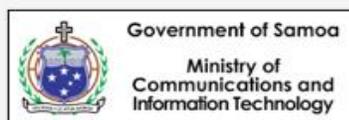




Information and Communication Technology Sector Plan

2022/23 – 2026/27



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MESSAGE FROM THE MINISTER OF COMMUNICATIONS & INFORMATION TECHNOLOGY



Information and Communication Technology (ICT) has become an integral part of everyday life for many Samoans. It is my belief that no government, business or social operation can function today without the support of ICT. It is therefore vital, to have a clear framework for action to guide the sectors developments over the next five years in an attempt to achieve the overall vision of **“Affordable, appropriate, accessible, and secured ICT services to promote social and economic well-being and quality of life for all.”**

I acknowledge the contribution of all stakeholders and the people of Samoa including Sui Tama’ita’i o Nu’u, Sui o Nu’u, and Sui o le Mālo, for your most valuable inputs that will help this sector ensures the needs of our communities, the private sector and Government are prioritized.

The Information and Communications Technology Sector Plan 2022/23 – 2026/27 provides a coherent set of strategies, policy interventions, coordinated actions, and resource requirements to enable the ICT Sector to play a vital role in Samoa’s socio-economic developments as envisioned in the Pathway for the Development of Samoa FY2021/22 - FY2025/26. Moreover, this Plan recommends relevant legislations to cover privacy and data protection, and other security laws to facilitate a safer and more secured digital environment to support our local businesses. The sector plan also indicates outcome and output targets that the sector will achieve over the next five years. To realize tangible success, it is imperative that stakeholders in both public and private sectors, be actively involved and participate in the implementation of this plan, including funding, execution of activities, monitoring and evaluation over the next five years.

I commend the Information and Communication Technology Sector Plan 2022/23 – 2026/27 to our communities, private sector, stakeholders and to our development partners. I highly recommend this document to be a usable document for our sector, one which is actionable and not just a document that ‘sits on the shelf’ and ‘ticks’ the so-called ‘box’.

A handwritten signature in blue ink, appearing to read 'Toelupe', with a stylized flourish at the end.

Hon. Toelupe Poumulinuku Onesemo
MINISTER OF COMMUNICATIONS AND INFORMATION TECHNOLOGY

Acknowledgements

The formulation of the Information and Communication Technology Sector Plan 2022/23 – 2026/27 required information and data collected from a number of people. We acknowledge everyone who took part in the data collection and in particular, the consultations and workshops. The response was greatly appreciated. Hence, the development of this sector plan relied heavily on the information received from those who kindly took part in our consultations.

The Ministry of Communications and Information Technology (MCIT), the Office of the Regulator (OOTR) and Samoa Post Limited (SPL) would like to express sincere appreciation to all of those who gave their time so willingly: our colleagues across the Government of Samoa, our partners in the Samoan private sector, the Samoa Information and Technology Association (SITA), our donor funding agencies and our citizen-friends in civil society.

A special Faafetai Tele to Afioga HE Aiono Hinuari Petana for taking the time from her busy schedule to edit, review and critique this document, which needed an input from an expert in the ICT sector from all respects. Not only that she did this huge job but did it free of Charge. Faafetai tele, na o manuia o le Atua e sasaa atu mo lau Afioga!

Acronyms

ASN	Autonomous System Number
AUS-DFAT	Australia Department of Affairs and Trade
CAPI	Computer Assisted Personal Interview
CEO	Chief Executive Officer
CPI	Consumer Price Index
CSAM	Child Sexual Abuse Material
CSL	Computer Services Limited
CSP	Communications Sector Plan
CSWM	Cooperative Sustainable Wholesale Model
DMO	Disaster Management Office
DTI	Digital Transformation and Innovation
DTTV	Digital Terrestrial Television
e-Commerce	Electronic Commerce
EFKS	Ekalesia Faapotopotoga Kerisiano Samoa
EPC	Electric Power Corporation
e-Services	Electronic Services
e-Waste	Electronic Waste
FY	Financial Year
GDP	Gross Domestic Product
GoS	Government of Samoa
HIES	Household Income and Expenditure Survey
ICT	Information and Communication Technology
ICTSP	Information and Communication Technology Sector Plan
ICT-TWG	Information and Communication Technology Technical Working Group
ISOC	Internet Society
ISP	Internet Service Provider
IXP	Internet Exchange Point
KPA	Key Priority Area
LTS	Lesā's Telephone Services
LTS	Lesā's Telephone Services
M&E	Monitoring and Evaluation
MCIT	Ministry of Communications and Information Technology
MESC	Ministry of Education, Sports and Culture
MJCA	Ministry of Justice, Courts and Administration
MOF	Ministry of Finance
MOH	Ministry of Health
MOR	Ministry for Revenue
MTEF	Medium Term Expenditure Framework
MWCSD	Ministry of Women, Community and Social Development
NUS	National University of Samoa
OAG	Office of the Attorney General
OOTR	Office of the Regulator
PAPI	Paper and Pencil Interview
PDS	Pathway for the Development of Samoa
PETSEL	Political, Economic, Sociological, Technological, Legal and Environmental
PSC	Public Service Commission
RAN	Radio Access Network

SamCERT	Samoa Computer Emergency Response Team
SBS	Samoa Bureau of Statistics
SDCL	Samoa Digital Company Ltd
SIM	Subscriber Identity Module
SITA	Samoa Information and Technology Association
SMS	Short Messaging Service
SNBH	Samoa National Broadband Highway
SPL	Samoa Post Limited
SPM	Sector Plan Manual
SQA	Samoa Qualifications Authority
SSCC	Samoa Submarine Cable Company
SWOT	Strength, Weakness, Opportunities, Threats
USF/UAF	Universal Service Fund/Universal Access Fund
VSAT	Very Small Aperture Terminal

Executive Summary

The Information and Communication Technology Sector Plan (ICTSP) FY2022/23 – 2026/27 is a continuation of the developments made over the last five years under the Communications Sector Plan (CSP) 2017/18-2021/22, with a focus on supporting the implementation of the Pathway for the Development of Samoa (PDS) FY2021/22 - FY2025/26 Key Priority Areas.

The initial ICT Sector Plan, CSP 2017/18-2021/22, established a roadmap for prioritizing ICT developments according to the needs of all sectors in accordance with the changes that occur overtime. The review of the CSP 2017/18-2021/22 also pushed for a more coordinated approach amongst all sectors involved for the successful implementation of the Plan. A key element in the success of the ICTSP FY2022/23 – 2026/27 lies in the establishment of a well-structured ICT institution, with appropriate capacity to implement activities identified in this plan.

The ICTSP FY2022/23 – 2026/27 stipulated seven (7) overarching Goals of the sector for the next five years; (1) Sustainable ICT workforce and an ICT literate population, (2) Improved domestic connectivity and access to ICT, (3) Improved e-services in priority sectors, (4) Strengthened ICT policy, planning capacity, and legislative and regulatory frameworks, (5) A safe and secure ICT environment, (6) A sustainable financing mechanism for the ICT sector with a comprehensive M&E framework, and (7) Effective multi-sectoral coordination and partnerships to fully utilize ICT as a tool for development. Achieving these stipulated goals through coordinated actions and multi-sectoral partnerships will contribute to “Affordable, appropriate, accessible, and secured ICT services to promote social and economic well-being and quality of life for all”, by the end of the Sector Plan life. The overall objective is moving towards Digital Transformation so that Samoa is not lagging behind. At the same time, the Sector plan also look at breaking barriers and compacting social impact on technologies and new innovations.

The vision, goals and objectives of this plan is a result of the SWOT Analysis conducted. This plan therefore, works towards the needs and expectations of the Sector’s stakeholders and partners. The final section of this plan includes a framework for action the Sector will use to monitor the status of activities over the five year period of the plan. By May to June of every year, the ICT Sector, through the Policy Development and Planning Division of the Ministry of Communications and Information Technology, will provide the Executive Management, comprising of the CEO’s of MCIT, OOTR and SPL, with an overall progress report of activities for each year of the Plan. By December 2024, a Mid-Term Review Report would have been developed and approved by the Sector Executive Management whilst a Final Review Report of the ICTSP FY2022/23 – 2026/27 would be developed by June 2027, in preparation for the development of a new Sector Plan for the ICT Sector.

Section 1: Introduction

The Samoa Communications Sector Plan (CSP) 2017/18-2021/22, was the ICT Sector's first initial Sector Plan, giving priority to a set of activities and critical path, designed to assist the sector organizations in achieving its overall vision of: "Affordable and Appropriate ICT Accessible to All", for the past five years, guided by three principles; affordability, accessibility and appropriateness.

Affordable and accessible ICT reduces the gaps between the 'haves' and the 'have nots', thereby enhancing economic opportunities for communities. 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 events of significance that impact on the lives and welfare of all Samoans regardless of where they are, through different reporting platforms.

The Information and Communication Technology Sector Plan (ICTSP) FY2022/23 – 2026/27 provides direction in strengthening a coordinated approach to harmonize ICT projects across all levels of society, including ICT developments in priority sectors such as health, education, commerce, tourism, and environment. It is recognized that disjointed and singular approaches to sectoral priorities waste resources and often result in uncoordinated and poor outcomes. To fully utilize and maximise the effectiveness of the benefits of ICT, a holistic coordinated approach is needed.

While the ICT Sector has few significant dependencies, other critical infrastructure sectors are dependent on the ICT Sector. As such, the ICT Sector is one of the few sectors that can affect all other sectors. At a minimum, each sector depends on services from the ICT Sector to support its operations and associated day-to-day communication needs for corporate and organizational networks, and effective delivery of services, through Internet connectivity, voice services, and video conferencing capabilities etc. Some sectors have even more significant dependencies on the ICT Sector beyond their routine operations.

The ICTSP aims to provide guidance to the ICT Sector to enhance its national efforts to achieve its vision of "affordable, appropriate, accessible, and secured ICT services to promote social and economic well-being and quality of life for all", in line with the Pathway for the Development of Samoa (PDS) FY2021/22 - FY2025/26 vision of "fostering social harmony, safety, and freedom for all".

Country Overview

Population and demography:

Samoa is a small Pacific Island State comprising of nine islands: the two main ones being Savai'i and Upolu, which account for 99% of the total land area of 2,842 square kilometres. The preliminary count of the 2021 census released by the Samoa Bureau of Statistics in April 2022, indicates a total population of 200,010 in 2021¹, with 51% being males and 49% females. This compares with a total population count of 195,979 persons at the last census conducted in November 2016 with no changes in the gender composition. The recent result indicates a net increase in Samoa's population of 4,031

¹Source: Samoa Bureau of Statistics 2021 Census Preliminary Count https://www.sbs.gov.ws/images/sbs-documents/Population_and_Demography/2022/FinalPrelim_V3Final_final.pdf

over the five-year period, or just 806 people per year. That is an annual growth rate of just 0.4% per year.

The Samoa Bureau of Statistics (SBS) noted that this is the first census that the Computer Assisted Personal Interview (CAPI) method was used to collect the information compared to the Paper and Pencil Interview (PAPI) method used in the previous census. It is also the first time the population has been tabulated based on the new distribution of political districts and villages used in the national election by the Office of the Electoral Commission in April 2021.

Economy:

Samoa's economy depends largely on agriculture, fishing, tourism, remittances from family members abroad, and development assistance. Agriculture employs about two-thirds of the labour force and accounts for 90% of exports, comprising mainly coconut cream, coconut oil, and copra. The manufacturing sector mainly processes agricultural products. SBS Quarter Report for June 2022² indicated an increase of 3.2% Consumer Price Index for June 2022 compared to May 2022, and rose further by 10.9% in comparison to June 2021. This was influenced mainly by an increase of 4.2% in the imported Goods Component from the previous month, as a result of higher prices for fuel, imported food, and other consumables. The average annual inflation rate for the year ended June 2022 was 8.8%. This was the biggest increase in the last 13 fiscal years ending June. The annual inflation for the year ending June 2021 was a negative 3%.

Samoa's Gross Domestic Product (GDP) continues to drop according to the SBS June 2022 Quarter report³. In their view, the COVID-19 pandemic transmission within the community from its onset towards the end of March this year, heavily impacted the economic sector. The report further states that most sectors of the economy performed negatively during this period, especially retailing and wholesaling activities, communication, information services, construction and civil engineering activities being the most affected during the period April to June 2022.

GDP for Samoa for the June 2022 Quarter remained at constant 2013 basic prices which amounted to \$435.9 million. The largest contributors to this decline represented the commerce, communication, construction, fishing, agriculture, accommodation and restaurants, electricity and water.

Government:

A Cabinet of 13 Ministers led by the Prime Minister, have control of the Executive Government. The Executive Government is responsible for the day-to-day management of the State, including the enforcement of the laws of Samoa.

The Government of Samoa comprises of 15 Government Ministries in total, 6 Government authorities with mandates derived directly from the Constitution of Samoa, and 19 Government corporations or legal entities that were set up to undertake commercial activities on behalf of the Government; a total of 14 public sectors comprising of both public services and public enterprises. These include the Community Sector, Health Sector, Education Sector, Public Admin Sector, Law & Justice Sector, Agriculture Sector, Trade Commerce and Manufacturing Sector, Finance Sector, Tourism Sector, Environment Sector, Transport Sector, Energy Sector, Water & Sanitation Sector, and the ICT Sector.

² Source: Samoa Bureau of Statistics CPI June 2022 https://www.sbs.gov.ws/images/sbs-documents/Economics/CPI/2022/june/6-CPI_jun_2022.pdf

³ Source: Samoa Bureau of Statistics Quarter Report June 2022 https://www.sbs.gov.ws/images/sbs-documents/Finance/GDP/2022/GDP_Report-June_2022_Final.pdf

Information and Communications Technology (ICT) Sector Overview

The ICT Sector comprises of three bodies: the Ministry of Communications and Information Technology (MCIT), the Office of the Regulator (OOTR), and Samoa Post Limited (SPL).

MCIT facilitates, leads and implements the Government of Samoa's vision for ICT developments by providing sound policy and planning advice on all matters pertaining to ICT developments for affordable, reliable and secure ICT for all, as well as managing and operating the National Radio 2AP, Le Si'ufofoga o Samoa, and the Government's Digital Television channel for an informed community.

The OOTR is an independent authority established under the Telecommunication Act 2005. Its main function is to regulate the sector. They facilitate applications for licensing, and are mandated to monitor the performance of service providers to enforce compliance with regulations, policy and appropriate market conditions and behavior to ensure fair competition.

SPL was established on 1st September 2008, as a result of a government decision to privatise its national interests in its telecommunication and postal operations. It is a public body incorporated under the Company's Act and the Postal Telecommunications Services Act 1999. The entity's primary operations are the provision of postal services which includes sending, receiving, sorting and delivery of mails.

These three bodies work together to provide effective and efficient management of the goods and services that they produce for the benefit of Samoan society and economy, such as the Internet, telephone, television, radio, and postal services, along with products used to access and utilize those services like smartphones, tablets, computers, and other digital equipment.

Sector Plan Rationale and Methodology

The development of the ICTSP FY2022/23 – 2026/27 involved efforts and commitments from all key ICT stakeholders managed under the guidelines of the Sector Plan Manual (SPM) 2015.

The key elements of the methodology included the following.

i. Meetings with the Public and Private Sectors.

These meetings were conducted to ensure that all stakeholders had good participation in the development process. Through these meetings, information and data were collected from Government entities and the ICT industry to identify areas that were achieved over the last five years under the CSP 2017/18-2021/22, as well as to form the basis for the development of the ICTSP 2022/23 – 2026/27.

ii. Community Consultations

Through the Ministry of Women, Community and Social Development (MWCSO) and the Ministry of Education, Sports and Culture (MESO), MCIT carried out consultations with the community in both Upolu and Savaii, to ensure that the districts' inputs were incorporated in the plan.

iii. Communication Sector Plan Working Group Committee

A working group committee was established to support the review of the CSP 2017/18-2021/22 and the development of the new ICTSP 2022/23 – 2026/27. The Sector Plan Working Committee comprises

of representatives from MCIT, OOTR, SPL, and MOF.

iv. Desk Review

This method was used to review national and international strategic documents which the Pathway for the Development of Samoa (PDS) 2021/22–FY2025/26, Sector Plans, ICT Sector Annual Report and Corporate Plans, including various ICT programs and support documents, relevant statistical data reports such as the SBS GDP and CPI Quarterly reports, Household Income and Expenditure Surveys (HIES) Reports, Population and Demography Reports, etc. Documents and studies from other development partners relevant to the ICT sector were also reviewed to strengthen further inputs into the plan, where such information was relevant and enhanced Samoa’s own vision and mission for this vital Sector.

v. Situational Analysis

The situational analysis was conducted within the framework of monitoring and evaluation of different ICT programs and projects implemented. Furthermore, meetings with the public and private sector, and consultation workshops with the community, resulted in the collection of information and data to understand the current ICT environment. This would assist in the development of planned activities in the Sector Plan with its implementation.

vi. Outcomes Mapping

The SWOT analysis conducted under the Situational Analysis Section of this Plan assisted the identification of possible End of Sector Plan Outcomes desired for the next five years of the Plan. End of Sector Plan Outcomes is linked with the PDS and other relevant sector plans and strategies. These are important in strengthening the government’s whole of government approach to addressing Samoa’s vulnerabilities and limitations in its overall focus of sustainable development, and improved lives of its people. The outcomes mapping also drew attention to cross cutting issues such as vulnerable groups and impact of climate change on potential developments in the ICT sector.

Organization of the Plan

The ICT Sector Plan considers ICT under two (2) main aspects:

- 1) ICT as a sector in its own right; and
- 2) ICT as an enabler of all other sectors, including economic, social, and environmental sectors.

The ICTSP is organized according to the following process: Background to context/baseline, context baseline to vision, vision to strategy, strategy to implementation, and then implementation to results. The plan concludes with a detailed implementation and monitoring framework which provides a clear indication of the roles and responsibilities of lead agencies.

Section 2: Situational Analysis

Situational Analysis is a key enabler to the development of the ICTSP 2022/23 – 2026/27. The situational analysis includes the assessment of key stakeholders to analyze the sector’ internal and external environment in order to understand the current situation and the priority areas for the next five years. Data was collected through consultation workshops and face-to-face and online meetings with all stakeholders involved.

Performance Review and Baseline

The review of the CSP 2017/18 – 2021/22 identified some of the key indicators of the sector's performance over the years. This includes a number of developments initiated across the ICT Sector:

- The launching of the Tui Samoa Cable in February 2018, and the second Government cable, the Manatua cable, in November 2019.
- Following the launch of the Tui Samoa Submarine Cable, the Samoa Submarine Cable Company (SSCC) was established and registered as a private company which built, manage and operate the Tui-Samoa submarine cable between Apia Samoa and Suva Fiji on behalf of the Government of Samoa. SSCC operates a Cooperative Sustainable Wholesale Model (CSWM) with the mandate to deliver fast, reliable and affordable internet services to stimulate ICT innovation and development as an enabler of economic growth, prosperity and social development and cohesion for the people of Samoa.
- On the 31st of August 2020, Samoa turned off all analogue television broadcasting, marking the completion of its switch to digital TV transmission. Digital TV now covers 99% of Samoa's population, and is providing higher sound quality and image, as well as interactive services.
- The Samoa National Computer Emergency Response Team (SamCERT) was successfully established in May 2021 under the management of MCIT through funding support provided by the Australian Department of Foreign Affairs and Trade (DFAT). This is to promote and raise awareness of the importance of cybersecurity and cyber safety. SamCERT also work towards building resilient critical infrastructure and digital platforms, as well as strengthening the capacity of the workforce to maintain and sustain the security of emerging digital technologies and services.
- In addition to support from the international community, the Samoa Information Technology Association (SITA) was re-established in 2019. The re-establishment of SITA brought together IT experts from across Government and the Private Sector, ultimately strengthening Samoa's capacity to deliver training and awareness campaigns across the country, amongst all other developmental work and contributions to the Sector.
- As of October 2022, there are six (6) Internet Service Providers (ISPs) operating in the local market; namely Digicel, Vodafone, Computer Services Ltd (CSL), Bluewave Wireless, Samoa Digital Company Ltd (SDCL), and Lesa's Telephone Services (LTS).
- There is currently a total of nine (9) digital TV stations. These include the Samoa Broadcasting Corporation (TV1), EFKS TV (TV2), Apia Broadcasting Ltd (TV3), Upu Mana TV (TV4), Star TV (TV5), Kingdom TV (TV6), Hope TV (TV7), National University of Samoa (TV8), and the Government of Samoa's TV (TV9).
- There are more than 10 AM/FM Radio Stations in Samoa, including the National Radio 2AP which now streams worldwide through the use of online streaming apps such as the Zeno and GoLoud.
- Students can now also access education materials and distance learning through the use of an open-source learning portal called Moodle that is currently operated by the National University of Samoa (NUS).
- Digicel and Vodafone have also distributed free safe student SIM cards to assist students with their education and learning.
- MCIT, together with MESC, OOTR and Bluewave Wireless have commenced the establishment of the Satellite Connections in Schools Project (VSAT) to connect schools in the rural areas via satellite connections.

The ICT Sector, along with its stakeholders and development partners, will continue to focus on ensuring extensive progress is made to enable all Samoans to stay connected, through affordable, reliable, secure and appropriate ICT services.

SWOT Analysis

The identification of strengths and weaknesses represents the internal assessment of the ICT sector, while the consideration of opportunities and threats represents the analysis of the external environment for the sector.

The SWOT analysis, along with the Stakeholder Analysis, form the basis for identifying goals, objectives and strategies that may be employed to apply the strengths and address the weaknesses of the sector, capitalize on the opportunities and mitigate the threats to the long-term development of the sector.

The SWOT analysis for Samoa's ICT sector is presented in the following tables. The SWOT analysis is presented for each sector; the ICT Sector, community, the public sector, private sector and non-governmental organizations. This ensures a whole of country approach to the ICT sector developments and future plans for the country, by engaging all stakeholders including communities in its approach.

ICT Sector

Strengths	Weaknesses
<ul style="list-style-type: none"> Regional and international support through strong partnerships with regional and international organizations Increased focus on digital transformation Open and regular dialogue with development partners Key driver of cybersecurity and cyber safety 	<ul style="list-style-type: none"> Alignment of policies and plans Community awareness and participation Sector Coordination Monitoring and reporting Lack of staff and institutional capacity Accessibility to information and data
Opportunities	Threats
<ul style="list-style-type: none"> Centralized database for sector statistics Cross-sectoral coordination Greater participation of community Monitoring and evaluation 	<ul style="list-style-type: none"> Project fatigue (too many projects) Contradicting government priorities Small population and geographic isolation Limited economic opportunities Rapid technological changes Staff turnover

Community

Strengths	Weaknesses
<ul style="list-style-type: none"> Radio, TV, Postal, Telephone communications has improved to support internal and external communications and awareness. Cheap / cost-effective Ease the burden for children's education Access to information during natural disasters Access to international links for scholarships and job opportunities overseas Funding support through online portals/platforms (eg, donation for surgery and cancer awareness programs) Live streaming of community activities (eg. Church services, etc.) Innovative ideas learnt from social media such as Facebook and YouTube to help earn money (eg, cooking 	<ul style="list-style-type: none"> High cost of devices and internet access for low income earners Not enough mobile towers and some are too far from some communities causing poor connection in some areas Extra expenses on electricity bills Not enough education and trainings on the use of technologies and online services. Not enough Wi-Fi in communities and public areas. All applications are in English, need to translate to Samoan to better understand how to use these applications. No Government legislation on cybersecurity and cyber safety. Expensive costs of advertisements on radio and television. Expensive cost of delivering mails through Samoa Post.

<ul style="list-style-type: none"> • recipes, medicinal chemistry, agriculture farming, etc.) • Fast communication with police, fire service and ambulance during emergencies. • Clear radio broadcastings which assisted the children with their educations during COVID-19 lockdown. • Radio and television broadcastings can be accessed from anywhere through the use of mobile phones. • Less expenses on transportation as some services are done online (eg. payment of water and electricity bills, booking for hotels and resorts, etc.) 	
Opportunities	Threats
<ul style="list-style-type: none"> • Increase ICT capacity and knowledge of children (but not all children). • Social inclusion (eg. Youth group meetings online). • Fundraising via online (eg. Tausala) • Village and district councils develop rules to protect their communities from online threats and conflicts. • Some church and village communities have conducted trainings on the uses of smart end users' devices. 	<ul style="list-style-type: none"> • Online threats via social media platforms • Cyberbullying • Online thefts/scams • Exploitation of children to inappropriate contents online (CSAM) • Inappropriate television programs for young children. • Disputes between families, schools, church and district communities associated with the use of online communication tools. • When there is power outage, no ICT device works and sometimes causes problems to television equipments. • Effects of bad weather on connectivity.

Private Sector

Strengths	Weaknesses
<ul style="list-style-type: none"> • Users moving fast to 3G and 4G networks. • Young generation (digital age) are adopting well with the current trend of technology. • Support of e-waste management through trading old mobile phone for new phone and a sim card deal. • Subsidization of devices by manufacturers through Govt to support school projects. • Work collaboratively with Govt in terms of National Disaster response and recovery (e. measles epidemic and COVID 	<ul style="list-style-type: none"> • High cost of end user devices. • High cost of infrastructures and equipments. • School curricula and tertiary courses do not meet the business need in terms of digital services. • Current submarine cable is not fully utilized. • No National Disaster Communications and Information Technology Plan in place for Samoa. • Lack of investments/incentives for ICT Private Sector.

pandemic).

Opportunities

- Work collaboratively with Govt and stakeholders in building digital capacity hubs to improve digital skills.
- Work with Govt to strengthen digital content through a Content Management Policy.
- Establish a Samoa App Market and train more application and software developers to make use of the current infrastructures (cables).
- Establish a market for second hand phones and recycling resources from e-waste and resold to digital repairing companies to lower cost of repair and replacement.
- A Technology Exhibition for Technology Manufacturers to showcase their products to the public.
- Establish e-waste management framework to improve facilitation of the disposal of e-waste in the country.
- Collaborate with Govt and any development partners regarding improvements to fiber networks.
- Build more international relationships and secure engagement with Manufacturers to provide support in terms of endorsing agreements that would consider support of national incentives to facilitate subsidization of products and services from the Manufacture, that would be beneficial to the Country.
- Policy reforms to support areas of need such as the impact of the cost of devices and infrastructures, impeding growth and efficiency and effectiveness in the delivery of services; essential capacity building, and ongoing reviews of legislation, regulations and policies that would continue to enhance further the structural framework for all ICT operations. Alongside this would be access to resources – namely, financial resources, human capital, appropriate protection, security, and privacy interventions to support ICT and digital services in anticipation of ongoing technological developments that will affect its platforms for operations.
- Work collaboratively with Govt and other interested partners in terms of building security for the country.

Threats

- Pirated contents on video streaming.
- Labour mobility threat

- Work collaboratively with Govt in building capacity in terms of building Data Centers and Cloud technology and other data tools.

Public Sector

Strengths	Weaknesses
<p>Health:</p> <ul style="list-style-type: none"> • Improved health care provision and reduced number of NCD's through the use of ICT tools and systems. • Free and open source software to assist in managing health supply chains and updating the national essential drug list to be aligned with WHO recommendations. • Long distance consultation between patient and doctors through remote clinical services / telemedicine. • Use of text messaging to deliver health care awareness and send reminders to patients regarding appointments. • Free open source Electronic Health Record to record vaccination status for individual patients and produce vaccination certificates for COVID-19. • Publication of real-time vaccination update data via broadcasting and social media platforms to promote healthy competition between districts and boost vaccine targets. <p>Environment:</p> <ul style="list-style-type: none"> • Use of IBL software engineering system to collect observational data and to disseminate relevant weather warnings, forecasts, and bulletins. • General public can view current weather forecast via mobile app. • In place is a DELAIRCO Display - portable iridium satellite terminal that permits text-based alerts and messaging in remote locations where communication options are limited. <p>Commerce, Industry & Labour</p> <ul style="list-style-type: none"> • Zoom licenses enabled staff to continue meetings during 	<p>Health:</p> <ul style="list-style-type: none"> • Lack of technology and proper training for doctors to perform sophisticated operations such as heart surgery, valve replacement, cancer therapy, etc. • Even if technologies become available to accommodate these surgical procedures, the on-going support and training is not available on a continuous basis. • Lack of data trained staff to implement health systems (eg. Patient Information System) • Lack of continuous internet connectivity affecting the flow of information among rural district hospitals and health centers or between these remote centers with the two main hospitals. • To fully utilize e-health systems, many staff require ongoing training in entering information. This is necessary to also accommodate staff turnover from time to time. <p>Environment:</p> <ul style="list-style-type: none"> • Absence of an E-waste strategy to guide the implementation of e-waste management. • Cost of maintaining meteorology systems. There was the issue of inadequate spare parts, the time it takes to rehabilitate old and damaged equipment, or even timely delivery of replacement equipment. • No dedicated staff and limited investment in capacity building and training opportunities that focused on operating and maintaining meteorology systems. • High costs charged by Telecommunication companies for data transmission. The data that are collected through these systems are used to provide awareness and public information regarding change in weather patterns. This is a vital sector

<p>COVID SOE restrictions.</p> <ul style="list-style-type: none"> • Online business registry system to enable businesses to register online. • Overseas payments transfer for copyrighting and registration of intellectual properties. • Establishment of Job seeker system connecting job seekers and employers. • Use of G-suite (Google Workspace) for official internal matters (eg. shared calendars, online document editing and storage, video meetings, etc.) • OSH Registry for faster response in terms of accident reporting and better storage of accident data and information. • Seasonal workers database system to improve shortlisting and recruitment selections. • Internal intranet portal for internal communications and awareness (eg. HR information). <p>Agriculture & Fisheries</p> <ul style="list-style-type: none"> • AgriTouch app for farmers to promote farming methods, products and services. • Firewall and antivirus to protect against cyber threats and cyber attacks <p>Education</p> <ul style="list-style-type: none"> • Use of ICT resources in schools for teaching and learning. • Procurement and installation of new AV equipment for live broadcasting and streaming for all schools. • 36 schools installed with Zoom equipments for school principals to attend online meetings with MESC. • Use of NUSTV to deliver lessons, notices and announcements to education sector stakeholders. <p>OOTR</p> <ul style="list-style-type: none"> • Online dialogue for Girls in ICT following COVID pandemic restrictions. <p>OEC</p> <ul style="list-style-type: none"> • Implementation of disaster recovery plan led to e-roll system backup offsite, and successful retrieval of data to 	<p>which should be supported by telecom providers to help lowering the high cost of operation and maintenance.</p> <ul style="list-style-type: none"> • The Met office website continues to break down and requires support from the Ministry IT team, whenever they are available. • No National Disaster Communications and Information Technology Plan for Samoa. <p>Commerce, Industry & Labour</p> <ul style="list-style-type: none"> • No legislation for e-commerce and online business transactions. • Extra cost on outsourcing maintenance of e-registry system due to lack of in house capacity. • Backup system failure. • Low level IT staff with advanced IT skills. • No laws on data privacy. • Lack of data/information showing percentage of women personally using mobile financial services. <p>Agriculture & Fisheries</p> <ul style="list-style-type: none"> • Lack of farmers capacity in using AgriTouch app. • Lack of awareness for AgriTouch app. • No consultation or awareness regarding SNBH reason for Ministry not using SNBH. • Limited space on cloud for storage. • No funding from Ministry budget to finance software, therefore heavy reliance on development partners. • Different Microsoft versions across the ministry, therefore compatibility is an issue. • Shortage of IT staff to cater for a large Ministry. <p>Samoa Post</p> <ul style="list-style-type: none"> • No funding under Samoa Post to provide free wifi at SPL outlets. • No demand for e-waste disposal services. • Lack of awareness in terms of marketing services (eg. sending koko samoa overseas using SPL services). • No internal IT staff. <p>MWTI</p>
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<p>the Data Center, when the data became inaccessible or unavailable at the Center.</p> <ul style="list-style-type: none"> • Amendments to legislation led to upgrade of E-roll system to reduce errors and data inconsistency. • Spice-works (service desk system) allowing staff to have access to the system so there is record of all the calls they will make, and track how many hours the call has been active or pending until it is closed. • OEC now has a 24/7 Global IP address block and its own Autonomous System Number that identify OEC for the rest of the world which means that we do not lease IP Address from any ISPs here in Samoa but use our own which also helps with security of the system. • Live feed on the status and percentages of votes. • Concerning the national electoral roll, a new Voter roster database system proactively conducts spot checks to check double votes, conduct queries on the number of people who didn't vote, and store data for future planning. <p>Tourism</p> <ul style="list-style-type: none"> • Community Wi-Fi access for devices without sim cards making it convenient for rural communities. • Use of social media platforms for marketing to international community with up-to-date information on activities, tourist products and services. and key attractions. • Easy for overseas people to make bookings through the Merchant Online Booking Agent accessing the Tourism website and make online payments through ANZ e-gate. <p>Finance</p> <ul style="list-style-type: none"> • Finance One and SNBH are heavily used at the Ministry of Finance. <p>NUS</p> <ul style="list-style-type: none"> • Use of TV broadcasting (NUS channel) to deliver courses during SOE – multi-mode approach. • NUS to deliver its courses and notices to its stakeholders to serve the purpose of multimodal delivery. 	<ul style="list-style-type: none"> • No Ministry budget to fund development of systems. <p>NUS</p> <ul style="list-style-type: none"> • Students not affording devices to continue learning during COVID SOE. • High cost of internet. <p>MPE</p> <ul style="list-style-type: none"> • No funding assistance for cybersecurity and maintenance of ICT equipment. • Lack of skills for IT staff in cybersecurity, Networking, Graphic Design, Advance Skills in Office, Virtualization, Windows, Server Administration, Website development. <p>MJCA</p> <ul style="list-style-type: none"> • Poor quality of internet service. • Cost of equipment. • Lack of data protection laws that specifically address gender based online safety. • Lack or no identifications of cases where ICT tools are used to commit acts of gender violence. • E-Govt not live
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- Move all courses online to use online learning management system called Moodle as a free open sources system
- Activate backup support system at the Digicel NOC during the lockdown where the LMS Moodle hosts
- ICT division to provide online support 24hours to both staff and students due to the new norm of learning and teaching.
- Increase the zoom license to suffice support on online classes - lectures
- Procure Office 365 A3 licenses for staff and Computing students and A1 license for all students and some staff
- Encourage all students to use NUS student email accounts for ease of communications and mass broadcasting on online platforms
- Allow free credits every month to staff to assist with online delivery during the lockdown
- NUS already has ASN from APNIC and is already testing peering with Digicel and its working.
- Upgrade campus internal network with fibre connectivity.
- Upgrade computers in computer labs to the latest computer specs accordingly.
- Procure a set of laptops for staff who used desktops to continue their work from home and anywhere.
- Deliver online trainings to faculties in our how to use some online systems during the lockdown to assist with their delivery of courses.

MJCA

- Use of Docsvault System to Capture, Manage & Secure paper documents, electronic files & emails.
- Digitization of LTC records in Upolu and Savaii giving access to the public for viewing and printing of files. Saves time and money from travelling between islands to access files and historical records.
- Improved customer service and reduced waiting time to

<p>10-15 minutes.</p> <ul style="list-style-type: none"> Regular update of Back-up servers on a weekly basis for both in-house and off-site. Legislations in place for enforcing IT use and access. <p>SAO</p> <ul style="list-style-type: none"> Website makes all the relevant information available to the public and stakeholders 	
Opportunities	Threats
<p>Environment</p> <ul style="list-style-type: none"> Take back system for e-waste and awareness programs for community, on how to properly dispose electronic devices. <p>Central Bank of Samoa</p> <ul style="list-style-type: none"> Electronic Payment System (ATS-CSD) that will provide a more secure, modernized and real time settlement of funds transfer between participants of the system to be launched early 2023. Support Samoa's digital economy. <p>Commerce, Industry & Labour</p> <ul style="list-style-type: none"> Online business registry system to include payment options with the availability of payment gateway. Tax exemption on e-commerce services and transactions (eg. MauaApp) Use of social media to increase awareness (eg. OSH). 365 license bulk purchase for all Govt ministries to save costs <p>Agriculture & Fisheries</p> <ul style="list-style-type: none"> Digitization of Ministry records and important documents (preferable at SNBH). Digital library to collect and store quantitative and qualitative information, analysis and modeling. <p>MWTI</p> <ul style="list-style-type: none"> Reviving the integrated system to link all existing systems of the sector. The system will indicate all Govt assets and maintenance requirements. <p>MESC</p> <ul style="list-style-type: none"> Trainings to upskill teachers in using ICT for continuous 	<p>MNRE</p> <ul style="list-style-type: none"> ICT devices can become a major source of emission. <p>Commerce, Industry & Labour</p> <ul style="list-style-type: none"> Online threats and negative comments on the Ministry's Facebook page. <p>MESC</p> <ul style="list-style-type: none"> Electrical issues (electrical wiring, power spikes, surge faults, bad ground wire, etc.) WAN issues (obsolete, unsupported, power supply issues, etc.) SNBH technical issues (infrastructure gradually deteriorated without regulatory monitoring and contingency planning) causing decline in school connectivity, including SchoolNet learning center hardware. No one-size fits all technology like the SNBH and SchoolNet. Each school has its own specific, unique needs and requirements for their students, teachers and village communities. <p>OOTR</p> <ul style="list-style-type: none"> COVID-19 impacts causing delay to digital TV developments. Natural disasters such as Fire causing loss of 90% of assets including LAN, tools, (ASMS) and data for licensing and monitoring. <p>MJCA</p> <ul style="list-style-type: none"> Young children accessing inappropriate contents and materials online.

<p>learning during SOE.</p> <ul style="list-style-type: none"> • Deployment of fiber optic, 4G LTE wireless, VSAT satellite, Point to Point wireless links, etc.) to address geographical challenges in terms of school locations. • Monitoring and reporting framework with service providers for sustainability and effective service delivery to schools. • NUS Rent to Own scheme. • ICT capacity building for teachers. <p>OOTR</p> <ul style="list-style-type: none"> • Review of current legislations. • Review of SSCC to ensure it is fully utilized, sustainable and affordable. <p>OEC</p> <ul style="list-style-type: none"> • Ensure Network redundancy by setting up multiple paths for traffic and two ISPs engaged, to provide a redundant connection. <p>Tourism</p> <ul style="list-style-type: none"> • Cheaper data plans for hotels and local businesses to market their products and services online. • Establish local IXP to reduce costs, improve bandwidth and increase routing efficiency. • Trainings for NUS students on how to use software applications. • NUS Foundation course to be aligned with overseas universities so that students do not struggle when going overseas for further education. • Remote switch to automatically control sirens for alerts during SOEs. <p>Finance</p> <ul style="list-style-type: none"> • Upgrade to Financial System considering cloud services. <p>NUS</p> <ul style="list-style-type: none"> • Upgrade of student system. <p>MPE</p> <ul style="list-style-type: none"> • Trainings for IT staff and infrastructure support. • Whole of Govt data storage. 	
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<ul style="list-style-type: none"> • Whole of Govt - network / email system / intranet. • Whole of Govt – procurement. • 365 license bulk purchase for whole of Govt. <p>MJCA</p> <ul style="list-style-type: none"> • Increase cyber safety awareness targeting parents. • ISPs to filter internet contents. • Work with MWCSO to improve connectivity of services both Ministries are tasked to deliver to the community. 	
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Non-governmental organizations

Strengths	Weaknesses
<ul style="list-style-type: none"> • Free Wi-Fi for the community has been done by Digicel and Vodafone. • Utilize the capacity of SITA to provide suitable advice as an external and third party. • Integration of Building codes that address and include ICT as part of the process; for example road developments, infrastructure development and also transport system. • Strengthen support to the Tourism Sector in terms of their existing apps for tourists and also payment gaps. 	<ul style="list-style-type: none"> • There is a need to build community through Digital Hubs, but we are lacking in Human Resources to provide support for those Hubs.
Opportunities	Threats
<ul style="list-style-type: none"> • Encourage the use of the IXP. • Developing of legislation on Information Privacy to strengthen and protect Digital Services and Application we have in-country. • Utilization of our local consultants to build our local market in the Digital and ICT Space, instead of TA’s from overseas. considering the increase in skills, knowledge and experience available in the country. • Training and Capacity upskilling to provide the relevant skills to the supporting officers out in the field. • Utilise local talent in the ICT Space. • There is a need to build tools in the language to better support the Samoan language to support digital application for online tools for our citizens. 	<ul style="list-style-type: none"> • Cyber Safety and Content Filtering for kids and other cybersecurity elements.

PETSEL Analysis

Analysis	Strength	Weakness	Opportunities	Threats
Political	<ul style="list-style-type: none"> Public Policy Cooperation between public & private sectors 	Conservative attitudes in trying e-services	Political willingness	<ul style="list-style-type: none"> Cyber-attacks and cybercrimes Security breach and copyright issue
Economic	<ul style="list-style-type: none"> E-commerce policies and regulations Modern payment instruments 	<ul style="list-style-type: none"> Perception of difficult development process Lack of sufficient funds to finance and enhance systems Unemployment 	IT proficient people can have better opportunities for employment	<ul style="list-style-type: none"> Inflation rates Startup costs to establish a business, including prohibitive cost of investment in appropriate IT hardware and systems, including maintenance
Social	<ul style="list-style-type: none"> Knowledge society Tech-savvy younger generation 	<ul style="list-style-type: none"> School leavers and older generation are not ICT literate 	E-services in vital areas of economic & social development Online shopping	Rapid development of mobile and SMS technology
Technology	<ul style="list-style-type: none"> Increase mobile usage Innovation 	Some government websites are not user friendly Over capacity of internet highway due to heavy traffic	Local networks facilitate faster connection	Where there is high dependency on ICT small technical problems will disrupt entire networks, if there is limited technical knowledge to address these problems instantly
Environment	Early warning systems and disaster management	Electronic wastes	Refurbishment, reuse, resale, and recycling through material recovery	E-waste is not biodegradable and accumulates in the environment. Has environmental implications
Legal	Protection of vulnerable groups	Advances in ICT outpacing the development of accompanying legal and regulatory standards	Address concerns over e-commerce, by ensuring consumer protection, data authentication and data privacy legislation and policies	Cyber criminals bypassing legal requirements

Stakeholder Analysis

Key stakeholders are identified according to their roles and responsibilities in the provision of ICT services in Samoa. These stakeholders include:

- End-users
- Civil society partners - Sui Tama'ita'i o Nu'u, Sui o Nu'u, Sui o le Mālo, Ekalesia ma faalapotopotoga o lo'o lagolagoina atina'e o nuu ma alalafaga i totonu o Afioga.
- Government Ministries and agencies
 - Ministry of Education, Sports and Culture
 - Electric Power Corporation
 - Ministry of Natural Resources and Environment
 - Ministry of Health
 - Ministry of Finance
 - Ministry of Commerce, Industry and Labour
 - Office of the Attorney General
- Non-governmental organizations
 - Samoa Information Technology Association
- Private Sector
 - Internet Service Providers
 - Commercial Banks
 - Broadcasting Industry
- Development Partners
 - International Telecommunications Union
 - Asia Pacific Telecommunity
 - Commonwealth Telecommunication Organisation
 - United Nations Development Programme
 - Australian Department of Foreign Affairs and Trade
 - New Zealand Ministry of Foreign Affairs and Trade
 - Asian Development Bank
 - World Bank

These stakeholders have a very strong influence on the issue of connectivity. Moreover, their level of influence measures how they impact on the successful provision of accessible, affordable, appropriate and secure ICT. This is illustrated in the following table.

Table 1: Stakeholder Interest /Influence Matrix

Stakeholder	Interest (Strong, Very Strong)	Influence (High, Medium, Low)
End-users	Strong	Low
Civil Society Partners	Strong	Medium
Ministry of Education, Sports and Culture	Strong	High
Electric Power Corporation	Strong	High
Ministry of Natural Resources and Environment	Strong	High
Ministry of Health	Strong	High
Ministry of Finance	Strong	High
Ministry of Commerce, Industry and Labour	Strong	High
Office of the Attorney	Strong	Medium

General		
Samoa Information Technology Association	Very Strong	Very High
Internet Service Providers	Very Strong	Very High
Electronic Retail Shops	Very Strong	Very High
Commercial Banks	Strong	Medium
Broadcasting Industry	Very Strong	Very High
Development Partners	Very Strong	Very High

Section 3: Sector Aspirations

Overview

Within the Pathway for the Development of Samoa (PDS) 2021 – 2025, the Government is committed to extending the benefits of reliable, affordable internet access to all. It recognizes that internet usage in Samoa has increased significantly over the past years and has become an important foundation for Samoa and its economy. ICT is recognized as an enabler of economic growth and development in Samoa. With new technologies and the growth of the internet, the government can now provide public services and information in a much more consistent and streamlined way.

However, the PDS noted further action is required by the ICT Sector to ensure that barriers to universal and affordable access are removed. In this regard, it is recommended under the PDS, that the government strengthens its efforts in growing e-commerce, through improved internet connectivity, especially the promotion of digital financial services. The government’s response to the impact of Covid-19 lockdown highlighted the important role ICT played in ensuring business continuity and the ongoing delivery of services. To enable e-commerce to grow, a more effective management and robust utilization of the Samoa National Broadband Highway needs to be in place. These developments will help drive down the high access costs relative to income levels.

The Government of Samoa, through the ICT Sector, is committed to having licensing frameworks that are fit for purpose, and robust policies and regulations that foster competition, which are aligned with best practice in the sector. In parallel, greater investment in better infrastructure development and strengthened policy framework will aid the government’s focus on improved and affordable connectivity for all Samoans.

The ultimate goal of the ICT Sector through its Sector Plan is to contribute effectively to the Government of Samoa’s national vision by achieving its sector goal and vision as set out below.

Mandate

The ICT Sector is mandated under the following legislations:

- Telecommunications Act 2005;
- Broadcasting Act 2010;
- Postal Services Act 2010;
- Public Finance Management Act 2001;
- Ministerial and Departmental Arrangements Act 2003;
- Public Service Act 2004;
- Crimes Act 2013;
- Cabinet Directives

Vision

Affordable, appropriate, accessible, and secured ICT services to promote social and economic well-being and quality of life for all.

Mission

To improve the quality of digital service delivery that meets and exceeds the expectations of all Samoans.

Values

Inclusiveness

We value diversity, equality and equity, cooperativeness, and community participation.

Teamwork

We operate in a teamwork environment and a commitment to building effective relationships.

Respect

We respect others and treat them with fairness and courtesy.

Responsive

We respond to citizens and stakeholders request in a timely manner

Innovation

We strive to introduce new ways of using technologies to meet the demands of the public, community and business goals

Integrity

We are honest and we deliver according to our promises.

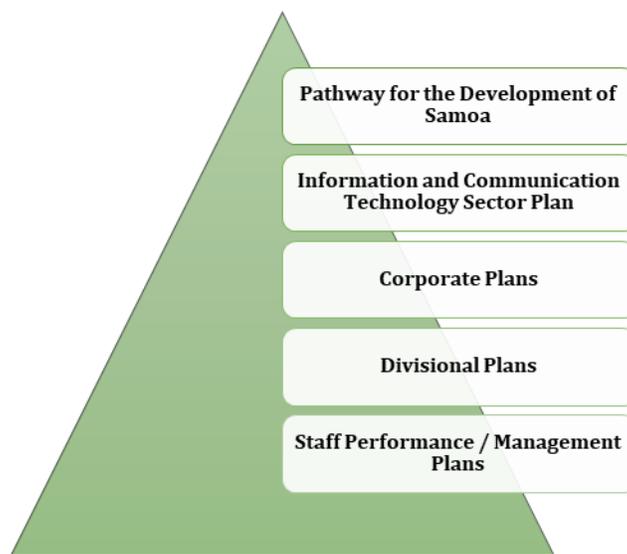
Section 4: Sector Strategic Framework

Overview

Pathway for the Development of Samoa:

The PDS 2021 – 2025 provides the overarching framework that sets the pace and tone of Samoa's sustainable development. This includes the Information and Communication Technology Sector's Framework for action under the ICTSP 2022/23 – 2026/27.

Diagram 1: Planning Chain



The PDS 2021 – 2025 is pillared by five interlinked strategic outcomes; (1) Improved Social Development; (2) Diversified and Sustainable Economy; (3) Security and Trusted Governance; (4) Secured Environment and Climate Change; and (5) Structured Public Works and Infrastructure.

The ICT Sector will contribute to achieving strategic outcome five by ensuring that public works and infrastructure are guided by a long-term phased development plan that underpins socio-economic progress in Samoa. This is through achieving Key Results Area (KRA) 20; Innovative Information, Communication and Technology Use.

Key Results Area 20: Innovative Information, Communication and Technology Use.

Expected Outcome 1: Affordable access to internet usage in whole of Samoa achieved

Indicators:

- Proportion of population covered by a mobile network, by technology
- Fixed Internet broadband subscriptions per 100 inhabitants, by speed
- Proportion of individuals using the Internet
- Amount of wholesale international bandwidth available to Samoa

Expected Outcome 2: Improved business performance through the use of ICT

Indicators:

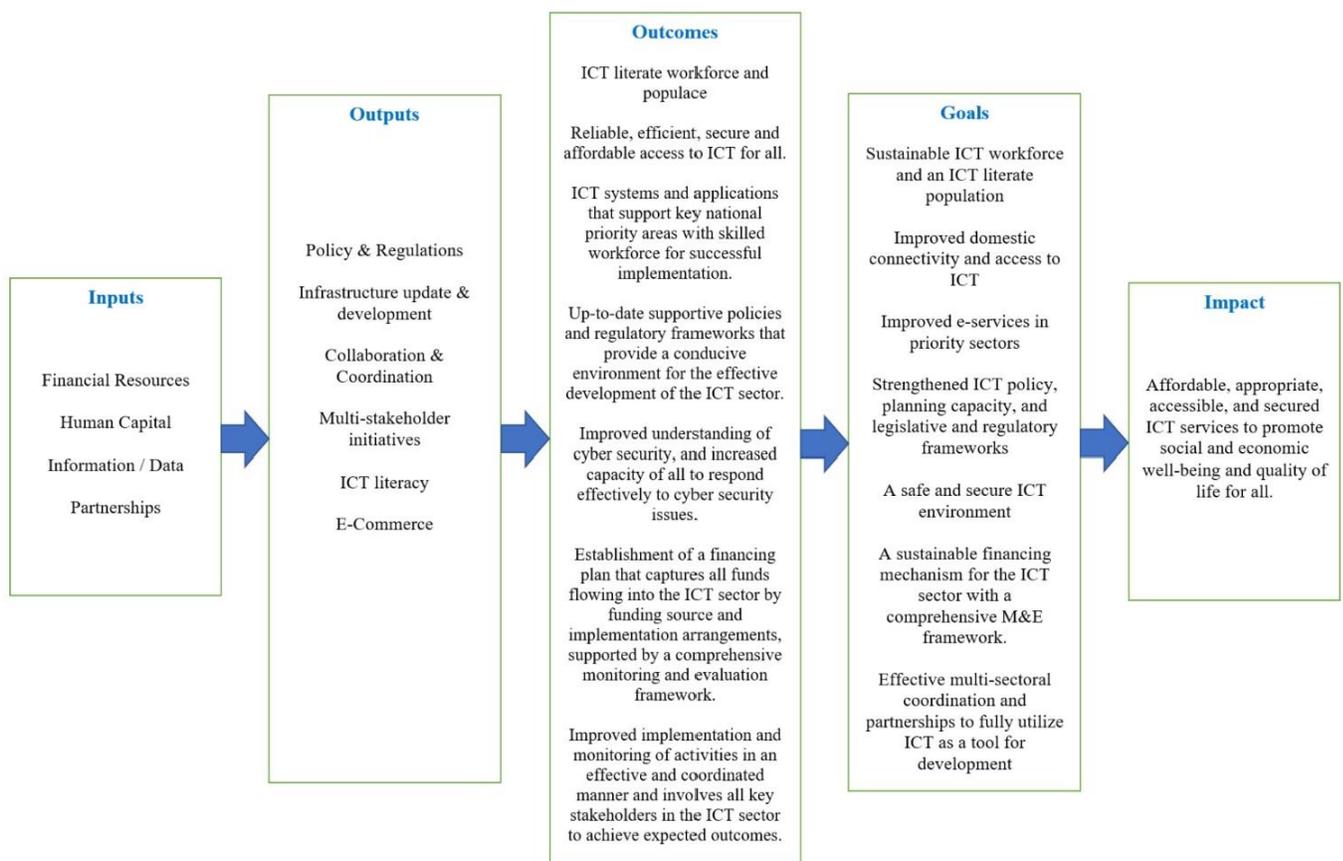
- Number of foreign investors registered
- Number of trainings on the National Payment System conducted
- Rollout of electronic Know-Your-Customer Utility to MTOs

Theory of Change

Over the five years of the ICTSP 2022/23 – 2026/27, the ICT Sector will work towards achieving the following expected outcomes, in pursuit of the sector’s vision for the next five years.

The following logic model is a graphical illustration of how the sector proceeds to achieve the desired impact or vision within five years, also known as the theory of desired change. Key components of this theory includes: Inputs or resources needed to implement identified programs and projects in order to attain desired outcomes to accomplish high level goals, contributing to achieving the desired impact of affordable, appropriate, accessible, and secured ICT services to promote social and economic well-being and quality of life for all.

Diagram 2: Theory of Change Logic Model



Strategic Planning Model

The ICTSP strategic planning process commenced with the SWOT Analysis. This aided the identification of issues that needed to be addressed within the next five years, by analyzing the current situation and how the sector intends to use its strengths, overcome weaknesses, utilize identified opportunities, and manage internal and external threats in order to address the identified issues.

The second phase consists of the Outcomes Mapping exercise, which includes the development of the sector’s vision and mission, goals and objectives, whilst using the SWOT analysis to set the sector plans priority areas. Once the outcomes have been identified, steps or activities needed to achieve these outcomes were then mapped against the opportunities identified in the SWOT Analysis, as well as activities highlighted in other Sector Plans and Corporate Plans. This is to create a link to the ICT Sector Plan proposed activities, and also to avoid duplication of activities across different sectors.

The third and final phase of the planning process includes the resource requirements and costing. In this phase, various resources or inputs were identified, including the leading and responsible agencies, as well as the proposed timeframe to achieve each activity. The following diagram presents the ICTSP Planning process.

Diagram 3: ICTSP Planning Model



Strategic Objectives

Goal 1: Sustainable ICT workforce and an ICT literate population

End of Sector Plan Outcome: An ICT human capacity building programme that is established and implemented in an effective and coordinated manner while involving all key stakeholders in the ICT sector and focusing on endorsed priorities.

Strategic Objective 1.1: Develop a sustainable ICT workforce	
Outcome 1.1.1	Encourage international certification and develop local ICT skills standards and certification.
Outcome 1.1.2	Promote and support the development of qualified personnel in ICT in a sustainable manner to meet labour market needs.
Outcome 1.1.3	Promote and support the use of online learning tools and resources by converting traditional learning to online learning environments.
Outcome 1.1.4	Develop and retain ICT professionals and technical staff by promoting personal development aiming at ensuring continued motivation, energy and productivity over the course of their career.
Strategic Objective 1.2: Improve basic ICT skills of citizens	
Outcome 1.2.1	ICT is integrated into all levels and processes in the education system, thereby producing a knowledge-based and educated society. This will include the early

	childhood, primary, secondary, tertiary and life-long learning institutions, as well as teacher training colleges.
Outcome 1.2.2	Establish ICT district hubs and ensure their sustainability through partnerships with civil society partners.
Outcome 1.2.3	Encourage the development and use of digital libraries and learning resources.

Indicators:

- An international certification standard is developed by Q3 of FY2023/24
- A joint capacity building programme is established for Government and reviewed by Q4 of every Financial Year
- Ongoing online trainings for ICT staff across the public sector
- All Government schools have Internet access by Q4 of FY2025/26
- 90% Government schools have Computer labs
- Bi-annual teacher trainings on ICT conducted
- Bi-annual trainings conducted for community on using ICT by district
- Annual Girls in ICT programme is completed

Goal 2: Improved domestic connectivity and access to ICT

End of Sector Plan Outcome: Reliable, efficient, secure and affordable access to ICT for all.

Strategic Objective 2.1: Establish the appropriate ICT infrastructure and initiatives to support and facilitate national sustainable development	
Outcome 2.1.1	A domestic Internet Exchange Point is established and sustained by all local service providers.
Outcome 2.1.2	Encourage private sector investment in ICT infrastructure by promoting fair and competitive ICT markets.
Outcome 2.1.3	SNBH is upgraded to become the centralized government network linking all ministries, corporations, authorities, schools and communities across Samoa.
Outcome 2.1.4	SNBH is operated and maintained under MCIT.
Outcome 2.1.5	Optimal communication for emergency management is developed with SNHB onward with RAN (Radio Access Network) technology to support disaster management.
Outcome 2.1.6	Strengthen public service broadcasting.
Outcome 2.1.7	Power is an essential component for ICT infrastructure to operate. Ensuring accessible and affordable energy, particularly in rural areas is a national priority.
Outcome 2.1.8	Better management of e-waste to reduce environmental impacts and encourage the recycling/refurbishment and reselling of end user devices to improve affordability.
Strategic Objective 2.2: Ensure that ICT networks, support infrastructure and end user devices are reliable, fast and cost-effective.	
Outcome 2.2.1	Increase accessibility to end user devices.
Outcome 2.2.2	Enhanced postal services that is cost-effective and trustworthy.
Outcome 2.2.3	Create a vibrant ICT industry that is profitable, employs hundreds of Samoans and does not rely on government incentives.

Indicators:

- Universal Access Policy is approved and implemented by Q4 of FY2023/24
- Implement the Universal Access Fund and amend legislation to replace “access” to “service” by Q1 of FY2023/24
- Last Mile Connectivity Project is completed by Q1 of FY2023/24
- Smart Village Project is completed by Q3 of FY2022/23

- Domestic IXP is launched by Q4 of FY2022/23
- All Service Providers with ASN numbers are connected to the IXP by Q4 of FY2022/23
- SNBH upgrade plan of action is developed and implemented by Q1 of FY2023/24
- All government agencies, schools, and community is connected to SNBH by Q4 of FY2023/24
- SNBH becomes a sub-division of MCIT by Q2 of FY2022/23
- ICT incentive policy to promote duty free importation of ICT equipments and smart devices is developed and implemented by Q1 of FY2023/24
- The Innovation and Technology Park pre-feasibility study is completed by Q4 of FY2022/23
- Exemption of spectrum license Policy and Regulations approved and implemented by Q3 of FY2022/23
- Service Providers have contingency/business continuity plans
- A program is established for sustainable and affordable energy
- A national E-environment programme (including e-waste) is established
- Implement the operation of the telecommunication universal access scheme by Q2 of FY2022/23
- Ongoing monitoring of ICT/Telecommunications and broadcasting coverage and quality of service
- Plans are developed to maintain Digital Terrestrial TV (DTTV) services and to include digital radio services by Q2 of FY2022/23
- Co-location is promoted for underserved and unserved areas by Q3 of FY2022/23
- Telecommunication tariff is reviewed and monitored on an annual basis
- Cost models for effective pricing are developed and anti-competitive behavior is monitored by Q2 of FY2023/24
- A subsidy for Lifeline tariff is applied by Q2 of FY2022/23
- Technical service standards for broadcasters is established by Q4 of FY2024/25
- Encouraged investment in standalone solar projects for rural communities by Q4 of FY2024/25
- Regulate satellite sector with a view of sustainable investment by Q2 of FY2023/24
- Conduct Market Analysis on Submarine Cable Market by Q4 of FY2022/23

Goal 3: Improved e-services in priority sectors

End of Sector Plan Outcome: ICT systems and applications that support key national priority areas with skilled workforce for successful implementation.

Strategic Objective 3.1: Promote and sustain E-services in sectors including government, health, environment and education	
Outcome 3.1.1	All Government services are available digitally and is accessible by citizens and businesses from anywhere, anytime, on any device, for every service.
Outcome 3.1.2	Establish a Digital Transformation Unit (DTA) to drive the digital transformation program and coordinate the implementation of a whole-of-society approach to digital transformation.
Outcome 3.1.3	Encourage and support Government sectors to develop e-government plans that may include a single point of contact for government services and centralization of ICT resources.
Outcome 3.1.4	Promote and support e-services in priority sectors including agriculture, health, environment, education, and in the provision of financial services.
Strategic Objective 3.2: Preserve, safeguard and promote the Samoan culture and language	
Outcome 3.2.1	Promote culture and encourage development of local content and use of local language for e-services across all sectors of government.
Outcome 3.2.2	Preserve traditional knowledge and records.
Outcome 3.2.3	Strengthen government archiving systems.

Indicators:

- A Digital Transformation Strategy and Policy is approved and implemented by Q4 of FY2023/24
- A Digital Transformation and Innovation Division is established under MCIT by Q3 of FY2024/25
- Social Media Policy for Government is reviewed, and new Policy developed and implemented by Q3 of FY2023/24
- Freedom of Access to Information Policy is approved and implemented by Q2 of FY2022/23
- All Government agencies have e-government plans
- All Government ministries websites are available in English and Samoan language
- A program is established to digitize historical records
- A program is established to capture traditional knowledge and archived by Q3 of FY2023/24
- Satellite sector is reviewed with a view of sustainable investment by Q2 of FY2023/24
- A centralized area is established for Government Ministries and Agencies offsite back-up by Q4 of FY2023/2024
- A new office is established for Samoa Post to offer remittances services, including account to account services.

Goal 4: Strengthened ICT policy, planning capacity, and legislative and regulatory frameworks

End of Sector Plan Outcome: Development and implementation of up-to-date supportive policies and regulatory frameworks that provide a conducive environment for the effective development of the ICT sector.

Strategic Objective 4.1: ICT policy, legislation and regulatory frameworks that provide an enabling environment for social and economic sustainable development	
Outcome 4.1.1	Encourage and support the development and adoption of national ICT policies.
Outcome 4.1.2	Encourage and support the development of ICT policies for priority sectors (education, health, commerce and trade, environment and tourism).
Outcome 4.1.3	Promote and support the adoption of legislation that encourages electronic commerce.
Outcome 4.1.4	Promote and support the adoption of data protection legislation.
Strategic Objective 4.2: ICT policy, legislation and regulatory frameworks that promote open and non-discriminatory access to ICT	
Outcome 4.2.1	Review licensing schemes to facilitate full benefits of converged technologies and services.
Outcome 4.2.2	Harmonize the radio frequency bands allocated for broadband ICT applications and services.
Outcome 4.2.3	Promote and encourage access to and use of ICT by disadvantaged groups such as women, the disabled and youth.
Strategic Objective 4.3: ICT policy, legislation and regulatory frameworks to address socially undesirable activities	
Outcome 4.3.1	Enforcement of Crimes Act legislation on the misuse of ICT for criminal purposes.
Outcome 4.3.2	Ensure electronic files are admissible in court.
Outcome 4.3.3	Develop appropriate policies and legislations to protect children when they use the Internet.
Outcome 4.3.4	Develop appropriate legal frameworks to combat cybercrime and facilitate international cooperation.
Strategic Objective 4.4: ICT policy and regulations that are consistent with international and national laws, regulations, technical standards, and obligations	
Outcome 4.4.1	Ensure national technical standards incorporate emerging technologies and that they are fully compliant with international standards.
Outcome 4.4.2	Review, update and enforce appropriate communication-related legislations.

Outcome 4.4.3	Ensure compliance with software licensing agreements and encourage the use of Free and Open Source Software.
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Indicators:

- National ICT policies and implementation plans including M&E frameworks are developed and operational
- E-commerce regulation is developed and implemented
- Data protection and privacy legislation is developed and implemented
- ICT for education policies including M&E frameworks are developed and implemented
- ICT for health policies including M&E frameworks are developed and implemented
- Licensing schemes are reviewed annually
- Disadvantaged groups such as women, people with special needs, and youth are included in national ICT policies and legislations
- Cybercrime legislation is developed and implemented
- Electronic files are admissible in court
- Technical standards incorporate emerging technologies and comply with international standards
- Technical standards incorporate the use of Free and Open Source Software
- Establish the feasibility of number of portability and implement by Q4 of FY2023/24
- Review international roaming availability and charges. Develop industry rules to govern same by Q2 of FY2022/23.

Goal 5: A safe and secure ICT environment

End of Sector Plan Outcome: Improved understanding of cyber security, and increased capacity of all to respond effectively to cyber security issues.

Strategic Objective 5.1: Provide a more secure and safer ICT environment	
Outcome 5.1.1	Promote and support security capabilities of IT personnel for the efficient and effective handling of cyber incidents.
Outcome 5.1.2	Strengthen regional partnerships with CERTs across the region.
Outcome 5.1.3	Ensure that cyber security is included in the curricula of local tertiary institutions and training providers.
Outcome 5.1.4	Develop and promote ICT and Internet safety awareness programmes.

Indicators:

- Ongoing cybersecurity trainings conducted for public and private sector
- A National Cybersecurity Strategy is launched by Q4 of FY2022/23
- Ongoing awareness activities conducted for community and other stakeholders
- A Helpline available is activated and users are informed accordingly by Q4 of FY2022/23
- An Information Security Policy is approved and implemented by Q3 of FY2022/23
- Annual Cybersecurity Week is completed
- Ongoing cyber safety awareness through Netsafe hub
- Implement ongoing online safety awareness campaigns

Goal 6: A sustainable financing mechanism for the ICT sector with a comprehensive M&E framework.

End of Sector Plan Outcome: Establishment of a financing plan that captures all funds flowing into the ICT sector by funding source and implementation arrangements, supported by a comprehensive monitoring and evaluation framework.

Strategic Objective 6.1: ICT financing framework to ensure sustainable ICT development	
Outcome 6.1.1	Develop a framework of cooperation among all stakeholders involved in the ICT sector (including regional agencies, the private sector, civil society and development partners), to enable them to work collaboratively to achieve benefits at the national level.
Outcome 6.1.2	Facilitate and assist in securing funding to support the implementation of national ICT policies and plans.
Strategic Objective 6.2: Quality data and guidelines for better policy and effective monitoring and evaluation	
Outcome 6.2.1	Enhance identification and measure of data quality issues, implementing processes to address those issues, and monitoring data quality over time.
Outcome 6.2.2	Develop cost-effective mechanisms for data collection to support policy and M&E activities.

Indicators:

- A national coordination/collaborative framework is established by Q1 of FY2023/24
- A list of new international and regional partners to assist the implementation of national ICT projects and programs by Q4 of FY2026/27
- National financial plans are developed to address priorities identified in national policies and plans, including the ICTSP during mid-year budget reviews

Goal 7: Effective multi-sectoral coordination and partnerships to fully utilize ICT as a tool for development

End of Sector Plan Outcome: Improved implementation and monitoring of activities in an effective and coordinated manner, involving all key stakeholders in the ICT sector to achieve expected outcomes.

Strategic Objective 7.1: Develop a mechanism to coordinate a multi-partnership holistic approach to ICT development with appropriate monitoring and evaluation.	
Outcome 7.1.1	Establish an ICT sector coordination unit for development partner interaction and coordinated resource mobilization and allocation to ICT initiatives.
Outcome 7.1.2	Establish local facilitated communities of practice to enhance sharing of knowledge and experience to contribute to improved coordination of ICT initiatives at local, national and regional level.

Indicators:

- A Database is created by the MCIT Policy and Planning Division to store quantitative and qualitative data collected by Q4 of FY2022/23
- A Sector Coordination Unit is established and operational
- ICT Sector Coordinator is a core member of numerous sector steering committees
- Ongoing monitoring and reporting of the ICTSP 2022/23 – 2026/27
- A mid-term review of the ICTSP is conducted and a report is completed by mid-2026 by Q2 of FY2024/25
- A final review of the ICTSP is conducted and report is completed by Q4 of FY2026/27

Section 5: Sector Programming

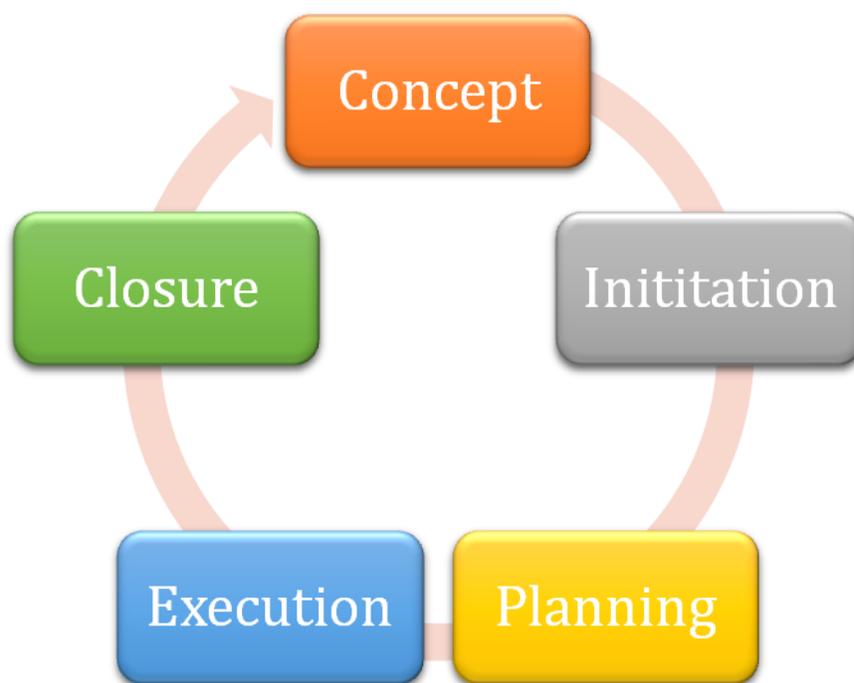
Overview

ICT programs and projects, if well executed, can impact all aspects of life, empowering people by providing more choices, innovative solutions and ways for people to interact, network, seek help, gain access to information, and extend their knowledge and ongoing education. Besides its presence everywhere, ICT has immense economic and social significance, and require responsible management to ensure the work of the sector adds value to people development, and in turn sustainable development of the country as set out under the PDS.

The success of the ICTSP relies heavily on the successful implementation of ICT projects and programs. This includes all ICT projects that cut across the public and private sectors. A consolidated management approach to projects is therefore needed to include all aspects of an ICT project life cycle.

Five stages of an ICT project life cycle is identified: (1) Concept; (2) Initiation; (3) Planning; (4) Execution; and (5) Closure. This is illustrated in the diagram below.

Diagram 4: ICT Project Life Cycle



1. Project Concept

Project Concept Note is a brief outline of the proposed project. It will include an introduction, background, proposed objectives and results and a budget overview. Ideally, a project concept note should not be more than 2-3 pages unless the donor agency has specific requirements. It is important to note that ICT projects are assessed at a high level for their potential value, alignment with national strategies and plans including the PDS, and whether they overlap with other existing or proposed projects.

2. Project Initiation

The initiation stage involves the objective and scope of the proposed project. This will take place after the project idea is defined, evaluated, and authorized to proceed by the donor partner/project committee. It is important to note that an ICT project will not be initiated unless it is aligned with national strategic plans and funds have been committed to it.

3. Project Planning

The planning stage of a project life cycle defines the project scope, develop the project management plan, and identify and schedule activities that will occur within the project. The plan should also identify required human resources, ICT facilities, integration requirements, cost of all components, etc.

4. Project Execution

Project execution is a critical phase in the project lifecycle. Most of the time and effort that go into the implementation of a project are during its execution. Therefore, this stage of the cycle is critically important. It is important to note that change management, training and capacity building will be undertaken throughout the project implementation phase, to ensure that by the time the project is commissioned, all users/stakeholders have been adequately trained and have the requisite skills and competencies to perform their jobs in the new ICT-driven work environment. Further, change management will ensure that an organizational culture that is supportive and enabling for ICT adoption and use has been developed and instituted.

5. Project Closure

The purpose of this stage is to formally close all activities of a project, transfer the complete project to the appropriate authority that commissioned it, or terminate a cancelled project. It includes finalizing all activities across all process groups, and transfer of the completed or cancelled project as appropriate. It also establishes the procedures to coordinate activities needed to verify and document the project deliverables, to formalize acceptance of those deliverables by the client or sponsor, but also to document the reasons for terminating a project if a decision was taken to abort it.

Strategies and Programmes

The ICT sector is very dynamic and cuts across all sectors of government, civil society and the private sector. The successful implementation of the following current programs and projects, including cross-sectoral initiatives, will contribute immensely to the ICTSP's overarching goal.

Table 2: List of current ICT projects

No.	Project	Lead	Funding
1	Domestic Internet Exchange Point (IXP)	MCIT, OOTR	IXP Members, ISOC
2	School Connectivity Project	MESC, MCIT	GoS
3	Last Mile Connectivity Project	MCIT	APT
4	Smart Village Project	MCIT	ITU
5	National Digital ID	SBS	World Bank
6	SamCERT	MCIT	AUS-DFAT

Mainstreaming Cross-Cutting Issues and Constituencies

Cross-cutting issues are relevant to all aspects of the ICT sector development. The PDS identifies five (5) Key Strategic Outcomes that Government as a whole, including the ICT Sector, shall work towards in achieving the overall vision of “Fostering social harmony, safety, and freedom for all”. These Key Strategic Outcomes are:

- KSO 1: Improved Social Development
- KSO 2: Diversified and Sustainable Economy
- KSO 3: Security and Trusted Governance
- KSO 4: Secured Environment and Climate Change
- KSO 5: Structured Public Works and Infrastructure

In an effort to achieve the Government's overall vision by delivering the above key strategic outcomes, the ICT Sector through the implementation of the ICTSP 2022/23 – 2026/27, will work closely with four key sectors, namely (1) Environment; (2) Health; (3) Education; and (4) Commerce.

1. Environment

E-Waste Management

The ICT Sector will work closely with the Environment Sector and partners to achieve the PDS FY2021/22 - FY2025/26 Key Priority Area 16: Effective Environmental Protection and Management Frameworks, by reducing environmental impacts and better management of e-waste. The increased importation of electrical and electronic appliances ranging from large household appliances such as refrigerators and air conditioners, computers and stereo systems, to hand-held digital apparatuses and mobile phones, contribute greatly to environmental and health impacts. The Environment Sector will take the lead in e-waste management with support from the ICT sector and relevant partners. The ICT Sector will also work closely with local electronic retailers to encourage the refurbishment and reselling of second hand mobile phones, tablets and other commonly used devices.

Disaster Management Systems

Existing technology is used for disaster management in several ways in Samoa. Alerts activated from the Hawaii Tsunami centre are received by the National Disaster Management Office (DMO), and then the alerts are disseminated to selected citizens via traditional media such as prerecorded SMS, radio, TV and email. These information alert warning signals are then transmitted locally by using church bells, school bells and sirens to inform the public of approaching danger. Upon receipt of the early warning information, citizens are expected to proceed to designated shelter/recovery centres and to remain there until the danger subsides.

During a disaster response, two-way communication provides better performance in saving lives in disaster affected communities. Two-way communication is essential for collecting information directly from disaster affected communities on their needs for food, water, shelter and medicine. Appropriate ICT systems should be considered as essential aid to people affected by Cyclone, Tsunami or any other national disaster because precise and timely communication saves lives. Therefore, cooperation from Mobile Network Operators and Internet service providers is necessary at all times in an emergency.

2. Health Sector

Samoa's response to the measles outbreak and effective protective measures in place to fight against the COVID-19 pandemic, has proven that ICT is essential to saving lives and sustainable health care delivery. Samoa's e-Health Policy and Strategy 2017 – 2022 was developed to improve healthcare

service delivery, and also provide effective monitoring of performance of Samoa's health services through the dissemination timely of quality health information. The Strategy sets out E-health initiatives and guide its implementations.

The ICT sector will contribute to improving public health care by:

- Supporting the development of ICT skills and competencies in Health Information Systems to increase the efficiency of services.
- Strengthen the district hospitals connectivity and access to technologies through improved local connectivity and affordable smart devices program.

These initiatives will address some of the notable challenges currently facing the health sector including the lack of ICT capabilities to operate health systems, and poor connectivity in rural district hospitals.

3. Education Sector

The emergence of the digital era has brought about a paradigm shift in the way in which modern training systems operate. The aim of the ICTSP 2022/23 – 2026/27, is to maximise the use of ICT to improve the local education system. This is complemented by strengthening the ICT literacy of teachers across all levels, from pre-schools to tertiary and higher education institutions. The majority of current teachers come from a generation that had not experienced the use of information technology in learning, therefore, one cannot gain the benefits of online approaches if they are not acquainted with online learning modalities available with the use of existing technologies.

There are at least 4 modes of learning: Visual, Auditory, Reading/Writing, and Kinesthetic. Visual learners learn best from images, demonstrations, and pictures. Auditory learners learn best from listening to an explanation, such as being engaged in a school lecture. Reading, writing learners learn best from reading and writing habits, whilst kinesthetic learners learn best by interacting physically with the world. Hands-on mode requires touching and playing with objects.

Everyone has their own preferred way of learning, either by one of the above modes or through a combination of them. If information is presented in accordance with their preferred learning style, then people will be able to learn quicker and more efficiently to gain technical skills. Knowledge and skills are required to converting a traditional learning environment to an online environment. E-tools, e-assessments, and key concepts for converting traditional approaches to online environment for learning should be properly introduced, and methods of supporting teaching and learning must be adapted accordingly. Assessments are essential, and e-assessments provide an important way to keep human resources engaged in learning actively and seamlessly.

4. Commerce Sector

Samoa's e-commerce strategy launched in October 2022, is the Government's initiative to take advantage of e-commerce to reduce costs and raise efficiency in doing business. However, there are a number of barriers the government needs to remove for successful implementation of e-commerce in Samoa.

The ICT Sector is continuously working towards improving access and affordability of technology devices. However, even if the population were better connected, e-commerce cannot take off if the majority of the population do not have a bank account or credit card and remain skeptical of mobile payment solutions. One of the notable reasons Samoans seem reluctant to trust online payments, is the absent of a sound legal system and regulatory framework to ensure protection of stakeholders, ranging from individuals to companies and businesses that will interact in e-commerce.

The ICT Sector is committed to strengthening policy and a regulatory framework to support economic developments. This is through the development and incorporation of data protection and privacy legislation to secure consumer protection online. Furthermore, the ICT Sector will support MCIL in rolling out awareness programs of what e-commerce is and how to benefit from it, focusing on small and medium businesses owned by women since current e-commerce facilities are more accessible by well-established male-owned businesses.

Linkages with other Sectors and Plans

The seven (7) identified goals of the ICTSP have potential linkage points with other sectors' policies and plans, where good coordination is needed to ensure that coherent complementary actions and synergies are fostered.

The following table identifies some key linkage points between the ICTSP and other sectors and plans.

Table 3: Linkages with PDS and other Sector Plans

PDS FY2021/22 - FY2025/26	ICTSP Linkages to other Sectors and Plans	
Key Strategic Outcomes (KSO)	ICTSP 2022/23 – 2026/27 Goals	Other Sectors and Plans
<p>KSO 1: Improved Social Development</p> <ul style="list-style-type: none"> • Alleviating Hardship • Improved Public Health • Quality Education • People Empowerment • Skilled Workforce 	<p>Goal 1: Sustainable ICT workforce and an ICT literate population</p> <p>Goal 2: Improved domestic connectivity and access to ICT</p> <p>Goal 3: Improved e-services in priority sectors (government, commerce and trade, health, environment, education and tourism)</p>	<ul style="list-style-type: none"> • Community Sector Plan 2021 - 2026 • Health Sector Plan 2020 - 2030 • Education Sector Plan 2019 – 2024 • Public Admin Sector Plan 2020 – 2025
<p>KSO 2: Diversified and Sustainable Economy</p> <ul style="list-style-type: none"> • Community Development • Agriculture, Fisheries and Aquaculture Productivity • Tourism Revitalization • Business Innovation and Growth • Increased Labour Mobility • Macroeconomic Stability 	<p>Goal 5: A safe and secure ICT environment.</p> <p>Goal 6: A sustainable financing mechanism for the ICT sector with a comprehensive M&E framework.</p>	<ul style="list-style-type: none"> • Community Sector Plan 2021 - 2026 • Tourism Sector Plan (under review) • Finance Sector Plan 2022/2023 – 2026/2027
<p>KSO 3: Security and Trusted Governance</p> <ul style="list-style-type: none"> • Empowered Legislation • Improved Accountability • Dynamic Global Relations and Partnerships 	<p>Goal 4: Strengthened ICT policy, planning capacity, and legislative and regulatory frameworks</p> <p>Goal 5: A safe and secure ICT environment</p>	<ul style="list-style-type: none"> • Law & Justice Sector Plan 2021 – 2025 • Public Admin Sector Plan 2020 – 2025 • Finance Sector Plan 2022/2023 – 2026/2027
<p>KSO 4: Secured Environment and Climate Change</p> <ul style="list-style-type: none"> • Build Climate Resilience • Effective Environmental Protection and Management Frameworks • Enhanced Conservation and Sustainable Use of Natural Resources • Sustainable Energy Development Enhanced 	<p>Goal 2: Improved domestic connectivity and access to ICT</p>	<ul style="list-style-type: none"> • Natural Environment Sector Plan (under review) • Water & Sanitation Sector Plan 2020 – 2025 • Energy Sector Plan 2017 – 2022
<p>KSO: Structured Public Works and Infrastructure</p> <ul style="list-style-type: none"> • Responsive Public Utility Services • Innovative Information, Communication and Technology Use • Consolidated Infrastructure Management 	<p>Goal 7: Effective multi-sectoral coordination and partnerships to fully utilize ICT as a tool for development</p>	<ul style="list-style-type: none"> • Finance Sector Plan 2022/2023 – 2026/2027 • Water & Sanitation Sector Plan 2020 – 2025

Section 6: Sector Policy, Legislation and Institutional Reforms

Overview

The Sector will review, formulate and implement the following policies, legal and regulatory frameworks to support the implementation of the identified programmes and projects:

Policy Reform

Review:

- National Broadcasting Policy 2017
- Internet & Email Policy 2016
- Social Media Policy for Government 2017
- Universal Access Policy 2010

Develop:

- One Government Digital Platform Policy
- Freedom of Access to Information Policy
- Information Security Policy
- ICT Incentive Policy
- Digital Transformation Policy
- E-Commerce Policy
- ICT for Education Policy
- ICT for Health Policy
- ICT for Tourism Policy
- Exemption of Spectrum Fees for ICT Projects Policy

Legal Reform

Review:

- Telecommunications Act 2005
- Broadcasting Act 2010
- Postal Services Act 2010

Develop:

- Cybercrime Legislation
- E-Commerce Legislation
- Data protection and privacy legislation
- Right to Information Legislation

Institutional Reform

The Ministry of Communications and Information Technology will reform its current institutional structure to include the following divisions/units:

- Sector Coordination Unit under the Policy Development and Planning Division
- SNBH Operation and Maintenance Unit under the ICT Secretariat Division
- A Digital Transformation and Innovation Division

Section 7: Sector Resourcing and Financing

Overview

Medium Term Expenditure Framework (MTEF)

The ICT Sector's MTEF map out the financial needs of the sector based on the ICTSP's Strategic Framework for action. MTEF integrates all streams of funding coming into the Sector, consisting of national funding and external grants. The MTEF is to be reviewed annually, with the timing of the review to be aligned with the national budget cycle. Given these are based on forward estimates, the ICTSP mid-term review will update actual figures based on approved annual budgets and final utilization amounts from the concluding financial year of the ICTSP.

Resource Requirements

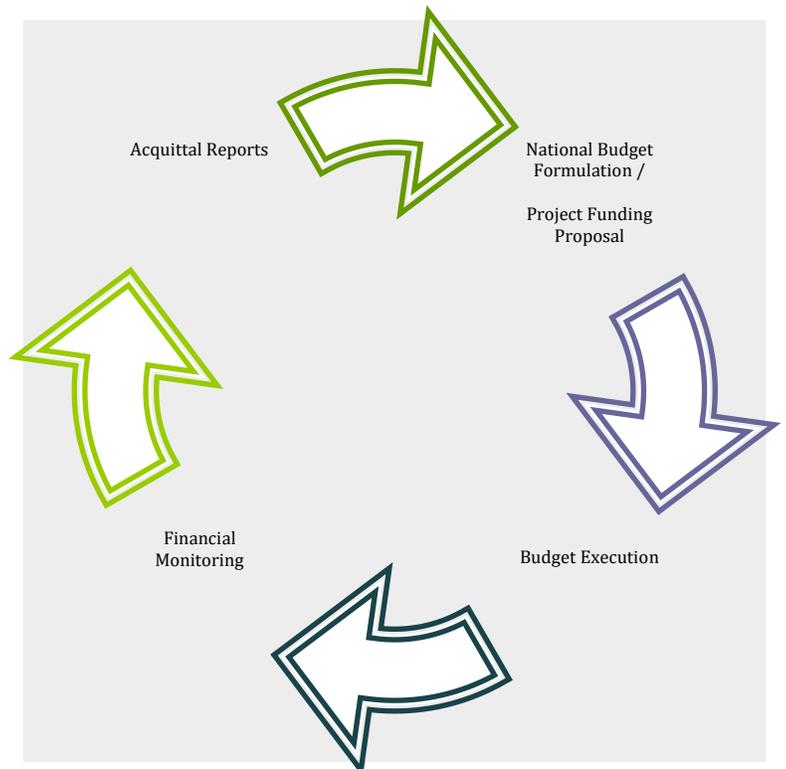
The implementation of the ICTSP 2022/23 – 2026/27 activities will be financed through the approved budget allocation for each of the ICT Sector bodies, including revenue and expenditure forecast developed by the Ministry of Finance. It will also consider funding assistance from various development partners to finance new and improved operating developments proposed under this ICTSP. The Government of Samoa's national budget will fund operational expenditure, which largely comprises of utilities, salaries, and office operating expenses for all agencies involved in the implementation of various activities stipulated in the Plan.

In terms of cross-cutting activities, financial and other related resources will be provisioned by the leading agencies appropriations. Hence, the ICTSP funding sources are spread across the GoS National Budget and various development partners financial and in-kind support.

Resource Mobilization and Financing Framework

Resource mobilization process requires careful consideration of prioritized activities under the ICTSP, with a focus on activities that are measure able, achievable, and have specific timeframes for execution and completion.

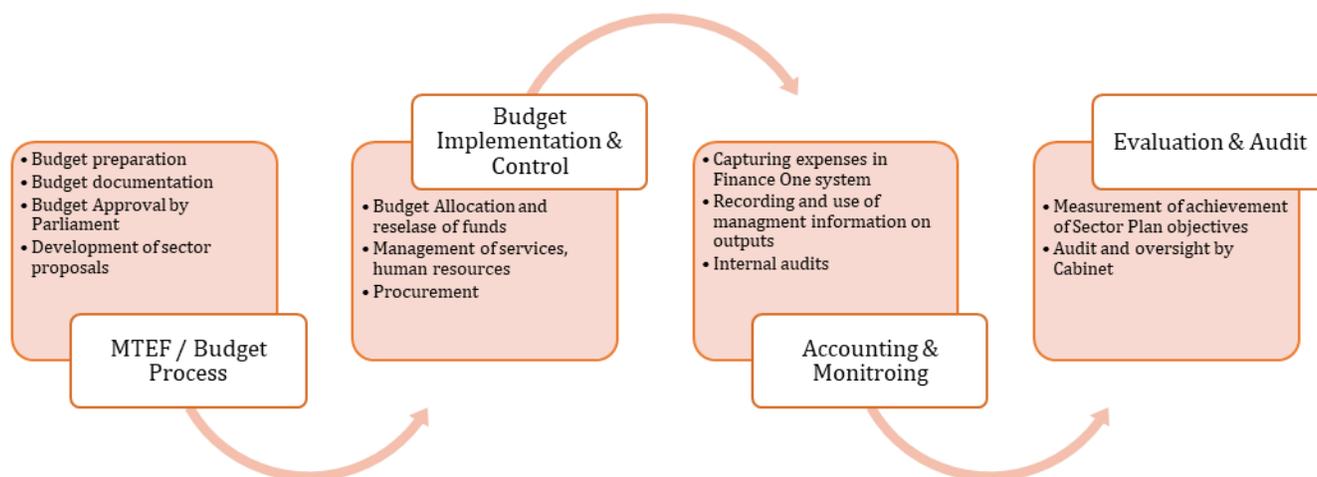
The resource mobilization and financing process as illustrated in Diagram 5, will provide guidance for the sector to assess progress and make adjustments accordingly over the implementation phase of the plan.



Planning and Budgeting Framework

Operational expenditure over the five years of the ICTSP are allocated to each Goal. This is illustrated in Annex III: Cost and Financing Matrix on page 67. The following Diagram is the ICTSP's planning and budgeting framework for setting multi-year objectives of the plan for budget expenditure and ensuring that they are respected in the national budget formulation, approval and execution. The main feature of the ICTSP MTEF is that budget preparation is carried out within a framework, taking into account the resources expected to be available to the government over the medium term.

Diagram 6: Planning and Budgeting Framework



Section 8: Risk Management

Overview

A number of high-level risks and assumptions have been identified which may have a negative impact on the successful implementation of the ICTSP. These risk factors are classified into two categories; internal and external. Internal risks are those that arise from within the ICT Sector and is manageable with appropriate measures in place, whereas external risks are risks the sector may have little or no control over.

Risks and Assumptions

External Risks:

- Natural Disasters and Extreme Weather

Samoa, like many other Pacific Island countries, is prone to natural disasters and other extreme weather events. Notable, these natural occurrences have increased in frequency and severity in recent years, impacting local and regional communications infrastructure. On a national level, these could cause an electromagnetic pulse that collapses electric power grids and triggers a long-term outage in national communications.

- Global Political and Social Implications

The ICT Sector is part of a global network, with regional and international partners the sector works closely with to deliver a number of activities and services. Regional and international relations, economic conditions, and other factors such as geopolitics, may affect the continuation of activities and can impact negatively the successful achievement of the ICTSP’s desired outcomes.

- Supply Chain Vulnerabilities

The ICT Sector depends on suppliers for the products and services that are necessary to deliver ICT services to users. In particular, the sector is dependent on reliable hardware and software. Interruptions in the supply chain can negatively impact the delivery of activities and undermine the achievement of desired outcomes.

- Cyber Vulnerabilities

Any vulnerabilities or threats to functions and capabilities outside of the ICT Sector, such as hardware, software, and operating systems, have the potential to affect network provider services and, therefore, require ongoing attention.

- Differences in priorities with some sectors

Just as other sectors depend on the ICT Sector for day to day operations and communications needs, such as internet connectivity, networks, video teleconferencing, etc., the ICT Sector also has a number of significant dependencies. Hence, disruptions to a dependency sector outcome can affect the overall achievement of the ICTSP desired outcomes.

Internal Risks:

- Lack of human resources, both capacity and capability, within the ICT Sector to deliver key elements of the ICTSP.
- Unavailability of funds to support ICT projects and programs.
- Inconsistent allocation of funds across sectoral activities.

Risk Analysis

Table 4: Risk Assessment

Risks	Impact on:		Risk Level		
	Operational	Timeline	Low	Medium	High
Natural Disasters and Extreme Weather	✓	✓			
Global Political and Social Implications		✓			
Supply Chain Vulnerabilities	✓	✓			
Cyber Vulnerabilities	✓				
Differences in priorities with some sectors		✓			

Lack of human resources	✓	✓			
Unavailability of funds		✓			
Project fatigue (too many projects)		✓			

(Toa, you should reconsider Global Political and Social Implications and put the risk level on either medium or high given the current environment with the Ukraine/Russia conflict, China etc).

Risk Management and Mitigation Strategies

To avoid possible delays and negative impacts in the achievement of the ICTSP goals and activities, the following strategies have been identified to mitigate identified risks.

	Risks	Mitigation Strategy
High Level of Impact	Natural Disasters and Extreme Weather	<ul style="list-style-type: none"> • Installation of backup generators or alternative energy sources. • Provide for alternative communication capabilities in the event of telephone service interruptions • Ensure surge protection is in place for sensitive circuits, such as those serving electronic power supplies associated with computers and automation controls.
	Supply Chain Vulnerabilities	<ul style="list-style-type: none"> • Development of a plan for alternative options
	Lack of human resources	<ul style="list-style-type: none"> • Identifying capacity requirements up-front across the portfolio of work (operations, projects and strategy) and proactively targeting their development to address capability gaps • Identifying and engaging with stakeholders and partnering vendors to provide additional capacity and capability as required.
	Unavailability of funds	<ul style="list-style-type: none"> • Identification of a range of options
Medium Level of Impact	Differences in priorities with some sectors	<ul style="list-style-type: none"> • Improve coordination and monitoring and reporting.
	Project fatigue (too many projects)	<ul style="list-style-type: none"> • Prioritisation of plans, with careful assessment of resources and timeframes for implementation to avoid project fatigue • Allocation of tasks and responsibilities
	Global Political and Social Implications	<ul style="list-style-type: none"> • Integrating social and global political risks into management decision-making

Section 9: Monitoring and Evaluation Framework

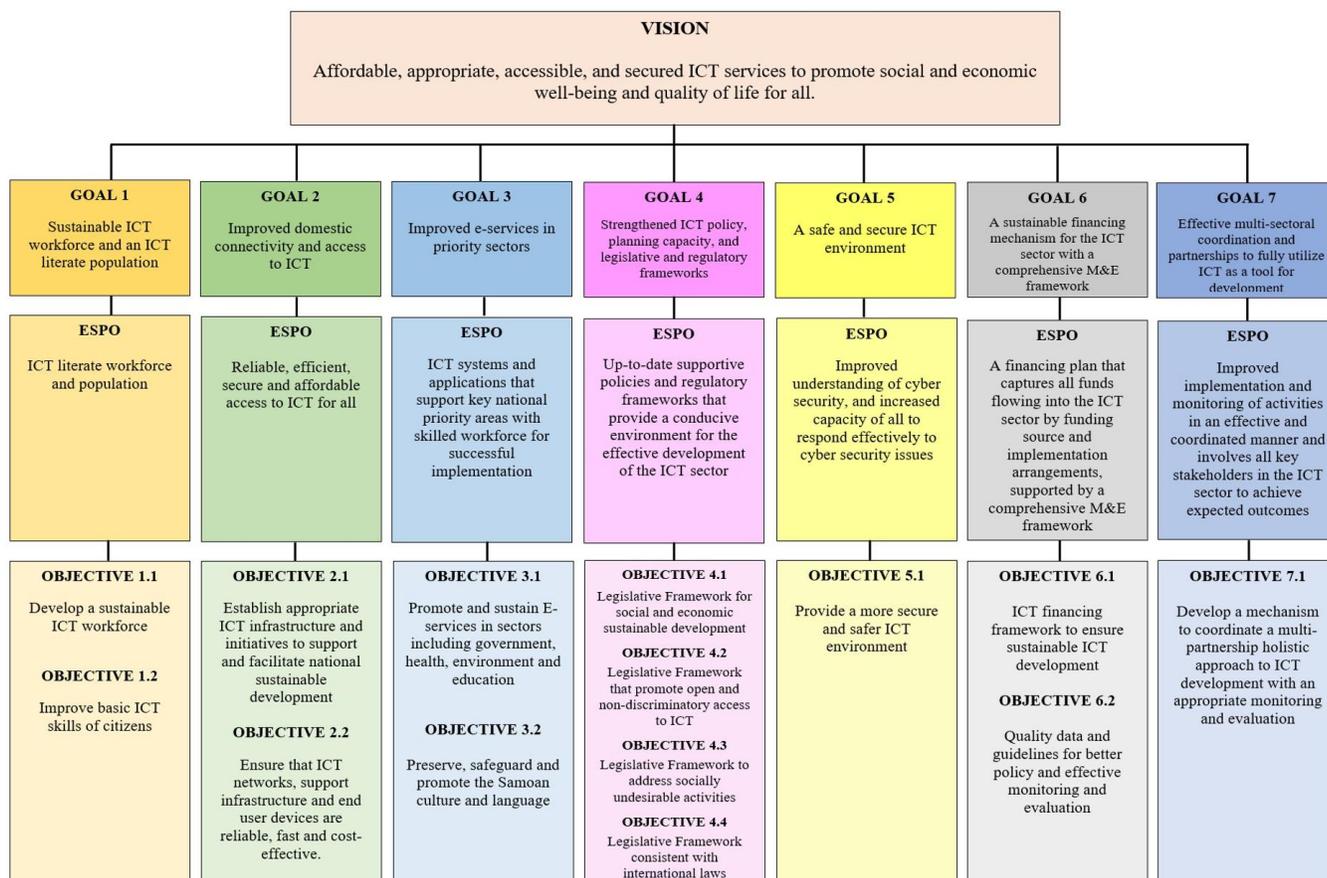
Overview

The monitoring and evaluation framework has been made simple and concise to encourage its use as a regularly applied management tool. The timeframe over which these targets are to be achieved is the

timeframe of the ICTSP 2022/23 – 2026/27. Ongoing monitoring and reporting on results will give Sector Management and stakeholders the opportunity to reflect on what has, or has not worked. This provides the opportunity to overcome any challenges and setbacks in achieving Sector Plan results.

Results Framework

Diagram 5: ICTSP Results Framework



Monitoring and Evaluation Framework

Outputs	FY 2022/23				FY 2023/24				FY 2024/25				FY 2025/26				FY 2026/27				Responsible
	Q1	Q2	Q3	Q4																	
Goal 1: Sustainable ICT workforce and an ICT literate population																					
Strategic Objective 1.1: Develop a sustainable ICT workforce																					
An international certification standard is developed																					MCIT, TWG, SQA, MESC
A joint capacity building programme is established for Government and also include trainings on technical standards																					MCIT, TWG
Number of online trainings for ICT staff across the public sector																					MCIT, ICT-TWG, PSC
Strategic Objective 1.2: Improve basic ICT skills of citizens																					
All Government schools have Internet access																					MESC, MCIT, OOTR
90% of Government schools have Computer labs																					MESC, MCIT
Bi-annual teacher trainings on ICT conducted																					MESC, MCIT
Bi-annual trainings conducted for community on using ICT by district																					MWCSO, MCIT, SITA
Annual Girls in ICT programme is completed																					OOTR
Goal 2: Improved domestic connectivity and access to ICT																					
Objective 2.1: Establish appropriate ICT infrastructure and initiatives to support and facilitate national sustainable development																					
Universal Access Policy is developed and implemented																					MCIT, OOTR
Universal Access Fund is implemented and a legislation to replace “access” to “service” is developed.																					MCIT
Last Mile Connectivity Project completed																					MCIT
Smart Village project is launched																					MCIT
Domestic IXP is launched																					MCIT, OOTR
The Innovation and Technology Park pre-feasibility study is completed																					MCIT
All Service Providers with ASN numbers are connected to the IXP																					MCIT, OOTR
SNBH upgrade plan of action is developed and implemented																					MCIT
All government agencies, schools, hospitals																					MCIT

Section 10: Annexures

Annex I:	Implementation for Results Matrix
Annex II:	Milestone Plan
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Annex I: Implementation for Results Matrix

Indicators	Actions	Responsible	Timeframe	Budget (SAT\$)	Budget Source	Status
Objective 1.1 Develop a sustainable ICT workforce						
A national ICT competency standards for the public sector is developed for e-government and public officials based on international standards.	ICT Training unit is established under the MCIT ICT Division and staff hired	MCIT/PSC	July 2023	\$800,000.00	GoS	
	Establish ICT Workforce Advisory Committee: MCIT, PSC, SQA, MOF	MCIT	October 2023	Nil	N/A	
	Online survey conducted to assess the current level of ICT proficiency across the public sector, addressing different areas of specialization	MCIT	August 2023	Nil	N/A	
	A workshop is conducted to assess the level of ICT needs for all Ministries and Govt bodies.	MCIT, ICT-TWG	September 2023	\$10,000	GoS / Development Partner	
	Conduct an assessment to map current ICT proficiency skills, public sector needs and digital transformation strategy requirements, to identify gaps and assist in developing a national ICT competency standards	MCIT	November 2023	Nil	N/A	
	Launch the National ICT competency standards during the National ICT/Cyber week	MCIT	March 2024	\$5,000	GoS / Development Partner	
	Survey assessment to ensure the National ICT competency standards is integrated into all Ministries and Government bodies Internal Workforce Plans	MCIT, PSC	March 2025	Nil	N/A	
A joint capacity building programme is established for Government and updated every year	A program on local ICT needs training for public officials is developed, based on the National ICT competency standards	MCIT	June 2023	Nil	N/A	
	Submit proposal for funding and TA to conduct trainings	MCIT	August 2023	Nil	N/A	
	Training workshops conducted	MCIT	Ongoing	\$20,000	GoS / Development Partner	
	Training workshop report completed and published	MCIT	June 2027	Nil	N/A	
Online trainings for ICT staff across the public sector	Application for online trainings offered by ITU, APT, CTO and others are shared to ICT-TWG based on the ICT Workforce Development Plan.	MCIT, ICT-TWG	Ongoing	Nil	N/A	
	Application forms endorsed and submitted to organizer	MCIT	Ongoing	Nil	N/A	
	Update of trainings and certification database to inform new planned trainings	MCIT	Ongoing	Nil	N/A	
Objective 1.2: Improve basic ICT skills of citizens						
All Government schools have Internet access	Monitoring visits of project phase reports received from Bluwave wireless for submission of payments	MCIT/MESC	Completion of each phase	\$6,000.00	GoS	
	Establish and sign agreement between MESC and MCIT on the establishment and maintenance of school	MCIT/MESC	July 2024	Nil	N/A	

90% of Government schools have Computer labs	computer laps					
	Assessment survey of school computer laps	MESC	July 2024	\$5,000.00	GoS	
	Submit proposal for funding	MCIT/MESC	July 2024	Nil	N/A	
	Project launch and implementation with clear allocation of responsibilities amongst all parties involved	MCIT/MESC	December 2025	\$20,000.00	GoS, Development Partner	
	Quarterly reports on project implementation	MCIT/MESC	Ongoing	Nil	N/A	
	Completion of project and project report	MCIT/MESC	June 2027	Nil	N/A	
Bi-annual teacher trainings on ICT conducted	Survey assessment of current teacher literacy	MESC	June 2023	\$10,000.00	GoS	
	Develop plan for implementation of training programs	MCIT/MESC	August 2023	Nil	N/A	
	Submit funding proposal/PK for project	MCIT/MESC	August 2023	Nil	N/A	
	Conduct bi-annual trainings	MCIT	Ongoing	\$50,000.00	Gos, Development Partner	
Bi-annual trainings conducted for community on using ICT by district	Meeting with MWCSD to discuss and develop plan for implementation of trainings/workshops for all districts	MCIT/MWCSD	July 2023	Nil	N/A	
	Submit funding proposal/PK for project	MCIT/MWCSD	August 2023	Nil	N/A	
	Conduct bi-annual trainings / workshops	MCIT	Ongoing	\$50,000.00	GoS, Development Partner	
Annual Girls in ICT programme is completed	Develop plan for Girls in ICT	OOTR	Ongoing	Nil	N/A	
	Conduct Girls in ICT event	OOTR	Ongoing	\$20,000.00	GoS, Development Partner	
Objective 2.1: Establish appropriate ICT infrastructure and initiatives to support and facilitate national sustainable development						
Universal Access Policy is developed and implemented	Review of Universal Access Policy 2010	MCIT	December 2022	Nil	N/A	
	Identify gaps and propose recommendations	OOTR	December 2022	Nil	N/A	
	Draft new Universal Access Policy	OOTR	December 2022	Nil	N/A	
	Consultations with all stakeholders on draft policy	OOTR	January 2023	\$5,000.00	GoS	
	Update draft policy	OOTR	January 2023	Nil	N/A	
	Submit final draft policy for approval	OOTR	February 2023	Nil	N/A	
	Regular monitoring of the implementation of the new Universal Access Policy	OOTR	Ongoing	Nil	N/A	
Last Mile Connectivity Project completed	Follow up APT on proposal submission for CII of the project	MCIT	November 2022	Nil	N/A	
	MCIT to confirm acceptance of project award for implementation	MCIT	December 2022	Nil	N/A	
	APT informs MCIT on the outcome of the project nominated expert	MCIT	December 2022	Nil	N/A	
	Project Implementation	MCIT	January 2023 – September 2024	USD200,000	Government of Japan	
	Project completion and reports are developed	MCIT	Sept 2024	Nil	N/A	

Smart Village project is launched	Submission of project concept note to Honorable Minister for his information on the project	MCIT	December 2022	Nil	N/A	
	Follow up APT on project proposal submission	MCIT	December 2022	Nil	N/A	
Domestic IXP is launched	Follow up ISOC on procurement of equipments and proposed arrival date	MCIT	Nov 2022	Nil	N/A	
	Ensure facility (NUS) is well established for hosting the IXP and all necessary requirements are in place	MCIT/NUS	Nov 2022	Nil	N/A	
	Launching of the IXP	MCIT		\$20,000.00	GoS	
All Service Providers with ASN numbers are connected to the IXP	All IXP members sign agreement	MCIT	Dec 2022	Nil	N/A	
	Regular monitoring of IXP operation and ensure agreements are well followed by all members	MCIT	Ongoing	Nil	N/A	
SNBH upgrade plan of action is developed and implemented	Develop SNBH plan of action and submit for approval	MCIT	Nov 2022	Nil	N/A	
	Ongoing meetings with development partners for possible funding of SNBH upgrade	MCIT	Ongoing	Nil	N/A	
	Implement the upgrade of the SNBH and all necessary requirements needed are in place	MCIT	June 2023	\$85,113,500.00	GoS, Development Partner	
	Ongoing monitoring of the upgrade implementation against approved plan	MCIT	Ongoing	Nil	N/A	
All government agencies, schools, hospitals and community are connected to SNBH	Conduct meetings with all stakeholders for the full utilization of the SNBH and report on recommendations	MCIT	Ongoing	Nil	N/A	
	Regular monitoring and update reports on utilization of SNBH	MCIT	Ongoing	\$30,000.00	GoS	
SNBH becomes a sub-division of MCIT	Submission of PK for cabinet approval of new proposed positions	MCIT	Nov 2022	Nil	N/A	
	Proposed new positions is approved by Cabinet	MCIT	Nov 2022	Nil	N/A	
	Advertisement and selection process for the new recruits	MCIT	Nov 2022	Nil	N/A	
	Procurement of equipments and resources		Dec 2022	\$20,000.00	GoS, Development Partner	
Regulate satellite sector with a view of sustainable investment	Ongoing monitoring and enforcement of satellite sector	OOTR	December 2024	Nil	N/A	
Market Analysis on Submarine cable market	Conduct Market Analysis on Submarine cable market and submit report for approval	OOTR	June 2023	Nil	N/A	
Objective 2.2: Ensure that ICT networks, support infrastructure and end user devices are reliable, fast and cost-effective.						
ICT incentive policy is developed to promote duty free importation of ICT equipments and smart devices.	Develop draft ICT incentive policy	MCIT	January 2023	Nil	N/A	
	Consult with relevant stakeholders	MCIT	February 2023	\$5,000.00	GoS	
	Update draft policy	MCIT	February 2023	Nil	N/A	
	Submit policy document for approval	MCIT	March 2023	Nil	N/A	
	Policy is approved by Cabinet	MCIT	April 2023	Nil	N/A	
Exemption of spectrum license Policy and Regulations approved and implemented	Develop draft Exemption of spectrum license fees policy		August 2022	Nil	N/A	
	Consult with relevant stakeholders	MCIT	January 2023	\$5,000.00	GoS	
	Update draft policy	MCIT	January 2023	Nil	N/A	

	Submit policy document for approval	MCIT	March 2023	Nil	N/A	
	Policy is approved by Cabinet	MCIT	April 2023	Nil	N/A	
Service Providers have contingency/business continuity plans	Meeting with Service providers to discuss benefits of having in place continuity plans	OOTR	June 2026	Nil	N/A	
	Ongoing monitoring of continuity plans	OOTR	Ongoing	\$5,000.00	GoS	
A program is established for sustainable and affordable energy.	Liaise with MNRE on support required for establishing sustainable and affordable energy program/project	MNRE	Ongoing	Nil	N/A	
A national E-environment programme (including e-waste) is established	Liaise with MNRE on support required for the establishment and implementation of a national e-environment program/project	MNRE	Ongoing	Nil	N/A	
Ongoing monitoring of ICT/Telecommunications and broadcasting coverage and quality of service	Ongoing monitoring of ICT/Telecommunications and broadcasting coverage and quality of service and submit report for approval	OOTR	Ongoing	\$5,000.00	GoS	
Plans are developed to maintain Digital Terrestrial TV (DTTV) services and to include digital radio services	Develop plans for maintenance of DTTV services and digital radio services and submit for approval	OOTR	December 2022	Nil	N/A	
Co-location is promoted for underserved and unserved areas	Develop plans for promotion of co-location for underserved and unserved basis	OOTR	March 2023	Nil	N/A	
	Implementation of approved plans	OOTR	Ongoing	\$50,000.00	GoS	
Telecommunication tariff is reviewed and monitored on an annual basis	Review telecommunication tariff and submit report for approval	OOTR	Ongoing	Nil	N/A	
Cost models for effective pricing are developed and anti-competitive behavior is monitored	Cost models for effective pricing are developed	OOTR	December 2023	Nil	N/A	
	Monitoring of anti-competitive behavior	OOTR	Ongoing	\$50,000.00	GoS	
A subsidy for Lifeline tariff is applied	A lifeline tariff subsidy is approved and applied	OOTR	December 2022	Nil	N/A	
Technical service standards for broadcasters is established	Develop Technical service standards for broadcasters	OOTR	June 2025	Nil	N/A	
	Meeting with broadcasting industry	OOTR	June 2025	Nil	N/A	
	Implementation and monitoring of technical standards	OOTR	Ongoing	\$10,000.00	GoS	
Encouraged investment in standalone solar projects for rural communities	Ongoing awareness to promote and encourage investment in standalone solar projects for rural communities	OOTR	Ongoing	\$30,000.00	GoS/ Development Partner	
Objective 3.1: Promote and sustain E-services in sectors including government, health, environment and education						
A Digital Transformation Strategy and Policy is developed and implemented	Regular meetings with ITU and UNDP to update and discuss way forward for each stage of the strategy and policy process	MCIT	Ongoing	Nil	N/A	
	Hold stakeholder workshop on Draft Digital Transformation strategy and report responses back to ITU and UNDP	MCIT	Feb 2023	\$10,000.00	GoS, Development Partners	
	Work with ITU and UNDP to update the strategy based on stakeholder feedbacks and recommendations	MCIT	Ongoing	Nil	N/A	
	Launching of the Digital Transformation Strategy	MCIT	June 2024	\$20,000.00	GoS,	

					Development Partners	
	Implementation of the Digital Transformation Strategy, including the drafting of the Digital Transformation Policy	MCIT	July 2024	Nil	N/A	
	Conduct workshop for draft Digital Transformation Policy with all relevant stakeholders	MCIT/ITU/UNDP	August 2024	\$10,000.00	GoS, Development Partners	
	Update draft policy document according to stakeholder feedback	MCIT/ITU/UNDP	September 2024	Nil	N/A	
	Submit Digital Transformation Policy for approval	MCIT	October 2024	Nil	N/A	
	Follow up FK for Digital Transformation Policy	MCIT	November 2024	Nil	N/A	
A Digital Transformation and Innovation Division is established under MCIT	Submit PK and all relevant documents including JDs for approval	MCIT	December 2022	Nil	N/A	
	Circulate FK to PSC and MOF for usual support	MCIT/PSC/MOF	January 2023	Nil	N/A	
	Advertise and selection process for new positions	MCIT/PSC	January 2023	Nil	N/A	
	Procurement of office equipments and resources	MCIT/MOF	February 2023	\$100,000.00	GoS, Development Partners	
Social Media Policy for government reviewed and new policy developed	Draft review of policy and submit for approval	MCIT	March 2023	Nil	N/A	
	Draft new Social Media Policy and circulate for inputs	MCIT	March 2023	Nil	N/A	
	Conduct consultation workshop with all relevant stakeholders	MCIT	April 2023	\$5,000.00	GoS	
	Update draft policy document according to stakeholder feedback	MCIT	April 2023	Nil	N/A	
	Submit policy for approval	MCIT	June 2023	Nil	N/A	
	Follow up FK for policy and circulate to all Govt agencies to commence implementation	MCIT	June 2023	Nil	N/A	
	Quarterly survey assessment of policy implementation	MCIT	Ongoing	\$3,000.00	GoS	
	Prepare and submit implementation report for approval	MCIT	Ongoing	Nil	N/A	
Freedom of Access to Information Policy is approved	Submit policy for cabinet approval	MCIT	Nov 2022	Nil	N/A	
	Follow up FK for policy and commence implementation	MCIT	Nov 2022	Nil	N/A	
	Meeting with UNESCO to secure funding for implementation of Policy	MCIT	Nov 2022	Nil	N/A	
	Sign contract with UNESCO for funding of the online portal and trainings	MCIT	Nov 2022	Nil	N/A	
	Procurement of supplier for development of online requesting portal	MCIT	Dec 2022	\$20,000.00	UNESCO	
	Ensure the online requesting portal is established and operating	MCIT	Dec 2022	Nil	N/A	
	Conduct trainings for all relevant officials on the implementation of the online portal	MCIT	Jan 2023	\$10,000.00	UNESCO	
	Quarterly report on the operation of the online requesting	MCIT	Feb 2023	Nil	N/A	

	portal					
All Government agencies have an e-government plans	Survey assessment on the status of e-government plans for all Govt agencies	MCIT	January 2024	\$3,000.00	GoS	
	Prepare report and provide recommendations for further improvements (if relevant)	MCIT	June 2024	Nil	N/A	
Satellite sector is reviewed with a view of sustainable investment	Conduct review of satellite sector with a focus on sustainable investment	OOTR	December 2023	Nil	N/A	
Objective 3.2: Preserve, safeguard and promote the Samoan culture and language						
All Government ministries websites are available in English and Samoan language	Whole of Government survey assessment on current status of websites	MCIT	June 2025	\$3,000.00	GoS	
	Prepare plan of action for implementation of translation requirements	MCIT	July 2025	Nil	N/A	
	Regular monitoring of Government websites and report on implementation	MCIT	Ongoing	Nil	N/A	
A program is established to digitize historical records	Survey assessment of current digitization activities in relevant ministries	MCIT	December 2023	\$5,000.00	GoS	
	Develop a workplan and budget for proposal	MCIT	December 2023	Nil	N/A	
	Submit proposal for possible funding arrangements	MCIT	January 2024	Nil	N/A	
	Sign contract with potential development partner	MCIT	April 2024	Nil	N/A	
	Initiate digitization project	MCIT	May 2024	\$50,000.00	Development Partner	
	Develop report and submit for approval and publication	MCIT	June 2025	Nil	N/A	
A program is established to capture traditional knowledge and archived	Develop archiving plan of action and needs assessment	MCIT	December 2022	Nil	N/A	
	Meeting with development partners to discuss archiving plan and needs assessment	MCIT	January 2023	Nil	N/A	
	Procurement of relevant equipments	MCIT	April 2023	\$100,000.00	Development Partner	
	Implementation of archiving records at Radio 2AP	MCIT	April 2023	\$50,000.00	Development Partner	
	Develop completion and financial report	MCIT	July 2023	Nil	N/A	
Objective 4.1: ICT policy, legislation and regulatory frameworks that provide an enabling environment for social and economic sustainable development						
National ICT policies and implementation plans including M&E frameworks are developed and operational	Ongoing monitoring of existing policies and recommendations/advice for the development of new policies	MCIT	June 2027	Nil	N/A	
E-commerce regulation is developed and implemented	Meeting with MCIL and AG on drafting the E-commerce legislation	MCIT/MCIL/OAG	January 2026	Nil	N/A	
	Draft legislation	MCIT/MCIL/OAG	April 2026	Nil	N/A	
	Conduct consultation workshops with all relevant stakeholder on draft legislation	MCIT/MCIL/OAG	May 2026	\$20,000.00	GoS/ Development Partner	
	Update draft legislation according to feedback from stakeholders	MCIT/MCIL/OAG	June 2026	Nil	N/A	

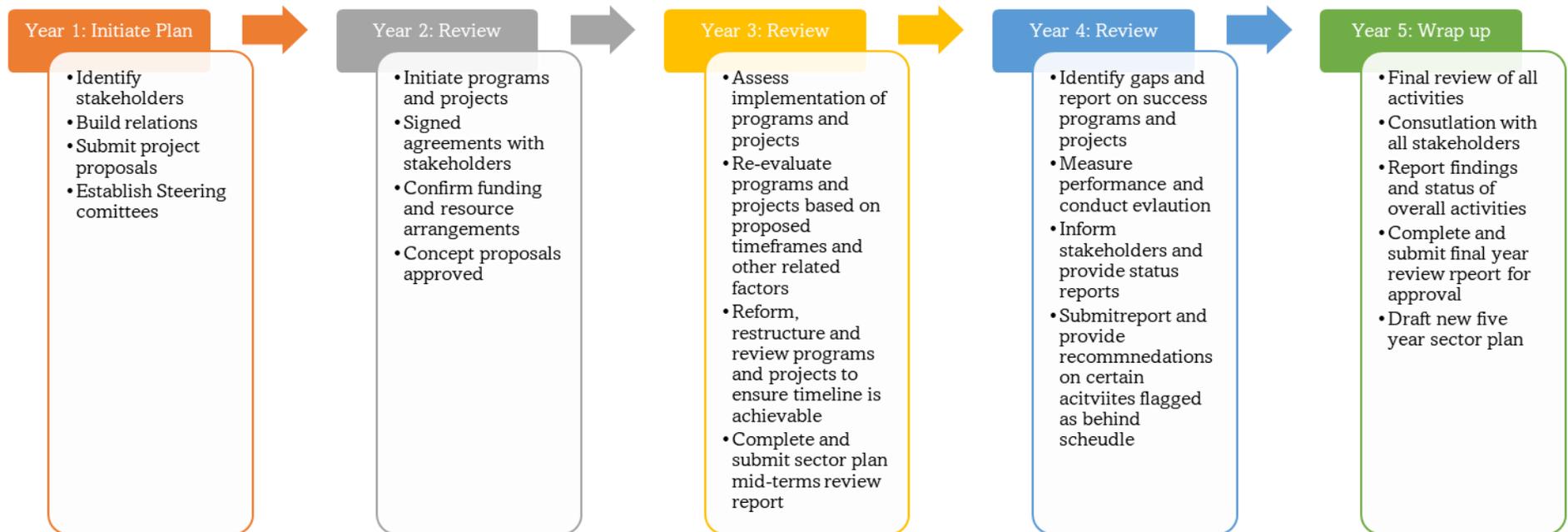
	Submit e-commerce bill for parliament discussion	MCIT/MCIL/OAG	September 2026	Nil	N/A	
	Enforcement of the E-commerce legislation	MCIT/MCIL/OAG	September 2026	Nil	N/A	
Data protection and privacy legislation is developed and implemented	Meeting with OAG on drafting the data protection and privacy legislation	MCIT/OAG	March 2025	Nil	N/A	
	Draft legislation	MCIT/OAG	April 2025	Nil	N/A	
	Conduct consultation workshops with all relevant stakeholder on draft legislation	MCIT	August 2025	\$20,000.00	GoS, Development Partner	
	Update draft legislation according to feedback from stakeholders	MCIT/OAG	October 2025	Nil	N/A	
	Submit data protection and privacy bill for parliament endorsement	MCIT	December 2025	Nil	N/A	
	Enforcement of the data protection and privacy legislation	MCIT	December 2025	Nil	N/A	
Objective 4.2: ICT policy, legislation and regulatory frameworks that promote open and non-discriminatory access to ICT						
Licensing schemes are reviewed annually	Review of licensing schemes	OOTR	Ongoing	Nil	N/A	
Disadvantaged groups such as women, people with special needs, and youth are included in national ICT policies and legislations	Ensure the drafting and consultation workshops for all new ICT policies includes disadvantaged groups	MCIT	Ongoing	Nil	N/A	
Objective 4.3: ICT policy, legislation and regulatory frameworks to address socially undesirable activities						
Cybercrime legislation is developed and implemented	Samoa signs and ratify the Budapest Convention on cybercrime	OAG	June 2025	Nil	N/A	
	Meeting with OAG on drafting the cybercrime legislation	MCIT/OAG	August 2025	Nil	N/A	
	Draft legislation	MCIT/OAG	October 2025	Nil	N/A	
	Conduct consultation workshops with all relevant stakeholder on draft legislation	MCIT/OAG	January 2026	\$20,000.00	GoS	
	Update draft legislation according to feedback from stakeholders	MCIT/OAG	March 2026	Nil	N/A	
	Submit data cybercrime bill for parliament discussion	MCIT/OAG	June 2026	Nil	N/A	
	Enforcement of the cybercrime legislation	MCIT/OAG	June 2026	Nil	N/A	
Electronic files are admissible in court	Meeting with MJCA to discuss requirements	MCIT/MJCA	June 2025	Nil	N/A	
	Implement approved activities for admissible of electronic files in court	MCIT/MJCA	August 2025	Nil	N/A	
	Develop report on project completion and maintenance requirements	MCIT	September 2025	Nil	N/A	
Objective 4.4: ICT policy and regulations that are consistent with international and national laws, regulations, technical standards, and obligations						
Technical standards incorporate emerging technologies and comply with international standards.	Drafting of technical standards	MCIT	January 2024	Nil	N/A	
	Consultation workshop with public sector agencies on the draft technical standards	MCIT	March 2024	\$5,000.00	GoS, Development	

					Partner	
	Update drafted technical standards to incorporate inputs from public sector consultation workshop	MCIT	May 2024	Nil	N/A	
	Circulate final draft technical standards for further improvements	MCIT	May 2024	Nil	N/A	
	Technical standards that incorporate emerging technologies and comply with international standards approved and monitored over the lifetime of the sector plan	MCIT	June 2024	Nil	N/A	
Technical standards incorporate the use of Free and Open Source Software	Drafting of technical standards	MCIT	January 2024	Nil	N/A	
	Consultation workshop with public sector agencies on the draft technical standards	MCIT	March 2024	\$5,000.00	GoS, Development Partner	
	Update drafted technical standards to incorporate inputs from public sector consultation workshop	MCIT	May 2024	Nil	N/A	
	Update drafted technical standards to incorporate inputs from public sector consultation workshop	MCIT	May 2024	Nil	N/A	
	Circulate final draft technical standards for further improvements	MCIT	June 2024	Nil	N/A	
	Technical standards that incorporate the use of Free and Open Source Software is approved and implemented	MCIT	June 2024	Nil	N/A	
Objective 5.1: Provide a more secure and safer ICT environment						
Ongoing cybersecurity trainings conducted for public and private sector	Develop training plans and submit for approval	MCIT	December 2022	Nil	N/A	
	Implement trainings according to approved plans	MCIT	Ongoing	\$50,000.00	GoS, Development Partner	
	Develop report and evaluate participants responses to inform future training programs based on participants and organizational needs	MCIT	Ongoing	Nil	N/A	
A National Cybersecurity Strategy is launched	Draft National Cybersecurity Strategy	MCIT	February 2023	Nil	N/A	
	Conduct consultation workshop with all stakeholders on draft National Cybersecurity Strategy	MCIT	April 2023	\$5,000.00	GoS, Development Partner	
	Update strategy based on stakeholder feedback	MCIT	April 2023	Nil	N/A	
	Submit Strategy for approval	MCIT	May 2023	Nil	N/A	
	Launch the National Cybersecurity Strategy	MCIT	June 2023	\$20,000.00	GoS, Development Partner	
	Ongoing monitoring of Strategy M&E	MCIT	Ongoing	Nil	N/A	
Ongoing awareness activities conducted for community and other stakeholders	Submit proposal for potential funding	MCIT	January 2023	Nil	N/A	
	Signed contract for funding arrangements	MCIT	March 2023	Nil	N/A	
	Conduct awareness activities and produce reports	MCIT	Ongoing	\$50,000.00	GoS, Development	

					Partners	
A Helpline available is activated and users are informed accordingly	A Helpline available is activated and users are informed accordingly	MCIT	June 2023	\$50,000.00	GoS, Development Partner	
An Information Security Policy is approved and implemented	Develop draft Information Security Policy	MCIT	December 2022	Nil	N/A	
	Conduct consultation workshop with relevant stakeholders	MCIT	January 2023	\$5,000.00	GoS	
	Update policy according to stakeholder feedback and input	MCIT	January 2023	Nil	N/A	
	Submit final policy to NPCC meeting for review	MCIT	February 2023	Nil	N/A	
	Submit cabinet submission for policy approval	MCIT	February 2023	Nil	N/A	
Annual Cybersecurity week is completed	Develop program and circulate invitation letters	MCIT	Ongoing	Nil	N/A	
	Confirm venue, catering and other relevant logistics	MCIT	Ongoing	\$20,000.00	GoS, Development Partners	
	Develop completion report and submit for approval	MCIT	Ongoing	Nil	N/A	
Ongoing cyber safety awareness through Netsafe hub	Develop cyber safety awareness program	MCIT	Ongoing	Nil	N/A	
	Conduct cyber safety awareness programs including online awareness activities	MCIT	Ongoing	\$30,000.00	GoS, Development Partners	
	Develop report and submit for approval and publication	MCIT	Ongoing	Nil	N/A	
Objective 6.1: ICT financing framework to ensure sustainable ICT development						
A national coordination/collaborative framework is established	Meeting with all relevant stakeholders	MCIT	January 2023	\$1,000.00	GoS	
	Develop national coordination/collaborative framework	MCIT	February 2023	Nil	N/A	
	Circulate draft national coordination/collaborative framework to all relevant stakeholders for review and inputs	MCIT	March 2023	Nil	N/A	
	Finalize national coordination/collaborative framework	MCIT	June 2023	Nil	N/A	
	Regular monitoring of the national coordination/collaborative framework	MCIT	Ongoing	Nil	N/A	
A list of new international and regional partners to assist the implementation of national ICT projects and programs	Develop list of international and regional partners to assist the implementation of national ICT projects and programs	MCIT, OOTR, SPL	Ongoing	Nil	N/A	
	Publish list on ICT sector websites	MCIT, OOTR, SPL	Ongoing	Nil	N/A	
National financial plans are developed to address priorities identified in national policies and plans, including the ICTSP	Develop national financial plans	MCIT	December 2022	Nil	N/A	
	Circulate national financial plans for review and inputs	MCIT, OOTR, SPL	December 2022	Nil	N/A	
	Finalize and submit national financial plan for approval	MCIT	December 2022	Nil	N/A	
Objective 6.2: Quality data and guidelines for better policy and effective monitoring and evaluation						
A Database is created by the MCIT Policy and Planning Division to store quantitative and qualitative data collected	Develop plan for database development including data to be collected and stored	MCIT	December 2022	Nil	N/A	
	Draft internal data storage policy	MCIT	January 2023	Nil	N/A	
	Circulate draft internal data storage policy for review and	MCIT	February 2023	Nil	N/A	

	feedback					
	Finalize and submit final policy for approval and implementation	MCIT	June 2023	Nil	N/A	
	Collection of data	MCIT	Ongoing	Nil	N/A	
	Storage and update database	MCIT	Ongoing	Nil	N/A	
Objective 7.1: Develop a mechanism to coordinate a multi-partnership holistic approach to ICT development with an appropriate monitoring and evaluation.						
A Sector Coordination unit is established and operational	Draft proposal and JDs for new positions	MCIT	December 2022	Nil	N/A	
	Proposal submitted to Cabinet for approval	MCIT	December 2022	Nil	N/A	
	FK submitted to MOF and PSC for usual support	MCIT	March 2023	Nil	N/A	
	Advertisement and selection process for new positions	PSC	March 2023	Nil	N/A	
	Procure equipments and resources	MCIT/MOF	May 2023	\$50,000.00	GoS	
ICT Sector Coordinator is a core member of numerous sector steering committees	Attend and provide input on behalf of the ICT sector and report back on meeting discussions and/or resolutions	MCIT	Ongoing	Nil	N/A	
Ongoing monitoring and reporting of the ICTSP 2023 – 2028	Regular monitoring of ICTSP 2023 – 2028 and develop report for submission and approval	MCIT	Ongoing	Nil	N/A	
A mid-term review of the ICTSP is conducted and a report is completed	Draft Mid-Term Review report	MCIT	December 2024	Nil	N/A	
	Conduct workshop consultation with relevant stakeholders on draft mid-term review report	MCIT, OOTR, SPL	December 2024	\$30,000.00	GoS	
	Revise and update draft mid-term review report	MCIT	December 2024	Nil	N/A	
	Finalize and submit mid-term review report for approval	MCIT	December 2024	Nil	N/A	
A final review of the ICTSP is conducted and report is completed	Draft Final Year Review report	MCIT	June 2027	Nil	N/A	
	Conduct workshop consultation with relevant stakeholders on draft final year review report	MCIT, OOTR, SPL	June 2027	\$30,000.00	GoS	
	Revise and update draft final year review report	MCIT	June 2027	Nil	N/A	
	Finalize and submit final year review report for approval	MCIT	June 2027	Nil	N/A	

Annex II: Milestone Plan



Annex III: Cost and Financing Matrix

No.	Objectives	Total Costing (SAT\$)	Funding Source
1.1	Develop a sustainable ICT workforce	\$835,000.00	GoS, Development Partners
1.2	Improve basic ICT skills of citizens	\$161,000.00	GoS, Development Partners
2.1	Establish appropriate ICT infrastructure and initiatives to support and facilitate national sustainable development	\$85,188,500.00 + USD\$200,000.00	GoS, Development Partners
2.2	Ensure that ICT networks, support infrastructure and end user devices are reliable, fast and cost-effective.	\$160,000.00	GoS
3.1	Promote and sustain E-services in sectors including government, health, environment and education	\$181,000.00	GoS, Development Partners
3.2	Preserve, safeguard and promote the Samoan culture and language	\$208,000.00	GoS, Development Partners
4.1	ICT policy, legislation and regulatory frameworks that provide an enabling environment for social and economic sustainable development	\$40,000.00	GoS, Development Partners
4.2	ICT policy, legislation and regulatory frameworks that promote open and non-discriminatory access to ICT	Nil	N/A
4.3	ICT policy, legislation and regulatory frameworks to address socially undesirable activities	\$20,000.00	GoS
4.4	ICT policy and regulations that are consistent with international and national laws, regulations, technical standards, and obligations	\$10,000.00	GoS, Development Partners
5.1	Provide a more secure and safer ICT environment	\$230,000.00	GoS, Development Partners
6.1	ICT financing framework to ensure sustainable ICT development	\$1,000.00	GoS
6.2	Quality data and guidelines for better policy and effective monitoring and evaluation	Nil	N/A
7.1	Develop a mechanism to coordinate a multi-partnership holistic approach to ICT development with an appropriate monitoring and evaluation.	\$110,000.00	GoS

Approximate total cost of proposal (if relevant)
Specify a brief timeframe for the project, from start date to completion date
Describe any possible constraints and risks facing the implementation of the project

Annex V: Capital Project Summaries

No.	Project	Cost Assumption (SAT\$)	Implementation				
			Yr1	Yr2	Yr3	Yr4	Yr5
1	Domestic Internet Exchange Point (IXP)	\$600,000.00					
2	School Connectivity Project	\$2,000,000.00					
3	Last Mile Connectivity Project	\$100,000.00					
4	Smart Village Project	\$200,000.00					
5	SNBH Upgrade	\$85,113,500.00					
6	National ID Project (system)	\$11,000,000.00					