the first consultation included the decision makers in both private and public sector, and NGOs. The second and third consultations were aimed at the civil society. All the Village Pulenu'u or village Mayors and Presidents of village Women's Committees, Youth and some Church Ministers participated in the consultations held in Upolu and Savaii. The feedback, input and recommendations from these consultations have been reviewed and taken into account in this Strategy.
- 1.7 Now, Cabinet is committed to establish partnerships with the Private Sector, NGOs and Civil Society to ensure that the implementation of the Strategy is sustained through a multisector partnership and an integrated approach.

# 2 Purpose of the Strategy

- 2.1 The purpose of this Strategy is to provide a framework and a focus for the roll out of ICT at the national level. It demonstrates the commitment of Government to increase the use of ICT as a tool for faster and cheaper communication, achieving the strategies of the SDS, MDGs and WSIS, and thereby making Samoa the leader of ICT development in the South Pacific in achieving good governance.
- 2.2 The framework fits within the Government's overall strategic direction as identified in the SDS, which is based on the views of the people. The strategy is both high level and sets a vision for the future and also includes an implementation plan, which shows exactly what each sector will do in order in to ensure that the vision becomes a reality.

# 3 Key Issues Addressed in this Strategy

The key issues addressed in this strategy are:

- Access to ICT
- Confidence and Security in the use of ICT
- Capacity building to use ICT as a tool for development
- Gender Equity

#### 3.1 Access to ICT

- 3.1.1 Access to ICT requires a telecommunication infrastructure that allows access to ICT products and services (e.g. basic telephony, power, hardware, software etc.) especially in the remote and rural villages. There is a low rate of access to ICT infrastructure and applications by some villages. While basic telephone services have reached most villages, the feedback during consultations with village mayors suggest that these services are not stable and often do not work due to either climate conditions or poor maintenance (e.g. power often goes off destroying television sets, rain disrupts telephone services etc.)
- 3.1.2 Access to ICT also requires policy and regulations to ensure universal and affordable access to ICT particularly by rural villages, women, youth, and people with disabilities. These policy and regulations need statistics and case studies in ICT necessary to inform policy and regulatory decisions. In regards to this strategy, the wide consultations with all sectors of the populations have provided the information relevant to developing ICT policies and regulations.
- 3.1.3 Consultations with representatives of every village in Samoa also suggest that the digital divide in ICT is widening with the very low number of people with the capacity to access, use and disseminate information through the new media. Nearly every village mayors and officials of the women's committees have never seen a computer, and some of the rural villagers have never used a telephone.
- 3.1.4 During the consultations, it was evident that one of the key issues of access to ICT is affordability of new technologies and applications of ICT and safety of its

use. In other words, the digital divide does exist in Samoa and will get wider if not addressed immediately.

#### 3.2 Confidence and Security in the Use of ICT

- 3.2.1 While ICT has been proven as the strategic tool for socio-cultural and economic development of any country, there is evidence that harmful content (e.g. child pornography, trafficking etc) and cybercrime (e.g. scams, virus etc) can increase if security in the use of ICT is not addressed. It means that it is a requirement for the Government of Samoa to address these security issues through developing laws in ICT i.e. cyberlaws and its enforcement, and selecting and using technologies to prevent cyber crimes.
- 3.2.2 One of the main focus of this strategy is to ensure that the people of Samoa has confidence and security in using ICT. As such, key laws and regulations to address these issues are some of the priority ICT projects of this strategy.
- 3.2.3 The required laws and regulations to ensure the confidence and security of using ICT are addressed in Part II of this strategy.

#### 3.3 ICT as a tool for development

- 3.3.1 Consultations suggest that there is a very low awareness of ICT, computer literacy and pre-requisite skills for ICT use especially by women. This low awareness also leads to the need of Government policies to address existing disparities in the use of ICT. Such disparities include the
  - absence of coordination within and between government agencies relating to all issues in ICT,
  - lack of legal frameworks and/or government programs to ensure participation in ICT for all,
  - impact of localisation of ICT (e.g. Television programmes in English)
  - lack of evaluation mechanisms within gender and other development programs,
  - lack or absence of co-operation among stakeholders concerning sensitive content development; and
  - absence of media support for all issues in ICT.

#### 3.3 Gender Equity

To ensure that both men and women have equal opportunities to benefit from the using, creating and disseminating information using ICTs

#### 3.4 Benefits of ICT

- 3.4.1 Potential benefits from ICT development include:
  - achievement of an effective management;
  - increased labor productivity;
  - availability of new export opportunities,

- provision of information to the farmers on agricultural markets and weather conditions;
- creation of the primary consultative medical assistance;
- expansion of distance education capabilities;
- improved cooperation between the government, local communities, private sector, NGOs and civil society;
- improved communication between government Ministries, which in turn will result in improved services to the country,
- improved quality of state services rendered to the population.
- acquiring new markets
- preserving Samoan culture and traditions for future generations
- protecting Samoa from being a haven for drug trafficking and terrorists
- 3.4.2 All these benefits can move Samoa to the next level of development where meaningful and timely information will be provided to decision makers to base their decisions on, and disseminate them through existing and emerging channels to the people of Samoa.

# 4 Strategic Goals and Objectives

There are 4 key strategic goals of this strategy. These goals are addressed throughout this strategy both in the cross cutting themes (Part II) and the sectorial applications (Part III). Table 1 summarises the 4 key strategic goals of this strategy, and the objectives to achieve these goals.

Strategic Goal 1	Increasing the awareness of ICT in Samoa						
Objectives	To provide awareness programmes using all forms of media						
-	To deliver consultation of the Strategy to all sectors of the Samoan community						
	3. To design programmes that allows all Samoan people to learn the issues of ICTs						
	4. To deliver all community ICT programmes and projects in the Samoan language						
	To create links with diaspora to increase awareness of ICT developments in Samoa						
Strategic Goal 2	Ensuring the confidence and security of using ICT						
Objectives	To design legislations and laws to protect the users and providers of ICT services						
	To build and increase the capacity of all to use, receive and create information using both traditional and modern ICT mediums						
	To encourage partnership between Government, private sector, NGOs and Civil Society in designing necessary laws						
	To protect Samoa from scams, pornography, drug and terrorist information						
Strategic Goal 3	Responding to increased demand for ICT skilled Human Resources						
Objectives 1. To provide capacity building to all people to increase basic cor							
	literacy  2. To establish partnerships between private sector, donors and institutions to ensure appropriate programmes are developed for the much needed ICT skills such as computer networking and technical qualification.						
	3. To develop appropriate ICT programmes for women's committees, youth, NGOs and people with disability on how to use ICTs especially the computer, Internet and email.						
	To integrate ICT into the processes and procedures of all sectors						
Strategic Goal 4	Providing Universal Access						
Objectives	To continue the roll out of telephone cables to rural villages						
Objectives	To establish multipurpose communication and information centres in villages						
	To create partnerships with donors and private sector to improve access to ICTs						
Table 1. Sausas de	4 To establish and maintain formal working relationships between SamoaTel, MCIT, EPC and Samoa Broadcasting Corporation to meet the peoples needs						

**Table 1: Strategic Goals and Objectives** 

#### 5 Current Situation of ICT in Samoa

- 5.1 It is evident from consultations that their infrastructure plays an important role in disseminating and use of ICT at the national level. These services include electricity, telecommunication, existing communication channels such as the television, the Health, and Education sectors.
- 5.2 There are still villages that do not have access to the basic telephone services. The electricity service continues to be a problem in that it goes off every now and then. This disparity means that television sets, radios, and computers can be destroyed by power surge.
- 5.3 The Television is one of the most recent communication channels to be accessed by the Samoan people. However, during consultations for this strategy, the key complaint was that the contents of the television programmes are not suitable for a large percentage of the population. This is because most of the programmes (such as movies) are in English, which is not understood by most people in the rural villages. Here, we need to bear in mind that the population split is 27% urban and 73% rural. It means that these issues need collaboration between government agencies to address them.
- 5.4 Most health centres in rural villages have a telephone but all have no computers, television, printers, photocopiers, fax etc.
- 5.5 In Education, there is a lack of ICT hardware in schools such as a telephone, televisions, computers, photocopiers, fax etc. Very few primary schools now have computers donated by some donors, but because teachers have no skills to use them, some are still sitting in the new air condition rooms.
- In this regard, it can be said that Samoa is a late adopter. However, being a late adopter has its advantages. It means that Samoa can now learn from the successes and failures of those countries that took the lead in ICT development. Samoa can now adopt the proven models and adapt it to suit her culture and ICT needs, and have the opportunity to leapfrog to proven technologies and methodologies.
- 5.7 The key issues of ICT development in Samoa are limited funding, lack of ICT policies, legislation and ICT skills among others, especially at the grassroots level. Some countries address the policy issues first, establish partners then find funding. Others find funding first to address the key issues, then develop strategies etc. However, the Prime Minister of Samoa, Hon. Tuilaepa Sailele Aiono Malielegaoi stated:

"it is not a good strategy to stop development so we can decide what issues should be resolved first and which ones last, rather we can learn and resolve the emerging issues as we go along – otherwise, we will never develop and move forward."

#### 6 Current Status of the Infrastructure

#### 6.1 Telecommunication Infrastructure and Information Services

- 6.1.1 The telecommunications infrastructure in Samoa is provided under exclusive license by two organisations, SamoaTel and Telecom Samoa Cellular. SamoaTel is a state owned enterprise, licensed by the Government of Samoa to provide local, national and international telecommunications and all Postal services in Samoa on an exclusive basis. SamoaTel was corporatised in July 1999 and is 100% owned by the Government of Samoa. The exclusive license expires in 2009.
- 6.1.2 Over the last 3 years SamoaTel has embarked on a rapid network replacement and build out programme. This has included installation of a high speed digital backbone on both Upolu and Savaii using a combination of fiber optic and digital radio technology, a build out of the local access network in rural and urban areas using a combination of copper and wireless reticulation and digital concentrators, the establishment of high speed data services in key business areas and the roll out of payphones throughout Apia and many villages.
- **6.1.3** The rollout of services is continuing with SamoaTel reinvesting the majority of its profits back into infrastructure to enable it to provide better coverage and service to its shareholders, the people of Samoa. Projects currently under way or planned include the construction of a new disaster resistant telephone exchange building, the installation of a new telephone exchange switch to increase capacity and reliability, the installation of a second satellite earth station, upgraded and redundant international Internet gateway services, continued roll out of local access and more payphones.
- **6.1.4** Telecom Samoa Cellular Limited (TSCL) is a private enterprise that is 90% owned by Telecom New Zealand Limited and 10% owned by the Government of Samoa. TSCL was established in 1996 to provide mobile phone services in Samoa on an exclusive basis.
- 6.1.5 TSCL provide an AMPS and D-AMPS mobile network and SMS services, (text). There is coverage in Apia, much of the north coast to Faleolo and beyond and the central south coast of Upolu and around Salelologa in Savaii. TSCL currently house much of their equipment in or on SamoaTel facilities, leverage the SamoaTel network to provide connectivity to their base stations around Samoa and interconnect with SamoaTel for access to domestic and international traffic.
- 6.1.6 Retail Internet services in Samoa is operated by the private sector in an open and competitive market. There are currently three licensed Internet Service Providers in Samoa, Computer Services Limited, iPasifika and Lesamoa. All three ISPs secure Wholesale Internet services through SamoaTel's International Internet Gateway. Utilisation of the three ISPs is aggregated at the gateway to maximise network efficiency and capacity purchasing power with SamoaTel's upstream Internet gateway providers. Retail Internet access to the consumer is provided via a number of technologies including high-speed dial up (56kbps),

- Basic Rate ISDN, (64~128kbps), leased data circuits, (64k~2048kbps) and high speed Ethernet access, (10Mbps).
- 6.1.7 The provision of value added ICT services, either as stand alone Information Technology services or ICT that make use of or/and leverages the underlying monopoly telecommunications infrastructure, sits wholly in the private sector and constitutes an industry in its own right. There are numerous private enterprises providing specialist computer and communications hardware, software and services. Many of the government departments, organisations and larger enterprises also retain their own in house ICT expertise.

# 6.2 Electricity

- **6.2.1** Electricity is a key requirement to the sustainable delivery and use of ICTs including radio, television, printers, fax, computers etc.
- **6.2.2** Currently, electricity covers over 99% of the country. However, the service is often disrupted during the day or night, especially in the rural villages
- **6.2.3** The sporadic nature of electricity was one of the key issues discussed at the consultations for this strategy. It is the intention of Government to ensure that the Electric Power Corporation and the Ministry of Communications and Information Technology must work together to ensure that access to ICT by the general population is not disrupted by the instability of the power supply.

# 7 The Way Forward

- 7.1 The National ICT Strategic Plan sets out main priorities, objectives and tasks, main principles, provisions and directions of the national ICT policy and will be a living document of an initial 5-year duration to reflect the rapid changes in ICT.
- 7.2 The Strategy is viewed as one of the important areas for development, within the framework of implementation of Samoa's Statement of Development Strategy, the Millennium Development Goals, and the Declaration of the World Summit of the Information Society.
- 7.3 ICTs provide opportunities to achieve SDS strategic outcomes, accelerate economic development and in turn reduce poverty, the main goal of the MDGs. ICTs have the potential to become a catalyst and a driving force in the development of Samoa. A list of priority short, medium and long term projects is listed in Table 2 to guide the new division within the MCIT that will be responsible with implementing the strategy.

		The second second		1			
Area	No	Name of project	2005	2006	2007	2008	2009+
Human	1	Public Service – Human Resource Management					
Resource		Information System					
Development							
	2			<b>†</b>			
	~	Computer Training for the workforce with a					
		special emphasis for teachers at all levels of					
		education					
	3	ICT Curricula and Certification					
	<u> </u>						
	4	SchoolNet: especially using the Internet for Schools					
	5	Computer training for Women's Committees					
		Sompator training for Frontier's Sommittees					
	6	Computer training for Church Youth Groups	+	+			
	٥	Computer training for Church Touth Groups					
				T	1		
Infrastructure	7	Telecentres Infrastructure					
	] '						
	<u> </u>						
	8	Universal Affordable E-mail					
	9	Complete Fibre Optic Project	1	+			
	9	Complete Fibre Optic Froject			ı		
	10	Affordable Technology		1			
	1						, I
	11	Affordable Software e.g. FOSS					
				1			
	<u> </u>		+	<del>                                     </del>		<u> </u>	1
Applications and	12	Distance Education and e-applications					
Contents		e-education					
		e-health					
		e-agriculture					
		e-environment					
		e-commerce					
		e-employment					
	13	Localisation of Applications and Contents					
		1.6 0 6					
	14	Information Systems for Health and Education					
	15	Development of Websites in the Samoan Language	+			-	
	10	for Community based organisatons and NGOs		L		l	
		ioi Community based organisatons and NGOs					
			-	-			
Governance	16				_		
	1	Government-wide Financial Management					1
	<u> </u>	Information System		<u> </u>			
	17	e-Government and a country gateway					
	1			1	1		1
	40	Distillar Madical Dansada (c. 18 - 18 - 18 - 18 - 18 - 18 - 18 - 18	1	1			
	18	Digitise Medical Records for all patients and Police					
		records together with capacity building to use ICTs					
	19	Global Immigration Systems					
	.	J. J				•	1
	20	Digtise Land Register					
	21	Civil Identification Systems					
	22	Electoral Processes Management Systems					
		2.55to.di i 10000000 Managomont Oyotomo					
Dolinyand	23	Davidon Email and Internet Deligies in Dublic					
Policy and	23	Develop Email and Internet Policies in Public,					
Regulation	24	Private, NGOs and Civil Society	+	+		-	
	24	Develop Legislations to protect	1	1	<u> </u>	1	<u> </u>
	II A T						

Table 2: List of priority short, medium and long term ICT projects

# 8 The Role of the National ICT Steering Committee

- 8.1 The Government of Samoa is contributing to the development and disseminating ICT throughout Samoa, moving Samoa towards the knowledge economy and the information society. As such, Government established the ICT Steering Committee to develop policies and strategies for the effective management of:
  - Awareness programmes for all sectors and all Samoan people
  - developing and retaining a knowledgeable workforce with ICT skills
  - a sustainable rural connectivity
  - ICT networks and infrastructure in Governments, private sector and civil society
  - Multisector Partnership approach between Government, the private sector and community based organisations
  - cooperation with regional and international organisations
  - ICT programmes in Education, Health and all sectors
  - a Universal Access to ICT
  - an improved and efficient Public Service
  - development of applications and content
  - security and societal Impact of ICT
  - research to ensure findings are linked to policy making

# 9 Principles / values

The Samoa ICT Steering Committee is committed to:

- Fairness: acting with impartiality and integrity at all times
- Innovation and Business Performance Excellence: demonstrating an innovative and business-like approach
- Responsiveness: enabling and ensuring individuals take personal responsibility for their actions
- Safety and Security: having safe and secured ICT environments for the public and private sector, for NGOs, people with disability, Women and Civil Society
- Teamwork: being responsive to others and enhancing relationships nationally, regionally and internationally, to maximise effectiveness in disseminating and developing ICT.

In respect of Samoan people, the Government of Samoa is also committed to:

- Samoan values: The Government will incorporate Samoan values i.e. it will utilise the strong supporting mechanisms within the Samoan communities (e.g. family, the church, youth groups, women, communities and local agencies of the international organisations) and develop an inclusive supportive family/community based approach to ensure that ICT compliments the Samoan values.
- **Relationships:** The Government will work in collaboration with Government Department/Ministries, private sector, international agencies,

NGOs, and Civil Society to increase awareness and understanding of ICT, and work to develop and maintain an effective working relationship among all sectors.

- Diversity: The Government acknowledges the diversity of sectors and groups in Samoa and distinct business cultures that should be respected. Each of these groups face different issues and have different needs and as such the Government will continue to identify those groups that will need a representation in the Samoa ICT steering committee.
- Consultation: The Government recognises that consultation with all sectors is crucial for obtaining information for the development of ICT strategies and policies for Samoa. The consultation will be extensive and the views and feedback from these consultations will be utilised in all future ICT policy work that impacts on the lives of the Samoan people. Consultation will also be used to review this document starting with a consultation with Decision Makers, at the highest level from all sectors.

# 10 Linkages to the SDS, MDGs and WSIS

The Vision of the SDS is:

"For every Samoan to enjoy an improved quality of life premised on a competitive economy with sustained economic growth, improved education, enhanced health standards and strengthened cultural and traditional values"

- 10.1The National ICT Strategic Plan is aligned to this vision through recommending ICT initiatives that will enhance and improve the processes and procedures required achieving the 9 strategies and outcomes as outlined in the SDS.
- 10.2The National ICT Strategic Plan is also linked to the MDGs especially the overarching goal of "reducing poverty." The Government has identified in the Strategy initiatives that will use ICT as a tool to provide income opportunities for people living in rural villages through encouraging small businesses at the village level increasing the village economy.
- 10.3The key WSIS principle that this strategy will address is "universal access" for all. The Objectives and Strategies for implementing the of the WSIS Plan of Action are incorporated within this strategy in the Plan of Action attached as Appendix I

# 11 Integrated Approach

11.1 The resources required for the implementation of a national ICT policy go beyond the capacity of the Government of Samoa. In order to maximise the limited resources available from the Government and the donor community, actions will be implemented in the framework of an integrated programme inclusive of private sector, NGOs and civil society, which highlights linkages and synergies among projects.

- 11.2 Projects to exploit the benefits of ICTs in the six priority areas identified in the ICT Policy (education; human resource development; health; universal access; infrastructure; and governance) are thus identified within the following programme components:
  - Human capacity;
  - Content and applications;
  - E-government;
  - Country Gateway
  - Policy and regulation;
  - Infrastructure; and
  - Enterprise
- 11.3 The Committee recommends establishing a new division within the Ministry of Communications and Information Technology (MCIT), to be responsible for the implementation and monitoring of the National ICT Strategic Plan. The Committee looked at the three different models of managing the implementation of the Strategy and decided that the option recommended here is the most cost effective option for the Government.
- 11.4 While the first two options were successfully deployed by other developing countries, the committee felt that those countries are all large countries and their economies can sustain such a set up. In that regard, the committee finds that the third option is the option that is affordable and sustainable for the Government. The three options the committee considered are:
  - that Government "establish a National ICT Development Agency (NIDA)" to implement the ICT policy, regulate, monitor, evaluate and verify progress on an on going basis under the supervision and coordination of the Ministry of Communications and Information Technology (MCIT) and the Ministry of Finance – common amongst developing countries in Latin America, Europe and Africa.
  - that the Government outsource the management of the ICT Strategic plan to an external consortium of private companies, reporting directly to the Prime Minister – the Malaysian model.
  - that Government appoints the Ministry of Communication and Information Technology to coordinate the implementation of the Strategy in such a way where the private sector, NGOs and civil society can take part to implement ICT policy, regulate, monitor, evaluate and verify progress to Cabinet and donors on an on going basis.
- 11.5 An integrated approach promotes the strict coordination required to ensure that project prerequisites are met, for example, for infrastructure. The following table lists the dynamics that will be generated through this integration.

Human capacity	Infrastruct ure	Enterprise	E-Government and Country Gateway	Policy and Regulation	Content & Applications
Creation of national competencie s	Modern, appropriate , affordable and highly efficient	Finance and credit	Efficacy & Efficiency	Transparency and Inclusion	Relevance & usefulness
High-level technicians		Market access	Reduction of operational costs	Solid legal framework	Language
Valued professionals		Demand stimulus	Reduction of bureaucracy and corruption	Capacity building	Affordable Costs
		Efficiency	Increased accountability		Applications

Table 3: Dynamics of an integrated approach

# 12 Monitoring the Implementation of the Strategy

The reporting of the progress on the action points identified in the implementation plan of the strategy will be through the MCIT's annual report.

Reporting on the specific milestones agreed to with the MCIT and various sectors in relation to Capacity Building will provide another avenue for the Government and other agencies to monitor progress of the Strategy periodically over time.

# 13 Risks to Successful Implementation

The risks to successful implementation of the Strategy and initiatives are:

- The implementation of the strategy is set to occur at the time when the
  establishment of an implementation division within the MCIT has yet to be
  approved by Cabinet, which means resources and capability will be stretched.
- Significant legislation concerning the security of using ICT especially the Internet and email, intellectual property and privacy among others has not yet been developed. There is a likelihood of delaying implementation until the legislations are developed to ensure that the priority projects are developed within a secure and legal environment.
- Funding to establish the new proposed ICT Division within the MCIT have not yet been approved by the Ministry of Finance and Cabinet, posing a possible delay in the implementation of the strategy.
- The skills required for the new ICT Division may not be available locally which will require more expenses for MCIT when recruiting experts from overseas; however, the donor community may be able to help.

# 14 Measures

"If you cannot measure, you can't manage." Measures and evaluations are important ingredients of creating an ICT national landscape. For this strategy, measures and

indicators of success of implementation will be addressed in the Implementation Plan. This is a separate document to this strategy.

#### 15 DEFINITIONS AND ACRONYMS

#### I. ICT - DEFINITION

- A. The term Information Technology (IT) means computers, ancillary equipment, software and firmware (Hardware) and similar procedures, services (including support services) and related resources.
- B The term ICT includes any equipment or interconnected system or subsystem of equipment, that is used in the automatic acquisition, storage, manipulation, management, movement, control, display, switching, interchange, communication, transmission or reception of data or information. ICT also includes the traditional media including radio, telephones, television and any other media that are used to communicate information.

#### II. ACRONYMS

- 1 Backbone A bulk data communication network
- 2 BIS Broadband Internet Services
- 3 CEO Chief Executive Officer
- 3 CIO Chief ICT Officer
- 4 CMD Centre for Management Development
- 5 DPA Data Protection Act
- 6 GIS Geographical Information System
- 7 GII Global Information Infrastructure
- 8 HIS Health Information System
- 9 ITF Industrial Training Fund
- 10 ICT Information and Communication Technology
- 12 ISP Internet Service Provider
- 13 LII Local Information Infrastructure
- 14 MESC Ministry of Education, Sports and Culture
- 15 MCIT Ministry of Communication and Information Technology
- 16 MOF Ministry of Finance
- 17 MOH Ministry of Health
- 18 NECC National Electronic Commerce Council
- 19 NII National Information Infrastructure
- 20 NIIB National Information Infrastructure Backbone
- 21 MCIT National ICT Development Agency
- 22 NICTDF National ICT Development Funds
- 23 NICTSC –National ICT Steering Committee
- 24 NITMA National ICT Merit Awards
- 25 NUS National University of Samoa
- 26 NICTC Samoa ICT Corps
- 27 POP Point of Presence
- 28 PRIMARY HEALTH CARE Preventative Health Service
- 29 PSC Public Service Commission
- 30 SDT Software Development Tools
- 31 SECONDARY HEALTH CARE Patients requiring medicines etc
- 32 SMART Simple Moral Accountable Responsive Transparent
- 33 SME Small to Medium Enterprises
- 34 STRATEGY National ICT Strategic Plan
- 35 Tertiary Health Care Patients requiring special medical care
- 36 TOKTEN Transfer of Knowledge Through Expatriate Nationals
- 37 UBE Universal Basic Education
- 38 UN United Nations

#### 16 ACKNOWLEDGEMENTS

The necessity for a national ICT policy became more obvious after the participation of the Samoan Prime Minister, Hon. Tuilaepa Sailele Aiono Malielegaoi as a delegate in various forums involving the Internet in the early nineties. As a result, the Ministry of Finance through the assistance of various donors did a study of e-readiness in Samoa. The outcome of these studies was the establishment of the Samoa ICT Steering Committee through the proposal to Cabinet by the CEO of the Ministry of Finance, Ms Hinauri Petana in 2001.

We acknowledge the efforts of the Samoa National ICT Steering committees whom in 2003 submitted the draft ICT policy proposal which, Cabinet approved for consultation purposes. More efforts followed and culminated in the production of a national ICT strategic plan in 2004 making Samoa the first country in the South Pacific to launch a National ICT Strategic Plan.

The former Minister of the Ministry of Communications and Information Technology (MCIT), Hon. Tuilaepa Sailele Aiono Malielegaoi identified ICT as a national priority and his enthusiastic commitment has helped tremendously in the recruitment of the skilled human resource from overseas to spearhead the improvement of the telecommunication infrastructure. Likewise, the present Honourable Minister of MCIT, Hon. Palusalue Faapo II, provided the motivation, support and mobilisation to continue the improvement of Samoa's telecommunication infrastructure and complete this critical task of developing the Samoa ICT Policy and the National ICT Strategic Plan in 2003 and 2004.

Special thanks to the members of the committee especially those listed below who contributed their time and effort in developing this ICT strategic plan:

Mr Tua'imalo Asamu Ah Sam, Chairman of the Committee and CEO – Ministry of Communications and Information Technology

Ms Laeimau Oketevi Tanuvasa, Deputy Chairperson, and CEO – Samoa Computer Services Limited, Representative Samoa Association of Manufacturing & Exports (SAME)

Mrs Gisa Fuatai Purcell – Secretary

Mr Gary Tunstall – former Managing Director – ANZ Bank

Mr Don Hollander, former CEO - CSL

Mr Magele Mauiliu Magele, Vice Chancellor of the National University of Samoa

Ms Mandy Simpson, Managing Director – ANZ Bank

Mr Norman Wetzel and Mr Aitken Fruean of the Samoan Chamber of Commerce and Industry

Mr Grant McGough, Acting CEO, SamoaTel

Mr Leota Raymond Schuster, Lawyer, Attorney General's Office

Mr Iluminado Aloaina, IT Manager – Ministry of Finance

Ms Rosemarie Esera, IT Manager – Ministry of Education, Sports and Culture

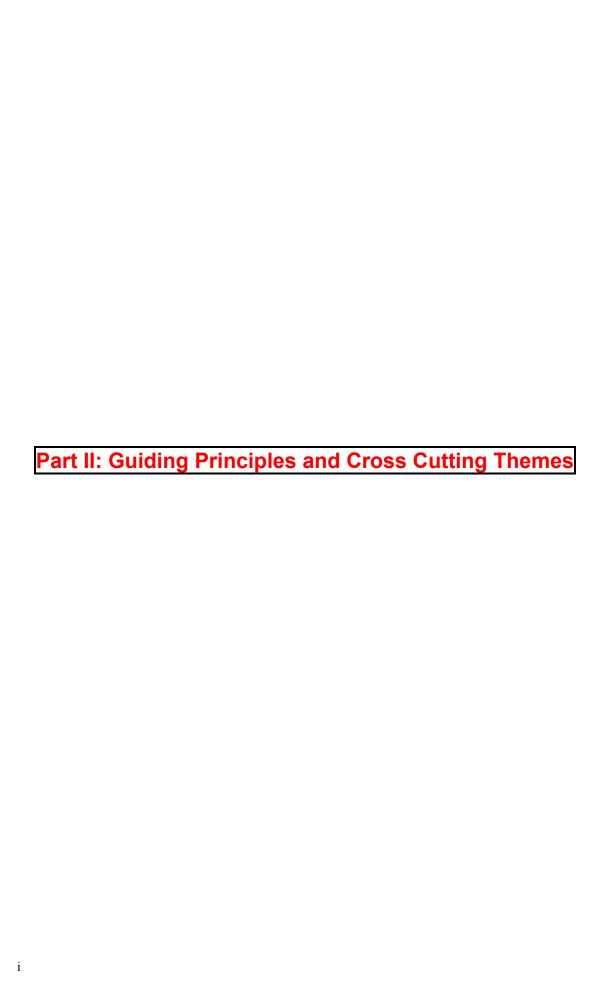
Ms Elisapeta Pasa, IT Manager – Ministry of Health

Mr Numia Tauauve'a, IT Manager – Public Service Commission

Mrs Sia'ea Uele – Public Service Commission

Ms Tima Leavai & Mrs Kisa Kupa of MCIT

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# **CHAPTER 1: HUMAN RESOURCE DEVELOPMENT**

"Thus the most important assets of nations are not raw materials, physical goods or economic production, but human resources keyed into the information and knowledge revolution." Wright, 2000

#### 1 Introduction

The Government strongly promotes the need to approach information society issues with a vision focused on human rights and sustainable human development. Flowing from this vision is the guiding principle of Human Resources. This guiding principal is one of the key themes, which cuts across all sectors of development.

In order for Samoa to fully develop, it needs a population, which is fully conversant with ICT in work and in play. Thus, ICT literacy must be promoted as widely as possible to all segments of society with everyone encouraged contributing to the global economy. It is especially **critical to attract**, **develop and retain an ICT knowledgeable workforce** who will be the driving force to maximize the gains from these technologies.

# 1 Policy Statement

1.1.1 ICT will be used to inform and connect the population of Samoa and ensure that it benefits from flexible and appropriate education, training and experience.

# 1.2 Objectives

- 1.2.1 The objectives to ensure that the above principle is enacted on include:
  - 1.2.1.1 To develop a pool of ICT engineers, scientists, technicians and software developers.
  - 1.2.1.2 To provide attractive career opportunities and develop retention schemes.
  - 1.2.1.3 To develop requisite skills in various aspects of ICT.
  - 1.2.1.4 To raise the ICT literacy of the general public starting at early childhood level
  - 1.2.1.5 To enhance special skills for "made in Samoa ICT products and services" to earn foreign exchange.
  - 1.2.1.6 To provide capacity to civil society so they can participate in the information society

# 1.3 Strategies

- 1.3.1 The strategies identified to achieve the above objectives include:
  - 1.3.1.1 Making the use of ICT mandatory at all levels of educational Institutions through the provision of adequate financial resources Developing relevant ICT curricula for the primary, secondary and tertiary institutions.

- 1.3.1.2 Exploiting the effective use of ICT distant learning networks to enhance learning opportunities for educationally disadvantaged areas.
- 1.3.1.3 Encouraging ICT companies with appropriate incentives to invest in education and training through for example, certification for tax rebates.
- 1.3.1.4 Promoting ICT study grants and scholarships.
- 1.3.1.5 Promoting "Training the Trainers" scheme using existing establishments such as the National University of Samoa (NUS), Public Service, the Polytech, Computer Services Limited (CSL), and other private trainers to boost capacity building in ICT.
- 1.3.1.6 Working in partnership with related domestic and international programmes.
- 1.3.1.7 Redeploying used ICT equipment to various community sectors especially schools
- 1.3.1.8 To provide attractive and challenging ICT career opportunity.
- 1.3.1.9 Develop telecentres in rural villages

# 1.4 Priority Projects

The following projects make up the Human Resource Development Component of the Strategy:

	Description	Short, Medium Long	Implementing Partners	Ti	ming
		Term		Begin	End
1	Public Service Human Resource Information System	Short Term	UNDP, Government, donors and Private Sector	2005	2005
2	Computer Training for the workforce with a special emphasis for teachers at all levels of education. Public Servants will be using the IS in priority 1	Medium Term	UNDP, Government, donors and Private Sector	October 05	September 08
3	ICT Curricula and Certification: Develop a programme to include the use of Computers, the Internet and Email use in School Curriculum	Short Term	UNDP, Education, AUSAID, NZAID	October 2004	September 06
4	Develop a SchoolNet or distance learning programme at every level of education: especially using the Internet for Schools	Long Term	UNDP, UNESCO, ADB, Government, donors and Private Sector	February 05	January 2009
5	Computer training for Women's Committees	Medium Term	UNESCO, GKP	2005	March 06
6	Computer training for Church Youth Groups	Medium Term	Government, donors and Private Sector	2005	September 06
7	Develop a computer reusable programme.	Medium Term	Government, donors and Private Sector		
8	Develop a distance learning centre within the NUS	Short	Government, NUS, Donors and Private Sector	2005	

Table 1: Priority Projects in the Area of Human Resource Development Component of the Strategy

### **CHAPTER 2: INFRASTRUCTURE**

#### Introduction

It is vital for sustainable developments that appropriate ICT infrastructure is implemented. This should be infrastructure that has been proven elsewhere in the world and is financially viable, robust, and yet adaptive to changing needs. A competitive market should be established to encourage private sector participation in the provision of appropriate and affordable ICT services.

# 2.1 Policy Statement

- 2.1.1 Appropriate ICT Infrastructure will be developed to support ICT development for Samoa ensuring that National ICT Networks and support infrastructure will be reliable, secure, fast, cost effective and adaptive as appropriate to the needs of Samoa.
- 2.1.2 The Government identified the following objectives and strategies to achieve this principle.

#### 2.2 Objectives

- 2.2.1 Following are the objectives to achieve these principles.
  - 2.2.1.1 To provide leadership, direction, and a progressive legislative framework to guide continuous ICT infrastructure development
  - 2.2.1.2 To encourage private sector investment in ICT by opening the telecommunication market sector.
  - 2.2.1.3 To accelerate the educational, economic and social development of Samoa and its people through the development of an ICT infrastructure.
  - 2.2.1.4 To maximise the availability of and access to ICT throughout Samoa in a sustainable manner and to provide an information infrastructure that guarantees the privacy, integrity, accuracy, confidentiality, security, availability, and quality of personal information.
  - 2.2.1.5 To accelerate the realization of the benefits of ICT, the prudent assessment of, and access to international assistance for infrastructure development
  - 2.2.1.6 To stimulate the sharing of national and international technical knowledge and capabilities on telecommunication networking and infrastructure
  - 2.2.1.7 To promote business efficiency and growth through facilitating the infrastructure for electronic commerce.

#### 2.3 Strategies

- 2.3.1 Adopting appropriate approaches in selecting an easy-to-use and scalable Information Infrastructure Technology.
- 2.3.2 Promoting partnership with local companies in order to stimulate private sector investment in telecommunication infrastructure.
- 2.3.3 Ensuring that the entire country is linked by appropriate and sustainable Information network systems by the year 2007.

- 2.3.4 Establishing a ICT Secretariat with the MCIT to coordinate with various entities to ensure that the information infrastructure provides and protects privacy information of individuals and organisations
- 2.3.5 Participating in international seminars workshops and conferences on telecommunication or information infrastructure
- 2.3.6 Developing a Change Management Strategy which promotes the training of local staff on communication networking, infrastructure and the value of a customer focussed approach
- 2.3.7 Leading the business sector in selecting and implementing an e-commerce infrastructure

# 2.4 Priority Projects

	Description	Short,	Implementing	Timing	7
		Medium Long Term	Partners	Begin	End
1	Deregulation of Telecommunication Services	Medium Term	Government, SamoaTel and others	Already started ongoing	and
2	Increasing the number of qualified local people on telecommunication skills and experience	Long Term	Government, private sector and donors	2005	
3					

# **CHAPTER 3: LEGISLATION**

#### Introduction

ICT policies and regulations will facilitate development and the implementation of the guiding principles, and sectorial applications while maintaining their appropriateness to the people and culture of Samoa. Such policies and regulations must be consistent with local and international laws, regulations, standards and policies. It is essential that the laws and regulations developed must strike a balance between community versus individual rights. This section will address the required legislation and national security.

# 3.1 Policy Statement

- 3.1.1 The Government will create legislation to establish usage and implementation of ICT. Such legislation shall promote and guarantee freedom and rights to information and its use, protect individual privacy and secure Justice for all.
- 3.1.2 Protect and promote the interest, assets and safety of Samoa, and those we work with in the global environment, by developing knowledgeable manpower with commensurate discipline, and ICT skills-set capable of efficiently generating and effectively utilizing information in a timely manner, for national decision making.
- 3.1.3 The following objectives and strategies are identified as relevant to achieving this principal.

# 3.2 Objectives

- 3.2.1 To facilitate legislation that will impact on electronic communication and electronic commerce (e-commerce).
- 3.2.2 To promote and secure electronic fund transfer and digital transaction payment system.
- 3.2.3 To protect government data, records and information in digital form.
- 3.2.4 To establish and enforce Cyber laws to address computer crime.
- 3.2.5 To enthrone public confidence in the use, application and sharing of information.
- 3.2.6 To promote acceptable standard, authenticity and integrity in ICT use nationwide.
- 3.2.7 To enhance freedom and access to digital information at all levels while protecting personal privacy.
- 3.2.8 To promote intellectual property and copy rights.
- 3.2.9 To address critical ethical issues of the digital-culture, and protect the rights of the child and under-privileged through developing laws to penalise those who access and distribute undesirable contents and applications.
- 3.2.11 To safeguard life and property of all Samoan both at home and abroad.
- 3.2.12 To preserve the territorial integrity of our borders and assets.
- 3.2.13 To provide attractive career opportunities for our citizens.
- 3.2.14 To ensure that Samoa is protected from the unruly behavior of the terrorists
- 3.2.15 To safeguard both private and public sector from the use of ICT

# 3.3 Strategies

- 3.3.1 Using ICT to address contemporary and emerging security threats and challenges that are being re-defined by ICT.
- 3.3.2 Raising awareness and educating National Security and Law Enforcement personnel at all levels on the use, benefit and risks of new ICT environment.
- 3.3.3 Appropriately informing and protecting our citizens, government, infrastructure and assets from illegal and destructive activities found in the global electronic environment thus enhancing the confidence of our nation and its partners in our citizens, government and infrastructure.
- 3.3.4 Government through the Justice Department in collaboration with the MICT, Attorney General, and after due deliberation with ICT and sectorial experts, will frame appropriate legislation in the following areas among others, namely;
  - a. Computer Crimes,
  - b. **Digital Signature**
  - c. Tele-Medicine
  - d. Tele-Education
  - e. Intellectual Property/ Copyright
  - f. Consumer Protection
  - g. Media Convergence
  - h. Electronic Government
  - i. Electronic Commerce
  - j. Pornography
  - k. national security
- The Implementation Division, in collaboration with the Ministry of Justice and the Attorney General's Office, with inputs from the private sector advisory committee, NGOs and civil society (where deemed necessary) shall sponsor and promote the establishment of the following ICT Legislation to realise objectives such as:
  - freedom of access, free flow of information and rights to information,
  - on-line transaction and services,
  - privacy and confidentiality,
  - digital signatories, and
  - intellectual property rights:
- 3.3.6 Ensuring the protection of individual and collective privacy, security, and confidentiality of information.
- 3.3.7 Introducing the machinery for verification and admissibility of copies of electronic records and digital evidence in administrative or legal proceedings, and promote the digitalisation of court proceedings.
- 3.3.8 Reviewing of relevant existing laws to take care of any impediments that may hinder the implementation of ICT policy.
- 3.3.9 Training and re-training all judiciary personnel, including Judges, Magistrates, Lawyers, Prosecutors and Court Clerks to apply and use computers and Other ICT tools to improve the delivery of justice.
- 3.3.10 Computerizing and networking all arms of law enforcement and converting existing relevant records into digital format.
- 3.3.11 Enacting legislation on the following;
  - a. Establishing a National ICT policy.

- b. Establishing a new ICT implementation division within the Ministry of Communications and Technology ensuring membership include the private sector, NGOs and Civil Society representative.
- c. Government workforce restructuring in the ICT era.
- d. Commercial transactions using ICT media and digital signature technologies.
- e. Computer crime and Cyber laws (CCCL)
- f. Promoting the free flow of information, knowledge and data
- 3.3.12 Enacting Bills and Acts to stimulate and protect the right of users and developers.
- 3.3.13 Establishing Government ICT Procedure Act (GITPA) to enhance equipment standards, performance and security.
- 3.3.14 Establishing a Data Protection Act (DPA) for safeguarding privacy of National computerized records and electronic documents.
- 3.3.15 Encouraging "Made in Samoa ICT products and services" such as software and professional services through incentives such as reduced tax and tariffs
- 3.3.16 Updating any existing National Copy Rights Act to protect ICT related intellectual property rights (IPR).
- 3.3.17 Updating any existing laws regarding censorship to incorporate ICT as a media. The onus should be at the organisational level to develop ICT policies and procedures on protecting users e.g. pornography, drug and terrorist information.

# 3.4 Regulations

- 3.4.1 A regulatory framework is essential to avoid violating policy goals and direction, while incorporating social and consumer concerns in the deployment of new products and services, and to safeguard national resources. A continuous balance must be achieved between under-regulation that breeds sharp practices and excessive regulations that stifle industry investment and growth.
- 3.4.2 In devising a useful regulatory framework, the following steps shall be taken:
  - a. Focus on creating an equitable, fair, just and competitive environment, based on the principles of the free market and open unfettered access to products and services.
  - b. Make optimum use of existing Information Communication Technology investments and removal of restrictions on voice and video transmission via the Internet, Intranet, or other data communication media.
  - c. Allow network operators the freedom to build their own backbone and local access, and encourage collaborative private sector efforts in this regard.
  - d. Facilitate deployment of infrastructure for advancement of ICT and related services.
  - e. Review government management and procurement policies to ensure that they encourage competition among ICT service providers.
  - f. Promote the self-sustained development of Samoan ICT solution providers in areas such as training, software development and "service" houses by ensuring that not less than 30% of the value of

all IT contract awards by government are undertaken using local value added products, services or personnel.

#### 3.5 Standards

- 3.5.1 The government through MCIT shall adopt standards on an ongoing basis as part of a continuing IT planning process by initially determining what and where to standardize and the costs versus benefits of standardization. Issues to be considered include:
  - a. Compatibility in sharing of data and information.
  - b. Effective and efficient sharing of skills and knowledge.
  - c. Efficient usage of resources.
  - d. Improved product quality.
  - e. Avoiding the stifling of creativity and development of new products and ideas.
- 3.5.2 The relevant Policy and Technical committee shall study, review and produce advisory standards to be adopted in the use of ICT by the government and the private sector.
- 3.5.3 For the public sector the government will ensure that government owned, funded or controlled organisations; cooperate in the use of ICT to improve the productivity of national programs and to promote a coordinated, interoperable, secure and shared Government wide infrastructure.
- 3.5.4 Establish inter-agency support structures that build on existing successful interagency efforts and shall provide expertise and advice to agencies.
- 3.5.5 Recommended Standards shall be reviewed and published on a regular basis. The publications shall be used as guidelines by government, public and private sector organizations throughout the country. Where specific standards are identified as critical to the development and deployment of a countrywide infrastructure, compliance with these shall be made mandatory.

# 3.6 Priority Projects

	Description	Short,	Implementing	Timing	1
		Medium Long Term	Partners	Begin	End
1	ICT training for Judges, Lawyers and Court clerks	Short Term	Government, donors and Private Sector		
2	Digitising Justice Records	Medium Term	Government, donors and Private Sector		

# **CHAPTER 4: GOVERNANCE**

#### Introduction

It has been proven by those countries that have established e-Government projects that ICT is the tool that can achieve good governance through the timely and integrity of information. The focus is to utilise ICT as the tool to achieve the effectiveness, efficiency, transparency and accountability of all ministries, NGOs, Civil Society and private organisations as they strive to deliver various services to the people of Samoa.

# 4.1 Policy Statement

Samoa shall use ICT as the major driving force to re-engineer and rapidly transform governance to interface with the ICT needs of citizens by establishing a transparent electronic Government (e-Government) at the national level and a Country Gateway that will help improve development, reduce poverty and the digital divide in rural areas. The objectives and strategies to achieve this principle include:

# 4.2 Objective

- 4.2.1 To replace traditional governance with electronic governance, and replace legacy systems with electronic systems especially the Finance Management Information Systems (FMIS) and Human Resource Management Information System
- 4.2.2 To use cost effective software that allows the people of Samoa the freedom to use for software development the Samoan way
- 4.2.3 To create knowledge-based and **Simple Moral Accountable Responsive** and **Transparent** (SMART) governance.
- 4.2.4 To reduce bureaucracy.
- 4.2.5 To maximise productivity and quality.
- 4.2.6 To eliminate waste.
- 4.2.7 To increase efficiency, effectiveness and transparency.
- 4.2.8 To create an easy and free access to government information.
- 4.2.9 To reduce the cost of service delivery.

# 4.3 Strategies

- 4.3.1 Establishing an FMIS project team to document current processes in order to identify the gaps between the existing FMIS and the needs of Government
- 4.3.2 Establishing a national information management system for Human Resource Management
- 4.3.3 Building a country gateway to focus on development issues and share development information nationally, regionally and internationally
- 4.3.4 Establishing a Data Protection Act (DPA) for safeguarding privacy of National computerised records and electronic documents.
- 4.3.5 Encouraging local companies and institutions, working with or providing ICT training to use the most likely cheaper but scalable software and comparing capital costs of such software with others and not driven by market forces
- 4.3.6 Ensuring through the MCIT the implementation of compatible standards for networking of all Government Departments and Ministries (hereinafter referred to as Government agencies) to share data, information and reporting

- on-line; establish inter-agency support structures that build on existing successful inter-agency efforts in other small countries; and provide expertise and advice to other government agencies.
- 4.3.7 Expanding the skill and career development opportunities of ICT professionals in government; and improve the management and use of ICT within and among agencies by developing ICT procedures and standards and by identifying and sharing experiences, ideas, and promising practices; and provide innovative, multi-disciplinary, project-specific support to Government to enhance interoperability, minimize unnecessary duplication of effort, and capitalise on agency successes; supported by a Government ICT Procedure Act (GITPA).
- 4.3.8 Making ICT skill acquisition mandatory for all government employees, by:
  - a. Requiring all civil servants to become functionally computer literate within 24 months of this policy coming into force.
  - b. All new entrants into the civil service must be functionally computer literate prior to commencing their appointment; and
  - c. Tie eligibility requirements for all employees, of government owned, funded and controlled organisations, nominated to attend overseas, advanced management or technical programs, or those being considered for promotion or special posting will henceforth include their being functionally computer literate.
- 4.3.9 Establishing clear accountability for information resource management by centralising existing Government IT Divisions, to one Government IT Agency (GIA) or outsource.
- 4.3.10 Establishing Internet connectivity and access for all government ministries and corporations at all levels.
- 4.3.11 Establishing Web Sites for improved government image and as information centres for the citizens.
- 4.3.11 Safeguarding the effective use of the "dot ws (.ws)" Domain name for Samoa.
- 4.3.12 Developing an e-Government project to ensure the speedy processing of information requests both from local and overseas customers and clients, using real time payment and procurement, business to business (B2B), business to consumers (B2C) and on-line forms for information collation and research.
- 4.3.13 Establishing a central payment clearing house to validate credit cards in Samoa and serving as the clearing house for the Pacific region
- 4.3.14 Simplifying citizens' access to the process of governance and government information by providing choices and options for interaction with government, and advance the use of electronic media for government contract tendering and procurement processes, and encouraging community based organisations to bid for tenders.

	Description	Short,	Implementing	Tim	ing
		Medium Long Term	Partners	Begin	End
1	e-Government	Medium Term	Government, donors and Private Sector	2005	2007
2	Central Payment Clearing House  – can serve the rest of the Pacific	Medium Term	CSL, ANZ, Government, donors and Private Sector	2005	2007
3	Internet training for all government employees who are not using the Net	Short Term	Government, donors and Private Sector	2004 last quarter	2005 second quarter
4	Application for Funding to fund e- Government project	Short Term	Government, donors and Private Sector	2004 second qtr	2004 last quarter
5	Plan capacity building for private sector, NGO and civil society – use e-Government for online completion of license application forms etc.	Medium Term	Government, donors and Private Sector		

#### **CHAPTER 5: CONTENTS AND APPLICATION**

#### Introduction

While ICT has been recognised as the tool to social and economic development, the fact that ICT information is mostly in English means that a large percentage of the Samoan population with limited knowledge of English will be a barrier to effectively utilise ICT in all sectors of the country especially the civil society. This is evident from the consultations at the village level where it was voiced that most of the television programmes are in English and people in the villages do not understand them. As such, Samoa has recognised the importance of this theme especially in promoting:

- local culture, knowledge and content
- local media
- archives of historical information
- indigenous knowledge
- local media

#### 5.1 Policy Statement

- 5.1.1 ICT applications and information content development are especially crucial to respond to specific needs and demands that are not currently adequately met in Samoa, especially in rural villages. Information content packages, appropriate to all Samoans and relevant to children, youth, women, disabled and other beneficiaries, will be developed and included in priority projects and activities, of this Strategy.
- 5.1.2 The activities of this Strategy will focus on key applications such as e-governance, e-business, knowledge sharing, rural ICT services, e-health, distance education, e-agriculture, e-environment, e-community, and special technology applications for persons with disabilities.

### 5.2 Objectives

These objectives have been identified as crucial to meeting this principal.

- 5.2.1 To ensure that new technical terms are translated into appropriate Samoan words and that the meanings of the new terms are taught in all education levels as well as community based organisations such as the women's committees etc.
- 5.2.2 To raise public awareness of the undesirable nature of some ICT contents especially the Internet
- 5.2.3 To ensure that ICT contents are tailored for local usage
- 5.2.4 To promote the development of local applications and contents
- 5.2.5 To make Health related information easy to understand by all
- 5.2.6 To ensure that Government sets a good example of appropriate safe use of the Internet and contents

## 5.3 Strategies

- 5.3.1 Integrate with the Samoan National Language Commission to translate technical terms to Samoan language
- 5.3.2 Establishing a panel of experts to look at translating applications to Samoan
- 5.3.3 Documenting a list of common translations of ICT terms and disseminating this information to organisations both in Samoa and overseas to eliminate fragmented ICT translations
- 5.3.4 Investigating available localisation tools that are useful for translating contents to Samoan
- 5.3.5 Ensuring that content is closely monitored to ensure that Government ICT assets are not used to access undesirable contents
- 5.3.6 Increasing the participation of Samoa in international organisations working towards eliminating undesirable contents e.g. pornography
- 5.3.7 Increasing public awareness of undesirable contents especially the Internet

	Description	Short,	Implementing	Tim	ing
		Medium Long Term	Partners	Begin	End
1	Identify and formalise an institution to approve the addition of new ICT words to the Samoan language	Medium Term	Government, donors and Private Sector	2005	Ongoing
2	Awareness Campaign	Medium Term	Government, donors and Private Sector	2005	Ongoing
3	Establish a central Government body to (check policy and apply)	Short Term	Government, donors and Private Sector	2004 last quarter	2005 second quarter

# CHAPTER 6: COOPERATION BETWEEN STAKEHOLDERS

#### Introduction

It is intended that ICT Policy should promote full stakeholder consultation notwithstanding limitations in human resources and stakeholder participation. The aim is to produce cross-fertilization of ideas and benefits between concerned parties that will result in effective and synergistic strategies being developed, resulting in good governance, private sector development and effective service delivery.

### 6.1 Policy Statement

The Government of Samoa will be a role model through national organisations (particularly government departments and corporations) in encouraging the private sector, NGOs and Civil Society to expand their use of ICT in interacting with their stakeholders, in the dissemination of information, promotion of efficient business operations, good governance and sound business planning.

Recognizing that the ICT should be private sector driven, government shall engage joint venture investment with the private sector, in addition to the provision of an enabling environment for investment.

### 6.2 Objectives

- 6.2.1 To provide an enabling environment so that private ventures can flourish.
- 6.2.2 To use favourable fiscal policies to make Samoan ICT products and services globally competitive.
- 6.2.3 To ensure that MCIT in collaboration with the private sector develops a large pool of ICT professionals with wide range of state of-the-art ICT skills for internal and international redress of shortages.
- 6.2.4 To establish joint Government/Private sector institutional framework for developing Advisory Standards and quality control.
- 6.2.5 To encourage local capacity building by providing partnership opportunities internationally for specialized and strategic ICT sectors.
- 6.2.6 To promote special ICT training for women's committees and community based organisations or groups such as the untitled men or taulele'a, and village council of matais.

- 6.3.1 Establishing incentives to attract private sector investment.
- 6.3.2 Developing government/private sector R & D partnerships through equitable facilities sharing and by establishment of Pilot Schemes in software and hardware development within/outside ICT.

- 6.3.3 Establishing and supporting a National ICT development Trust Fund (NICTDF), which amongst its other activities, will provide venture capital finance to the start up of SMEs in the ICT sector. The MCIT will manage this fund.
- 6.3.4 Promoting multisector partnership with ICT investors both locally and internationally.
- 6.3.5 Establishing an export promotion drive to sponsor participation of Samoan ICT solutions and service providers in national and international ICT exhibitions.
- 6.3.6 Encouraging multisector partnership in the development of local capacity building.

	Description	Short,	Implementing	Tim	ing
		Medium Long Term	Partners	Begin	End
1	Establish and Advisory Group to establish ICT standards for Government, Private Sector, NGOs and Civil Society, and cooperate between stakeholders	Long Term	Government, donors and Private Sector	1QTR 2005	Ongoing
2	Establish a National ICT development Trust Fund	Medium Term	Government, donors and Private Sector	2QTR 2005	3 <sup>rd</sup> 2006
3	Training to use ICT for women's groups, NGOs and Civil society	Long Term	All Sectors	2 QTR 2005	Ongoing
4					

#### **CHAPTER 7: ICT DIFFUSION AND AWARENESS**

#### 7.1 Policy Statement

A comprehensive promotion and awareness campaign shall be undertaken in order to create an information society with leading and cutting edge technologies. This campaign will ensure every citizen is empowered to contribute positively to national development.

### 7.2 Objectives

- 7.2.1 To promote ICT diffusion, and utilisation within and across sectors.
- 7.2.2 To promote the use of ICT by the heads of Government, Ministers, and all other key officers and leaders who can influence public opinion.
- 7.2.3 To encourage the performing arts (home video, artists, musicians etc) and other similar media sources to integrate ICT popularisation into their programmes.
- 7.2.4 To use the electronic and traditional media extensively to increase ICT Awareness.
- 7.2.5 To use the modern and traditional media and traditional social structures extensively for the popularisation of ICT
- 7.2.6 To encourage the development of simple ICT tools designed for local language interactions.

#### 7.2.7 To promote gender equity in the use of ICT for development use

7.2.8 To promote the inclusion of women in national delegations to regional and international ICT dialogue or conferences, promoting culturally sensitive ICT uses and applications

- 7.3.1 Using Mobile Internet Units (MIU) with varying multimedia aids to tour rural areas in order to educate the populace on ICT features and benefits in addition to the community telecentres.
- 7.3.2 Encourage ICT skill acquisition for all other professional entities of government within 24 months of this policy going in to effect.
- 7.3.3 Establishing interactive websites for all key government offices within 12 months as information centres for the populace.
- 7.3.4 Organizing workshops to demonstrate the features and benefits of ICT for performing artists through the Ministry of Youth, Sports and Culture.
- 7.3.5 Collaborating with the Ministry of Women Affairs to organize workshops and training in ICT skills for women and other special groups especially in rural villages.
- 7.3.6 Collaborating with the Ministry of Communications and Information Technology as well as other Government Corporations such as Samoa Broadcasting Corporation, and private media companies and organisations to popularise ICT through the slogan 'Use Information and Communication Technology' (USE ICT) via television and radio.
- 7.3.7 Including women as leaders and decision-makers in all planning processes for the implementation of this strategy making recognition that women's perspectives can make a significant contribution to aligning this strategy to the Statement of Development Strategy and other international declarations such as the WSIS.

7.3.8 Facilitating and encouraging women as members of national delegations and representatives of civil society and business by setting targets for delegations to include at least 30% women including gender and ICT experts

## 7.4 Priority Projects

	Description	Short, Medium	Implementing	Tim	Timing	
		Long Term	Partners	Begin	End	
1	Awareness Programme	Short Term	ICT Committee, Government, Donors and Private Sector	June 2004	June 2005	

Part III: Sectorial Applications

#### **CHAPTER 8: EDUCATION**

#### 8.1 Policy Statement

8.1.1 The government shall invest in ICT based Education systems to ensure easy access to good Education providing opportunities for all. Following are the objectives for ICT development in the Education sector.

## 8.2 Objectives

- 8.2.1 To integrate ICT for the of an Education Information Systems (EIS) cutting across primary, secondary and tertiary Education systems.
- 8.2.2 To improve the efficiency and effectiveness of teaching and learning positive outcomes through the use of ICT.
- 8.2.3 To integrate ICT for the development of school infrastructure, information, teaching, and learning resources.
- 8.2.4 To integrate ICT for use in distance learning providing access to good quality of teaching and learning for all.
- 8.2.5 To use ICT as research tool and means of disseminating information.
- 8.2.6 To integrate ICT into Educational teaching programmes as a tool for empowering teaching professionals.
- 8.2.7 To use ICT as a research tool for all students and teachers to access library and archive information on-line
- 8.2.8 To use affordable and appropriate technology to allow schools in rural villages to access education information through the use of modern ICT especially the Internet and email.
- 8.2.9 To provide human resource training on using and managing ICT

- 8.3.1 Capitalising on existing global ICT infrastructure such as the free School net "nearly real-time" email facilities that connect, via e-mail, teaching personnel at all levels in the developing world to each other, and to select Education experts in developed countries.
- 8.3.2 Networking all local Education institutions and schools to collate information, share data and communicate on-line such as the free school net to connect all levels.
- 8.3.3 Establishing full Internet connectivity and access for Educators, and students at all levels (primary, secondary and tertiary).
- 8.3.4 Making ICT skills acquisition mandatory for all Educators thus achieving computer literacy within 12 months.
- 8.3.5 Establishing a computer aided learning institution e.g. computer as tutee
- 8.3.6 Digitising library and archive information using ICT allowing all schools access to library and archive information on-line.
- 8.3.7 Developing ICT courses for school curricula at all levels
- 8.3.8 Establishing a network of co-operating centres, institutions for training education, software development and research to produce the software and necessary human resources needed.

	Description	Short,	Implementing	Tim	ning
		Medium Long Term	Partners	Begin	End
1	Basic computer training for all teachers at all levels	Short Tem	Government, JICA and Private Sector		
2	Developing Curriculum to include basic computer courses	Medium Term	AUSAID, Government, donors and Private Sector		
3	Archiving library information	Long Term	JICA, ADB, Government and PR		
4	Developing schoolNet	Short Term	ADB & Government		
5	EIS Development		Government, donors and Private Sector		

#### **CHAPTER 9: HEALTH**

#### 9.1 Policy Statement

9.1 The government shall invest in ICT based healthcare systems to ensure that Samoans have easy access to quality healthcare delivery including "taulasea" Samoa or traditional healer.

### 9.2 Objectives

- 9.2.1 To use ICT for the enhancement of Health-care Information Systems (HIS) cutting across primary, secondary and tertiary healthcare systems.
- 9.2.2 To integrate ICT in programmes to improve the efficiency and effectiveness of health care
- 9.2.3 To deploy ICT as research tool and means of disseminating Health information to all Samoans.
- 9.2.4 To use ICT as a means of reducing costs and improve productivity of healthcare service delivery.
- 9.2.5 To use ICT as a tool to empower health professionals

- 9.3.1 Capitalise on existing global ICT infrastructure.
- 9.3.2 Networking all local healthcare facilities to collate information, share data and communicate on-line within a secured and legal framework.
- 9.3.3 Establishing an Internet and Email policy and providing full Internet connectivity and access for healthcare professionals at all levels (primary, secondary and tertiary) within the approved policy.
- 9.3.4 Making ICT skills acquisition mandatory for all healthcare professionals thus achieving computer literacy of the Health professionals within 24 months with a focus on:
  - a. Including IT courses in the curricula of all medical and para-medical education institutions.
  - b. Establishing a network of co-operating centres, institutions for training education, software development and research to produce the software and necessary human resources needed.
- 9.3.5 Utilising Software packages for;
  - a. The three levels of healthcare delivery, primarily to support clinical work and hospital management within the health facilities, so that information statistics is produced as a natural by-product of the daily operations.
  - b. Government authorities to accumulate the information coming from all levels of healthcare delivery and also to produce the combined statistics primarily to support the decision making by the authorities.
- 9.3.6 Computerising of all hospitals, healthcare, epidemiological, and administrative records.

- 9.3.7 Use ICT to address serious national health threats e.g. HIV/AIDS, leprosy, physical disabilities among many others;
  - To teach the youth on ways to prevent the possible transmission of communicable diseases.
  - ii. To promote Health education and awareness.

	Description	Short,	Implementing	Tim	ing
		Medium Long Term	Partners	Begin	End
1	Conducting a post implementation review of the HIS	Short Term	Government, donors and Private Sector	2005	
2	Conducting computer literacy training for all Health Professionals	Medium Term	Government, donors and Private Sector	2005	
3	Connecting all health facilities	Long Term	Government, donors and Private Sector	2006	

#### **CHAPTER 10: NATURAL RESOURCES & ENVIRONMENT**

#### **10.1 Policy Statement**

10.1.1 Samoa shall use ICT to re-engineer agriculture for the purposes of maximising food production, improving food self-sufficiency and security, increasing output for industrial raw material utilisation, providing employment, economic growth and minimising environmental abuse and degradation.

## 10.2 Objectives

- 10.1 To optimise land use for food production.
- 10.2 To provide employment for the citizens.
- 10.3 To minimise urban migration.
- 10.4 Develop and protect a sustainable agricultural environment.
- 10.5 To speed up the communication of information on agricultural issues such as pest, diseases etc to ensure preventative methods are sustained

- 10.3.1 Developing Geographical Information Systems (GIS) to monitor the environment and plan sustainable environmental usage: ICT is used in land and water management, offshore resource exploitation, yield assessment and livestock management. Government will revitalise agricultural extension services by empowering and equipping farm extension workers with ICT skills to support farmers through the use of ICT in areas such as:
  - Digital Mapping
  - b. Land Use
  - c. Soil types
  - d. Meteorology
  - e. Ecology
  - f. Oceanography particularly off-shore fisheries exploitation
  - g. Hydrology
  - h. Agricultural records
- 10.3.2 Establishing an agricultural information system to provide support for planning, production, storage and distribution of horticultural crops, livestock, and fisheries products.
- 10.3.3 Creating ICT awareness for all types of farmers at all levels nationwide.
- 10.3.4 Encouraging the Agriculture Department and the Agricultural Store to use ICT to preserve information on Agriculture and obtain information regarding preventative measures for farming problems e.g. the taro plight.
- 10.3.5 Establishing a Pest Net mechanism where by the Agriculture Department can quickly relay information to the national, regional and international agricultural community of any critical issues then use all the ICT media to disseminate information on pests etc to the local farmers

	Description	Short,	Implementing	Tim	ing
		Medium Long Term	Partners	Begin	End
1	Capacity building for all staff	Short	Ministry, private sector and donors	2005	
2	Developing programmes for mitigating issues online	Medium	Ministry, private sector and donors	2006	

#### **CHAPTER 11: URBAN AND RURAL DEVELOPMENT**

## 11.1 Policy Statement

The government shall facilitate the development and integration of Geographical Information Systems (GIS) and its utilisation with other ICT facilities for urban and rural area development.

### 11.2 Objectives

The GIS will be used to as a tool to assist in the urban and rural development as stated in the SDS. The key objectives of this chapter will be:

- 11.2.1 To develop digital master plans for Apia and Salelologa.
- 11.2.2 To improve rural area development and management
- 11.2.3 To reduce the trend of rural to urban migration
- 11.2.4 To achieve environmentally clean cities and rural areas.
- 11.2.5 To generate ICT related jobs for urban and rural youths.
- 11.2.6 To introduce the benefits of e-governance to urban and rural communities.
- 11.2.7 To make tools available to predict environmental problems in advance for necessary action.
- 11.2.8 To promote the development of rural ICT facilities.
- 11.2.9 To promote the proper documentation of ownership of land and property in urban and rural areas and the transformation of dead property assets to capital.

#### 11.3 Strategies

The above objectives will be achieved by the following strategies.

- 11.3.1 Creating environmental networks.
- 11.3.2 Organising enlightenment campaigns about ICT amongst city and rural area planners.
- 11.3.3 Developing the GIS technologies for use in urban and rural areas for planning and design.
- 11.3.4 Re-training the present core designers and planners for relevance in the information era.
- 11.3.5 Establishing rural Internet resource centres with appropriate technology that has the capability to connect such communities that cannot have access to the telecommunication infrastructure (as confirmed by SamoaTel and the MICT) especially the Internet, and information on the following;
  - a government programs,
  - b local news and weather details.
  - c land and related administrative records.
  - d government license and related documentation application on-line,
  - e local commodity prices and on-line transactions
- 11.3.6 Establishing ICT facilities in rural areas through the use of Community multipurpose Information Centres.

	Description	Short,	Implementing	Tim	ing
		Medium Long Term	Partners	Begin	End
1	Establishing a Community Multipurpose Information Centres Pilot – one in Upolu and one in Savaii		Government, donors and Private Sector		

#### **CHAPTER 12: TRADE AND COMMERCE**

## **12.1 Policy Statement**

Create an enabling environment that empowers stakeholders in trade and commerce with the underlying infrastructure to improve productivity and positively position Samoa for global competition.

## 12.2 Objectives

This is one of the key sectors that require ICT to be developed as it allows Samoa to enter and compete in the global market. The key objectives are:

- 12.2.1 To develop a transparent, stable and effective legal operating environment that promotes private sector business and investment in ICT.
- 12.2.2 To cultivate a culture of electronic commerce, which makes business transactions easy, quick and cost effective, for both national and international transactions.
- 12.2.3 To positively raise the local and international visibility of Samoan businesses.
- 12.2.4 To encourage foreign and domestic private sectors investment to build information infrastructure and related assets and develop subsequent downmarket activities.
- 12.2.5 To stimulate the proliferation of private sector-led information technology services and consequently generates meaningful employment opportunities for all Samoans
- 12.2.6 To promote ICT for enhancing and improving the small business sector in Samoa

## 12.3 Strategies

These strategies will allow Samoa to achieve the above objectives.

- 12.3.1 Firmly address the protection of intellectual rights by bringing the copyright laws in line with the needs of a globally competitive economy.
- 12.3.2 Permitting the private sector to establish an e-commerce communication "backbone" facility, stimulated on market demand with minimal governmental encumbrance.
- 12.3.3 Encouraging the development of alliances of communities and non-governmental organisations to enhance efficient and appropriate grass-roots development efforts.
- 12.3.4 Raising the profile of Small and Medium Enterprises (SMEs) through the Government agency, the Small Business and Enterprise Center (SBEC), in exports through e-commerce by helping the existing small businesses through the providing of low cost accessibility to markets and services.
- 12.3.5 Encouraging manufacturers and suppliers to utilise bar codes on items sold in the country.
- 12.3.6 Establish an enabling environment for businesses to use e-commerce.

	Description	Short,	Implementing	Tim	ing
		Medium Long	Partners	Begin	End
		Term			
1	Developing incentives for small businesses to use the Internet	Medium	Government, donors and Private Sector		

#### **CHAPTER 13: FISCAL MEASURES**

#### **13.1 Policy Statement**

13.1.1 The government shall introduce a series of fiscal measures, in order to stimulate further investment and growth in the ICT sector, with the creation of a favourable investment climate for the development of a globally competitive ICT enabled economy.

#### 13.2 Objectives:

- 13.2.1 To develop fiscal mechanisms that quickly respond to the fast changing needs of an ICT based economy.
- 13.2.2 To position the economy to secure capital inflow, retain capital and encourage local and foreign investment.
- 13.2.3 To create fiscal policies to ensure that Samoan ICT products and services are globally competitive.
- 13.2.4 To establish incentives to attract ICT investment.
- 13.2.5 Promote the development of economic sub-sectors, asset accumulation, and fiscal activities that arise from ICT use

- 13.3.1 Establishing incentives to retain skilled ICT professionals
- 13.3.2 Promoting the growth of alliances and partnerships among local firms and with foreign firms through the establishment of joint ventures and strategic alliances.
- 13.3.3 Government owned, funded or controlled organisations for a period of 3 years from the effective date of this policy will not deduct the statutory with-holding taxes from payments to Samoan ICT solution providers for the following services:
  - a. One hundred percent locally developed software
  - b. Locally assembled or manufactured ICT equipment
  - c. Internet access services, local web hosting, and local website design
  - d. ICT equipment maintenance
- 13.3.4 Stimulating the proliferation of high-speed Internet gateways through a less stringent licensing regimen towards Internet Service Provider's (ISP's) and Internet Access Provider's (IAP's).
- 13.3.5 Establishing a National ICT Development Fund (NICTDF) managed by the MCIT.
- 13.3.6 Access to special development funds such as the NICTDF or other funds to be approved by government from time to time.

#### **CHAPTER 14: ARTS, CULTURE & TOURISM**

#### 14.1 Policy Statement

14.1.1 ICT shall be used to project a positive image of Samoa's arts and culture, promote Samoa as a safe tourist destination, and preserve Samoan Arts and Culture for future generations.

## 14.2 Objectives

- 14.2.1 To safeguard manuscript and preserve cultural artefacts.
- 14.2.2 To promote Samoan cultural heritage on the Internet.
- 14.2.3 To use ICT as a tool to increase markets for locally produced arts especially handicrafts, which is generating income for unemployed people.
- 14.2.4 To promote business and tourist activities and generate revenue.
- 14.2.5 To enable Samoa to become a net provider of Internet content on the World Wide Web, as opposed to its status of being a net recipient of Internet content.

### 14.3 Strategies

- 14.3.1 Creating websites to project Samoan culture in order to.
  - a. Use web technology to attract tourist to Samoa,
  - b. Provide facilities to sell Samoan arts and cultural goods on the Internet,
  - c. Encourage Internet access services, local web hosting, and local web-site design,
  - d. Develop a multi-media virtual gallery, and
  - e. Develop low cost broadcast, video, arts, and film industry.
- 14.3.2 Introducing ICT as a tool to improve and speed the production process for art design e.g. handicrafts, carving, composing music etc.
- 14.3.3 Strengthening infrastructure and related facilities for reliable networked airline/transport/hotel reservation to increase the inflow of tourists.
- 14.3.4 Providing Internet connectivity to major tourist areas with access links to popular search engines for global visibility.
- 14.3.5 Promoting arts, culture and tourism through community broad networks using the Internet

	Description	Short,	Implementing	Tim	ing
		Medium Long Term	Partners	Begin	End
1	Digitise Library and Archive materials		Government, donors and Private Sector		
2					

#### CHAPTER 15: RESEARCH AND DEVELOPMENT

### **15.1 Policy Statement**

ICT Reseach and Development will be used for sustainability, capacity building, leapfroging and competitiveness.

## 15.2 Objectives

To ensure Samoa's contribution to ICT development and her competitiveness in the regional and international market.

- 15.2.1 To guarantee sustainability of ICT in Samoa and use it to stimulate industrial growth.
- 15.2.2 To promote self-reliance and export of ICT products and services.
- 15.2.3 To encourage joint R & D efforts between the private sector and the universities such as software development.
- 15.2.4 To identify key technological areas as well as others and provide fiscal support and incentives to encourage local technology development.
- 15.2.5 To encourage transfer of technology through exchange of visits between expatriate ICT experts and Samoan ICT experts in Diaspora on one hand and establishing and developing relationships with donors and vendors on the other hand. Funding to be coordinated via the MICT.
- 15.2.6 To include in the theme of applications design of ICT projects, which take women's needs into account, for example by developing ICT solutions suited to rural women, women in conflict areas, and applications that assist with the HIV/AIDS pandemic.
- 15.2.7 To develop projects that will collect and, analyze, appropriate gender specific data and reporting mechanisms to evaluate and monitor the impact of ICT developments on women and girls.

- 15.3.1 Developing local expertise and resources through adaptation.
- 15.3.2 Developing market-oriented software for local market and export using FOSS where there is the freedom to use the source code as we see fit.
- 15.3.3 Cultivating/upgrading the maintenance culture.
- 15.3.4 Developing low cost PCs, solutions, services and accessories in order to increase PC accessibility to at least 30% of the population by year 2015.
- 15.3.5 Encouraging and funding R & D at the NUS and Polytech. Industries are to be encouraged to set up R & D centres at university level, through faculty chairs, matching grants and focused joint projects, promoting the multisector partnership approach.
- 15.3.6 Requesting for research projects that will be made open to both research institutes and universities in order to select good and innovative projects for national development.
- 15.3.7 Implementing an information dissemination campaign that includes a wide range of media such as radio, drama and print and variety of languages

- 15.3.8 Commissioning a study on the interaction between gender equality and ICT, which should include development of a gender equality and ICT baseline study, indicators, conceptual tools and case studies on the impact of ICT on achieving gender equality.
- 15.3.9 Funding vacation or sabbatical visits of expatriate ICT experts and educationists in order to transfer knowledge and share their experiences.
- 15.3.10 Introducing "Innovative ideas" competitions, on countrywide basis covering all levels (from primary schools to tertiary institutions) and R & D centres to instill the spirit of innovation and excellence in our young professionals.
- 15.3.11 Stimulating growth of local ICT industries through government patronage of local ICT industries, products and services

	Description	Short,	Implementing	Tim	ing
		Medium Long Term	Partners	Begin	End
1	Establish an ICT Research and Development Centre within the NUS	Short to Medium	Government, donors and Private Sector	1 <sup>st</sup> QTR 2005	Ongoing
2	Conduct Research on Societal impact of ICT	Short	Government, donors and Private Sector	4 <sup>th</sup> QTR 2004	Ongoing

#### **CHAPTER 16: GLOBAL CONSIDERATIONS**

### **16.1 Policy Statement**

Recognising that the subject of globalisation is indeed an issue of internationalisation of technology, government shall encourage international collaboration in ICT knowledge sharing, investment, and security.

### 16.2 Objectives

- 16.2.1 To use ICT as the tool to ensure that Samoa is protected from becoming a haven of drug dealing, terrorist, pornography and scam information.
- 16.2.2 To encourage national and regional co-operation in the applications and development of ICT to strengthen co-operation and integration on a regional and international level.
- 16.2.3 To position Samoa as an ICT capable country globally through participating in the work of the World Summit of the Information Society.
- 16.2.4 To respond to the challenges of the ICT globalisation in goods, services and human capital.
- 16.2.5 To transform ICT brain drain from Samoa to brain gain.
- 16.2.6 To encourage the participation of Samoa in the Internet Society activities at the international and regional levels.

- 16.3.1 Using ICT to improve immigration, customs and police processes and procedures, and ensuring that these key Ministries are linked to regional and international organisation e.g. NZ Police, Interpol etc.
- 16.3.2 Establishing links with Samoan media organisation in New Zealand, Australia, Hawaii and the USA to ensure that Samoans living overseas are aware of the ICT developments in Samoa
- 16.3.3 Encouraging Samoan organisations to become members of regional and international ICT development e.g. PICISOC
- 16.3.4 Participating in regional and international forums for ICT development such as the World Summit of the Information Society.
- 16.3.5 Taking part in implementing the Plan of Action of the World Summit of the Information Society

#### CHAPTER 17: STRATEGY IMPLEMENTATION

#### 17.1 Policy Statement

Recognizing ICT as a strategic imperative for national development and taking into account the immense benefits of ICT, Government shall provide considerable national resources, both financial and otherwise, for the realization of the National ICT vision.

### 17.2 Objectives

- 17.2.1 To develop an efficient and cost-effective infrastructure that provides equitable access to national and international networks and markets.
- 17.2.2 To develop an extensive pool of trained ICT manpower at all levels to meet local and export requirements.
- 17.2.3 To promote the widespread use of ICT applications in governance.
- 17.2.4 To provide business incentives for both local and foreign investors to ensure the development of Samoa's ICT sector, including the software, hardware and service industries, and the use of ICT products.
- 17.2.5 To develop an encouraging legislative and regulatory framework for ICT related issues.
- 17.2.6 To give maximum opportunity to the private sector to lead the thrust in the development of ICT in Samoa.
- 17.2.7 To establish a tradition of electronic commerce for both national and international transactions.
- 17.2.8 To establish institutional mechanisms for the control, regulation and monitoring of ICT activities in Samoa.

- 17.3.1 Establishing a coordinated program for the enhancement of the National Information Infrastructure Backbone by using affordable, safe and appropriate technologies e.g. VSAT or Wi-Fi within 24 months of this strategy's approval.
- 17.3.2 Encouraging massive local and global ICT skill acquisitions through training in the public and private sectors as well through joint venture and alliances with a view to achieving a strategic medium-term milestone of at least 500 ICT skilled personnel by the year 2007.
- 17.3.3 Establishing ICT Research and Development centre at the National University of Samoa as incubating centres for the development of software/hardware applications.
- 17.3.4 Making ICT skill acquisition mandatory for all government employees and achieving computer literacy for all civil servants by the end of 2007.
- 17.3.5 Bringing Government to the doorsteps of the people by creating virtual forum and facilities to strengthen accessibility to government information and facilitating interaction between the governed and Government leading of transparency, accountability and strengthening of democracy.
- 17.3.6 Providing high–speed connectivity to the global information infrastructure by 2009.

- 17.3.7 Increasing the telephone line penetration rate by expanding the existing Telecom network and providing new networks by employing modern technologies in order to minimize the cost of expansion.
- 17.3.8 Removing the barriers to the introduction of new technologies such as Wireless Local Loop (WLL) by the private sector in order to ensure the spread of Communication services to under-served areas of the country.
- 17.3.9 Developing an integrated, flexible, robust and reliable transmission network covering the entire country and capable of voice and data by 2009.
- 17.3.10 Encouraging further deregulating of the communication industry with a view to providing affordable, competitively priced Internet connectivity (low and high bandwidth) for a larger community of users by the end of 2009.
- 17.3.11 Reducing the rates and tariff for all communication services to a level reasonable and consistent with economic realities of the country and the global trends.
- 17.3.12 Reducing the bandwidth rates, both domestic and international, dramatically to encourage the rapid launch of new services and distance learning and also provide a competitive edge to local companies trying to break into established international markets.
- 17.3.13 Restructuring the educational system at all levels with a view to developing relevant ICT curricula for the primary, secondary and tertiary institutions in order to respond effectively to the challenges and imagined impact of the information age and in particular the allocation of ICT development fund to education.
- 17.3.14 Networking all government organizations to share data, information and reporting on-line by the end of 2009.
- 17.3.15 Establishing full Internet connectivity and access for most government employees by the end of 2008.
- 17.3.16 Establishing Web Sites for improved government image and as information centres for the citizens.
- 17.3.17 Encouraging the development of high-speed gateways.
- 17.3.18 Encouraging the private sector to develop software for government and non/classified defense projects.
- 17.3.19 Encouraging Internet telephony as well as Voice over Internet Protocol (VoIP), to reduce the cost of telephony and make such services affordable to the populace.
- 17.3.20 The Action Plan for this strategy will be developed as a result of the consultation for this strategy. This is decision is based on the fact that most of the initiatives will need to be developed at the sectorial level which requires input from various sectors.

# Appendix 1 - Translation of the WSIS Declaration into the National ICT Strategic Plan

#### 1 Policy Statement

- 1. The common vision and guiding principles of the WSIS Declaration are translated in this National ICT Strategic Plan into concrete objectives and strategies to advance the achievement of the internationally-agreed development goals, including those in the Millennium Declaration, the Monterrey Consensus and the Johannesburg Declaration and Plan of Implementation, by promoting the use of ICT-based products, networks, services and applications, and to help Samoa overcome the digital divide. The Information Society envisaged in the WSIS Declaration of Principles will be realized in cooperation and solidarity by government, private sector, NGOs and Civil Society.
- 2. The Plan of Action is thus an evolving platform to promote the Information Society at the national, regional and international levels. Implementing the WSIS Plan of Action will be incorporated into the Implementation Plan for this Strategy.

#### 2 Objectives:

- To connect universities, colleges, secondary schools and primary schools in Samoa with ICT.
- 2 To establish a research and development centre within the NUS
- To ensure that more than half of Samoan villages have access to ICTs within their reach
- 4 To connect villages with ICTs and establishing community access points
- To connect all local and central government departments and establish websites and email addresses
- To connect Health centres or health facilities and hospitals with ICTs
- 7 To connect public libraries, cultural centers, museums, post offices and archives
- 8 To adapt all primary and secondary school curricula to meet the challenges of the information society taking into account our own national circumstances
- 9 Encouraging the development of content and to put in place technical conditions in order to facilitate the presence and use of all world languages on the Internet
- To ensure that all of Samoa's population have access to television and radio services

### 3 Strategies:

- Connecting universities, colleges, secondary schools and primary schools with ICTs
- 2 Establishing a research centre within the NUS
- 3 Ensuring that more than half of the Samoan population have access to ICTs within their reach
- 4 Connecting villages with ICTs and establishing community access points
- 5 Connecting Government Ministries and departments and establish websites and email addresses
- 6 Connecting health centres and hospitals with ICTs

- 7 Connecting public libraries, cultural centres, museums, post offices and archives with ICTs
- Adapting all primary and secondary school curricula to meet the challenges of the Information Society, taking into account national circumstances
- 9 Encouraging the development of content and to put in place technical conditions in order to facilitate the presence and use of all world languages on the Internet
- 10 Ensuring that all of Samoa's population have access to television and radio services

#### 3 Priority Projects:

- 1 A) Provide basic computer literacy training to all teachers and students at all levels of education, and administrative staff within the education department
  - b) Provide computer hardware to all colleges, intermediate and primary schools
  - c) Establish the School-Net project
  - d) Establish partnership with the private sector for maintenance of hardware
  - e) Provide email to all administrative staff and teachers
  - f) Provide technical training to IT staff
  - g) Establish a staff retention scheme for all staff
- 2 Establish a research centre in NUS and training staff and students to conduct research on ICT use and societal impact of ICT
- 3 SamoaTel, Government and public sector to work together to ensure that half the population of Samoa has access to ICT by the year 2015
- 4 Establish Telecentre pilot projects in the villages selected by the Ministry of Women, Community and Social Development.
- Implementing e-government and Conducting research into the current IT systems in each department
- Researching the most affordable and appropriate infrastructure to connect all Health facilities and conduct computer literacy training of all Health staff
- 7 Digitise library and archives, and digitise musuem artefacts
- 8 Implement the School Net project and providing computer literacy courses for all teachers. Enhance school curricula to include ICT
- 9 Establish a unit within the NUS where NUS and Polytech works together with the private sector partners in training young people to create contents
- 10 Research the number of families who do not have TV and radio and conduct national campaign to provide these to the cash poor people without a TV and a radio.

#### LIST OF PAPERS CONSULTED and MEETINGS HELD

- 1 The Samoan ICT Policy
- 2 The Statement of Development Strategy
- 3 The World Summit of the Information Society Declaration
- 4 Proceedings of the Workshop on National Information Communication Infrastructures, Policy, Plans and Strategies, Organized by Cooperative Information Network, under the Federal Ministry of Science and Technology, March 28-30, 2001
- The National ICT Policy Workpapers of the Subcommittees of the Samoa National ICT Steering Committee
- Investment Opportunities in Electronics and ICT.
  Info-Communications Development Authority of Singapore ACT. 1999 (No. 41 of 1999)
- Next Frontier in Convergence. INFLANET: Strategic Utilisation of Internet: Singapore's IT 2000 and Library 2000 Plans".
- 8 Risk E-Business: Seizing the Opportunity of Global E-Readiness- (August 200).
- 9 The Power of the Internet for Learning: Moving from Promise to Practice. "Report of the Web-based Education Commission to the President and Congress of the United States".
- Rules for Information Act 2000 by Government of India, Ministry of Information Technology.
- 11 INDIA: Ministry of ICT: Policy Organogram
- 12 INDIA: Ministry of ICT: Organizational Structure
- E-Japan Initiative for the ICT Revolution Report of Study Group on the Next Generation Internet Policy.
- Policy Paradigm, Development, Manufacture and Export of ICT Hardware: Indian Experience.
- 15 U.S.A.: IT LEGISLATIONS OVERVIEW: Senate Bills and Acts on Electronic Commerce, Internet on-line Laws, Consumer Protection Government Paperwork, Congress Hearing.
- 16 New Zealand ICT Strategic Plan
- 17 Consultation with the decision makers of Government and private sector in Samoa
- 18 Consultation with NGOs, small business owners, youth, village Mayors (Pulenu'u) and Presidents of Women Committees in every village of Upolu
- 19 Consultation with NGOs, small business owners, youth, village Mayors (Pulenu'u) and Presidents of Women Committees in every village of Savaii
- 20 Presentation: Mrs Olisitina Punivalu, Minister's Wife, EFKS Matavai Savaii
- 21 Presentation: Rev. Enefatu Lesa, EFKS Minister, Tanoalei'a
- 22 Key Note Speech Hon. Palusalue Faapo II, Minister of Communications and Information Technology.

#### PILOT PROGRAMMES IN RURAL VILLAGES

YOUTH ICT PROGRAMME - SAUANO, FAGALOA C/E REV. APELU PULA C/- 24142