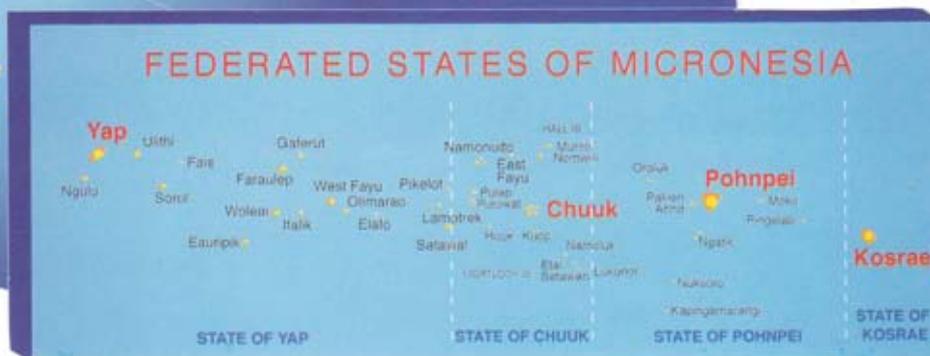




THE FEDERATED STATES OF MICRONESIA NATIONAL ICT AND TELECOMMUNICATIONS POLICY



September 2012



MESSAGE FROM THE PRESIDENT OF THE FEDERATED STATES OF MICRONESIA



Ran Annim, Kaselehlie, Mogethin and Len Mwo!

I am pleased to present the first National Information and Communication Technology (ICT) and Telecommunications Policy for the Federated States of Micronesia. The policy is an overarching framework which comprehensively addresses Information and Communication Technology and Telecommunication policies within the Federated States of Micronesia and establishes the direction for a secure and flourishing ICT environment for all citizens in FSM. To this extent, I am personally committed to the implementation of this policy which builds on the many consultations with the FSM leaders, stakeholders, and international and regional organizations.

The National ICT Policy has been a work in progress and I would like to express my appreciation to the International Telecommunications Union (ITU), the stakeholders who participated in the consultations on the development of the plan, the Chief Executives Council (CEC), the State and National Leadership Council (SNLC), the World Bank, and many individuals and organizations who have contributed to the development of the National ICT Policy.

I fully endorse this National ICT and Telecommunications Policy and Strategic Action Plan and ask you all to work with us as we implement this policy for the people of the FSM. I further direct that this Action Plan be incorporated into the FSM Strategic Economic Development Plan.

We are all well aware that ICT and telecommunications are recognized worldwide as a critical factor in driving the progress of economic and social development in today's modern society. While we are very proud of our common Micronesian heritage, and will continue to preserve the age-old wisdoms that have been passed down from our forefathers, we, the people of this nation must not be isolated from the global community. We cannot afford to be left behind, if not for us, then for our children and their children.

Telecommunications and ICT are the means which connects us within our communities, between our many islands, and to the global community. We cannot deny the fact that it is evident in other countries that changes in ICT and telecommunications policy have changed the way we communicate with each other, conduct government, handle business and commerce, educate our children, provide health services, and preserve our rich heritage and environment.

We are also cognizant of the many studies and recommendations by consultants to regional and international economic development organizations such as the Asian Development Bank and the World Bank that liberalization and reform of telecommunications in the FSM will positively contribute to economic development. Thus, in 2007, I established the Telecommunications and Submarine Fiber Optics Task Force and directed the Task Force in 2011 to modernize the policy, legal, and regulatory infrastructure for telecommunications and work with international funding organizations to move forward with broadband capacity for all states.

At the same time we are seeking to develop the ICT and telecommunications sector to support the social and economic objectives of the FSM, we should be mindful of the potential negative impacts associated with the new technologies. It is in this context that the FSM requires a good and sound policy to ensure our people, especially our children, are provided a safe ICT environment and develop the policy and infrastructure to extend services to islands and locations not currently served.

The overall vision of the National ICT Policy is to have a “Secure, Efficient, and Affordable ICT to achieve equitable communication for the People of the FSM.” This vision establishes the fundamental guiding core principle of the policy.

As President, I envision many islands, one nation through a safe, reliable, and affordable ICT for every citizen in the FSM. Government aims to empower citizens, enhanced democratic values and promote social and economic sustainable development. The expansion, diversification and effective application of ICT will help to establish a transparent, responsive and accountable government; develop skilled human resources; enhance social equity; ensure cost-effective delivery of services through public-private partnerships and provide enhanced opportunities for education, health and emergency management services; and enable a knowledge based society to secure a brighter future for all. Towards this end, I have tasked the Department of Transportation Communication and Infrastructure to lead this challenging and important initiative and implement the Strategic Action Plan. I direct our collective effort as stakeholders to ensure that we achieve our Vision.

With the endorsement of this National ICT Policy, the Federated States of Micronesia is charting the way forward for ICT and telecommunications development, addressing barriers, and highlighting priority areas in how ICT can contribute to improving the standard of living of all the people in the Federated States of Micronesia.

I therefore urge all offices in the National Government to commit to achieving the strategic goals and objectives to meet our Vision. I also invite the State Governments, FSM Telecom Corporation, private sectors including non-government organizations and Academia to contribute in implementing this policy. The Vision and the Action Plan can only be fully realized through our joint and collective efforts. We must collaborate in a way that helps bridge the digital divide for FSM.

Thank you,



Emanuel Mori
President

ACKNOWLEDGEMENT FROM SECRETARY OF THE DEPARTMENT OF TRANSPORTATION, COMMUNICATION AND INFRASTRUCTURE



As the Secretary of the Department of Transportation Communication and Infrastructure, I would like to express my sincere gratitude and appreciation for all the individuals and organizations that have participated in the development and formulation of the Federated States of Micronesia National ICT Policy and Strategic Action Plan. I am also pleased to say, that the development of this policy was truly a joint and collective effort that involved stakeholders representing the various public and private sectors. We acknowledge the significant contributions from the National and State Government offices/agencies that have taken an active role in developing this policy through the public consultations and subsequent finalization of this policy and action plan. His Excellency President Manny Mori has explicitly directed all departments and offices to give high priority and commitment to achieving the vision, goals, and objectives as stated in the policy.

The National ICT Policy is structured on the regional best practices in the Pacific and will continue to evolve as new challenges will arise with the development of new technologies to better suit the demands of our continuing nation building efforts. It is thus befitting to mention here, that the development of this policy started several years ago with the continued support and assistance of many regional partners. We appreciate the steadfast support and significant contribution of the International Telecommunication Union (ITU) through the ITU-European Commission (EC) project for the Pacific Island countries (ICB4PAC) that has provided Pacific Island regional ICT capacity development and contributed to the framework of this National ICT Policy. We appreciate the insightful comments of the World Bank which helped to highlight specific development benchmarks. We also acknowledge the assistance of the Sasakawa Peace Foundation, the Pan-Pacific Education and Communication Experiments by Satellite (PEACESAT) program of the University of Hawaii, the Secretariat of the Pacific Community (SPC), and other regional and international development partners that have assisted FSM with ICT capacity building over the many years.

Developing this plan is only the first step of the process, the tip of the iceberg, metaphorically speaking. Realizing the plan is the real challenge that will truly test our collective commitment to initiating the changes required to achieve the vision in the National ICT and Telecommunications Policy. It will require all of us to work together. It will not only require a national effort across all sectors of our society, but also better management of our limited funding and human resources. I am truly confident that this generation of Micronesians, together, through team work and determination will rise to the challenge. As it is said in the Pacific, let our guiding principles lead us to “think big, start small and scale up fast.”

Sincerely,

A handwritten signature in dark ink, appearing to read 'Francis I. Itimai'. The signature is stylized and fluid, written over a white background.

Francis I. Itimai
Secretary

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List of Acronyms

Chief Executives Council (CEC)
Enhanced Data rates for GSM Evolution (EDGE)
Electronic Health Record (EHR)
Environmental Impact Assessments (EIA)
European Commission (EC)
Federated States of Micronesia (FSM)
Federated States of Micronesia Telecom Corporation (FSMTC)
Free and Open Source Software (FOSS)
Gross Domestic Product (GDP)
Government to Business (G4B)
General Packet Radio Services (GPRS)
Global System for Mobil Communication (GSM)
Health Management Information Systems (HMIS)
High Frequency (HF)
Information Technology (IT)
Information and Communication Technology (ICT)
International Telecommunication Union (ITU)
ICT Capacity Building for the Pacific (ICB4PAC)
National Information and Communication Technology (NICT)
Strategic Development Plan (SDP)
Secretariat of the Pacific Community (SPC)
Single Side Band (SSB)
State – National Leadership Conference (SNLC)
Submarine Fiber Optic Cable (SFOC)
United Nations Educational Scientific and Cultural Organization (UNESCO)

PART ONE

National ICT and Telecommunications Policy

THE FEDERATED STATES OF MICRONESIA NATIONAL ICT AND TELECOMMUNICATIONS POLICY

Executive Summary

This National Information and Communication Technology (ICT) Policy establishes an overarching framework to harmonize national priorities through a participatory and inclusive approach. The objective of this document is to integrate national ICT policy and direction with the individual sector goals of the Federated States of Micronesia. The ICT policy shall be aligned with the National Strategic Development Plan that defines social and economic goals of the Federated States of Micronesia.

The National ICT Policy set out in this document serves to: (i) provide a clear National ICT policy and telecommunications statement; (ii) guide ICT and telecommunications development; (iii) specify the key challenges and untapped opportunities; and, (iv) identify the strategic priorities by building on successful approaches and initiatives and mobilizing relevant resources and partnerships.

A. Vision

“Secure, Efficient and Affordable ICT to achieve equitable communication for the People of FSM”

With this vision we aim to empower citizens, enhance democratic values and promote social and sustainable economic development. The expansion, diversification and effective application of ICT will establish a transparent, responsive and accountable government; develop skilled human resources; enhance social equity; ensure cost-effective delivery of services through public-private partnerships and provide enhanced opportunities for education, health and emergency management services; and enable a knowledge based society to secure a brighter future for all.

B. Goals

To enact on our vision, five Goals were identified in the consultations and establish the foundation of the FSM National ICT Policy:

- (i) Achieve Accessible and Affordable Communications for All,
- (ii) Strengthen ICT Human Resources and Increase Human Resource Development Opportunities through ICT,
- (iii) Improve Economic Growth and Sustainable Development through ICT,
- (iv) Utilize ICT for Good Governance and
- (v) Create an Enabling ICT Environment through Policy Reform and Improvements in Legal Frameworks.

Goal 1: Achieve Accessible, Secure and Affordable Broadband Communications for All

Policy Statement: All citizens will have equitable access to affordable and secure ICT.

The Government will play a leading role in building a networked society where organizations and individuals have equitable access to ICT-enabled resources.

It is a fundamental right for all citizens to have equal access to affordable ICT without discrimination of income, level of literacy, urban or rural and people with special needs. ICT infrastructure in rural and remote communities in FSM is underdeveloped. Consequently these communities have no or limited access to internet and advanced communication services. Furthermore, due to the developing economy and high cost of ICT and telecommunication services most homes cannot afford a computer and the recurring cost of services. As a result FSM citizens in general do not have easy access to important public information available on the internet, cannot access essential health and educational material, and are not easily able to participate in online learning opportunities.

The Government will increase accessibility by maximizing existing resources and sharing ICT access points in public locations such as local government institutions, post offices, health centers, and schools and thus increasing citizens' awareness of and ability to access ICT and e-Government services as these services become available.

Goal 2: Strengthen ICT Human Resources and Increase Human Resource Development Opportunities through the Use of ICT

Policy Statement: To implement and sustain the national ICT vision, the Government is committed to prioritizing ICT workforce development and strengthening the overall workforce knowledge skills and abilities by increasing human resource development opportunities through the use of ICT.

There is a need to develop a critical mass of human resources with ICT skills to implement and sustain the National ICT vision. ICT human resource development is needed at all levels including leaders, policy makers, consumers of ICT and the ICT workforce. The implementation of ICT in education and training provides an opportunity for reducing cost and expanding program outreach to more people in the Federated States of Micronesia. Government will utilize the most cost effective technologies and digital contents to produce ICT knowledge, skills, and abilities to garner confidence in our people in order to participate in the globalized economy. To this means, ICT will be leveraged for education or e-Learning to address the most challenging and resource constrained subjects, including mathematics, science, and languages. Government will support e-Learning programs for vocational and 'lifelong education' opportunities for youth and adults to develop updated and relevant skills needed to be competitive in the current workforce. At the same time it is recognized that e-Learning programs make available for more professional development and training opportunities for private and public sector employees thus reducing the high cost of travel for overseas training programs. Government encourages the coordination and participation in local and regional e-Learning programs to strengthen and enhance overall human resource development through the use of ICT.

Goal 3: Improve Economic Growth and Sustainable Development through ICT

Policy Statement: ICT will be utilized by the Government and the private sector to maximize economic growth and sustainable development.

Government will harness the potential of ICT to increase productivity of businesses, especially small and medium enterprises, and induce economic growth through widespread distribution and effective use of ICT. It is recognized that there is potential to transform the way government, business and consumers communicate and interact through ICT. Thus Government will promote the use of ICT by the private and public sectors as a tool to maximize economic growth through the development of websites and e-Commerce to enable the buying and selling of local and overseas products online. Economic development shall be achieved through the utilization of ICT to collect and distribute valuable data to businesses regarding market price, supply chain and consumer information. Government will promote ICT development and investment in FSM.

An ICT-based market will enable access to mechanisms that will not only benefit disadvantaged producers and businesses by ensuring equitable access to domestic and international markets but also to allow for transparent and efficient monitoring of market activities by government. The productivity and global competitiveness of the private sector including small businesses will increase by lowering costs of doing businesses through Government-to-Business services (G2B).

The Federated States of Micronesia must diversify, expand, and bolster the national ICT industry, including the telecommunication industry, in order to provide more technical solutions, services, and options for all consumers in the Federated States of Micronesia. At the same time, the industry, especially the IT-enabled services sub-sectors, can be promoted as a substantial national driver for growth through export earnings and employment of youth.

Government will also support and utilize ICT to promote sustainable development in health, education and other public service applications such as public safety, language and cultural perpetuation and protection of our environment.

Goal 4: Utilize ICT for Good Governance

Policy Statement: Every effort will be made to ensure that ICT systems and processes are used to enhance government accountability, efficiency, effectiveness, and transparency of delivering public services to all and combat corruption.

Access to information is vital for transparency, accountability, and rule of law as it enables community based participatory involvement in political decision-making. Increased access to ICT will enable grassroots and community based participation by instituting interactive communication channels facilitated by ICT.

Government will utilize ICT to support and improve the process whereby public institutions conduct public affairs, manage public resources, and guarantee the realization of rights and services without abuse, corruption and in accordance to law.

Delivery of services to citizens will be made anytime and anywhere through creative uses of ICT such as one-stop service counters, helpdesks and e-services to ensure not only a higher degree of efficiency in the delivery mechanism but to improve transparency and accountability within the government and non-government service provider organizations.

Internally government will improve on the utilization of ICT to promote and standardize best practices in government. For example ICT based decision support systems will be used to improve the planning, implementation and monitoring of the government including field administration personnel. These systems will enable sharing of data and information across various agencies of the government transcending departments and geographic boundaries. The potential reallocation of government human resource may result with the automation or digitization of government systems and services. Government will utilize ICT to facilitate access to services such as financial services, land registration, business license registration and other public service applications.

ICT will be utilized to support good government practices by developing and enacting policy reform to ensure the secure ICT services specifically with regard to electronic transactions, security, and privacy of citizens and including child online protection.

Goal 5: Create an Enabling ICT Environment through Policy Reform and Improvements in Legal Frameworks

Policy Statement: Government will establish new laws for ICT and develop a strong regulatory framework that supports a technology-neutral ICT enabling environment and market.

Government will strengthen the legal and policy framework for enabling social and economic development through ICT by developing a legal and regulatory framework that promotes competition between service providers, efficient pricing and costs, and universal access and provides oversight of the telecommunications sector. It is critical that these policies ensure equitable access to ICT-enabled services, applications, and content to all and particularly for rural and underserved populations.

To achieve affordable access, Government will develop an environment that supports a robust ICT industry that enables fair competition in telecommunications markets. An independent ICT Regulator will be established to provide oversight of the telecommunications sector. Government will adopt policies and regulations to promote universal access and will also focus efforts on policies to encourage greater use of the Internet to provide public services and services for health, education, and emergency management.

Introduction

Modern ICTs fundamentally change all aspects of social and economic development and 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 for the execution of civic rights, personal self-actualization, the means of obtaining knowledge, providing educational opportunities for the new generation, preserving culture for future generations and increasing ways of spending leisure time. In an information society, distances reduce, good governance emerges, globalization occurs, corruption reduces and unprecedented opportunities for development of countries and regions are created. FSM does not want to be left behind.

ICT has been globally acknowledged as an essential tool for sustainable social and economic development, critical for good governance and an effective vehicle of change. FSM has recognized these essential contributions of ICT and have been actively involved in global, regional, and national discussions and consultations on ICT guidelines, lessons learnt from other developing countries, and best practices.

Much work has been done in the FSM gearing towards developing a national ICT policy in the last 10 years. His Excellency President Mori mandated the Department of Transportation, Communications and Infrastructure to develop a national ICT policy to address the key issues facing the citizens of FSM because Government embraces the fact that 'ICT is recognized as a key factor in economic growth and social development in terms of providing opportunities, choices and access to information and knowledge.'

This policy provides the strategic direction for ICT development for the Federated States of Micronesia. It identifies obstacles and difficulties in development of ICT in FSM and outlines policies to address them. The NICTP further establishes key goals and strategies to implement these policies addressing priority areas including inequality of access to ICT, ICT Infrastructure, local capacity and ICT expertise, relatively high ICT costs and the need for an improved telecommunication regulatory environment.

This National ICT Policy will provide a framework that seeks a coherent, equitable, and focused utilization of ICT in the FSM for the benefit of the FSM people.

Background

The Federated States of Micronesia (FSM) is made up of four states: Yap, Chuuk, Pohnpei, and Kosrae. It comprises approximately 607 small islands in the Western Pacific spread over 2,600,000 sq. km of ocean. The FSM's land area amounts to approximately 700 sq. km. Its population of around 112,000 is centered on several main islands in each state. The geographic spread of the islands across the north Pacific is enormous; Yap at the western end is separated from Kosrae in the east by several thousand miles. Inter-island passenger traffic is almost entirely by air; sea-borne cargoes are delivered direct to each State by international shippers. ICT offers much potential for overcoming such vast geographic challenges in the FSM; however, to achieve the full benefits many ICT and telecommunication issues must be addressed in FSM.

The ADB conducted a study in 2007 and stated that there is considerable potential for sustainable development in the FSM but it is restricted due to the monopolies in the telecommunications sector, and opening of these markets and advancement of the submarine cable to all the states would likely have a considerable positive impact on the local economies of the FSM. The same study also found that although infrastructure is well supported with external finance, service delivery improvement depends on further policy development, particularly in the areas of regulation and market liberalization, and capacity building in project planning and implementation.

A study by consultants for the World Bank, in 2011, reinforced the study by the ADB and further articulated the importance and role of market liberalization in telecommunications and economic development. The World Bank study also reported on the many countries which have liberalized telecommunications in the Pacific Islands region.

The National Government acknowledges these barriers. The NICT Policy seeks to address these challenges in order to achieve the overall ICT vision of affordable and accessible communications for all FSM citizens.

Telecommunication Present Situation

Telecommunication links with remote populated islands are sparse. Mountainous interiors and dense jungles also add to the challenges in deploying telecommunication infrastructure. According to ITU statistics, in 2008 FSM had a fixed line penetration rate of 7.88%, a mobile penetration rate of 30.79% and an Internet user penetration rate of 14.49%. The country has around 100 broadband subscribers.

All telecommunication services including Internet, fixed and mobile telephony are provided by the FSM Telecom (FSMTC). In 2006 FSMTC upgraded its existing GSM network to a GSM/GPRS/EDGE network with high-speed packet data service capabilities. In 2011 FSMTC launched a Digital Wireless TV service in Yap and Chuuk. While FSMTC owned 100% of the cable TV in Kosrae, FSMTC has a 50% ownership with Island Cable TV for Pohnpei.

A link to the HANTRU-1 submarine fiber optics cable (SFOC) system has been extended to Pohnpei from Guam in April 2010. The FSM extension is financed through the United States Department of Agriculture Rural Utilities Service, Telecommunications Loan Program. The spur provides enhanced connectivity but does not fully use the capacity of the SFOC and does not unleash the potential for broadband communications for all states to achieve the economic and social benefits of telecommunications and ICT.

The challenge now is how to link the submarine cable to all the states in the FSM given the geographical issues described above as well as to develop a national strategy to promote a universal access to calling and broadband Internet access services including underserved communities in the FSM. Because of these issues, the President and the Government of FSM embarked on developing its national ICT policy, with the assistance of the ITU-EC project for Pacific Islands ACP member countries, to guide the development of ICT throughout the FSM.

In view of the rapid advancement in telecommunications, it would be unwise to be complacent with the achievements made so far. If the FSM is to keep pace with the global development and provide enhanced services and access to Internet based resources, we need to exploit the advances in today's technology.

Guiding Principles

A. Leadership, decision-making and governance

Strong and visionary leadership and robust governance are keys for successful ICT initiatives. A strong and senior leader is needed to sponsor national ICT implementation efforts and champions are needed for each important ICT initiative.

B. Holistic coordinated approach

A disjointed and 'silo' approach wastes resources and often results in failure. To maximize the effectiveness and fully utilize the benefits of ICT, a holistic coordinated approach is needed. Such an approach can result in a more sustainable long term outcome and minimize risks and disruptions due to the introduction of new technologies or systems.

C. Bridging the digital divide

Affordable and accessible ICT reduces the gaps between the 'haves' and the 'have nots' thereby enhancing economic opportunity for the people of the FSM. Access to ICT provides affordable communication, improved access to markets and services, a medium for building stronger social ties, improved access to education and health services, and better access to information and news. Competition between service providers is essential to promote service accessibility and affordability.

D. Sustainable livelihoods, culture, equity and gender

ICT interventions must address the need to reduce inequities, promote access by youth and differently abled, promote gender sensitivity and culture, improve efforts to reduce poverty across and within countries and territories; and facilitate equitable access to adequate, reliable, and affordable ICT and services to improve the FSM communities' livelihoods.

E. Using proven technologies: think big, start small, replicate fast

With the limited available resources, the FSM needs cost effective, technically proven, and appropriate ICT solutions. There is a need to identify the transformative means that deliver values to FSM communities including ICT sector reforms, new legislative framework to deal with emerging ICT challenges, and new skills requirements. Taking into account the weaknesses, there is a need to pick some test and pilot initiatives, especially those that cut across the key sectors and 'silos', to gain experience and in-depth insight into what is needed to fully realize the transformative changes. The small scale pilot initiatives, if successful, can then be scaled up or implemented on a larger scale in the country.

F. Convergence and multi-stakeholder partnership

Convergence means the interlinking of ICT with all media, broadcasting, text, audio, graphics, animation, and video to be delivered on a common platform while also allowing the user to choose

any combination of media to interact with. It brings together many disciplines, in particular the engineering sciences and the social and behavioral sciences. Convergence requires a multi-stakeholder partnership where: the government can implement enabling policies and regulations provide funding and build capacity; the private sector can build infrastructure and invest in services; civil society can work with communities; and communities own and drive initiatives. The framework will provide guidance on optimizing the opportunities provided by convergence to look for low-cost solutions.

G. E-Environment

Protection of the environment is an important issue for FSM. To complement the various environmental protection initiatives of other sectors, ICT should also play its part in preserving and safeguarding the environment. Green ICT programs should be established to ensure energy efficient ICT equipment are used and disposed in an environmentally friendly way. The Pacific legislators in their 2009 Rarotonga Communiqué on Sustainability, Equity and Accountability, ‘Recognized that modern ICTs play a vital role in climate change education and awareness, maintaining communication links in times of disaster and the timely management of disaster response and relief, and contributing to disaster risk reduction through, for example, the development of early warning systems’.

H. Availability of ICT data

Accurate measurement of ICT adoption, use, and impact is crucially important if policymakers are to make well-informed decisions. Appropriate measures need to be in place and mechanisms established to ensure integrity of ICT data collected and that statistics are updated and disseminated.

I. Appropriate investment in human capital

Lack of capacity is an acknowledged fact in the FSM. There are a number of capacity building initiatives in the Pacific but the issue remains. Scarcity of ICT data and inappropriate monitoring and evaluation (M&E) systems make it difficult to identify what works and what does not. M&E should be incorporated into capacity building initiatives but more importantly these initiatives should be needs based. Efforts to retained trained and qualified ICT personnel must be considered to ensure FSM has the necessary technical skills required to implement and achieve the goals and strategies of this National ICT policy.

J. Many partners, one team

There are many genuine partners and stakeholders in the ICT sector. All have excellent aims with their respective objectives that are primarily aligned to national needs. It is the intention that the “many partners, one team” approach be a collaborative response to national priority needs and plans to minimize duplication of efforts, exploit synergies and maximize the impact. The “many partners, one team” will be implemented through one implementation plan. That is, all partners will need to work as one team to implement this policy.

K. Financing, monitoring and evaluation

There are many regional and international declarations and plan of actions that are relevant to the implementation and monitoring of the implementation. It is important for FSM to ensure that they share the national ICT policy with other developing partners planning ICT work in the FSM. Every

effort must be made to ensure that donor funding has realistic monitoring and evaluation principles attached to such policy documents to ensure that the Government is able to justify the utilization of such funding.

Policy Context

This policy document sets out the over-arching goals, objectives strategies for the delivery of ICT. It will form the basis for the development of ICT in the Federated States of Micronesia for the next 3 years.

ICT in nature crosses all public and private sectors. In this context, the National ICT Policy is designed to integrate and harmonize top-level national priorities and sectoral goals through a participatory, inclusive, and cohesive approach.

This policy sets the direction to improving government efficiencies by promoting the use of ICT for internal government functions and supporting the development of eGovernment service for delivering online public services.

The intent is to create an environment where we are able to exploit the potential of ICT to foster entrepreneurship, creativity, and innovation, and to seek the best ideas and solutions offered from the rest of the world, consequently increasing productivity across the economy.

The direction is to develop robust frameworks for ICT policy, services, technical, and human resources development to enable our participation in an information society and networked economy. ICT is an inherently democratic and empowering force that presents an unparalleled opportunity to improve the free flow of information and ideas not only in our country but around the world.

A digitally connected society also comes with its own challenges and threats. It is therefore essential that laws and regulations are put in place to enable electronic transactions to take place – but also to protect individuals, the community, and businesses against cyber-crimes and inappropriate online content and behavior.

It is also important that our environment is protected. Policies are required to protect our countries from being used as dumping grounds for obsolete ICT equipment. Wise practices will ensure that e-waste will have minimal to zero impact on the vulnerable environment of our country.

The focus of this policy therefore, is to provide an ICT strategic framework to facilitate policies, laws, and regulations that promote competition and thereby enable socio-economic development of the Federated States of Micronesia and to make possible for our citizens and visitors to participate effectively in the local and global economy.

Responsibility for the implementation of this policy rests with the Department of Transportation, Communication, and Infrastructure. The Department will issue annual reports on the annual status of policy implementation.

This policy framework was developed with the assistance of the International Telecommunication Union (ITU) through the ITU-European Commission (EC) project for the Pacific Island countries (ICB4PAC) and in partnership with the Department of Transportation, Communication & Infrastructure.

Chronology of Events

The policy framework was developed over time. The following is a brief chronology of the major ICT policy, telecommunications, and ICT developments:

- 2003 The FSM Strategic Development Plan is initiated and recognizes the importance of broadband submarine fiber optics connectivity for all of FSM.
- 2004 The Amended Compact of Free Association between the United States and the Federated States of Micronesia provides for subsidiary agreements in the area of telecommunications.
- 2005 The U.S. Space Missile Defense Command (SMDC) initiates discussions with the FSM Government regarding a Submarine Fiber Optics Cable (SFOC) connection to Kwajalein.
- 2005 The Department of Transportation Communication and Infrastructure, the Sasakawa Peace Foundation, and the University of Hawaii conduct a workshop for policymakers on telecommunications.
- 2007 President Mori issues a Directive calling for the SFOC connections for all states and establishes an SFOC Task Force which is transformed into the Telecommunications and SFOC Task Force.
- 2007 The Asian Development Bank study calls for liberalization of telecommunications.
- 2008 The FSM Congress passes resolution supporting SFOC connectivity for all states and “urges the President to direct the appropriate authority at the National Government to develop, study, plan, and come up with recommendations to transform telecommunications and ICT to be vibrant infrastructure for the economic and social development of the FSM.”
- 2009 The Chief Executives Council which includes the President and four state Governors adopt a resolution calling for SFOC connections for all states.
- 2010 The Submarine Fiber Optics cable system, HANTRU1, becomes operational and connects Pohnpei directly to Guam.
- 2010 The World Banks and FSM Government discuss the need to open competition and to examine ways to ensure that the investment in the submarine fiber optics cable is optimized.
- 2011 A team from the International Telecommunications Union visits all FSM States to meet with stakeholders on the National ICT Plan.
- 2011 The State National Leadership Council supports the policy directions of President Mori which calls for liberalization, an independent regulatory body, restructuring of FSMTC, and broadband telecommunications for all states.

PART TWO
Objectives and Strategic Plan

Objectives and Strategies for GOAL 1: Achieve Accessible and Affordable Communications for All

Policy Statement: All citizens will have equitable access to affordable and secure ICT. The Government will play a leading role in building a networked society where organizations and individuals have equitable access to ICT-enabled resources.

The objectives for this goal are:

Objective 1 – Establish mechanisms for ensuring non-discriminatory access to ICT regardless of level of income, education, age, gender, and people with special needs.

Objective 2 – Develop mechanisms for increasing access to ICT by maximizing resources through shared use of facilities, subsidized ICT and decreasing the cost of ICT equipment and services for rural, underserved and public service sectors.

Objective 3 – Develop an FSM National Broadband Super Highway.

A. Strategies for Objective 1: Establish Mechanisms for Ensuring Non-discriminatory Access to ICT Regardless of Level of Income, Education, Age, Gender and People with Special Needs

- (i) Set in place non-discriminatory laws, mandates, policies, and practices for equal and equitable access to ICT infrastructure, services, assistive technology, applications and content, both for service providers and consumers.
- (ii) Work in collaboration with existing community groups, such as churches, women groups, seniors, schools, and libraries to provide outreach to their constituents in raising the awareness of ICT benefits, and provide opportunities for hands-on training.
- (iii) Identify resources and implement programs to support education, training, and development of technical systems for people with special needs.

B. Strategies for Objective 2: Develop Mechanisms for Increasing Access by Maximizing Resources and Decreasing Cost of ICT Equipment and Services for Rural Underserved and Public Service Sectors

- (i) Encourage public private partnerships in deploying ICT networks, especially for last mile connectivity.
- (ii) Establish Multipurpose Communication Telecenters with the use of affordable technologies and public service telecommunication services for connecting rural and underserved communities.
- (iii) Develop and adopt laws to waive levy, customs duty or other taxes for ICT equipment for rural, underserved communities and public service sectors such as health, education, emergency management.

C. Strategies for Objective 3: Develop an FSM National Broadband Super Highway

- (i) Investigate the technical and financial options for connecting states to submarine fiber optic cable or for the adoption of alternative forms of international connectivity able to provide substantially comparable levels of service to all citizens.

Objectives and Strategies for GOAL 2: Strengthen ICT Human Resources and Increase Human Resource Development Opportunities through the Use of ICT

Policy Statement: To implement and sustain the national ICT vision, the Government is committed to prioritizing ICT workforce development and strengthening the overall workforce knowledge skills and abilities by increasing human resource development opportunities through the use of ICT.

The objectives for this goal are:

Objective 1 – Provide ICT training for Political Leaders, Policy Makers and Regulators

Objective 2 – Develop an ICT-savvy workforce

Objective 3 – Support and participate in regional ICT human resource development initiatives

A. Strategies for Objective 1: Provide ICT Training for Political Leaders, Policy Makers and Regulators

- (i) Given the cross sectoral nature of ICT, encourage all leaders and policy makers to attend ICT awareness workshops and trainings to ensure that ICT is integrated in the policy development of all sectors.
- (ii) Plan and budget for human resource capacity building of the newly established independent ICT Regulatory Authority Office that will require a multi-disciplinary staff.
- (iii) Coordinate local and regional opportunities to provide regular and on-going ICT policy training for decision makers and policy staff.
- (iv) Provide ICT awareness workshops for Legislatures.

B. Strategies for Objective 2: Develop a Sustainable ICT Workforce

- (i) Coordinate and implement in-country ICT technical training in conjunction with local institutions of higher education.
- (ii) Encourage public-private partnership for ICT related training and human resource development.
- (iii) Public-private business partnerships to develop plans for workforce retention of ICT skilled personnel within the Federated States of Micronesia. Strategies may include remuneration incentives, assuring good working environments, providing professional development and clear career path opportunities.

- (iv) Organize a coordinated approach for increasing the participation of local communities in e-Learning programs for workforce development.

C. Strategies for Objective 3: Support and Participate in Regional ICT Human Resource Development Initiatives

- (i) Coordinate through regional initiatives such as the International Telecommunication Union- European Community (ITU-EC) Project for the Pacific Island (ICB4PAC) program to leverage, support and participate in regional ICT human resource development activities.
- (ii) Coordinate with local and regional educational institutions that are developing ICT human resource development programs.
- (iii) Encourage the use of regional online distance learning programs.

Objectives and Strategies for GOAL 3: Improve Economic Growth and Sustainable Development through ICT

Policy Statement: ICT will be utilized by the Government and the private sector to maximize economic growth and social development.

The objectives for this goal are:

- Objective 1 – Utilize ICT to maximize economic growth and enhance sustainable development**
- Objective 2 – Utilize ICT to maximize efforts in improving Energy, Transportation, Agriculture, and Food Security, Education, Health, Public Safety and Environment**
- Objective 3 – Promote the use of ICT for Language and the Perpetuation of FSM Culture**

A. Strategies for Objective 1: Utilize ICT to Maximize Economic Growth and Enhance Sustainable Development

- (i) Develop public-private strategies for the use of ICT to enhance the productivity of local business, the marketability of local goods and services, and the overall efficiency in economic development.
- (ii) Identify mechanisms to lower costs of ICT.
- (iii) Create an incubator model for small business development that incorporates ICT practices and that promote new rural business development.
- (iv) Investigate further the establishment of a special ICT tariffs for rural communities and targeted communities of users.
- (v) Encourage the use of ICT as a tool to create more jobs, sustain workforce development.
- (vi) Encourage the private sector to develop e-money such as mobile money and debit cards to easily make online payments.

- (vii) Coordinate with Banks and Lending Institutions to utilize ICT to improve the efficiency and value added services (e.g., loan applications) and connect to eGovernment Services.

B. Strategies for Objective 2: Utilize ICT to Maximize Efforts in Marketing Tourism, Improving Transportation, Energy, Agriculture and Food Security, Health, Education, Public Safety and Environment

Marketing Tourism

- (i) Develop a Tourism Green Code and use Internet and telephone services for advertisement, bookings, electronic payments; promotion of tourism by listing of hotels and businesses (for example through a centralized web page with contacts) and ICT services that help attract tourist and visitors.
- (ii) Identify and track ICT indicators to demonstrate effective utilization of ICT promotion of tourism and increase of revenue through tourism.
- (iii) Utilize ICT to market FSM as a tourist destination (e.g., tourism TV advertisements in other countries).

Make Transportation More Efficient

- (i) Promote the use of teleconferencing as a tool to decrease travel costs and expand the participation in meetings, workshops and other opportunities.
- (ii) Identify needs and assist in the development of ICT systems and mechanism for improving the collection and dissemination of information on all forms of travel.
- (iii) Implement systems and services to enable access to Internet at airports.
- (iv) Improve ICT-based monitoring and information systems to provide weather reports for ground, maritime and air transportation.

Improve Energy Efficiency and Sustainability

- (i) Each sector shall conduct an assessment of energy use and develop energy reduction plans.
- (ii) Support and encourage micro-energy production projects and research.
- (iii) Encourage the use of technologies that use less power and are more energy efficient.
- (iv) Identify options for and encourage the development of energy using our own country's resources, from renewable sources to the extent possible.

Strengthen Agriculture and Food Security

- (i) Support the implementation of ICT systems for improved fisheries management for sustainability, and food security.
- (ii) Fully utilize ICT technology to monitor and regulate fisheries to avoid over-fishing.
- (iii) Support the implementation of ICT to improve marketing of agricultural goods.

- (iv) Promote the use of ICT to improve the collection and distribution of information for agricultural support such as monitoring weather; use ICT for obtaining information on better seed crops and better breeding; informing farmers of prices of products and relative supply/demand.
- (v) Develop and support mobile text messaging and other ICT services to enable farmers to share information on agricultural issues, such as pest control, and to develop a collective marketing approach.
- (vi) Utilize ICT for consumer protection and advocacy complaints. Strategies for Objective 3: Promote the Use of ICT in Education, Health, Public Safety and the Protection of the Environment Improve Health

Develop a Health ICT Implementation Plan that will address the improvement of the delivery of health services to all including but not limited to:

- (i) Develop a Health Management Information Systems (HMIS) for public health surveillance and networking with regional health officials, for inventory management in health care clinics and hospitals, share traditional medicines and treatments, online help support for doctors in the field, and for Human Resource Development in Health.
- (ii) Acknowledge that health care issues are not all related to ICT. ICT is a tool but there are many problems that are not related to ICT such as issues of self-care via the Internet, related medical error rates, concerns for security of patient information.
- (iii) Establish policies, regulations, and guiding principles for patient information confidentiality relating to use of electronic patient/medical records.
- (iv) Utilize the FSM ICT Super Highway infrastructure to support telehealth, telemedicine and health related education and training programs.
- (v) Prioritize telehealth resources and programs to improve radiology and pathology services in FSM.
- (vi) Identify and implement a cost effective Electronic Health Record (EHR) system to improve clinical care.
- (vii) Plan for and develop the capability of health information exchange among clinics, hospitals, and providers within the Federated States of Micronesia.
- (viii) Develop a Health Information Technology multidiscipline working group to identify needs and resources for development and implementation of EHRs and health information exchange in the Federated States of Micronesia.
- (ix) Use ICT databases for public health and use ICT e-Health and telemedicine applications to improve health outcomes and lessen the cost of providing services to remote and rural communities.
- (x) Encourage Health Departments to use websites for notifications of immunization campaigns and provide information on communicable disease outbreaks.

Enhance Education Systems and Opportunities

Develop an Education ICT Implementation Plan that will address the improvement of the delivery of education and support the development of ICT literacy including but not limited to, the use of ICT for:

- (i) Increasing student opportunities for learning through the use of ICT.

- (ii) Improving assessment of the educational system for data collection and analysis for students, educators and other stakeholders.
- (iii) Implement ICT training for teachers.
- (iv) Improving access to ICT infrastructure and identifying appropriate technical solutions and prioritize funding opportunities to support the implementation, operation and maintenance of the ICT networks, equipment and services.
- (v) Strengthen administrative functions of the educational system through use of ICT.
- (vi) Utilization as a tool to address shortage of qualified teachers.
- (vii) Integrate ICT in school curricula.
- (viii) Introduction of ICT career counseling in high schools.
- (ix) To develop ICT policies within the schools that also provides information regarding safeguards and awareness of the downsides of the addiction to technology by students and impact on important values.
- (x) Utilize ICT as a tool to measure the performance of teachers and students.
- (xi) Utilize ICT to provide access to various research protocols, journals, and articles.

Improve Public Safety through ICT

- (i) Integrate ICT in the FSM disaster management and recovery plan for monitoring risk reduction, early warning alert systems and for assisting in disaster recovery.
- (ii) Conduct an annual review and periodic test of Disaster Management Communication plans and back-up systems; for example the utilization of High Frequency (HF) or Single Side Band (SSB) radio networks for communicating off island.
- (iii) Develop a plan that incorporates the prioritization of radio frequency spectrum for disaster management and emergency communications.
- (iv) Develop a contingency plan for international communication in the event of off island satellite failure.
- (v) Utilize ICT to assist in border control, immigration, and customs.

Environment

- (i) Environmental Impact Assessments (EIA) – Integrate ICT into environmental assessments to improve data collection, storage, analysis, and management and to ensure the faster provision of EIAs and related decisions.
- (ii) Climate Change – Utilize ICT to educate and raise awareness of climate change issues and impacts and improve the mitigation and adaptation climate change programs.
- (iii) Managing ICT e-Waste – Develop a policy ensuring all providers have a process in place for ICT-based waste removal and disposal. The policy should include a front-end recycling fee. ICT should be used to monitor, account, and reimburse for the recycling of ICT goods.

C. Strategies for Objective 3: Promote the Use of ICT for Language and Culture Perpetuation

- (i) Develop and maintain ICT databases of cultural and historical heritage (stories, songs, crafts, etc.) to ensure language and culture perpetuation.
- (ii) Utilize innovative technologies to record and maintain oral cultural heritage (including music and others).
- (iii) Utilize the resources of the United Nations Educational Scientific and Cultural Organization (UNESCO) programs that align with the perpetuation of language and culture.
- (iv) Provide assistance and support to local villages to digitally collect oral records.
- (v) Communicate and promote social decorum relating to ICT use in relation to respect for local culture and standards.
- (vi) Promote the perpetuation of local content through the development of information systems and online content in local languages.
- (vii) Encourage the use of ICT through developing online translation facilities in local languages.

Objectives and Strategies for GOAL 4: Utilize ICT for Good Governance

Policy Statement: Every effort will be made to ensure that ICT systems and processes are used to enhance government accountability, efficiency, effectiveness, and transparency of delivering public services to all and proactively combat corruption.

The objectives for this goal are:

Objective 1 – Develop an e-Government System

Objective 2 – Improve Government Efficiency through Good Governance Patterns

Objective 3 – Protect citizens’ rights relating to cybercrime, child protection and the right to information

Objective 4 – Improve Internal Government ICT Infrastructure and Support

A. Strategies for Objective 1: Develop an e-Government System

- (i) Conduct a feasibility study and an output proposal (technical and commercial) for an FSM e-Government system.
- (ii) Develop an e-Government strategy outlining an implementation plan for improving government processes through the use of ICT and connecting citizens to government services, so that all sectors can improve the delivery of public services and achieve the goals of transparency and accountability.
- (iii) Develop mechanisms to seek funding for implementing the e-Government strategy.
- (iv) Develop plans for the procurement of technology efficient network equipment to support transmission of voice, data, and video for e-Government applications.

- (v) Develop and implement an eGovernment policy to mandate the sector implementation of the eGovernment Plan.

B. Strategy for Objective 2: Improve Government Efficiency through Good Governance Patterns

- (i) Utilize ICT to improve grassroots and community based decision making.
- (ii) Ensure public access to government information to promote transparency, accountability, participation, and rule of law.
- (iii) Encourage people to take an active part in political decision-making, including free and open debates through interactive communication channels facilitated by ICT.
- (iv) Develop systems to safeguard employees from corruption.
- (v) Provide anti-corruption hotline and no-cost reporting of abuses.
- (vi) Further develop FSM's Financial Management Information System for online finance approval and management.
- (vii) National Government strongly recommends that State Governments develop State ICT Policies and Implementation Plans that are in alignment with the National ICT Policy. The Implementation Plans will also incorporate change management strategies.
- (viii) Review and update the National ICT Policy and Action Plan at minimum every 2-years.

C. Strategy for Objective 3: Protect Citizens' Rights Relating to Cybercrime, Child Protection and the Right to Information

- (i) Cyber Crime – Establish Cyber Legislation to address cyber crime.
- (ii) Child Protection – Establish a safe and secure environment for use of ICT by children.
- (iii) Develop and Implement a Spam Act
- (iv) Develop and Implement an Evidence Act
- (v) Develop a Copyright and Piracy Act (e.g., for software, movies, etc.)
- (vi) Right to Information – Implement a Right to Information Act so that citizens' may exercise their right to access information.

D. Strategy for Objective 4: Improve Internal Government ICT Infrastructure and Support

- (i) Conduct an assessment of government ICT equipment, services, human resource capacity to develop an internal government strategy for the implementation of ICT to improve efficiency and effectiveness.
- (ii) Develop standardization of ICT hardware to be used in all Government sectors.
- (iii) Develop a government software strategy and encourage the use of FOSS (Free and Open Source Software).
- (iv) Develop an Internet Use policy for government.

- (v) Develop a government Information Portal and Public Service Applications Portal. All government ministries, department and agencies to develop websites and where possible information management systems.
- (vi) Develop appropriate Local Area Networks and Wide Area Networks for all government agencies.
- (vii) Establish a National ICT unit to leverage limited government resources, reduce costs, and provide support and technical assistance to National and State Governments.
- (viii) Develop a Government ICT contingency plan that includes a secure data center and disaster recovery capability with back-up power generator.
- (ix) Mandate that public information be available through ICT (e.g., web sites)

Objectives and Strategies for GOAL 5: Create an Enabling ICT Environment through Policy Reform and Improvement of Legal Frameworks

Policy Statement: Government will establish new laws for ICT and develop a strong regulatory framework that supports a technology-neutral ICT enabling environment and market.

The objectives for this goal are:

Objective 1 – Promote competition in the telecommunication market to achieve accessible and affordable communications for all.

Objective 2 – Establish an independent ICT Regulatory Authority to provide oversight and management of the ICT Sector.

Objective 3 – Adopt a national strategy to promote universal access to calling and broadband Internet access services.

A. Strategy for Objective 1: Promote Competition in the Telecommunication Market to Achieve Accessible and Affordable Communications for All

- (i) Amend the FSMTC Act to remove the monopoly powers granted to FSMTC and enact law to establish the objective of promotion of competition in telecommunications markets, create independent regulation of those markets, with powers for the regulator to ensure prompt and fair network interconnection and access to other essential facilities, prevent anticompetitive behavior, and protect the interests of consumers. The new law will open the ICT sector to competition by providing for licensing of all network operators and retail service providers on fair and non-discriminatory terms.
- (ii) The regulator will ensure open access for all licensees to international connectivity through FSM submarine cable facilities.
- (iii) The Department of Transportation, Communication, and Infrastructure will be responsible for the development and monitoring of Government policies setting the overall direction for the sector.

- (iv) The Department will continue to oversee the requirements for frequency transmission harmonization with the United States through the Joint Telecommunications Board. The Department will consult with the regulator concerning harmonization of frequencies used for telecommunications services.
- (v) The Division of Communication in the Department will be responsible for sector policy and for supporting the new Office of the Regulator.
- (vi) FSMTC will be strengthened and reformed in order to prepare the company to operate efficiently in a competitive market, including sale of all or part of the government's ownership interest in the corporation to private investors, domestic or foreign.

B. Strategy for Objective 2: Establish an Independent ICT Regulatory Authority to Promote Competition, Ensure that Prices Reflect Efficient Costs, Manage Universal Access and Provide Oversight and Management of the Telecommunications Sector

- (i) Establish an ICT Regulator that is legally, institutionally, and financially independent of the Government to transparently manage sector regulation in accordance with Government sector policies. The Government will provide initial funding for the establishment of the Office of the Regulator. It is however the Government's intention that once new licenses have been issued, licensing fees will be applied towards the costs of regulation.
- (ii) The design of the regulatory regime will give weight to suitable options for reducing the cost of regulation where that can be done without jeopardizing competitive outcomes. Options may include sharing some regulatory activities with other countries where there are efficiency gains.
- (iii) The regulator will have the power to:
 - a) Issue individual and class licenses on a non-discriminatory and technologically neutral basis;
 - b) Allocate spectrum for the use of licensed network operators and, jointly with the Ministry, control the national spectrum plan;
 - c) Control the national numbering plan and ensure access to numbers for all licensed operators on a non-discriminatory basis;
 - d) Make binding decisions to resolve access disputes between operators, subject only to judicial review by the FSM Supreme Court for error of law or appeals on substance to an independent expert;
 - e) Investigate and prohibit behavior by any operator that may have the effect of restricting competition;
 - f) Require any dominant operator to submit for prior approval by the regulator any proposed changes to retail tariffs until such time as the regulator is satisfied that there is effective competition in that service market;
 - g) Investigate consumer complaints, set standard terms, and issue orders prohibiting unfair or misleading behavior by service providers;
 - h) Apply to the FSM Supreme Court to impose penalties in cases of violation of the Act;

- i) Review proposed ownership transactions that could diminish the level of competition in a relevant market for telecommunications services and decline permission for such transactions unless satisfied that they are in the public interest.
 - j) Administer any universal access scheme adopted by the government in order to ensure the availability of access to a minimum standard of voice calling and Internet access throughout FSM;
 - k) Hire staff, establish and operate an office, and incur such expenses as are properly required for the conduct of the regulatory function;
 - l) Set and collect license fees required to meet the costs of the regulatory function;
 - m) Make rules and issue regulations as are required within the scope of the new law to efficiently perform the regulatory function, such rules and regulations to be tabled in the Congress.
- (iv) The regulator will ensure that qualified and motivated local staff receive ICT regulation training and leverage international experience.
 - (v) If the Pohnpei spur submarine cable and associated assets are transferred out of FSMTC to a new Government-owned entity, that entity will provide open access to international connectivity on a cost-based and non-discriminatory basis.
 - (vi) Should the transfer of those assets out of FSMTC not be feasible, the regulator will ensure that access to international connectivity is available to all operators on a cost-based and non-discriminatory basis.
 - (vii) The Department of TC&I shall represent FSM in regional and international ICT regulatory forums.
 - (viii) The Regulator shall supply all relevant Regulations and Legislation and industry data required for regional performance surveys to the International Telecommunications Union, the Pacific ICT Regulatory Resource Center, and other relevant organizations as directed by the Department.

C. Strategy for Objective 3: Adopt a Universal Access Policy

- (i) The Government will in consultation with the regulator adopt a universal access policy to achieve ICT access throughout the whole country, to be administered by the regulator. In order to ensure funding for implementation of the policy, it is likely that the Government will take a two-fold approach – (1) mandatory coverage obligations imposed on mobile licensees, and (2) targeted subsidies used to support service expansion in the most remote and challenging areas. Options for funding a subsidy regime may include a requirement for licensees to contribute a portion of gross revenues towards those costs. Government will also explore the opportunity for participation in the United States universal service fund access program.
- (ii) Investigate and identify different policies and models for supporting increased access through the shared use of public service telecommunication services for health, education, emergency management and other public service sectors.

PART THREE
EXPECTED OUTCOMES

XII. Expected Outcomes

In order to achieve our vision, our Strategic Action Plan must be implemented to ensure we meet the following expected outcomes as outlined in table 1:

Table 1 – Expected Outcomes

Goal	Area	Key Outcomes
1	Equitable and Affordable Access	<ul style="list-style-type: none"> ➤ 75% of the population having access to voice calling and Internet access by end of 2015. ➤ Policies for non-discriminatory access to ICT regardless of level of income, education, age, gender and people with special needs are implemented.
2	Human Resource Development	<ul style="list-style-type: none"> ➤ Established links are formed between ICT education and industry through the provision of a Cisco Academy in FSM in partnership with ITU attached to the COM-FSM. ➤ Leadership and Policy Maker ICT education and training is organized and on-going. ➤ The Federated States of Micronesia representatives participate in 4 regional ICT Human Resource Development initiatives per year. ➤ ICT human resource development programs are established across government organization with career growth incentives. ➤ E-Learning programs and opportunities are available for public and private professional development.
3a	Improve Economic Growth	<ul style="list-style-type: none"> ➤ E-Commerce web sites actively on-line. ➤ Government policies provide incentives for ICT investment, regulatory certainty, and fair competition. ➤ Public-private partnership exists for ICT to generate investment, collaboration, and innovation. ➤ Infrastructures for facilitating financial inclusion for the poor are in place. ➤ Regulatory barriers to facilitate online commerce and to promote faster and more secure money transaction by reaching out to those outside the banking system are removed. ➤ Efficiency is seen by private sector growth through a robust financial system and ensuring equality through financial inclusion to the unbanked.
3b	Improve Sustainable Language and Culture	<ul style="list-style-type: none"> ➤ A database is developed to collect digital archives of cultural stories, songs, and images.
3c	Improve Sustainable Development: Education	<ul style="list-style-type: none"> ➤ ICT Education Implementation Plan and Strategy is adopted. ➤ ICT-based multimedia content is available for teacher training. ➤ 100% of schools have broadband Internet connectivity at a minimum peak download speed of 1 Mb/s, by 2015.
3d	Improve Sustainable Development: Health	<ul style="list-style-type: none"> ➤ ICT Health Implementation Plan is adopted. ➤ ICT is utilized to facilitate improvement in areas such as health administration, capacity building of health workers. ➤ An affordable and sustainable Electronic Health Records system plan is identified for the Federated States of Micronesia. ➤ Provisions are allocated for the development and implementation of Electronic Health Records System. ➤ A plan is developed for the exchange of Health Information for reporting on disease

		dynamics and related interventions.
3e	Improve Sustainable Development: Agriculture	<ul style="list-style-type: none"> ➤ ICT is used to improve efficiency and equity in the agricultural sector, particularly crop, fisheries and livestock. ➤ ICT is used to improve competitiveness of farmers and fishermen through on demand information and knowledge. ➤ There is a reduction of exploitation caused by lack of market information. ➤ Access to information enhances participation of farmers and fishermen in decision-making. ➤ Different ICT channels for rural finance are available.
3f	Improve Sustainable Development: Disaster Management, Environment and Climate Change	<ul style="list-style-type: none"> ➤ ICT is incorporated in a national disaster strategy particularly in the country's predictive capabilities, management of disaster and post-disaster situations through access to real time information by government officials. ➤ ICT is used to increase dissemination of information to the affected, and regular monitoring and tracking of data relevant to assessing impact of climate change. ➤ Enable ICT-based decision support is used for disaster assessments.
4	Good Governance	<ul style="list-style-type: none"> ➤ E-Government system is planned, implemented, and operational for 25% of government services. ➤ Relevant regulation and legislation enacted to in respect to ICT in society. ➤ Right to Information Act implemented. ➤ Cyber Legislation implemented. ➤ Child Protection and ICT Security Legislation Implemented. ➤ Privacy and security of information policies are developed and implemented. ➤ Anti-corruption hotline established. ➤ Government has standardized on ICT hardware. ➤ Government has developed a software strategy for cost efficiency. ➤ A government data center and disaster recovery capability with back-up power is implemented.
5	Open the market to New Entry and Regulatory and Legal Framework	<ul style="list-style-type: none"> ➤ Announce by the end of 2012 the intention to open the market to new entry with the first licenses to be issued by mid-2014 or sooner. ➤ Enact a law by mid-2013 to end the FSMTC monopoly and provide for the establishment of an independent regulator with the goal of promoting competition in telecommunications markets. ➤ Establish the Office of the Regulator by the end of 2013. ➤ Restructure FSMTC to prepare the corporation to operate efficiently in a competitive market, including the sale of all or part of the Government ownership interest, by the end of 2013. ➤ A universal access policy is adopted by mid-2014.

MANY PARTNERS ONE TEAM

This Strategic Plan is the result of multi-partnerships from all sectors that need to work together as one team to implement this policy through one implementation plan for the benefits of all the people in the Federated States of Micronesia.



Ms. Natasha Beschorner and Mr. Douglas Webb from the World Bank meet with President Mori



Japanese ICT Expert Team meet with Vice President Alik L. Alik



Pacific Regional ICT Ministerial Meeting, Tonga



SPC Cybercrime Workshop, Tonga



Pacific ICT Capacity Building for Pacific (ICB4PAC) in Kiribati and Hawaii



**Seventeenth FSM Congress in Session
(Photos Courtesy of Congress PIO)**

